Intake, output, and drop out in United Kingdom medical schools

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Precise knowledge about production of doctors is important for planning, but existing data make satisfactory analysis difficult.

Intake, output, and drop out data

Intake—Two sets of figures are available: university returns "at the beginning of the autumn term" and a December census for the University Statistical Record of intake "during the year ended 31 July." Comparison shows differences of 9-56 in the annual intake numbers for 1990-3 over all UK medical schools.

Output—Figures from the University Statistical Record—the medical return—give numbers gaining a first registerable medical qualification "during the year ended 31 July." Other tables, compiled by the Higher Education Funding Council for England, show students "leaving due to success," and give "revised calculation of % drop out" year by year during the undergraduate course. The methods of calculation are difficult to understand, but these tables, made available to individual medical schools, seem to be the only official drop out data. Although both sets of figures appear to be based on the academic year, comparison shows discrepancies of up to 355 in the quoted total numbers of qualifiers for individual years 1989-94 (table 1).

Table 1—Medical school intake, output of medical qualifiers, and derived percentage drop out rate for all United Kingdom medical schools combined for 1989-94

Year of qualification	Input of students five years previously ("year ended 31 July" data)	Output of qualifiers		Drop out rate (%)	
		"Medical return" data	"Revised % drop out" data	From medical returns	From revised % drop out data
1989	4125	3607	3618	12.6	12.3
1990	4093	3718	3363	9.2	17.8
1991	4119	3573	3712	13.3	9.9
1992	4125	3644	3595	11.7	12.8
1993	4186	3635	3593	13.2	14.2
1994	4219	3715	3577	11.9	15.2
Six year mean				12.0	13.7

Drop out—Medical students who enrolled in October 1991 will mostly qualify in the summer of 1996. Data for the year ended 31 July 1996 will miss those of the 1991 entry who have to resit examinations later in the year and those who have taken an intercalated degree or whose course has been prolonged for other reasons such as ill health. This undercounting will be offset by the inclusion of resitters and other late qualifiers from the 1990 entry or before. So long as cohort sizes and other factors change only slightly it is reasonable to compare intake with output five years later to derive a drop out rate.¹

Table 1 shows that, depending on which output figures are used, the drop out rate for the qualifying years 1989-94, calculated in this way, varied from 9.2% to 17.8%. Apart from two figures, the rates were always above 11%, as were the averages for the six year period. Comparing totals for three year periods of intake and output gives estimates ranging from 11.7% to 14.1%.

In striking contrast, the Higher Education Funding Council's "revised calculation of % drop out" tables give rates for 1988-9 to 1993-4 of "4.68% to 5.94%" for United Kingdom and European Union based students and of "5.28% to 13.37%" for overseas based students.

For our Medical Careers Research Group survey of 1993 qualifiers we compiled a cohort for the calendar year, which yielded 3675 doctors. Excluding nine respondents who had not begun their course in the United Kingdom,² this gives a drop out rate of 12.4%.

Discussion

Over many years committees have pondered whether we have enough doctors and enough medical school places.³ The Todd Report of 1968 estimated that by 1994 we should need to train more than 4500 doctors a year for the United Kingdom,¹ and we are currently producing a thousand a year less.

Getting the right intake needs knowledge and monitoring of drop out rates. Official tables quoted a drop out rate of about 5%. The Medical Workforce Standing Advisory Committee put the figure at around 10%,⁴ and my calculations, using the methods of the Todd committee, suggest at least 12%.

Relatively high drop out rates have always been quoted for overseas based students. After a 1992 recommendation⁵ medical school quotas of overseas based students rose from 5% to 7.5%; this has obvious implications during, and also after, the undergraduate course.

There is much confusion and uncertainty in the available figures. Data collection has now been transferred to the new Higher Education Statistics Agency, which proposes to collect information more rigorously. This opportunity should be taken to improve our medical workforce data for the future.

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1 Royal Commission on Medical Education. *Report*. London: HMSO, 1988 (Cmd 3569).

2 Second Advisory Committee for Medical Manpower Planning. *Report*. London: Department of Health, 1989.

3 Parkhouse J. *Medical manpower in Britain*. Edinburgh: Churchill Livingstone, 1979.

4 Medical Workforce Standing Advisory Committee. *Planning the medical workforce: second report*. London: Department of Health, 1995.

5 Medical Manpower Standing Advisory Committee. *Planning the medical workforce. First report*. London: Department of Health, 1992.

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ONE HUNDRED YEARS AGO

Baby Buds. By ELLIS ETHELMER. (Congleton: Mrs. Wolstenholme West. 1895. Cr. 8vo, pp. 48, 1s.)—This little manual is intended as a guide to mothers and teachers in answering the inconvenient questions of children as to the procreation of the human species. The author considers that it is far better to teach children simply and seriously how life originates than to let curiosity become prurient and inquiry indecent. By easy steps the child in

this little book is led to understand by the explanation of the action of the pollen on the ovules and the consequent production of fruit, that the sexual organs are sacred, to be used when the time arrives in the renewal of life. A very difficult and delicate matter is treated with considerable skill, although many will think that it had better have been left alone.

(BMJ 1896;ii:28.)