

Women in hospital medicine in the United Kingdom: glass ceiling, preference, prejudice or cohort e

house officers, final year medical students, and medical school applicants (1966–1991).

Analysis—Data were analysed according to cohort of entry to medical school to assess the extent of disproportionate promotion.

Results—The proportion of women in hospital career posts was largely explained by the rapidly increasing proportion of women entering medical school (hagesst)-.0.007Tc4.693004.69338406.7-177.77r

Method

The data for this study were obtained from several different sources. *Women in hospital career posts.*

discrimination is inevitably blurred as apparent “choice” may actually result from discouragement or lack of role models. Discrimination and differential choice cause disproportionate promotion with fewer women at higher career grades; its absence usually means the absence of both discrimination and differential choice. Interpretation of statistical data must also consider secular trends, specialties changing their attraction at different time periods.

The concept of a “glass ceiling” is a recurrent one in the recent literature on the career problems of women. It has been defined in Merriam-Webster’s Collegiate Dictionary (10th edition) as: “glass ceiling n (1986): an intangible barrier within the hierarchy of a company that prevents women or minorities from obtaining upper-level positions.”

The phrase has been used in the titles of several recent scholarly papers on the promotion of women within the US health care system,¹⁹⁻²¹ albeit with discrepant conclusions, that “objective evidence shows that women can succeed and are succeeding in gaining promotions in academic medicine”,¹⁹ or that “women physician medical school faculty are promoted more slowly than men”.²⁰

In this study we use official NHS statistics, coupled with data on career preference in medical students and recent graduates, to assess disproportionate promotion overall and in the main hospital specialties.

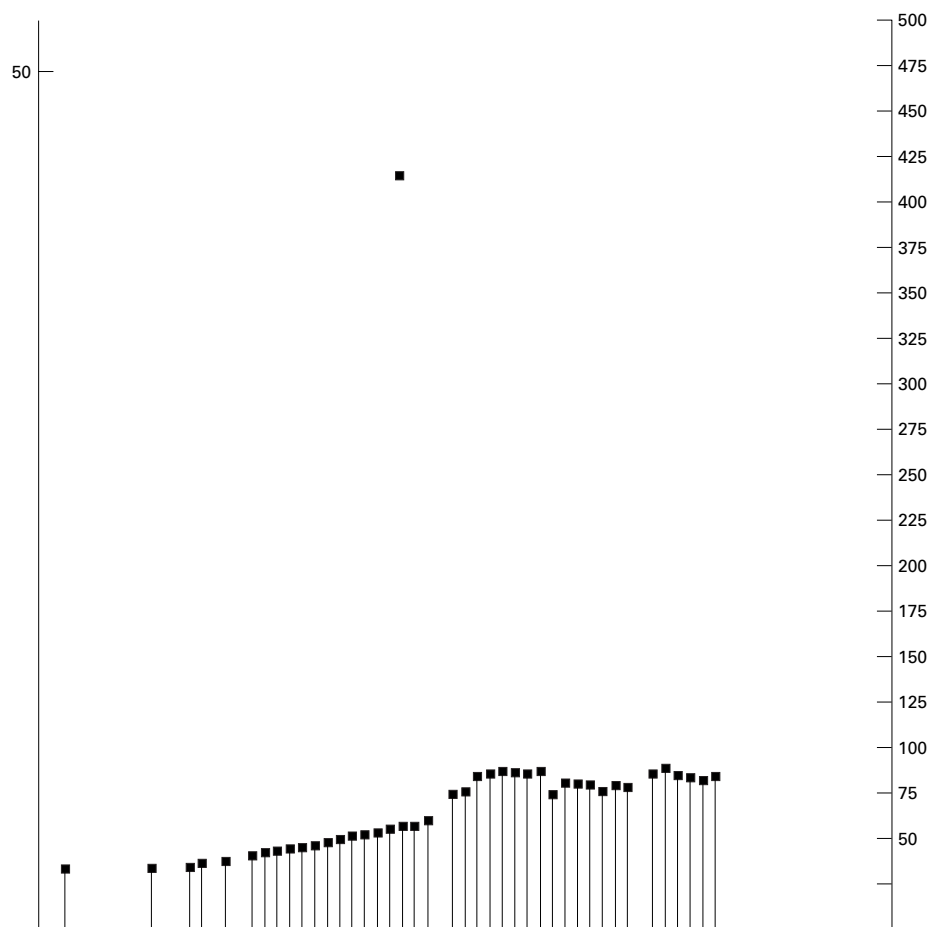


Figure 2 The thicker solid line shows the proportion of women entering UK medical schools for the years 1930–1996. Figures for 1967–1996 are derived from UCCA statistics for home students, figures for 1956–1966 are derived from Appendix 9 of the Royal Commission on Medical Education,⁴⁵ and data before 1946 have been estimated from data presented in the Willink report,⁴¹ and the Goodenough Report⁴¹ with linear interpolation. The thinner solid line shows the expected proportion of women among doctors aged 36–62 (that is, consultant age) as a function of the “typical” age of the consultant. Expected proportions for doctors of the age range of SRs, Registrars and SHOs are almost exactly as shown by the proportion of women medical school entrants and are not shown separately. Solid lines show the same data as those of figure 1 for the proportion of women in hospital career grades but plotted in relation to the typical median year of entry for that cohort of graduates (see text for further details). The bars at the bottom of the figure (% in hospital on the right hand axis) show the proportion of women in hospital careers as a percentage of the proportion of women entering medical school; a figure of 100% indicates that a female medical school entrant is as likely to be in a hospital post as is a male medical school entrant. Figures up to 1961 are for consultants, from 1963 to 1977 for SRs, and for subsequent dates for SHOs.

SHO grade to SR and consultant, with no disproportionate promotion and hence neither discrimination nor differential choice. Although the proportion of women hospital doctors does remain less than the proportion entering medical school, the lower part of figure 2 (% in hospital) shows the relative proportion of women in hospital medicine rose consistently through the 1940 to the 1965 cohorts, and then levelled out at 80–90% (that is, proportionately, for every 10 men entering hospital medicine, 8 or 9 women will do so).

SAMPLE SIZES

It is not practical for space reasons to provide detailed information on sample sizes in all cases. However, to give the reader a sense of the numbers involved, in 1978 and 1996 there were 12 285 and 20 300 consultants, 2718 and 5907 Senior Registrars, 5690 and 5467 Registrars, and 8722 and 14756 senior house

officers. In 1996 the numbers of consultants in the various speciality groups were 5743 in Hospital Medicine (Internal Medicine), 4515 in Surgery, 1799 in Radiology and Radiotherapy, 1887 in Pathology, 2432 in Psychiatry, 2780 in Anaesthetics, and 1039 in Obstetrics and Gynaecology.

INDIVIDUAL SPECIALTIES

The picture in individual hospital specialties may differ from the picture overall; in addition, their study also allows analysis of career preferences and hence intentions at application and qualification. Pathology, psychiatry and radiology/radiotherapy (fig 3A–C) show similar patterns, the lines for SHOs, registrars, SRs and consultants being superimposed, implying no disproportionate promotion from SHO through to consultant grade. The other specialties are different (fig 3D–G). Surgery, hospital medicine and O and G show disproportionate

promotion from SHO to higher grades, with little evidence of disproportionate promotion beyond the registrar grade. Anaesthetics shows

living constraints. These are important questions, and would be better considered in part by more qualitative research programmes, rather than the present numerical approach. Such a qualitative approach could be complementary to a more extensive methodology derived from the present type of analysis. The strength of this paper is in the comprehensive nature of the statistics, and the large sample sizes. The weakness is in the fact that it is retrospective, so that its predictive value is limited. In future it may be possible to carry out large scale prospective studies, perhaps based on the type of data collected by the Medical Workforce Research Group,^{47 54 55} where entire cohorts of doctors, both male and female, are asked not only about career intentions (as at present), but also about motivations, constraints and opportunities. That should allow the teasing apart of the issues raised in this study. A further possibility for further research is to examine comparative data, from the health care systems of other countries. In a recent example, data from Norway⁵⁶ have shown that despite forceful equal opportunities policies, positive sex discrimination, improved social benefits, workplace creche facilities, and daycare funding, women doctors are still less likely to reach senior positions in medicine; the exceptions are in specialties such as paediatrics in which there is a high proportion of women doctors. The explanation for such findings is not at all clear, although, in a related commentary,⁵⁷ Showalter points to limitations imposed by “the hierarchical system of medicine”, and “the very structure of medical training (which) creates a mystique of stamina, fierce dedication, and stoic endurance, so that deviation from the norm, however licensed, spells weakness rather than leadership potential”. Certainly that description is compatible with Cassell’s account of the career barriers experienced by American woman surgeons.¹³ A further route for future research is to put the data reported here on medicine into a much broader context of education and training in general, where there is a growing number of studies of the choices made by men and women at different stages of school and university education, and subsequent careers.⁵⁸ As a single example, it has been pointed out that although in the UK the introduction of a national Curriculum has meant that most students at school will study science to the age of 14 or 15, that has not changed the subsequent male excess of students taking science subjects after that age, when students make a free choice of subjects.⁵⁹ To some extent therefore it has to be accepted that career choices are precisely that, choices, and these are not entirely the result of social forces outside the person, but also reflect their own wishes, needs and desires. Separating those two components has to be a research need for both public health and social policy. People who are working in careers where they wish to be working are more likely to be satisfied, productive, effective professionals, than those who feel that they have been marginalised or

coerced into a specialty that is not of their own choosing. As such the career choices of doctors have broader implications for the public health in general.

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Conflicts of interest: none.

- 1 Lefford F. Women doctors: a quarter-century track record. *Lancet* 1987;i:1254–6.
- 2 Coulson J. Women want opportunity in macho medical world. *BMA News Review* 1994;21–2.
- 3 Elston MA. Women doctors in a changing profession: the case of Britain. In: Riska E, Wegar K, eds.

- 34 Anonymous. Medical and dental staffing prospects in the NHS in England and Wales 1990. *Health Trends* 1991;23:132-40.
- 35 Allen P. Medical and dental staffing prospects in the NHS in England and Wales 1991. *Health Trends* 1993;25:4-12.
- 36 Allen P. Medical and dental staffing prospects in the NHS in England and Wales 1992. *Health Trends* 1993;25:118-26.
- 37 Wilson R, Allen P. Medical and dental staffing prospects in