Occasional Papers

Education and Eminence in British Medicine

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British Medical Journal, 1971, 4, 162-163

Summary

The educational background of eminent members of the British medical profession was examined by recourse to *Who's Who*. Substantial differences in background were found among the various medical specialties. Members of specialties enjoying high prestige within the profession—physicians, surgeons—were more likely than other members of the sample to have been to an English school as opposed to one in Scotland, Wales, or Northern Ireland, and to a headmasters' conference school as opposed to a grammar school. Educational background was also found to relate to the aspect of the patient's body on which specialists normally worked. Specialists coming from English headmasters' conference schools were more likely than others to work on living bodies rather than dead bodies or parts of bodies, on the head rather than on the lower trunk, on male bodies rather than female bodies, and on the body's surface rather than its inside.

Introduction and Methods

The evidence presented in this paper concerns the various specialties in British medicine and the educational backgrounds of their most successful members. The study is based on the 1969 edition of *Who's Who*, and the sample is restricted to men born between 1900 and 1925 who were educated in the United Kingdom and whose primary claim to eminence is medical.

Criteria for inclusion in *Who's Who* are not made public and coverage is somewhat conservative. Entries are completed by the individual concerned and normally but not invariably include details of date of birth, marriage and offspring, school and university education, professional qualifications, membership of professional bodies, publications, and appointments held. These data, needless to say, are not necessarily exhaustive. It follows that as a biographical source *Who's Who* is imperfect. On the other hand its accuracy probably bears comparison with responses to interviews or questionnaires and it offers a rate of response that no other source can rival. Inclusion in *Who's Who* serves, in addition, as an acceptable, if fallible, index of the prestige an individual enjoys within the medical profession.

Members of the sample were classified where possible according to their specialties and then compared in the light of the secondary education they had received—whether,

particularly, they had been to a public (headmasters' conference) school or to a grammar school, and whether to a school in England as opposed to one in Scotland, Wales, or Northern Ireland. Specialties drawing most heavily on headmasters' conference schools also tended, it was found, to draw heavily on English ones ($r_s = 0.52$, $P < 0.025$). A handful of specialties were exceptional to this pattern—a disproportionate number of distinguished psychiatrists coming from headmasters' conference schools in Scotland, and distinguished dentists, anaesthetists, pharmacologists, and orthopaedic surgeons coming from English grammar schools. For the purpose of this paper, however, the two background variables are treated together, Table I listing the 23 specialties in which the sample size was 10 or more and giving the proportion in each specialty drawn from headmasters' conference schools in England.

Results

Table I shows that the medical specialties differ noticeably in the education their most successful members received. It indicates too that in general the specialties which draw most heavily on the English headmasters' conference schools are

TABLE I—Proportion of Eminent British Medical Specialists educated at English Headmasters' Conference Schools

		English Headmasters' Conference Schools	No.
Physicians	Cardiological	71%	14
	Dermatological	80%	10
	General and other physicians*	78%	97
	Neurological	50%	10
	Paediatric	68%	22
	Psychiatric	56%	18
Total		72%	171
Surgeons	Ear, nose, and throat	87%	16
	Gastrointestinal and rectal	60%	15
	General and other surgeons*	66%	65
	Obstetric and gynaecological	39%	36
	Ophthalmic	89%	19
	Orthopaedic	68%	19
	Plastic	100%	10
	Thoracic	67%	15
	Urological	80%	10
Total		67%	205
Others	Anatomists	39%	23
	Anaesthetists	65%	17
	Bacteriologists	38%	13
	Dentists	45%	29
	Pathologists†	56%	53
	Pharmacologists	29%	17
	Physiologists	33%	15
	Social and industrial medicine‡	35%	26
Total		45%	193
Grand total		61%	569

*Including specialties numbering fewer than 10.

†Including forensic medicine.

‡Including epidemiologists.

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those which enjoy high prestige within the profession. It would normally be conceded, for example, that consultant physicians and surgeons enjoy higher esteem than do, say, pharmacologists or dentists. (The difference between physicians and surgeons and the rest of the sample is highly statistically significant— $P<0.001$, χ^2 test.) In detail, however, this pattern is not consistent. It is not clear, for instance, among physicians, that dermatologists enjoy higher professional status than neurologists. If anything the reverse is true.

Interpretation of this loose-knit association of professional status with educational background is complicated in two respects. Firstly, the sampling of specialties in *Who's Who* may be biased in the sense that it may be easier, say, for a surgeon than a pharmacologist to gain entry. And, secondly, the specialties may themselves differ both in the extent to which they recruit students from English headmasters' conference schools and to the extent to which such a background is an aid to an individual once recruited. Neither uncertainty, however, reduces from the fact that questions of professional status within medicine are linked to more general questions of educational and social status; the status, specifically, that accrues in the British Isles to those educated at English public schools.

The data given in Table I also enable us to ask whether the specialties drawing particularly heavily on English headmasters' conference schools are distinguished from others in any strictly medical respect—whether differences in educational background bear in any systematic way on the kinds of task the various specialists perform. In the event unexpectedly simple, symbolic differences are found, and their nature widens the frame of reference within which interpretation of the present data takes place.

There is the distinction, first of all, between those specialists who have direct personal contact with and responsibility for patients and those who do not. At its simplest, this separates those whose contact is with living bodies from those who deal with dead bodies, with parts of bodies, or with germs, drugs, or statistics. Those in the first category—surgeons, physicians, dentists, anaesthetists—are significantly more likely to come from English headmasters' conference schools than are their colleagues specializing in pathology, anatomy, physiology, bacteriology, pharmacology, and social medicine ($P<0.001$, χ^2 test). Again, however, there are exceptions, some of which may prove explicable in historical or institutional terms—dentists, for example, who are trained separately from other medical students, and obstetricians and gynaecologists, who have been associated, historically speaking, with midwifery.

A second distinction is that which can be drawn among surgeons—between those who work exclusively on the head (E.N.T. and ophthalmic surgeons) and those who work on the lower trunk (gastrointestinal and rectal surgeons, obstetricians and gynaecologists, and urologists). Again the differences in educational background are substantial. Those who work on the head are significantly more likely to come from English headmasters' conference schools than are those who work below the waist ($P<0.001$, χ^2 test). The one exceptional group is that of the urologists. And though the sample is small it is interesting to find urologists differing in background from obstetricians and gynaecologists despite the contiguity of their clinical responsibilities—the obstetricians and gynaecologists dealing with the generative system in women; the urologists dealing with the urinary system in both sexes and the generative system in men. It is worth noting, parenthetically, that the two groups also differ in their fertility.¹ Data from *Who's Who* indicate that while the obstetricians and gynaecologists have on average more children than any other specialists the urologists have relatively few (3.17 and 2.27 respectively; $P<0.001$, Mann-Whitney U test).

Yet another distinction concerns specialists whose contact is with the surface of the body (physicians, most particularly dermatologists, and anaesthetists), compared with those who

deal directly with its inner workings. Some specialties are difficult to categorize in this second respect but others unequivocally deal with the body's insides (all surgeons except plastic surgeons, anatomists, pathologists, and physiologists). Those who deal with the surface are significantly more likely to come from English headmasters' conference schools than those who deal with the body's insides ($P<0.05$, χ^2 test).

In summary those specialties concerned with the living as opposed to the dead, the head as opposed to the lower trunk, the male as opposed to the female, and the surface of the body as opposed to its insides are in each case more likely to come from English headmasters' conference schools than one would expect by chance. These differences are summarized in Table II.

TABLE II—Differences in Educational Background between Medical Specialists grouped in terms of their Relation to the Human Body

Percentage of Specialists from English Headmasters' Conference Schools		Significance of Difference
High	Low	
Living bodies (68%)—physicians, surgeons, dentists, anaesthetists	Dead bodies, parts of bodies, etc. (45%)—pathologists, anatomists, physiologists, bacteriologists, pharmacologists	<0.001
Head (89%)—E.N.T., ophthalmic	Lower trunk (51%)—intestinal and rectal surgeons, obstetricians and gynaecologists, urologists	<0.001
Male bodies (80%)—urologists	Female bodies (39%)—obstetricians and gynaecologists	<0.06
Surface of body (72%)—physicians, anaesthetists	Inside body (60%)—all surgeons (except plastic surgeons), pathologists, anatomists, physiologists	<0.05

Discussion

Taken together the data in Tables I and II suggest that status within the medical profession is open to analysis in terms that are not self-evidently reducible to questions of medical skill. That for historical institutional or symbolic reasons certain specialties have higher prestige than others, and that medical students from schools enjoying high social status gravitate naturally to the more prestigious medical specialties. It is arguable, of course, that boys from English headmasters' conference schools achieve positions of high status within medicine because they are in some professional respect well adapted to it; that they display, for example, a confidence in dealing with patients that students from less privileged backgrounds lack. On the other hand it is a little hard to see how such an explanation could account for the kinds of difference summarized in Table II. In its turn Table II raises the possibility that symbolic categories familiar from structural analyses performed by cultural anthropologists on the myths and rituals of economically primitive peoples may not be entirely irrelevant to the analysis of professional life in our own society.²

Finally, it might be objected that while the subjects of the present inquiry are the "role models" to whom the present generation of medical students now look, evidence about their education is retrospective and concerns a state of affairs, both within society and in the profession, that may now have been superseded. The weight of this criticism can only be judged once further studies have been made of groups of younger specialists and of students themselves on the brink of specialization.

References

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