## What is already known on this topic

Male students and those with lower A level grades and of non-white ethnicity may perform less well on the undergraduate medical course

## What this study adds

Late acceptance on to the course and the presence of "negative comments" in the academic reference are additional risk factors at Nottingham medical

in the academic reference. Powis et al found that interviewers' negative remarks had weak predictive value for course withdrawal,7 and Papadakis et al suggested some correlation between negative statements regarding unprofessional undergraduate behaviour and later disciplinary action in graduates.8 In view of our results, statement review remains an integral part of our admissions process.

Similarly, we are not aware that others have examined the timing of course offers in relation to undergraduate progress.

## Future policy and research

Many medical schools in the United Kingdom are exploring more varied admissions policies, perhaps incorporating elements of the successful Australian policies of lower examination grades accompanied by psychometric testing.3 Their outcome evaluations, especially in relation to non-traditional students, may be important in guiding future policy across the UK.25 Our data suggest that the current four stage approach to student selection is sound, but we now have concerns that the introduction by UCAS of open references will reduce the opportunities for head teachers to draw attention to personal qualities or difficulties that might make it difficult for a student to succeed in medicine. A structured reference might be more helpful.

Pastoral support at Nottingham includes informal meetings with personal tutors and more intensive formal mechanisms, yet some students still hide, or deny, their difficulties until they reach a crisis point. In the course of this research we noticed a high incidence of depressive illnesses in strugglers, which is of particular concern. We intend to review our strugglers and our pastoral practices more closely to see what further support could be offered, perhaps as targeted interventions to those at greatest risk. Research elsewhere has identified personal, social, cultural, and financial pressures that may particularly affect students from non-mainstream backgrounds and that may need to be addressed explicitly and proactively.<sup>10</sup> <sup>11</sup> Failure in clinical examinations may have a sex related or cultural basis because the current emphasis on patient centred, empathetic care may be more natural for women than for men<sup>12</sup> and may present a considerable difficulty for students from more paternalistic cultures.<sup>13</sup> Language barriers may be important because fluency in standard English may not be adequate for medical and colloquial needs.14

We plan further investigations into the nature of negative comments and the characteristics and difficulties of those who do less well on the course.

The 1991 Townsend deprivation scores were accessed via the Census Data Service at http://census.ac.uk/cdu/Datasets/ 1991\_Census\_datasets/. We are grateful to Chris Rix of UCAS for providing approval and data for Nottingham applicants specifically for this study and to Carol Coupland for statistical advice. We thank David Powis and Eamonn Ferguson for reviewing an early draft of this paper and for providing valuable suggestions and advice, Caroline Mulvaney for performing statement validation, and members of the interviewing pool who responded to our questionnaire on negative comments.

Contributors: DJ conceived the study and is guarantor. JY collected and analysed the data. Both authors contributed to interpretation and wrote the paper.

Funding: JY is paid by Service Increment for Teaching (SIFT). Competing interests: None declared.

Ethical approval: Faculty of Medicine research and ethics

- Ferguson E, James D, Madeley L. Factors associated with success in medical school: systematic review of the literature. BMJ 2002;324:952-7. Searle J, McHarg J. Selection for medical school: just pick the right
- students and the rest is easy! Med Educ 2003;37:458-63.

  Powis D. Selecting medical students (commentary). Med Educ 2003;
- Council of Heads of Medical Schools. Guiding principles for the admission of medical students. London: CHMS, 2004.
  Townsend P, Phillimore P, Beattie A. Health and deprivation: inequality and
- the North. London: Croom Helm, 1988.
- Ferguson E, James D, O'Hehir F, Sanders A. Pilot study of the roles of personality, references, and personal statements in relation to performance
- over the five years of a medical degree. *BMJ* 2003;326: 429-32. Powis D, Bristow T, Waring T, O'Connell D. The structured interview as a tool for predicting premature with drawal from medical school. Aust NZ J Med 1992; 22: 692-8
- Papadakis M, Hodgson C, Teherani A, Kohatsu N. Unprofessional behaviour in medical school is associated with subsequent disciplinary action
- by a State Medical Board. Acad Med 2004;79:244-9
   Howe A, Campion P, Searle J, Smith H. New perspectives—approaches to medical education at four new UK medical schools. BMJ 2004;329:327-32.
   Treloar C, McCall N, Rolfe I, Pearson S-A, Garvey G, Heathcote A. Factors affecting progress of Australian and international students in a mobile pool of the progress of Australian and international students in a mobile pool of the progress of Australian and international students in a mobile pool of the progress of Australian and international students in a mobile pool of the progress of Australian and international students in a mobile pool of the progress of Australian and international students.
- problem-based learning medical course. *Med Educ* 2000;34:708-15.

  11 Hawthorne L., Minas I, Singh B. A case study in the globalization of medical education: assisting overseas-born students at the University of Melbourne. *Med Teacher* 2004;26:150-9.
- 12 Hamilton J. Women are from X; men are from Y (commentary). Med Educ
- 13 Liddell M, Koritsas S. Effect of medical students' ethnicity on their attitudes towards consultation skills and final year examination perform-
- ance. *Med Educ* 2004;38:187-98.

  14 Chur-Hansen A, Barrett R. Teaching colloquial Australian English to medical students from non-English speaking backgrounds. Med Educ 1996;30:412-7.

(Accepted 17 November 2005)

doi 10.1136/bmj.38730.678310.63

## Corrections and clarifications

Factors influencing death at home in terminally ill patients with cancer: systematic review

In this article by Barbara Gomes and Irene J Higginson the linked website in reference 64 (Macmillan Cancer Relief) was correct for the Gold Standards Framework (GSF) when the paper was written (BMJ 2006;332:515-21, 4 Mar). Macmillan Cancer Relief, however, ceased functioning as a support for the GSF Programme in 2004. The programme is now supported by the NHS End of Life Care Programme, and the correct web address is www.goldstandardsframework.nhs.uk.

Reproductive outcome after chromosome analysis in couples with two or more miscarriages: case-control study

In this research paper by Maureen T M Franssen and colleagues (BMJ 2006;332:759-62, 1 Apr) we wrongly described the study as a case-control study when it should have been an index-control study. The error, which happened during editing, occurred in the title and the abstract.