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WOMEN MEDICAL GRADUATES OF THE UNIVERSITY OF BIRMINGHAM 1948-58

A. G. W. WHITFIELD, M.D., Ph.D., F.R.C.P.

Director, Board of Medical Graduate Studies, University of Birmingham

IN order to obtain accurate information regarding medical emigration all those graduating in medicine from the University of Birmingham during the eleven years 1948-58 were asked to complete a pro forma showing where they are now living and in what type of medical work they are currently engaged. The emigration data so obtained have already been published (Whitfield 1963). The pro forma asked for much additional information and this, together with the University records, has produced a wealth of data regarding women medical graduates of the University of Birmingham which it is thought may be of value to those responsible for medical student selection and of some interest to the profession as a whole.

Intellectual Capacity of Women Graduates

During the eleven years 1948-58, 747 men and 229 women graduated in medicine from the University of Birmingham. The percentage of women graduating in each of the eight years 1951-58 was approximately the same (Figure 1) but in 1948, 1949 and 1950 there was a greater proportion of women, no doubt due to the fact that those qualifying in these years had started their undergraduate education during the latter years of the war when many potential male undergraduates chose, or were required, to join the armed forces at the age of eighteen. Over the whole eleven-year period the male/female ratio was a little over 3 to 1. Although the pro-

portion of women accepted by medical schools varies, if the medical schools of Great Britain are considered as a whole, the male/female ratio is approximately the same. The applications which the University of Birmingham receives for the one hundred places available are approximately two-thirds male and one-third female and although no accurate information is available regarding other medical schools it is not unreasonable to assume that their application lists are much the same. It is clear therefore that a greater degree of selection is exercised in respect of female applications as compared with male and this is commonly thought to result in female medical students being intellectually superior to male. This is indeed what would be expected if the methods of selection were effective in choosing the best brains available.

The undergraduate achievements of the 976 graduates have therefore been examined and it will be seen from Table 1 that the percentage of male graduates winning prizes, scholarships and medals (19.9) was almost exactly the same as the percentage of females who gained these awards (19.7). Table 2 shows the percentage of men and women who achieved honours or distinctions. While the female students obtained much more than their share of honours degrees, they only just kept pace with the male students in respect of distinctions.

It therefore appears that there is little difference between the intellectual capacity of men and

FIG. 1.—Percentage of women graduates in each year.

women medical students. This may well be due to ineffective methods of selection but there is a strong impression that at the age of seventeen, when medical students are selected, the girl is intellectually and personally more mature than her male counterpart and that she tends to lose this advantage during subsequent years.

Higher Qualifications

Of the 229 women graduates, 94 have obtained a total of 120 higher qualifications. Table 3 compares this achievement with that of the 747 male graduates. It will be seen that in this respect the women have been less successful than the men. Marriage, with resultant domestic and family commitments, is thought to be the chief factor responsible for this difference but ambition and necessity in the case of the male doubtless play a considerable part.

The higher qualifications obtained by the 229 women graduates are listed in Table 4. The only instances which are disproportionate compared with the male graduates are the D.C.H. and the D.A., both of which diplomas have been obtained by about the same number of women as men. This reflects the higher proportion of women graduates choosing to devote their life to public health, pædiatrics and anæsthetics.

TABLE 1
UNDERGRADUATE PRIZES, SCHOLARSHIPS AND MEDALS
(1948-58)

Sex	Number of Graduates	Prizes, Scholarships and Medals Awarded	Percentage Awarded Prizes, Scholarships and Medals
Male	747	149	19.9
Female	229	45	19.7

Present Work of Women Graduates

Of the 229 women graduates, 168 are married, 60 are unmarried and 1 is dead. All the single graduates and 61 of the married graduates are working whole time. A further 48 of the married graduates are working part time but 58 are not doing any medical work. The employment of one married graduate is not known.

As will be seen from Table 5, domestic and family responsibilities account for the medical unemployment of 52 of the 58 women who are not working medically, other factors being responsible in the remaining 6.

Of the 169 working 62 are engaged in general practice (39 working whole time and 23 part time), 33 have public health appointments (11 full time, 15 part time) and 19 are anæsthetists (5 working part time only). 8 are doing unspecialized hospital work, while missionary work in psychiatry and pædiatrics claim 7 each. Six are specializing in pathology, 5 in general medicine, 5 in ophthalmology and 2 in radiotherapy. The remaining 8 are engaged in general surgery, orthopædic surgery, obstetrics and gynaecology, chest diseases, geriatrics, dermatology, radiology and the colonial medical service (one in each).

Undergraduate Wastage

In addition to the 976 who graduated during the period covered by the survey there were 7 who either gave up their studies or were required to withdraw from the course by the University of these 7 were men and 4 women. While the

TABLE 2
HONOURS AND DISTINCTIONS 1948-58

Sex	Number of Graduates	Honours Degrees	Percentage awarded Honours Degrees	Total Distinctions awarded	Number of Graduates awarded Distinctions	Percentage awarded Distinctions
Male	747	13	1.7	54	49	6.6
Female	229	10	4.4	18	15	6.6

TABLE 3

HIGHER QUALIFICATIONS OBTAINED BY 1948-58 MEDICAL GRADUATES

Sex	Percentage of 976 Graduates	Percentage of 574 Higher Qualifications Obtained	Percentage Obtaining Higher Qualifications
Male	76.5	79.1	47.0
Female	23.5	20.9	41.0

TABLE 4

HIGHER QUALIFICATIONS OBTAINED BY 94 WOMEN MEDICAL GRADUATES, 1948-58

M.D.	..	..	..	3
M.R.C.P.	..	..	..	5
M.R.C.P.E.	..	..	..	3
F.R.C.S.	..	..	..	3
F.R.C.S.E.	..	..	..	1
F.R.F.P.S.	..	..	..	1
M.R.C.O.G.	..	..	..	2
D.R.C.O.G.	..	..	..	42
D.A.	..	..	..	17
F.F.A.R.C.S.	..	..	..	8
D.O.	..	..	..	2
F.F.R.	..	..	..	1
D.M.R.T.	..	..	..	2
D.C.H.	..	..	..	20
D.P.M.	..	..	..	5
D.P.H.	..	..	..	1
D.T.M. & H.	..	..	..	2
Dip. Bact.	..	..	..	1
L.M.C.C.	..	..	..	1

Total 120

TABLE 5

REASONS FOR NOT WORKING MEDICALLY BY 58 (25.3 PER CENT.) OF THE 229 WOMEN GRADUATES (ALL MARRIED)

Unable to obtain suitable work	..	..	3
Living overseas where British qualification does not entitle them to practice	..	..	2
Feels unfitted for the practice of medicine	..	..	1
Domestic and family responsibilities	..	..	52
Total	..	..	58

numbers were small, the wastage is appreciable and is proportionately a little greater among women students than male, though the number involved is too small for this to be statistically significant.

Loss to Medicine among Women

If it is assumed that the 48 married women graduates who are working part time devote one half of their time to medicine there is, including the 58 who are not working medically and the

TABLE 6

LOSS TO MEDICINE AMONG BIRMINGHAM WOMEN UNDERGRADUATES AND GRADUATES 1948-58

Undergraduate wastage	..	..	4	1.7
Graduates				
Not working medically	..	..	58	24.9
Working part time	..	..	48	
Assuming part time workers are devoting half of their time to medicine				10.0
Percentage loss to medicine:				
(i) of 233 women medical students				36.9
(ii) of all 976 graduates	..	..		8.4

TABLE 7

REASONS FOR EMIGRATION OF 36 WOMEN GRADUATES 1948-58

Marriage				
(i) To Dominion or non-British men	..	..	7	
(ii) To non-medical men having or wishing to live abroad	..	..	8	
(iii) To medical men who wished to emigrate	..	..	9	
			24	24
Missionary work	..	..	..	7
Postgraduate training	..	..	..	2
No reason given	..	..	..	3
				36

Total

FIG. 2.—Countries to which 36 women medical graduates 1948-58 have emigrated.

4 who did not qualify, a 36.9% current loss to medicine among the 233 women who were accepted as medical students (Table 6) and an 8.4% loss of the total 11-year output of the Birmingham Medical School.

It now costs Britain £10,000 to produce one doctor, so that, if this state of affairs were permanent and was the same in other medical schools, the financial loss to the State over a period of eleven years would be not very far short of twenty million pounds. Doubtless some of those medically unemployed at the time of the survey will resume medical work when their children are older and some of those working part time may later be able to undertake full-

time duties but the loss to medicine is formidable and Universities may well think it prudent to reduce their intake of women medical students during the 'bulge' years when there will undoubtedly be many more candidates with the requisite 'A' levels in the General Certificate of Education than there are places available.

Emigration among Women Graduates

36 (15.7%) of the 229 women graduates have chosen to live abroad. The reasons prompting their emigration are shown in Table 7, from which it will be seen that marriage has been responsible in 24 instances, while 7 have chosen to work as missionaries, 2 have gone abroad for postgraduate training and 3 have not supplied their reasons.

The countries to which the 36 women have emigrated are shown in Figure 2. 15 are in

underdeveloped countries, of these 3 are in the West Indies, 1 in Nigeria, 1 in Sierra Leone, 1 in Ghana, 1 in Rhodesia, 1 in Tanganyika, 1 in Mauritius, 1 in Arabia, 2 in Malaya and Singapore, 1 in Burma, 1 in India and 1 in Nepal. Seven are in the United States, 4 in Canada, 6 in Australia and 1 in New Zealand. The remaining three are in Holland, Switzerland and Colombia, South America.

Of those who have emigrated, 3 of the 4 in Canada, 2 of the 6 in Australia, 1 in New Zealand, 1 in the United States and the three in Holland, Switzerland and South America are not doing any medical work.

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REFERENCE

WHITFIELD, A. G. W. (1963): Medical Emigration Among Birmingham Graduates, *Lancet*, ii, 874.