Contemporary Themes

Careers of medical women

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Abstract

In autumn 1977 91% of the women who had graduated from United Kingdom medical schools in 1949-51 (early cohort) and 1965 (late cohort) were practising medicine. Over the first 12 years after qualification the late cohort was marginally more active in medicine and had more members in career and training posts than the early cohort. On the survey date 1 October 1977 (26-28 years after qualification) the participation index of the early cohort was 0.73 and of the late cohort (12 years) 0.65. Both cohorts show the bimodal career pattern characteristic of British women's occupational experience.

Introduction

The increase in the proportion of women medical students and the decreasing flexibility of requirements for higher professional training and accreditation have led to some concern about the future staffing of the health service. Four studies of medical women's activities have been published since 1975,¹⁻⁴ but these have been confined to women in certain posts and specialties, or from a small group of medical schools, or living or practising in a limited area. To obtain an overall view of the careers of women doctors an attempt has been made to study and contrast the career pathways and work patterns of all women who first gained a registrable medical qualification from a medical school in the United Kingdom in the years 1949-51 (early cohort) and 1965 (late cohort).

The early cohort were expected to be in their 50s, to have completed rearing children, and to have achieved their ultimate career positions. The late cohort would be in their mid-30s and rearing children. Many would be still in training grades, and more affected by the changes in training and other requirements in recent years.

Method

The "certified lists" of the various examining bodies held by the General Medical Council were scrutinised to obtain a register of all the women who first obtained a registrable qualification from a medical school in the United Kingdom in the years 1949-51 and 1965. Subsequent records were also examined, together with the *Medical Directory* and records held by medical schools, to obtain the latest names and addresses of the members of the two cohorts. These were sent a questionnaire, covering letter, and stamped addressed envelope at the end of September 1977. Two postal reminders were sent to non-

respondents, and a telephone follow-up was conducted of all those believed to be in the United Kingdom who had not replied by January 1978.

Response

Altogether 1467 women were identified as coming within the early cohort and 473 in the late. Seventy-one of the early cohort and six of the late had died before the survey date, and from the remaining 1396 early and 467 late the overall response was 74%. This ranged from 80% of those on the United Kingdom Register to 52% of those not currently registered. The range by clinical medical school was from 100% (Charing Cross and Dundee) to 49% (Edinburgh royal colleges).

Findings

In the absence of any information on the probable numbers of women qualifying in any year the three years 1949-51 were examined in the belief that they would be balanced by the numbers qualifying in 1965. In the event the numbers qualifying each year had hardly changed and hence the early cohort is nearly three times the size of the late cohort. Numbers given subsequently in this report apply to respondents only.

Ninety-one per cent of both cohorts were engaged in some measure of medical practice (figure and table I). As this ranged from one

session a week to full-time a participation index was devised to take account of the varying number of sessions being worked (see appendix). Both cohorts show the bimodal pattern with peaks in their early 20s and late 40s and a trough around age 30, which is characteristic of women's career patterns in the United Kingdom and to an increasing extent in the United States.⁵ The mean time spent away from practice during the first 12 years after qualification was 2.7 years for the early cohort and 1.8 for the late cohort.

Thirty-six per cent of the early cohort and 40% of the late had gained one or most postgraduate qualifications (table II). The

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TABLE I—Percentage of women participating in medicine after four, eight, 12, and 27 years

	Full-time	Part-time	Not practising	Participation index
After 4 years				
Early cohort	65	13	22	0.71
Late cohort	55	25	19	0.67
After 8 years				
Early cohort	52	23	26	0.61
Late cohort	40	45	14	0.61
After 12 years				
Early cohort	47	30	23	0.60
Late cohort	39	52	9	0.65
After 27 years				
Early cohort	54	38	9	0.73

TABLE II—Percentage of both cohorts having postgraduate qualifications

	Early (n = 1042)	Late (n = 343)
MRCP	5.2	10.8
FRCS	1.3	1.5
MD	4.0	2.9
FFA(RCS)	2.3	6.1
MRCOG	2.3	1.5
MRCGP	3.7	2.9
MRCPath	1.5	2.6
MRCPsych	2.6	6.1
FRCR or FFR	0.5	0.6
Other diplomas	21.8	12.0
One or more post-graduate qualifications	35.7	39.7
No postgraduate qualifications	64.3	60.3

TABLE III—Percentage of women holding different grades of posts at four, eight, 12, and 27 years after qualification

	Career	Training	Other	Not practising
After 4 years				
Early cohort	8	21	49	22
Late cohort	9	26	47	19
After 8 years				
Early cohort	17	14	44	26
Late cohort	22	21	43	14
After 12 years				
Early cohort	25	8	44	23
Late cohort	40	12	39	9
After 27 years				
Early cohort	56	2	33	9

holders of postgraduate qualifications had a higher participation index (0.75) than those without (0.68).

Nearly 100 different grades or posts were identified as being held at some time by respondents in this study. For the purpose of this analysis these have been combined in a more convenient form adapted from that used by the Institute of Manpower.³ Table III shows the posts held at the different points in time. At the latest comparable point (qualification plus 12 years) the late cohort had 39% in career posts while the early cohort had 25%. By the survey date—1 October 1977—the proportion in career posts in the early cohort had risen to 53%.

The specialties currently being practised are shown in table IV: 24% of the early cohort and 34% of the late were in specialties of their first choice. Women who had never married were more often practising in their first choice of specialty than those who had.

The questionnaire contained the open question: "If you can—please tell us the reason for your choice of career specialty, or the circumstances which led to your present situation."

The latter part of this question was directed primarily at those not currently practising, but the whole question enabled the respondents to say as much or as little as they wished about their choice of specialty. Eighty-five per cent made some response, some respondents giving more than one reason. Interest, liking, or aptitude were more often mentioned by those in hospital specialties than those practising outside hospital, while the latter more often mentioned the convenience of the hours and the adaptability of their practice to their domestic commitments.

On the survey date 83% of the early cohort and 89% of the late

cohort were or had been married. Just over half (55%) of the married respondents' husbands were doctors or dentists, and altogether 76% of the husbands were in social class I. The married respondents in the early cohort had a mean of 2.44 children and the late cohort 2.21. The respondents in the late cohort married earlier and became responsible for the care of children earlier than those in the early cohort. Almost half (49%) of the respondents considered that the family's need for their care had affected the posts they felt in a position to apply for, and 41% considered that they had been restricted in this respect by the requirements of their husbands' careers.

TABLE IV—Percentages practising in each specialty on survey date (1 October 1977)

	Early %	Late %
Medical specialties		
NEC	5	8
Surgical specialties	3	4
Paediatrics	3	4
Obstetrics and gynaecology	2	4
General practice	32	31
Community medicine	6	4
Clinical public health	19	10
Family planning	4	3
Psychiatry	8	8
Anaesthetics	4	9
Other hospital	5	6
Other NEC	1	1
Not practising	9	9
Total	1042	343

NEC = Not elsewhere classified.

Nine per cent of the respondents were not in practice on the survey date. One-third of those in the early cohort and over half of those in the late cohort gave family commitments as their reason for non-practice, and one-seventh were not practising because of ill health or retirement.

Three respondents (two early, one late) had never practised, and 27% of the non-practitioners in the early cohort had not practised for over 20 years: 65% of the non-practitioners in the late cohort had been away from practice for under six years.

Discussion

In surveys in which the response is less than 100% there is always a possibility that those who respond may differ in some fundamental way from the non-respondents. In this case it could be that doctors who responded were engaged in more medical activity than the non-respondents. There was no evidence that this was the case when the non-respondents were telephoned. In addition we found no correlation between the response rate from the 30 individual medical schools represented and the participation index of their alumnae; and so we can reasonably infer that in this respect our respondents are representative of the whole.

In the first 12 years after qualification the late cohort have engaged in a greater measure of practice than the early cohort, despite earlier marriage and responsibility for care of children. The early cohort, however, was engaged in the same period in more full-time practice (albeit offset by a greater measure of non-practice). This may be accounted for by later marriage and more respondents remaining single than in the late cohort. By the survey date the early cohort had 91% of its members in practice and had achieved a participation index of 0.73.

Over the first 12 years after qualification the late cohort has had a higher proportion of its members in training and career grades than the early cohort; though by 27 years after qualification most of the early cohort had reached these grades.

The difference in the early medical activity of the two cohorts may be accounted for by the different social conditions at the time they first qualified. In the early 'fifties women in all walks of life stopped work on marriage or at the latest on the arrival of their first child. Some respondents referred to general practi-

tioners' needs in the 'fifties to have a wife or other relative to act as secretary/receptionist. Substitute care for children was considered irresponsible; and medical jobs were in great demand, with competition from many redundant registrars and senior registrars.

The late cohort has not so far had to contend with quite this level of disincentives and may be expected to achieve a higher participation index when less occupied with their children. On the survey date 85% of the "ever-married" respondents in this cohort were responsible for the care of at least one child aged under 10 (PI 0.57). The PI of those whose youngest child was aged 10 to 15 was 0.77, while for those with children aged 16 and over it was 0.95.

Unfortunately child care is likely to be most time-consuming when medical practitioners are still establishing themselves. The retraining scheme (PM[79]3) has run into difficulties as the women approved for posts under the scheme have sometimes been unable to obtain appointments in their home areas.

The requirement for two of the three years of vocational training for general practice to be spent in hospital posts receives no support from our respondents, who see it as discriminating against women with children. The cost of substitute care can amount to over half the income of a junior hospital doctor, and tax concessions are long overdue. Holiday school schemes are available in a few areas but are susceptible to cuts in public expenditure. A married woman is unlikely to obtain a nursery place for her child, though a single parent may be more successful.

Exact comparisons of the careers of women doctors with women of other professions is not possible since no other profession has been studied in quite the same way as this; but it appears that women doctors have a higher level of professional activity than any other comparable group. The best available figures for other professions are accountants 89%, dentists 85%, and architects 76%⁵ compared with our respondents' 91%. These all in turn are considerably higher than those of physiotherapists 55%, nurses 51%, and teachers 41%.

Conclusion

Women who have had a medical education generally seek to use their training and skill as best they can. Social constraints may affect the amount of practice they can undertake, but provided that they are not deliberately or inadvertently impeded their willingness is beyond dispute. Although fathers are probably helping more with the children and other household duties than in the early 'fifties it is still the mother who has the greater responsibility¹; so that unless there is a more equal sharing in this task women will continue to be at a disadvantage in a calling that follows the masculine career model. The opportunity for partial

temporary withdrawal should be accommodated in the structures being developed to make the best use of the qualities that women can bring to the practice of medicine.

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Appendix

PARTICIPATION INDEX (PI)

$$PI = \frac{10 \left(\frac{a+b}{x} \times 100 \right) + 7 \left(\frac{c}{x} \times 100 \right) + 3.5 \left(\frac{d}{x} \times 100 \right)}{1000}$$

where

a = Number of respondents who practised full time or 10 or more sessions a week.

b = Number of respondents who practised probably full-time, but number of sessions not stated.

c = Number of respondents who practised six to nine sessions a week.

d = Number of respondents who practised under six sessions a week or "part-time, number of sessions not stated."

e = Number of respondents who were not practising.

$x = \Sigma(a + b + c + d + e)$

It should be noted that the participation index behaves like a mean, and therefore gives no indication of the distribution of values contained within it. This is shown, for instance, in table I relating to the position eight years after qualification. Both cohorts show a PI value of 0.61, but the early cohort has more full-timers and more non-practitioners than the late cohort.

References

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- 5 Silverstone R, Ward A. *Careers of professional women*. London: Croom Helm, 1980.

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What investigation and treatment can be given to a woman who has had only one child in six pregnancies?

Recurrent or habitual abortion must first be distinguished from heavy infrequent periods by the identification of fetal or placental tissue. In a recent series¹ the causes of recurrent abortion were divided into four groups: genetic abnormalities were found in 25% of patients, uterine abnormalities in 15%, endocrine causes in 23%, and in the remaining 37% the cause was unknown. Genetic problems, which include balanced translocation, are investigated by chromosome analysis of the parents and, if possible, abortion material. Uterine abnormalities include subseptate uterus, fibroids, and cervical incompetence, and are investigated first by hysterosalpingography. Possible endocrine causes, such as inadequate function of the corpus luteum, are assessed by hormone estimation or timed endometrial biopsy. The "unknown" group may include cases of infection such as mycoplasma or perhaps listeriosis.² In the series¹ quoted, the

ultimate pregnancy success rate was 33% among the "genetic" group, 60% in the "uterine" group, 91% in the "endocrine" group, and 73% in the "unknown" group. As well as the factors mentioned already, investigation³ entails checking for systemic disease, thyroid dysfunction, syphilis, diabetes, viral infection, toxoplasmosis, and isoenzymes. Treatment is of the specific cause when possible. Hormone supplements have been used before implantation¹ in the "endocrine" group of patients, but their use in later pregnancy seems pointless,³ and they do not prevent abortion once bleeding has started.⁴—J O DRIFE, lecturer in obstetrics and gynaecology, Bristol.

¹ Tho PT, Byrd JR, McDonough PG. Etiologies and subsequent reproductive performance of 100 couples with recurrent abortion. *Fertil Steril* 1979;32:389-95.

² Cohen SN. Perinatal listeriosis. *Lancet* 1980;ii:32.

³ Scott JS. In: Dewhurst CJ, ed. *Integrated obstetrics and gynaecology for post-graduates*. 2nd ed. Oxford: Blackwell, 1976:233.

⁴ Smith C, Gregori CA, Breen JL. Ultrasonography in threatened abortion. *Obstet Gynecol* 1978;51:173-7.