

The Selection of Medical Students at McMaster University

J. D. HAMILTON, MRCP, Assistant Professor,
Department of Medicine, McMaster University, Hamilton,
Ontario

McMaster early adopted the policy of accepting applications from candidates from any academic background provided they had completed three years at a recognised university at the time of their entry and had achieved a 'B' average (a fairly modest requirement) in their last recorded year at university. This policy allows access to a large pool of applicants whose diverse backgrounds can contribute imaginatively to an evolving role for the medical profession. We are the only school for which about one-fifth of our applicants are eligible. Students who do not have a standard biological science background undertake a brief course of guided study in the summer prior to entry. So far we have no reason to be alarmed at this policy and many reasons for being encouraged by it.

CRITERIA FOR ADMISSION

In the elusive 'good doctor', there are two interwoven sets of qualities: the one, traditional academic qualities, and the other the personal qualities of motivation, initiative, and social awareness. The training and development of students through the undergraduate curriculum pays attention to both these qualities and we also look for them in the selection of our medical students. The task for 1972 is to select 80 students from 1400 eligible applicants. The easiest method would be to look only at those with the highest university grades and then select within this group those with the best personal qualities. This policy would exclude applicants with good potential and no outstanding university grades and simply raise our minimum academic requirement. We do not feel that academic grades should be paramount in our selection procedure and we therefore have evolved a system of assessing these two aspects simultaneously, allowing applicants to move in the selection process into one or other of two streams called the 'academic' and the 'personal qualities' streams. These are not mutually exclusive streams and many applicants will appear equally well in both. The final class consists of an approximately equal proportion of applicants from the two streams.

We make no selection on the basis of race, sex or age except that applicants over the age of 35 years are assessed with particular care. We have some geographic priorities, favouring applicants from our own Health Region and from Ontario, especially those from its sparsely served northern areas. It is hoped that this, together with the development of medical educational programmes in these areas, will encourage our students to settle there.

SELECTION OF THE 'ACADEMIC' STREAM

All university grades are assessed and the best applicants are considered for interview on the basis of their letters of recommendation. About 150 of these applicants are then interviewed, looking mainly for personal rather than academic qualities. Last year we tried to establish at the interview further evidence of academic standing, but discovered that interviewers found this rather difficult when faced with applicants of such diverse backgrounds. It is of interest that last year, of those with the highest grades a half were assessed at the interview as insufficiently strong in personal qualities, and were not offered places.

SELECTION OF THE 'PERSONAL QUALITIES' STREAM

This is the more complex procedure and points of reference are much less firm. We are basing our initial selection on a technique that has been little explored in Canada: assessment of a letter written by the applicant about himself. All eligible applicants are asked to write such a letter. They are told that its purpose is to help the Admissions Committee to get to know more about them. This is a different approach from the use of letters of reference which attempt to find what other people think about the applicant. Last year little guidance was given to the writers and in consequence we found comparative assessment of letters difficult, so this year applicants were given some guidelines to the sort of topics that might be looked for in the letter. They were asked to talk about their motivation and goals, their attitudes to the McMaster programme, their response to intellectual and personal problems and the problems in society at large, their reflection on personal relationships, and their appraisal of their own abilities. Giving a structure may make the letter rather predictable; but in the majority of cases, assessors felt confident that they had a fairly clear picture of the applicant.

Each letter is assessed independently by three members of a reading team. These teams are prepared by an orientation session and they are guided in their assessment by a scoring system. They practise with model letters, but no attempt is made to overrule their own intrinsic judgement about the applicants and, in the event, there has been remarkable agreement between

people of diverse academic and cultural backgrounds. If spontaneous close agreement is not achieved, readers are asked to consult the other members of the team and, if necessary, send the letter for further assessment. Thirty such reading teams are involved. They are usually composed of one student, one faculty member, and a member of the community at large, not necessarily a doctor. Recently we have involved some patients. We have gradually increased student participation both here and in interviewing and in the planning of the overall procedure, with benefit to the whole system. Those applicants whose letters were ranked highly are brought for interview. Some selection at this level is made on the basis of geographic origin and letters of reference but we have found that the letters of reference have given us very poor differentiation between applicants and we have found them most useful simply as a safeguard to warn us of an unsuitable candidate or to indicate a highly suitable candidate that our own screening system has not selected. After these steps, 300 candidates are interviewed, looking for very much the same qualities that the letters were expected to demonstrate. The interviewers are given an orientation and some training in interviewing, but they do not know the letter assessment of their applicant or indeed whether their applicant has been selected in the 'personal qualities' or the 'academic' stream. We therefore have a good way of comparing the predictive value of the letters for interview performance.

The whole process of letter writing and assessment requires a lot of work and we need to examine its value. One may ask the following questions:

1. Can the letters be faked?

We cannot be sure, but we hope that the interviews will reveal those who have been dishonest. So far as we can judge, the applicants have been both honest and serious and took great pains in writing the letter.

2. Does the assessment of the letter reflect the literary style or the background experience of the applicant rather than his potential?

Readers are warned of this and we were reassured last year by finding that there was no relation between the assessment put on the letter and the type of academic background of the applicant or his age or the 'verbal score' in the Medical College Admissions Test (a standardised assessment used almost universally in most other medical schools in North America). It would seem therefore that we are not simply selecting older people with more interesting backgrounds who have had training in literary style. Moreover, there was no association with university grades, indicating that the letter is not simply reflecting standard academic achievement.

3. *Does the letter select a better group for interview than random selection?*

This is quite a serious question because many people feel that we might just as well do the entire selection randomly. However, we believe we are selecting a better group for interview because last year a group of 30 students was selected at random and on interview they received poor ratings when compared with those selected on the basis of letters even though the academic profile of this random group was much the same as the selected group and the interviewers were unaware of the basis of selection for interview. There was, moreover, a weak positive association between the assessment given to letters and the interviews of the same candidate.

4. *Do readers agree in their assessments?*

As indicated previously, they do; last year when three readers were each asked to place letters in three separate categories (rather than give numerical scores) there was total agreement in 42 per cent of letters—very considerably better than by random association.

5. *Is this process acceptable to applicants?*

A questionnaire was sent to all the class admitted last year and to an equal number of candidates who were not offered places. Both groups indicated that the procedure was very acceptable. Although most people found it difficult to write the letter, they felt that they had given a satisfactory picture of themselves.

6. *Is there any evidence that the letter predicts the future ability and development of the applicant?*

This is the most important question and we have not been using this technique long enough to be able to give an answer. We will not be able to make a proper assessment until our students are in practice several years from now but that is too long to wait and the assessment of the quality of a physician at that stage is difficult, so we hope for some interim answers by studies of the students during the next few years. Most studies of the predictive value of various admission criteria and curricula use the traditional examination system as a tool to measure success. It seems generally agreed that this, however, is not a complete measure of the 'good doctor' and we hope that we can validate the success of a system that opens medicine not only to people of diverse academic backgrounds, but also to people whose abilities are not measured by standard academic grades.