TALKING POINT

Careers of doctors qualifying in Britain in 1974: a report on their employment status in 1979

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In medical manpower planning it is important to estimate the working capacity of a given set of doctors. We have been looking at the career preferences of doctors qualifying in the United Kingdom for several years, and we thought that it would be interesting to investigate the employment status of one of our cohorts of qualifiers. In particular, we wanted to determine the proportion of doctors still working in the NHS or elsewhere in the public sector five years after qualifying and to estimate their contribution in whole-time equivalent (wte) posts.

Methods

The sampling frame for doctors qualifying in the United Kingdom in 1974 was prepared using lists of names and addresses obtained from their medical schools during the pre-registration year in 1975. All qualifiers were written to in 1975 to inquire about their career preferences.¹ Further follow-up inquiries were made in 1977, 1979,² and 1981 using updated addresses obtained from *The Medical Directory*, the GMC's *Medical Register*, and the GMC itself. In the follow-up inquiries, the qualifiers were asked for details of their current and previous posts.

The 1979 employment status of a 1974 qualifier was taken to be his or her occupation group in or around November 1979, when the 1979 questionnaires were first sent out. Occupation groups were based largely on those used by the Department of Health and Social Security (DHSS) in their civilian doctors statistics tables. We thought that it was necessary to obtain details for as many qualifiers as possible since those whose occupation remains unknown may well be atypical of the general picture.

The 1979 inquiry provided us with the employment status of only 1759 (74.9%) of the 2350 men and women known to have qualified in 1974. Two hundred and sixty-nine of the 1979 non-respondents replied in 1981, giving details of posts held in 1979. We then asked the DHSS for information about 250 untraced qualifiers whom we believed to have been practising in the United Kingdom in 1979. The DHSS was kind enough to supply us with aggregate details of 191 of these from their 1979 civilian doctors careers index (CDCI). We subsequently received replies to our questionnaires from 30 of the qualifiers whose names were sent to the DHSS, including seven who had not been traced by the DHSS. The numbers of men and women traced using each source are shown in table I, together with the numbers of untraced men and women and their likely locations.

The probable 1979 employment status of 35 of the qualifiers traced by the DHSS could have been obtained from the 1980 edition of *The Medical Directory*. Thus by our own efforts we

were able to find out what 2097 qualifiers (89.2%) were doing in 1979. With the additional information supplied by the DHSS we were able to trace 2230 qualifiers (94.9%).

Of the 120 untraced qualifiers, 39 were thought to be in the United Kingdom at the time of the 1979 survey, and all had addresses in the principal list of the 1979 *Medical Register*. Seventy-one others were not on the Register; they could not have been practising medicine legitimately in the United Kingdom, and the last known addresses of 54 of them were abroad. A further 10, though on the Register, were also thought to be overseas from their last known addresses. There remained, therefore, only 17 qualifiers (0.7%) whose location and occupation were unknown, none of whom were in the 1979 *Medical Register*.

TABLE I—Numbers (%) of men and women qualifiers traced and untraced

	Men	Women	Unknown	Total
Qualifiers traced: source				
1979 inquiry	1259 (73.2)	500 (79.6)	0	1759 (74.9)
1981 inquiry*	203 (11.8)	73 (11.6)	0	276 (11.7)
DHSS 1979 CDCI†	144 (8.4)	24 (3.8)	0	168 (7.1)
1981 inquiry and DHSS				
1979 CDCI*	20 (1.2)	3 (0.5)	0	23 (1)
Deceased	4 (0.2)	0	0	4 (0.2)
Total traced	1630 (94.8)	600 (95.5)	0	2230 (94.9)
Qualifiers untraced: location				
Thought to be in UK	23 (1.3)	16 (2.5)	0	39 (1.7)
Thought to be abroad	53 (3.1)	10 (1.6)	1 (50)	64 (2.7)
Location unknown	14 (0.8)	2 (0.3)	1 (50)	17 (0.7)
Total untraced	90 (5.2)	28 (4.5)	2 (100)	120 (5.1)
Total	1720 (100)	628 (100)	2 (100)	2350 (100)

CDCI = Civilian doctors careers index.

*For non-respondents to 1979 inquiry.

†For non-respondents to 1979 and 1981 inquiries.

Results

EMPLOYMENT STATUS

Table II shows the 1979 employment status of men and women qualifying in 1974, and table III gives a breakdown of the grades of employment of those in the NHS. Following the rules and occupation groups used by the DHSS in their tables of civilian doctors statistics, each qualifier is counted once only in the tables. Doctors holding honorary or part-time hospital posts, for example, are classified under their main appointment. The category "other public sector" covers doctors employed by the Medical Research Council (MRC), the Public Health Laboratory Service Board, the Department of Employment, and the DHSS, while "non-public sector" includes doctors employed by industrial organisations and those in private practice.

From their responses to questionnaires, 15 men and four women seemed to be employed partly in NHS and partly in non-NHS appointments. These qualifiers have been counted in the total of doctors working for the NHS in tables II and III.

There were 1296 men (75.3%) and 444 women (70.7%) known to be working for the NHS five years after qualifying, a

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total of 1740 doctors (74%). When doctors working for universities, the MRC, and other public sector employers were included there were 1382 men (80.3%) and 463 women (73.7%) still working in the public sector five years after qualifying, a total of 1845 doctors (78.5%).

TABLE II—Employment status in 1979 by sex (figures are numbers (%))

Occupation group	Men	Women	Unknown	Total
United Kingdom:				
NHS*	1296 (75.8)	444 (70.7)	0	1740 (74.0)
Universities	43 (2.5)	7 (1.1)	0	50 (2.1)
Other public sector	43 (2.5)	12 (1.9)	0	55 (2.3)
Public sector total	1382 (80.3)	463 (73.7)	0	1845 (78.5)
Non-public sector	6 (0.3)	3 (0.5)	0	9 (0.4)
Non-medical	5 (0.3)	0	0	5 (0.2)
Unemployed	22 (1.3)	89 (14.2)	0	111 (4.7)
Unknown but in 1979				
Medical Register	23 (1.3)	16 (2.5)	0	39 (1.7)
United Kingdom total	1438 (83.6)	571 (90.9)	0	2009 (85.4)
Armed Forces	54 (3.1)	1 (0.2)	0	55 (2.3)
Abroad:				
Medical	154 (9.0)	36 (5.7)	0	190 (8.1)
Unemployed	3 (0.2)	8 (1.3)	0	11 (0.5)
Unknown	53 (3.1)	10 (1.6)	1 (50)	64 (2.7)
Abroad total	210 (12.2)	54 (8.6)	1 (50)	265 (11.2)
Deceased	4 (0.2)	0	0	4 (0.2)
Unknown	14 (0.8)	2 (0.3)	1 (50)	17 (0.7)
Total	1720 (100)	628 (100)	2 (100)	2350 (100)

*Includes 15 men and four women apparently in partly NHS and partly university or other public sector posts.

TABLE III—NHS employment status of men and women in 1979 (figures are numbers (%))

Grade	Men	Women	Total
<i>Hospital</i>			
Senior hospital doctor:			
Consultant*	2 (0.1)	1 (0.2)	3 (0.1)
Senior registrar	123 (7.2)	25 (4.0)	148 (6.3)
Other	2 (0.1)	1 (0.2)	3 (0.1)
Total	127 (7.4)	27 (4.3)	154 (6.6)
Junior hospital doctor:			
Registrar	476 (27.7)	119 (18.9)	595 (25.3)
SHO	117 (6.8)	43 (6.8)	160 (6.8)
House officer	0	2 (0.3)	2 (0.1)
Other	6 (0.3)	0	6 (0.3)
Total	599 (34.8)	164 (26.1)	763 (32.5)
Part-time hospital medical officer	4 (0.2)	12 (1.9)	16 (0.7)
Hospital total	730 (42.4)	203 (32.3)	933 (39.7)
<i>Non-hospital</i>			
General practitioner	552 (32.1)	202 (32.2)	754 (32.1)
Post in community health service†	14 (0.8)	39 (6.2)	53 (2.3)
Non-hospital total	566 (32.9)	241 (38.4)	807 (34.3)
Total	1296 (75.3)	444 (70.7)	1740 (74.0)

*Includes one man and one woman with locum appointments, and one man with previous dental training who was a consultant in oral surgery. In addition, one man employed as a consultant in oral medicine in the Army also had previous dental training.

†Includes one man in ophthalmic medical practice.

The numbers of qualifiers known to be working outside the public sector, to have left medicine, or to have died were small. It is difficult to obtain information about such qualifiers, and the numbers quoted in table II may be underestimates of the true figures. The 23 men and 16 women who were not definitely traced but whose names were in the 1979 *Medical Register* were probably practising in the United Kingdom, and, possibly, some of these could have been working outside the public sector. Thus a total of 1411 men (82%) and 482 women (76.8%) were known or thought to be practising medicine in the United Kingdom in 1979, an overall practising rate of 80.6%.

Two hundred and sixty-five qualifiers (11.3%) were known or presumed from last known addresses to be living abroad in 1979. The true emigration rate may be slightly higher, as a majority of the 17 qualifiers with unknown occupation and location may also have emigrated.

PART-TIME WORKING IN THE NHS

The totals of doctors working in the NHS and elsewhere in the public sector include some who were working part time. Respondents to the questionnaires were asked to indicate the number of weekly sessions worked if part time, whereas the DHSS was asked only for aggregate totals of doctors working full time and part time. Posts were assumed to be full time unless information was available to the contrary.

Table IV shows the numbers of part-time sessions a week worked by women in the NHS for whom the part-time post was the only known employment at the time of the 1979 survey. Three of the

TABLE IV—Number of weekly NHS sessions worked by purely part-time women doctors

No of part-time sessions worked/week	No of women	Total No of sessions
<1	6	2
1	12	12
2	23	46
3	11	33
4	8	32
5	27	135
6	25	150
7	19	133
8	8	64
9	4	36
Unknown	7	NK
Total	150	643

NK = Not known.

seven women for whom the number of weekly sessions was unknown were non-respondents. The 150 women in table IV represented 33.7% of those known to be working for the NHS, and the mean number of weekly part-time sessions was 4.5.

There were also 10 men for whom a part-time NHS post was the only known employment at the time of the 1979 survey. One was working five sessions a week, but the numbers of sessions worked by the nine others, only one of whom had replied to the questionnaires, were unknown.

As pointed out above, there were a further 15 men and four women who seemed, from questionnaire responses, to be working part time with the NHS while holding a non-NHS, usually an academic or research, post. The numbers of NHS or other sessions worked by all but one of these doctors were unknown.

UNEMPLOYMENT IN THE UNITED KINGDOM

In the United Kingdom 111 qualifiers (4.7%), comprising 22 men (1.3%) and 89 women (14.2%), were not in regular employment at the time of the 1979 inquiry. Of these, four men and five women were doing occasional work of some kind. The main reasons given for unemployment by men and women among 1974 qualifiers were discussed in a previous article.²

As noted in that study, most unemployed women were temporarily out of circulation for domestic reasons. From their questionnaire responses it seemed that several other qualifiers were temporarily unavailable for employment because, for example, they were studying for examinations or moving. At least four men and three women were waiting to take up their next post. Allowing for such qualifiers, there seemed to be at most 13 men (0.8% of all men and 0.9% of those known or thought to be in the United Kingdom) and 30 women (4.8% of all women and 5.3% of those in the United Kingdom) who were available for work but could not find suitable employment, a combined total of 43 qualifiers (1.8% of all qualifiers and 2.1% of those in the United Kingdom).

Thus unemployment did not seem to be a serious problem among 1974 qualifiers in 1979, though it was noticeable that some women who were not in regular employment anticipated or had experienced difficulty in finding employment compatible with their domestic arrangements.

Because of part-time working the numbers of doctors working in the public sector, including the NHS, are not accurate reflections of the manpower concerned. Among 179 qualifiers thought to be working part time for the NHS the number of weekly sessions worked

was not known for 35; 16 of these were purely part-time workers, and for numbers of wte posts in table V they were assumed to be working five NHS sessions a week. The 19 others were full-time doctors apparently working partly for the NHS and partly for other public sector employers: they were assumed to be working five NHS and five non-NHS sessions a week in table V. The table also shows estimated wte in medicine for 1974 qualifiers in the United Kingdom as a whole, those in the armed Forces, and those abroad. The contribution of untraced qualifiers was estimated as: described in the footnotes to the table.

BREAKDOWN OF 1979 EMPLOYMENT STATUS BY MEDICAL SCHOOL

Table VI gives a breakdown of the 1979 employment status of 1974 qualifiers by their clinical medical schools. The percentage of

TABLE V—Estimated whole-time equivalent posts held by men and women in medicine (figures are numbers (%))

Occupation group	Men	Women	Unknown	Total
United Kingdom:				
NHS	1283.2 (74.6)	360.5 (57.4)	0	1643.7 (69.9)
Universities	46.0 (2.7)	6.5 (1.0)	0	52.5 (2.2)
Other public sector	46.8 (2.7)	13.0 (2.1)	0	59.8 (2.5)
Public sector total	1376.0 (80.0)	380.0 (60.5)	0	1756.0 (74.7)
Non-public sector	6.0 (0.3)	1.2 (0.2)	0	7.2 (0.3)
Unknown but in 1979				
Medical Register*	22.5 (1.3)	11.0 (1.8)	0	33.5 (1.4)
United Kingdom total	1404.5 (81.7)	392.2 (62.5)	0	1796.6 (76.5)
Armed Forces	54.0 (3.1)	1.0 (0.2)	0	55.0 (2.3)
Abroad:				
Medical	154.0 (9.0)	35.1 (5.6)	0	189.1 (8.0)
Unknown†	52.0 (3.0)	8.0 (1.3)	1 (50)	61.0 (2.6)
Abroad total	206.0 (12.0)	43.1 (6.9)	1 (50)	250.1 (10.6)
Unknown‡	13.7 (0.8)	1.4 (0.2)	1 (50)	16.1 (0.7)
Total	1678.2 (97.6)	437.7 (69.7)	2 (100)	2117.9 (90.1)

*23 men and 16 women; wte contributions estimated proportionately using all other United Kingdom figures.

†53 men, 10 women, and one of unknown sex; wte contributions estimated proportionately using all other abroad figures.

‡14 men, two women, and one of unknown sex; wte contributions estimated proportionately using all other figures.

TABLE VI—Clinical medical school by employment status in 1979 (figures are percentages of qualifiers in each medical school)

Medical school	Total No of qualifiers	United Kingdom								Total UK	Armed Forces	Abroad	Deceased	Unknown	
		Public sector (PS)*				Non- PS	Non- medical	Unemployed	Unknown						
		NHS	Universities	Other PS	Total PS										
Provinces:															
Birmingham	115	81.7	0.9	2.6	85.2	0	0	1.7	0.9	87.8	1.7	10.4	0	0	
Bristol	89	77.5	1.1	3.4	82.0	0	0	7.9	0	89.9	2.2	7.9	0	0	
Leeds	74	78.4	1.4	1.4	81.1	0	0	5.5	0	86.5	1.4	10.8	0	1.4	
Liverpool	119	74.8	2.5	4.2	81.5	0.8	0.8	4.2	0.8	88.2	3.4	7.6	0	0.8	
Manchester	146	76.0	1.4	3.4	80.8	1.4	0.7	4.8	1.4	89.0	1.4	7.5	0	2.1	
Newcastle	79	77.2	2.5	2.5	82.3	1.3	0	5.1	1.3	89.9	0	8.9	0	1.3	
Oxford	48	60.4	4.2	6.3	70.8	0	0	8.3	2.1	81.3	2.1	14.6	0	2.1	
Sheffield	80	75.0	1.3	2.5	78.8	0	0	1.3	1.3	81.3	1.3	17.5	0	0	
Provinces total	750	76.1	1.7	3.2	81.1	0.5	0.3	4.5	0.9	87.3	1.7	10.0	0	0.9	
London:															
Charing Cross	40	77.5	0	2.5	80.0	0	0	5.0	0	85.0	7.5	7.5	0	0	
Guy's Hospital	115	73.0	0	3.5	76.5	0	0	2.6	2.6	81.7	5.2	12.2	0	0.9	
King's College	83	71.1	2.4	4.8	78.3	1.2	0	2.4	0	81.9	2.4	15.7	0	0	
The London	113	73.5	2.7	3.5	79.6	0.9	0.9	2.7	0.9	85.0	1.8	12.4	0.9	0	
The Middlesex	83	72.3	4.8	2.4	79.5	0	0	2.4	3.6	85.5	2.4	12.0	0	0	
The Royal Free	91	68.1	2.2	1.1	71.4	1.1	0	13.2	1.1	86.8	3.3	9.9	0	0	
St Bartholomew's	84	65.5	6.0	2.4	73.8	0	1.2	4.8	1.2	81.0	1.2	16.7	0	1.2	
St George's	62	82.3	3.2	1.6	87.1	0	0	1.6	1.6	90.3	1.6	8.1	0	0	
St Mary's	82	80.5	1.2	0	81.7	0	0	1.2	2.4	85.4	2.4	12.2	0	0	
St Thomas's	81	71.6	0	1.2	72.8	1.2	0	3.7	3.7	81.5	1.2	12.3	3.7	1.2	
University College	107	72.9	3.7	4.7	81.3	0	0	6.5	1.9	89.7	2.8	7.5	0	0	
The Westminster	69	75.4	1.4	0	76.8	0	0	7.2	1.4	85.5	5.8	8.7	0	0	
London total	1010	73.2	2.4	2.5	78.0	0.4	0.2	4.5	1.8	84.9	3.0	11.5	0.4	0.3	
Wales	93	84.9	0	1.1	86.0	0	0	2.2	2.2	90.3	1.1	7.5	0	1.1	
Scotland:															
Aberdeen	95	68.4	3.2	2.1	73.7	0	0	9.5	1.1	84.2	5.3	10.5	0	0	
Dundee	66	66.7	3.0	0	69.7	0	0	10.6	3.0	81.8	3.0	15.2	0	0	
Edinburgh	146	76.6	2.1	1.4	80.1	0	0.7	4.1	0.7	81.8	2.7	9.6	0	2.1	
Glasgow	190	68.4	2.6	0.5	71.6	0.5	0	4.2	4.7	81.1	0	17.4	0	1.6	
Scotland total	497	70.6	2.6	1.0	74.2	0.2	0.2	6.0	2.4	83.1	2.2	13.5	0	1.2	
Overall total	2350	74.0	2.1	2.3	78.5	0.4	0.2	4.7	1.7	85.5	2.3	11.3	0.2	0.7	

1974 qualifiers still working for the NHS five years after qualifying varied from 60.4% for Oxford to 84.9% for Wales. St Bartholomew's showed the highest proportion of qualifiers employed in universities (6.0%), while most of Oxford's 6.3% who were working for other public sector employers were employed by the MRC. The total percentages of qualifiers still working in the public sector ranged from 70.8% for Oxford to 87.1% for St George's. There were slightly higher percentages of qualifiers working in NHS or other public sector posts from provincial medical schools in England than from London medical schools, but the corresponding overall percentages for Scottish medical schools were rather lower.

Of Royal Free qualifiers, 13.2% were in the United Kingdom but not in regular employment at the time of the 1979 survey, by far the largest proportion of unemployed qualifiers for medical schools in England Wales. There were 44 women qualifiers from the Royal Free out of a total of 91, giving the highest proportion of women for any medical school (48.4%), and 10 of these women were unemployed. United Kingdom unemployment was also high for Aberdeen (9.5% of all qualifiers) and Dundee (10.6%) mainly because of nine and seven women respectively from the two medical schools who were not working. This pushed the combined rate for Scottish medical schools to 6.0%, considerably above the overall figure of 4.7%.

The number of 1974 qualifiers abroad in 1979 varied considerably between medical schools: 14 Sheffield qualifiers (17.5%) and 33 Glasgow qualifiers (17.4%) were known to have emigrated, while only three qualifiers from Charing Cross (7.5%) had gone abroad. Overall, the emigration rate was highest for Scottish medical school qualifiers, with a slightly higher proportion of London qualifiers than provincial qualifiers having gone abroad.

Table VII shows how the qualifiers from each medical school who were working in the NHS in 1979 were distributed between the different medical services.

The medical schools in northern England (Leeds, Liverpool, Manchester, Newcastle, and Sheffield) and Glasgow showed higher percentages of qualifiers in general practice than in the hospital service. Overall, there were slightly more qualifiers from the provincial medical schools in general practice than in hospital posts; the reverse was true for qualifiers from London medical schools, Wales, and Scottish medical schools.

The percentage of qualifiers in the community health service was highest at Charing Cross (7.5%) and Manchester (5.5%), though the actual numbers were small (three and eight respectively).

TABLE VII—Clinical medical school by NHS occupation groups in 1979 (percentage of qualifiers in each medical school)

Medical school	Total No of qualifiers	NHS occupation group			Total
		Hospital service	General practice	Community health	
Provinces:					
Birmingham	115	43.5	36.5	1.7	81.7
Bristol	89	42.7	32.6	2.2	77.5
Leeds	74	35.1	40.5	2.7	78.4
Liverpool	119	34.5	36.1	4.2	74.8
Manchester	146	31.5	39.0	5.5	76.0
Newcastle	79	34.1	41.8	1.3	77.2
Oxford	48	37.5	18.8	4.2*	60.4
Sheffield	80	27.5	46.3	1.3	75.0
Provinces total	750	35.7*	37.3	3.1	76.1
London:					
Charing Cross	40	40.0	30.0	7.5	77.5
Guy's Hospital	115	45.2	26.1	1.7	73.0
King's College	83	42.2	27.7	1.2	71.1
The London	113	40.7	31.0	1.8	73.5
The Middlesex	83	44.6	26.5	1.2	72.3
The Royal Free	91	37.4	28.6	2.2	68.1
St Bartholomew's	84	44.0	20.2	1.2	65.5
St George's	62	43.5	38.7	0	82.3
St Mary's	82	47.6	30.5	2.4	80.5
St Thomas's	81	45.7	24.7	1.2	71.6
University College	107	46.7	22.4	3.7	72.9
The Westminster	69	40.6	33.3	1.4	75.4
London total	1010	43.4	27.8	2.0	73.2
Wales	93	46.2	37.6	1.1	84.9
Scotland:					
Aberdeen	95	35.8	31.6	1.1	68.4
Dundee	66	40.9	25.8	0	66.7
Edinburgh	146	43.2	30.8	2.7	76.7
Glasgow	190	31.6	34.7	2.1	68.4
Scotland total	497	37.0	31.8	1.8	70.6
Overall total	2350	39.7	32.1	2.3	74.0

*Includes one ophthalmic medical practitioner.

Discussion

Several other studies of careers of doctors have been made recently, particularly concerning the employment of women. But few seem to have been specifically geared towards estimating the contribution to NHS or public sector medicine, and many of the studies have concentrated on doctors 10 or more years after qualification, by which time they should have largely settled in their careers. Table VIII presents the results of surveys³⁻⁸ of doctors roughly five years after qualification,

comparing their findings with our own. In assessing the different studies the populations of qualifiers under consideration and the methods used for obtaining names and addresses must be allowed for.

In Table VIII percentages of qualifiers practising medicine and their percentage wte have been calculated relative to the numbers of qualifiers traced, as the total percentage traced is generally only around 75%. Wte contributions have been estimated for the other studies by allocating part-time working half the value of a full-time post. This seems to be a reasonable assumption when compared with the mean numbers of weekly sessions for men and women doctors calculated from our data. For example, relative to the number who were definitely traced the wte contributions for 1974 women qualifiers in medicine in 1979 estimated by this method is 71%, whereas from table VIII the "exact" figure is 70%.

Ward *et al*³ calculated a "participation index" for each of their groups of qualifiers that was analogous to our percentage wte. The values of their participation index for 1949-51 and 1965 graduates were 0.71 and 0.67 respectively: these were virtually identical with the wte percentages for their surveys shown in table VIII (72% and 68%), which were estimated as above.

Six of the surveys reviewed in table VIII concerned only women qualifiers. There seemed to be a gently increasing trend in the percentage of women qualifiers practising approximately five years after qualifying. Their estimated wte contribution dropped in the early 1960s but continued to rise through the 1970s, mainly due to an increasing proportion of women working full time.

The percentages of men practising and their wte contributions for the survey of Last and Broadie⁶ were similar to our own. Higher values were obtained by the Scottish Council for Post-graduate Education⁷—in its survey only one man out of 268 was known to be unemployed.

Two of the surveys of the careers of women doctors shown in table VIII do not seem to fit in with the general pattern. In the surveys of Flynn and Gardner⁵ and Beaumont⁸ the percentage of women still practising two to six years after qualifying seemed to be rather high, particularly for those in full-time employment. Consequently, the wte contributions were also high. This may have been because of the more recent graduates

TABLE VIII—Surveys of careers of doctors approximately five years after qualification

Year(s) of interest	Survey details		Years since qualific- ation	Overall sample size	No traced			Total % traced	% practising medicine				% wte in medicine		
	Relevant coverage	Sampling frame			Men	Women	Total		Men	Women		Total	Men	Women	Total
										Part-time	Full-time				
1953-5	1977 survey of 1949-51 women graduates ³	GMC certified lists	4	1396		1028		74		65	13			72	
1962	All women doctors resident in UK (including 1953-7 graduates) ⁴	1960 <i>Medical Directory</i> and new registration lists	5-9	NK		1320		73†		44	34			62	
1963	All women doctors resident in UK (including 1950-9 graduates) ⁴	BMA divisional lists	4-13	NK		2637		72†		44	33			61	
1966	Women graduates from Royal Free (including 1960-4 graduates) ⁵	List of graduates from medical school	2-6	NK		251		87†		61	23			73	
1969	1977 survey of 1965 women graduates ³	GMC-certified lists	4	467		339		73		55	25			68	
1969	British doctors registering between 1962-5 ⁶	Respondents to 1966 stratified 50% survey	3-7	1496	1022	331	1353	90	97	48	33	93	96	65	89
1975	1970 graduates from Scottish medical schools ⁷	Graduation lists; addresses from <i>Medical Register</i> and GMC	5	476	268	90	358	75	100‡	48	34	95	100‡	65	91
1976	Women doctors in three Thames regions (including 1969-73 graduates) ⁸	1975 <i>Medical Register</i>	2-6	NK		495		75†		74	15			82	
1979	1974 graduates*	Preregistration lists; updated addresses from <i>The Medical Register</i> , <i>The Medical Directory</i> , and GMC	5	2350	1630	600	2230	95	98	58	26	94	98	70	90

NK = Not known.

†Percentage of all doctors sent to in survey.

*Current survey.

‡99.6%—one man was known to be unemployed.

in the samples considered, who were more likely to have been in full-time work. It is possible, however, that the populations of women in those two surveys were not representative of all women doctors. Our data are not sufficiently complete to allow an exact breakdown of the relative wte contributions of women from each medical school. From the information we have, however, the wte contribution to medicine for women from the Royal Free, for example, was in the range 55-60%. This is considerably below both the overall figure for women in table V (67.9%) and the estimate from Flynn and Gardner's data (73%).

Our results may also be compared with projected stocks of all British-born doctors active in medicine in Great Britain, as estimated in the DHSS Green Paper on medical manpower.⁹ Table IX shows the numbers and percentage of wte contributions of 1974 qualifiers (at least 95% of whom are known to be British born) known to be active in medicine in Great Britain in 1979—that is, working in medicine or temporarily unemployed and assumedly intending to return to medicine at the time of the 1979 survey. These are compared with DHSS projections for all British-born doctors in 1975 and 1985.

TABLE IX—Civilian doctors active in medicine in Great Britain

Year	Population	No			% whole-time equivalent		
		Men	Women	Total	Men	Women	Total
1975 All British-born doctors		42 200	11 800	54 000	97.2	77.1	92.8
1979 All traced 1974 qualifiers		1 410	555	1 965	98.0	68.7	89.7
1985 All British-born doctors		47 700	23 600	71 200	97.3	78.8	91.3

The 1979 wte contribution for men qualifying in 1974 was slightly higher than the DHSS projected percentages for 1975 and 1985. The contribution for women was rather low, reflecting the wastage at this stage in their career due largely to domestic commitments such as pregnancy and the care of young children.

The Medical Manpower Steering Group¹⁰ reported the wte of British-born and Irish-born civilian doctors working in the NHS during 1974-6 to be about 80% of the total number of active British-born and Irish-born doctors in Great Britain. The group regarded a range of 80-85% as being a realistic assumption for future projections. From our data the corresponding percentage for 1974 qualifiers in 1979 was 83.6%, within the group's expectations. Even so, the wte contribution to the NHS in 1979 as a percentage of all known 1974 qualifiers was only 69.9%—that is, the overall wastage due to part-time working, unemployment, non-NHS employment, working in the armed Forces, and emigration was of the order of 30%.

Conclusions

In this study we were able to identify the 1979 employment status of 94.9% of the 2350 doctors known to have qualified in the United Kingdom in 1974, and we knew the probable whereabouts of a further 4.4%. This represents a considerable improvement on the response rates in similar studies of doctors' careers. We were, therefore, able to build up an accurate picture of what 1974 qualifiers were doing in 1979.

In comparison with recent studies of women doctors over the entire United Kingdom, there were indications that the

percentage of women practising five years after qualifying and their wte contribution to medicine were both rising. There also seemed to be a swing away from part-time into full-time working. There was little with which to compare corresponding findings for men, but our results seemed to confirm those of recent studies. The overall contribution of 1974 qualifiers to the NHS agreed with a recent projection that of all British-born civilian doctors in Great Britain, a percentage wte of 80-85% were working in the NHS. Allowing for doctors working in the armed Forces or overseas, however, the true wte contribution to the NHS for our qualifiers was only 69.9%, while that for the public sector in general—NHS, universities, MRC, etc—was 74.7%. The overall contribution to medicine was 90.1%.

Anxieties have been expressed about the possibility of future medical unemployment. These have usually been based on comparisons of the likely output from 3800-4000 medical school places a year with the foreseeable number of consultant and general practice vacancies in each year. If the analysis is confined, in this way, to the main sectors of the NHS our figures suggest that, after five years in medical practice, 3500-3750 qualifying doctors are likely to seek about 2450-2600 whole-time vacancies throughout the NHS. Allowing for retirements and other losses, this would not leave a large margin for expansion. In making this estimate, we believe that we have traced all known 1974 qualifiers who were working for the NHS at the time of the 1979 survey; there was no evidence of any appreciable degree of involuntary unemployment; and, apart from women with domestic commitments who were seeking part-time employment, there was little to suggest that more doctors would have sought NHS posts had they been available.

We thank all those 1974 qualifiers who have participated in our surveys, the DHSS for support for this work and for supplying us with aggregate details for many of the qualifiers whom we could not trace, and the Medical Mailing Company for supplying us with a list of names and addresses of 1974 qualifiers, which was helpful in tracing doctors who failed to respond to our initial questionnaires. We would be delighted to hear from any 1974 qualifiers who have not kept in touch and who would like to help us complete the picture.

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