



PROSPECTIVE STUDENTS' AND PARENTS' ATTITUDES TOWARDS A GRADUATE-ENTRY MEDICAL DEGREE

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The current medical curriculum in the Faculty of Health Sciences at the University of the Witwatersrand (Wits) admits school leavers to a 6-year undergraduate degree. In the debate around curriculum reform, there is strong support for graduate-entry programmes which only accept students to study medicine once they have completed a Bachelors degree. This has been the preferred means of access to medical schools in the USA for many decades¹ and several medical schools in Australia and the UK have recently undertaken the change to graduate entry.²⁻⁶

The reasons for preferring a graduate-entry medical degree were initially tested qualitatively in a meeting with the principals of the 10 schools that provide the majority of Wits medical students. They were also tested in two focus group discussions with parents, grade 11 and final-year scholars. The results of this qualitative survey are given below.

QUALITATIVE SURVEY

Problems with making a career decision at too young an age. At present bright scholars consider a career in medicine at age 16 or 17 years, when they have little life experience beyond school. There is often parental and peer pressure on these scholars to take up medicine, and they are not of an age to exercise independent judgement. Generally these decisions are made without insight into what the training and profession entail. The 10 heads of high schools, in particular, were unanimous in their opinion that most school leavers are not in a good position to make serious career choices.

Applicants to medicine may have a realistic fear that it is so competitive to gain entry into medicine that one cannot afford to turn down an offer or there will be no second chance.

Matriculants are no longer adequately prepared academically — consequent need for university experience. At present Wits accepts into medicine students with a wide range of backgrounds, both social and educational. There are high failure and drop-out rates in these years and the

traditional methods of student selection have not prevented this. Specifically, school matriculation results seem to be less useful than before in predicting success. Moreover, the standard of matriculation science and biology seems to have dropped, placing a greater requirement on such training in the early university years. Such training need not be part of the medical degree and does not fit well into an integrated curriculum.

Graduates will have proven ability to cope with university education, having already completed a degree.

Graduate entry will help level the playing field for the entry of disadvantaged scholars into medicine. At present many disadvantaged school leavers do not have good enough matriculation scores to be considered for medicine. They often do manage to enter university, however, and if they graduate could then apply to a medical programme.

Educational reasons for acquiring a formative general Bachelors degree before the professional education.

Graduates will have a broader education, and therefore bring a greater variety of non-medical skills, knowledge and experience into medical school, and into medicine in general. Many parents felt that doctors with a broader education, particularly in the humanities, would make better doctors with regard to communicating with and understanding patients.

Graduates are likely to be more motivated than school leavers and less likely to drop out.

The interviews also highlighted the key perceived disadvantage of the proposed graduate-entry programme, namely that 7 years of university was a long period of study and carried the associated costs and loss of income. The Faculty was particularly concerned that the additional costs would have a negative effect on black students who are frequently poorer than others.

The information gathered qualitatively needed to be tested quantitatively, particularly to weigh up the perceived benefits against the costs.

QUANTITATIVE SURVEY

The reference population for this survey needed to be representative, not of all school leavers, but rather of those school leavers who wished to study medicine and would be eligible to do so on broad admission criteria including acceptable academic performance and choice of subjects.

It became clear that the most efficient way to sample such a reference population was to take the students actually admitted to medicine at Wits, shortly after their admission.

We were able to expand the sample to assess the bias introduced by the absence of school leavers who wanted to study medicine but were not admitted because of the competition. This was achieved by including in the survey



students admitted to the degrees of Bachelor of Dental Science, Bachelor of Science in Physiotherapy, Bachelor of Science in Occupational Therapy and Bachelor of Pharmacy. We have frequently found that these students had medicine as their first choice.

The opinions of the parents or guardians of these students are important as they play a role in the students' decision-making regarding career choice.

The Dean gave an introductory talk to all first-year Health Science students in April 1999, after which they completed a 16-item inventory. An adapted version of this inventory, together with an information sheet, was sent to all parents.

Three hundred and twenty-seven of 403 students responded (81% of all registered first years in the relevant disciplines). Of these, 56% were in medicine and the remainder in the other health science disciplines. Thirty-eight per cent were white, 43% Indian and 20% black or coloured and 5% had previously completed another degree or diploma.

A total of 156 parents (approximately 45%) returned their postal inventories by the final closing date.

In attempting to quantify the extent to which students feel ready to make career choices in their final school years, 84% of medical students, 95% of their parents and 78% of non-medical students said they were sure of what they wanted to study at university. This, of course, does not mean they have made the right choice — that is something they will probably only find out in later years, but it does contradict the widely held view of parents, teachers and some pupils, expressed in the qualitative research phase, that school leavers experience significant confusion and doubt regarding career paths.

Whether or not students at age 16 are indeed able to make informed career choices could not be answered by this study, but it seems clear that career path uncertainty would not be a major factor directing students to choose another degree before studying medicine:

The majority of students and parents appreciate the educational value of a broad-based first degree, as well as the employment advantages of having two degrees. Only 10 - 20% disagreed with this.

The additional period of study and the additional costs would be a deterrent to about one-third of medical students and their parents. However, only 15% of non-medical students and their parents would be deterred, suggesting that this factor would not be as significant if students did not have a choice. The impact on black students is higher, with 41% of black medical students indicating they would be deterred. Again, however, only 23% of black non-medical students said they would be deterred by the costs of the additional year. No suggestions of bursaries or financial support were introduced into the survey, and these would need to be offered in order to avoid a differential negative impact on access for black students.

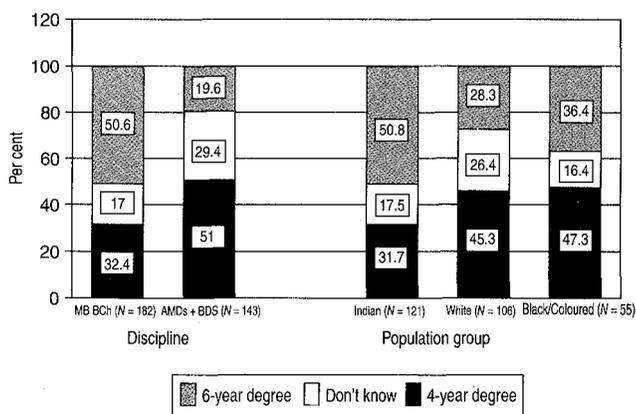


Fig. 1. Choice between 4-year graduate-entry medical degree and traditional 6-year degree for students in different disciplines, and by population group. (AMD = allied medical disciplines; BDS = Bachelor of Dental Science; MB BCh = Bachelor of Medicine and Bachelor of Surgery).

Overall, if offered both options, all other things being equal, there would be approximately equal preference for the new 3+4-year and the traditional 6-year medical degree among the school leavers who would traditionally have applied to study medicine at Wits. The pattern by population group is not simply what would have been predicted from their attitudes to the additional costs. Forty-seven per cent of black and coloured, 45% of white and 31% of Indian students would have preferred the new 3+4-year degree structure (Fig. 1).

The term 'black' is used to denote black African students and parents. Indian, white and black/coloured students were treated separately in Fig. 1 for comparative purposes. It was necessary to identify the opinions of these groups separately to ensure that any proposed changes to the medical curriculum would not further disadvantage groups that had already been disadvantaged through the racially based educational and socio-economic systems of apartheid.

References

1. Donald R. Is there a place for a graduate entry medical course in New Zealand? *N Z Med J* 2000; 113: 323-324.
2. Sefton AJ. Australian medical education in a time of change: a view from the University of Sydney. *Med Educ* 1995; 29: 181-186.
3. Light E. Are the brightest the best? *Australian Medicine* 1996, 8(8): 14-15.
4. Geffen LB. The case for graduate schools of medicine in Australia. *Med J Aust* 1991; 155: 737-740.
5. Leggat PA. Traditional and innovative approaches to medical education in Australia and the move to graduate schools. *Medical Teacher* 1997; 19: 93-94.
6. Horton R. Why graduate medical schools make sense. *Lancet* 1998; 351: 826-828.

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