quate number for our population. This contrasts with 6,082 graduations during 1952 in the United States, whose population is half that of ours.

One of India's imperative national needs is for a much larger number of qualified medical men, but owing to financial stringency we cannot afford to increase the number of medical colleges for many years to come. Many more students would like to take up the career of medicine, as is shown by the number who apply for admission. At Lucknow, for 125 vacancies, we have 1,100 to 1,200 applicants, so that less than 10% of applicants can be admitted. More or less the same figures can be quoted for other medical colleges.

Faults in Present Methods

It is the opinion of many of us (and I have discussed this subject with many colleagues at my own college as well as from other institutions all over India, and also with a number of students) that our present method of selection is unsatisfactory. By depending almost entirely on their scholastic achievements, or rather on their capacity to do well in certain written tests, we find that a number of unsuitable students gain admission, thus excluding others who might have been better fitted temperamentally for the arduous duties of a medical man. The very high failure rates in the examinations are another source of anxiety to us. There are many causes for this, but an important one appears to be that by our present method of selection we get many entrants who are temperamentally unfitted to be medical students, even though they have done well in the competitive pre-medical test.

We feel that, in addition to a written test, there should be some sort of psychological screening, including aptitude tests, which would enable us to obtain better material. Various psychological methods are being devised and practised in certain teaching institutions in Britain and America, and it would be of interest to us to know about these methods and whether their use has led to the selection of better student material.

Finally, many of us feel that an age of admission of 17 years is too low, and that this should be raised to 18 or 19. This will enable students to put in at least one year at the university and make them more mature. It is also felt that the present premedical education is too narrow and that greater stress should be laid on students being given a more liberal education.

SELECTION OF STUDENTS IN THE PHILIPPINES*

BY

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If we were to state the aims or objectives of undergraduate medical education it would give us a pretty fair picture of the type of student that is best qualified to undertake the study. In simplest terms, undergraduate medical education is designed to establish within the medical student a formidable or solid foundation for his future development. It is not the purpose of undergraduate medical education to present the complete, systematic, detailed body of knowledge in every discipline. What is important is to stress the acquisition of fundamental principals which the student may employ in his approach to every subject or to the entire sum of medical knowledge. It must also promote the development in the student of the capacity for the

logical assessment of facts and problems coupled with the ability to secure critical judgment based upon evidence and experience. He must further be able to apply these basic principles and critical judgment to actual problems he may meet in health and in disease. It is also desirable that during this phase of his professional training the student should be encouraged to develop an appreciation and a desire for continued medical education—realizing that graduation merely brings to a close that phase in which he is taught how to study effectively.

The implementation of these objectives is usually guaranteed by: (1) giving the student, not an encyclopaedic mass of material, but the requisite basis of professional knowledge; (2) helping him develop habits promoting a sound critical attitude, with love for method, thoroughness, and accuracy; (3) helping him develop technical skills in the clinics and laboratory, with the capacity to correlate and integrate the information that he may gather; and (4) helping him develop understanding of his surroundings, professional and ethical principles, and a sympathetic comprehension of the doctor-patient relationship.

The Prospective Student

What type of student, then, shall be admitted to the formal study of medicine? What soil must be selected to nurture these seeds of medical education? During these last few days we have been privileged to hear distinguished colleagues from many countries describe and expound the qualities that should be looked for in a prospective entrant into a medical college.

The consensus of opinion to which we personally subscribe is that:

1. He should have a clear idea of what he is after; he must, in other words, have a clear objective in his mind that will guide him in his days as an undergraduate, a house officer, and finally as a practitioner. Needless to say, his motives must be proper.
2. He must be broadly educated in the humanities, with a better regard and preference for human biology probably than for the biology of lower animal life.
3. He must be cultured, naturally with an appreciation of language and literature, with insight and understanding, with a logical trend of mind, and at the same time fired with enthusiasm to serve the individual, family, and country.
4. At the same time he should be thoroughly drilled in the principles of science as a necessary prerequisite for the comprehension of the medical sciences. In other words, he must have a "hard core" of scientific knowledge for the understanding of the more technical subjects in the medical curriculum. We must caution him, however, and urge him to be more familiar with the place and role of these scientific subjects in his education and to avoid becoming a mere repository of a mass—or mess—of unrelated details.
5. He not only should take pains to develop his personality, but must also be imbued with a high sense of duty, love of work and responsibility. Great emphasis should also be placed upon his emotional stability.

Some of these qualities are measurable, others are not. It is really with sympathy and understanding that we should view the problems and great responsibility of selection boards of screening committees. It is true that the academic records of the student, coupled with aptitude testing and favourable personality quotients obtained at interviews, will fill the greater part of the available places in the medical schools. But the real problem lies, as emphasized by Dr. Weaver, in the "borderline cases." It becomes most taxing to undertake the great responsibility of assessing their capabilities. There is really great danger that a student with real potentialities which are as yet undeveloped may be

*A paper read in Section A at the First World Conference on Medical Education, London, 1953.

excluded, and, on the other hand, a misfit be granted admission. From the point of view of screening committees, here is where a calculated risk may have to be taken. If, however, this is always kept in mind and we employ collateral guides such as confidential personality assessments and the like, the margin of error may well be reduced.

There are a few other points that I should like to touch upon very briefly. I am sure it is almost superfluous to state that the applicant should have an unblemished regard for ethics and morality, which we consider to be basic behaviour qualities that will guide him in his professional career.

We must give a thought to those with minor physical defect. In exceptional cases this alone should not be a bar to admission to a medical school. It is a common observation that they turn out to be more dedicated to their work, are dependable, and often are more likely to contribute something to the fund of medical knowledge.

The question of age is important, and we believe that medicine demands maturity in approach. For this reason, in my country we have recently added an extra year to the pre-medical course. The more important reason for this, however, is to increase the number of hours in the humanities.

Language Difficulties

There are about 7,000 islands in the Philippines. Although not all of these are inhabited, sufficient geographical separation led to the development of numerous dialects. It became expedient, therefore, to employ English as the medium of instruction. While the majority of medical students obtain an adequate command of the English language, so as to utilize with advantage the excellent textbooks, journals,

and other publications in this language, it is understandable that some difficulties may creep in at the classroom level. The shades, nuances, and innuendoes sometimes necessary to drive home a point run the risk of being altogether lost. The professor therefore must be careful to transmit his thoughts clearly. It is very fortifying to hear, in our first morning session, an English student, in describing his experience with foreign languages, confess that he sometimes does not understand his own professor discussing in his own language. I am informed that similar situations obtain in other countries.

Finally, I wonder if it would not be an advantage to drop the term "premedical" when referring to the courses necessary as a preliminary to the formal study of medicine. Admission to premedical courses and subsequent rejection by the medical school produce a certain degree of psychic trauma to the student and his family—in other words, a loss of face. A general science course which will permit the rejected student to follow an alternative profession will, we believe, prevent this. We have no doubt that if this introductory course is well organized it will prepare the student not only for medicine but for other callings as well. If we then call this course by another name than "premedical" rejection will lose some of its sting.

We have four medical schools in Manila and we are interested in all phases of medical education. The University of Santo Tomas, which I represent, is particularly interested in this problem of student selection. There is no doubt that the collective opinion set down in this First World Conference on Medical Education will go far towards establishing the basic tenets of efficient medical instruction.

PHYSIQUE AND PERFORMANCE: HONOURS CLASS AT OXFORD

BY

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"Our minds are perpetually . . . wrought on by the temperament of our bodies."—JOHN DRYDEN, 1631–1700.

In 1953 I described the relationship found to exist between physical characteristics and students' choice of faculty at the university (Parnell, 1953a). Final examination results are now available for men whose Sheldonian somatotype had been determined in course of the pilot health survey at the Institute of Social Medicine from 1948 to 1951, and who have since graduated. The results are reported both for their general interest and because they may be found to contribute not only towards improved assessment of personality but also to prediction of performance.

The Sample

The somatotype sample of 321 constitutes 78.2% of the men who joined the student health service, and for whom a first-, second-, or third-class honours result is known. Eleven with fourth-class honours, seven with passes, two who failed, and various others who for one reason or another did not complete the examination are excluded from the analysis on the ground that their numbers were small. Comparison of the distribution of honours-class results for the somatotyped sample with the results of all attenders at the health service showed no significant difference—in fact, hardly any difference at all. How far those volunteering for the health service are representative of the two men's colleges concerned is less easy to answer categorically, because over the five years of the survey only 65% of the freshmen

coming into residence volunteered. In examination results, however, health service attenders did slightly better than the two colleges as a whole (see Table I); they had 3.7% more first-classes, 5% fewer thirds, and incidentally fewer fourths and passes. This raised the question whether athletes might have attended less often than, say, less athletic scholars. Tanner (1952) checked

TABLE I.—*Honours-class Results among Scholars and Commoners who had been Somatotyped*

	Firsts		Seconds		Thirds		Total	
	No.	%	No.	%	No.	%	No.	%
Scholars ..	33	34.4	57	59.3	6	6.3	96	100.0
Commoners ..	22	9.8	131	58.2	72	32.0	225	100.0
Total somatotyped	55	17.1	188	58.6	78	24.3	321	100.0
Total at the two colleges, 1949–53	103	13.4	435	57.2	223	29.3	761	99.9
Whole university, 1951 and 1952 ..	271	8.9	1,695	55.5	1,089	35.6	3,055	100.0

Note.—The following were excluded from the analysis on the ground that the samples were small: 11 men with fourth-class honours, 7 with passes, 2 failures, 6 who went down for one reason or another, 3 who were ill, and 4 who died. The remainder attending the health service were postgraduates, with the exception of a few medical students who in the post-war period did not take an honours degree.

this possibility, and reported that athletes came to be somatotyped quite as often as others. So far as can be ascertained from these two checks of academic and athletic ability, there is no significant bias in the present sample. Although it is neither a complete nor a random