

Do we value work experience before medical school?

The selection of future doctors in the UK is based on restricted entry to medical school. The 12% drop-out rate in training¹ is lower than the 18% drop out rate for other courses.² The present selection process for medical school entry is therefore of paramount importance, given the numbers entering medical education. By 2005, the annual intake to British medical schools will be 5894 compared with 3749 in October 1997.³

Previous studies investigating student selection have considered the fairness of the selection procedure. They attempted to establish the qualities believed to be most important in successful applicants. For some time however, it has been recognised that academic performance alone is not a satisfactory marker of the 'right' student,^{4,5} and that personal attributes should also be considered, particularly when their suitability for subsequent general practice is considered.^{6,7} However, recent reliable meta-analyses demonstrate that previous academic performance remains a good (but not perfect) predictor of successful medical training.⁸ Nevertheless, provided students surpass a certain academic threshold, other qualities such as communication, team and psychomotor skills can help to provide the basis of selection.⁹ Personality traits such as conscientiousness have also been positively associated with pre-clinical performance.¹⁰

However, the value of work experience, obtained during the school years seems not to have been previously studied. This is surprising since work experience is often discussed in the selection interview. Such experience helps the student to make an informed career choice and exploring it at interview can reflect student motivation to study medicine. Furthermore, as recently demonstrated for general practice,¹¹ personal experience can have a highly positive influence on an individual's attitude to a particular speciality.

At present, previous work experience is variably and subjectively valued by

different panel members of admissions committees, and the ease with which it is available to some students, but not others, is often overlooked by them. Surely progress in the selection of our future doctors should relate to a more formal and fair evaluation of such work experience? However, admissions staff would need some baseline information relating to the nature of medically-relevant work experience that school students seek, their success in obtaining different forms of experience and their reasons for doing so.

During 2003 we sought information about work experience before medical school entry with a retrospective questionnaire study. Five hundred and twenty-seven Bristol medical students (who applied through the Universities' Central Council on Admissions for entry in the years 1999–2001) were given the questionnaire; 87% responded.

Nearly all responders (96%) obtained some experience. There were no significant differences in the forms of experience sought or obtained between the years, sexes, or those with a first degree.

Two important findings demand attention. First, although hospital medicine, general practice, and surgery were the most common forms of experiences sought, less than half of students actually obtained general practice experience. This failure of students to obtain experience of general practice is a particular cause for concern. As hospital medicine and surgery become increasingly specialised, medical student experience narrows.¹² However, general practice, by its fundamental characteristics, remains resistant to this trend and as a consequence becomes increasingly valuable as a means of pre-admission, relevant work experience. Personal experience of general practice is also the most important factor influencing medical students' attitudes towards it, and those with greater contact with GPs have a more positive attitude towards general

practice.¹¹ Encouraging school students to experience general practice would therefore not only increase their awareness of the life to which they are about to commit, but could aid recruitment to general practice as a speciality.

The second important finding relates to why students seek work experience. Sadly, students seek to obtain work experience more as an aid to get into medical school (82% considered it 'obligatory/very important'), and to a lesser extent for personal value (only 67% rating their experience as 'incredibly valuable/valuable'). By ensuring that all applying for medicine have equal access to work experience, students should become encouraged to obtain experiences for their own personal value, rather than just as an aid to get into medical school.

Although some GPs and their patients welcome school students, others will not allow such clinical experience.^{13,14} It is possible that their presence in the consultation and issues of confidentiality, especially when the student may know the patient, can pose barriers to students. However, in cases where patients freely consent to having a student in the room, and with steps to ensure complete confidentiality, these barriers can often be overcome. The Junior Medical Forum supports such work experience for school pupils and has called on the British Medical Association (BMA) to set out principles of good practice including issues of confidentiality and consent.¹⁵ Furthermore, in Scotland, a recent review of workforce requirements recommended medical careers should be promoted to school students.¹⁶

Our findings support present BMA efforts to help students seek and gain medical work experience. Admissions staff should be aware that some students have greater difficulty in obtaining experience (especially general practice) and that they should not be penalised for this implied short-coming.

Hopefully, as recruitment for our future doctors increases, so will our ability to be fair and consistent in the valuation of work experience, and to be widely supportive of students who seek such experience.

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An unexpected day in the mountains

Friday afternoon being my study time, I was contemplating the options for a productive culmination to the day over lunch in the surgery. Then the phone rang, 'It's Mike from the rescue team. Are you free?' Around 11.30 that morning, an aeroplane had disappeared from radar over a remote tract of land, north-west of Ben Wyvis. It was a scheduled postal service returning to Inverness, with only the pilot onboard. Dundonnell Mountain Rescue Team are not a busy team, but we cover a vast area including some of the most isolated mountain terrain in the British Isles. At the time of the phonecall, my car was having its MOT, but I was able to collect it by early afternoon to drive out west and join in the search.

Several team members were already on the hill, and had been joined by RAF and Coastguard helicopters. The helicopters can be useful when visibility is good, but for such conditions as often prevail in the Scottish mountains, much ground must be covered by foot. The clouds were breaking slightly as the afternoon grew late, but no sign of the plane had been traced. A number of reports came in from stalkers and fishermen of an explosion, or a thud, but it was difficult to localise the noise.

There was little hope of finding anything once darkness set in, so we retired to our beds in preparation for a full scale search at first light. While I was driving home, late in the evening, a voice on the radio revealed the identity of the pilot and a few other pieces of information about him. The poignancy of the occasion had set in by the time I prepared my lunch for a full day on the hill.

By morning, the assembled search party consisted of four civilian mountain rescue teams, two RAF mountain rescue teams and two helicopters. Equipped with radio communication and other emergency gear, each person was one vital element in a coordinated search that combed an area bigger than the English Lake District. Along with five other members of the Dundonnell team, I was

initially dropped by helicopter to scour a section of mountain plateau which was encircled by low cloud.

The crash site was located at 1430 hours by another party from our team. We listened in silence as the grid reference and a description of the scene were transmitted in subdued tones. A rainbow formed, then faded, in a glen to the east. After crossing 4 kilometres of peat hags, my party arrived on scene about an hour later. I prefer not to describe what was found in any detail, except that my presence satisfied the routine formality of confirming death. Later, the statement to the press simply read that we had 'recovered the pilot's body'.

Mountain rescue teams in the UK are all voluntary organisations. Nevertheless (perhaps predictably?), the commitment, dedication and professional approach of the majority of volunteers is second to none. They are people with humility, who acknowledge human vulnerability. They have great respect for the power of nature and are often witness to its ultimate dominance over the fragility of life. They understand risk, think calmly under pressure and have a structured approach to solving problems. Interdependence and teamwork are fundamental to an effective search or rescue effort. In summary, the personal attributes required in mountain rescue are not much different to those that are important in general practice.

Many weeks have passed since this particular event, but it seems in a small way to have affected my daily thoughts and actions. I feel more confident when faced with problems that are solvable, and I feel more human when faced with those that aren't. When I am in the mountains, the rocks, sun, rain, clouds and wind all seem more real and tangible than the ordinary concerns and worries of daily existence, and it is satisfying for former stressful pre-occupations to be seen in a new light and brushed aside as inconsequential. I think that writing about it has helped me too.