Editor's Choice

What’s the matter with UMAT?

The selection of medical students is an important issue for the community and the medical profession because of the high costs involved in medical education and the need for graduates to be good doctors. Since the 1970s, the method of selecting medical students in Australia has evolved from the use of purely academic criteria based on secondary school matriculation results to the use of interviews that assess personal characteristics, and more recently to tests of aptitude — the Undergraduate Medicine and Health Sciences Admission Test (UMAT) and Graduate Australian Medical School Admissions Test (GAMSAT).

The imperative for change in the selection process has been the perceived need for doctors to provide academically and clinically appropriate medical care in a professional and humane manner that is appropriate for the society in which they work. Additionally, reliance on results achieved in high school has been held to introduce considerable socioeconomic bias (BMJ 2002; 324: 952-957). While some of the steps taken to reduce socioeconomic disadvantage are transparent, such as pathways designed to improve access of Indigenous and rural students to medical school, the rationale supporting the use of interviews and aptitude tests has not been well articulated. These methods add complexity and cost to the selection process, and their evaluation is a priority.

The Journal has published comment (MJA 2008; 189: 323-324) and research on the selection of medical students over many years, including papers on the role of the interview (MJA 2008; 188: 349-354), the effect of coaching (MJA 2008; 189: 270-273) and the role of the GAMSAT (MJA 2007; 186: 120-123). Unsurprisingly, there seems to be agreement that academic ability is a good predictor of completing medical school, but the minimum level of academic ability required is not certain. Studies assessing other selection methods suggest that the additional benefit conferred by the interview may be small and that of the GAMSAT may be negligible.

In this issue of the Journal (page 341), Wilkinson and colleagues contribute to this debate with the first peer-reviewed data on the predictive validity of the UMAT for medical students’ academic performance. The paper shares limitations of other studies in this area — it is a correlation study (and thus cannot prove causation), it assesses outcomes in a highly performing and selected cohort of potential students (“range restriction”) who might all be expected to perform well in medical school, and it does not evaluate the clinical performance of students after graduation.

Wilkinson et al’s finding that there is only weak correlation between UMAT results and performance in medical school makes it vital that research into selection processes continues. It remains to be seen whether the UMAT predicts clinical performance and contribution to the medical profession and the health of the community, but early indications seem to suggest it has little to offer.

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