

SURVEY OF QUEEN'S UNIVERSITY MEDICAL GRADUATES

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INTRODUCTION

IN RECENT years a growing concern about manpower problems within the National Health Service, the maldistribution of medical staff and the high rate of emigration among doctors has precipitated a number of surveys of medical manpower in Great Britain, most of them relating to choice of specialty.

Little work, however, has been done in this field in Northern Ireland. One of the main functions of the Northern Ireland Council for Postgraduate Medical Education is to provide a careers information and advisory service for recent graduates. This service is limited by a lack of basic information about the factors which influence young doctors in choosing a specialty and deciding in which part of the world they will practice. There is no reliable information available about the career preferences of Queen's medical students; how these preferences may be influenced by academic achievements and home background or how preferences may change as students are exposed to various specialties and aspects of medical practice during their undergraduate and early postgraduate years. Information about the ultimate location of Queen's medical graduates has been derived largely from hearsay.

In an attempt, therefore, to obtain a better understanding of the subject, Council has undertaken a two-fold survey with the assistance of the Faculty of Medicine. In general terms the objectives of the survey are:-

1. To collect information on career preferences and their determinants and the desired location of practice among Queen's medical undergraduates and how far these are or can be fulfilled.
2. To collect information on the chosen specialty and on the destination (transient and permanent) and its determinants of Queen's medical graduates.

This paper is a report on the second aspect of the study, and includes references, where relevant, to other work done in the Republic of Ireland, Great Britain and the United States. Details concerning the undergraduate survey have been published separately (Egerton, 1979).

METHOD

Five cohorts were chosen for the study (those who graduated in 1950, 1955, 1960, 1965 and 1970) in the belief that they might offer a fairly representative sample of graduates over the past 25 years. It was decided that the 1975 graduates should not be included, since the majority could not be expected to have made firm decisions about their career and ultimate location of practice two years after qualifying.

Graduation lists were obtained from the Secretary's office, and current addresses, where possible, from the Medical Directory and Medical Register, and, in the case of

those living abroad, from relations and former colleagues still in this country, and from the General Medical Council.

Of the total of 418 graduates, 15 were known to be dead. Addresses were obtained for all but 9 of those believed to be alive and 394 postal questionnaires were distributed at the end of September and the beginning of October 1977. In the event, 8 of the addresses were found to be out-of-date when the questionnaires were returned by the Post Office and no forwarding addresses could be obtained. Consequently the total number of questionnaires presumed to have reached their destination was 386. Reminders, personally signed by the Chairman of Council, then the late Sir John Biggart, were sent out in January and again in April 1978, bringing a response of 357 completed forms, 88.6 per cent of the number of doctors believed to be alive, and 93 per cent of the number presumed to have received forms (Table 1).

TABLE I
Number of questionnaires distributed and returned

<i>Year</i>	<i>Total No. of graduates</i>	<i>No. believed to be alive</i>	<i>No. presumed to have received forms</i>	<i>No. of forms returned</i>	<i>As percentage of those presumed to have been received</i>	<i>As percentage of those believed to be alive</i>
1950	93	86	84	78	92.7	90.7
1955	90	86	80	74	92.5	86.0
1960	63	62	57	53	93.0	84.1
1965	71	69	67	*58	86.6	84.5
1970	101	101	98	94	95.9	93.1
TOTAL	418	403	386	357	93.0	88.6

*Another two questionnaires, making a total of sixty, were returned too late to be included in the statistical analysis.

The questionnaire covered (1) background information (age, sex, marital state, place of residence before going to Queen's); (2) employment (whether working and, if so, specialty/ies practised; if not, former employment); (3) present location: if living abroad, reasons for leaving Northern Ireland and feelings about returning; and (4) comments.

RESULTS

Background Information

Age at Graduation

The majority of students (62.8 per cent of the 1950 cohort, 77 per cent of the 1955 cohort, 79.2 per cent of the 1960 cohort, 70.7 per cent of the 1965 cohort, and 89.4 per cent of the 1970 cohort), were aged 23 to 25 on graduation. One of the 1950 graduates commented (later on the questionnaire) that his was not a typical year. A number of the students were ex-servicemen and consequently their choice of

specialty was probably influenced by the need to earn a good income as soon as possible. Although this sounds a reasonable assumption, the percentage of 1950 doctors graduating over the age of 26 (24.4 per cent) does not exceed the average for the five cohorts (21.2 per cent) to the extent one would expect, and is considerably less than the 1965 figure (29.1 per cent). Clearly, then, the age factor alone is no more likely to have influenced choice of specialty in 1950 than in subsequent years. In fact the most noticeable point of variation in 1950 is the relatively large percentage (12.8) who graduated under the age of 23. Only one other from the five cohorts, a 1960 graduate, did so. This is because the main graduation in 1950 was in December, the medical course being then a five and a half year one. After 1950, the course changed to one of six years' duration. The person who graduated at the age of 22 in 1960 had presumably been exempted from the first MB year, or had his twenty-third birthday immediately after graduating (or possibly both).

Present Age

The fact that questionnaires were returned over a period of eight months has meant a slightly wider spread of present age distribution, depending on the exact date of birth. At the time of completing the questionnaire, 60.2 per cent of the 1950 cohort was aged between 50 and 52, 71.6 per cent of the '55 cohort between 45 and 47, 75.5 per cent of the '60 cohort between 40 and 42, 67.3 per cent of the '65 cohort between 35 and 37, and 86.1 per cent of the '70 cohort between 30 and 32.

Sex

Responses from women doctors made up less than a quarter of the total (80, or 22.4 per cent). There were 25.6 per cent in the '50 cohort, 27 per cent in the '55 cohort, 20.8 per cent in the '60 cohort, 17.2 per cent in the '65 cohort and 20.2 per cent in the '70 cohort. These percentages are closely representative of the distribution of the sexes among the total number of graduates in each cohort (an average of 22.4 per cent women). Men and women, therefore, were equally conscientious about returning the questionnaires. The undergraduate aspect of this study, which was concerned with the 1976-77 second, fourth and final year students, showed that an average of 33.4 per cent of the students were female, a considerable increase on the current survey.

Marital State

The vast majority of the respondents (89.1 per cent) were married. Of the remainder, predictably, more of the younger doctors were single and more of the older ones were widowed.

Place of Permanent Residence before entering Q.U.B.

Table II illustrates the place of permanent residence of the respondents before entering medical school. Of the small number classified under "elsewhere", 10 came from African states, 10 from various parts of Asia, 5 from North America and 1 from Hungary. Most striking is the upsurge of students coming from outside Northern Ireland in the 'fifties, 17.1 per cent of the 1954 intake (i.e. the 1960 cohort of graduates), almost doubling to 29 per cent of the 1959 intake (the 1965 graduates), followed by a dramatic decrease to 4.3 of the 1964 intake (the 1970

TABLE II
Place of permanent residence before going to QUB

	1950	1955	1960	1965	1970	TOTAL
N.I.	76 (97.4)	66 (89.2)	44 (83.0)	41 (70.7)	90 (95.7)	317 (88.8)
Rest of UK and Eire	1 (1.3)	5 (6.8)	2 (3.8)	3 (5.1)	3 (3.2)	14 (3.9)
Elsewhere	1 (1.3)	3 (4.1)	7 (13.3)	14 (23.9)	1 (1.1)	26 (7.3)

graduates). Data emerging from the parallel undergraduate study appear to indicate, however, a slight increase in the number of students from outside the province in the 'seventies (5.7 per cent of the 1971 intake, 7.7 in 1973 and 8.5 in 1975).

Present Employment

Of the 357 doctors who returned the questionnaire, all but six (married women) were engaged in some type of medical practice. Four of the six were 1970 graduates; the others were 1950 graduates. (The questionnaire did not differentiate between full and part-time employment).

Table III gives the specialties practised by those who were working. Respondents who were engaged in more than one specialty were not asked to indicate their main field, which means that there is a certain amount of overlap as the total number of specialties indicated was 408. In fact, a total of 43 doctors listed more than one specialty.

General practice, which attracts the greatest percentage of graduates each year, enjoyed its highest recruitment level (47.4 per cent) in 1950. Whether this was a result of the number of ex-servicemen who graduated that year (as suggested by the respondent mentioned previously), or of the lack of opportunity in hospital medicine, or whether indeed it was purely fortuitous, is open to conjecture.

On average, the second most popular specialty was anaesthetics, with medicine, surgery and community medicine lying equal in third place. From year to year, however, the pattern varies somewhat, psychiatry ranking third among the 1955 graduates and academic medicine and research lying second among the 1965 graduates. One might possibly generalise by saying that general practice, medicine and surgery (in that order) attract most of our newly qualified doctors (as borne out by Council's Careers Information and Advisory Service year after year), but that the period 1950-1970 was one of rapid growth and development in anaesthetics colouring the findings of this enquiry. The enduring attraction of community medicine for women doctors is discussed more fully in the next section.

Of those who were not working at present, the two 1950 graduates had previously practised anaesthetics, general practice and medicine, and the four 1970 graduates had been engaged in community medicine (2) paediatrics (2) and medicine (1).

TABLE III
Numbers in each specialty

<i>Specialty</i>	<i>Number Practising</i>	<i>Specialty</i>	<i>Number Practising</i>
Academic Medicine and Research	27 (7.6)	Otolaryngology	2 (0.6)
Anaesthetics	37 (10.4)	Paediatrics	12 (3.4)
Community Medicine	29 (8.1)	Psychiatry	25 (7.0)
General Practice Medicine	141 (39.5)	Radiology/Radiotherapy	14 (3.9)
Laboratory Medicine	9 (2.5)	Surgery	29 (8.1)
Obstetrics/Gynaecology	18 (5.0)	Others	25 (7.0)
Ophthalmology	11 (3.1)	TOTAL	408

Factors Influencing Choice of Specialty

The figures in Table III were broken down further by the variables of sex and marital state in an attempt to ascertain whether these had any influence on choice of specialty.

Sex

The specialties favoured most by women doctors were general practice (40.5 per cent of the women worked in general practice) and community medicine (which absorbed another 25.7 per cent). These findings correspond closely with those of Scottish Council in their survey (1979) of the 1965 and 1970 graduates of the Scottish University medical schools. While general practice was equally favoured by the male respondents in our survey (40.1 per cent), there is a significant difference between the percentage of males (3.6) and females (23.8) working in community medicine ($p < 0.001$). It is perhaps pertinent that in the parallel study of Queen's medical undergraduates, after second year the female students had little interest in community medicine, and certainly no more than the men. It would appear the qualified women doctors tend to be drawn into community medicine (the school medical service, family planning, etc) after marriage, largely because of the availability of part-time work, flexible hours, and conditions that are more compatible with domestic responsibilities and family commitments. All of the women in our survey who were practising community medicine (19) were either married (17) or widowed (2). The Scottish Council reported that the majority of women in community medicine covered by their survey stated, when questioned, that they did not regard it as a long-term career prospect.

The other specialty where the numbers of males and females differed significantly was surgery. Twenty-eight (10.1 per cent) of the men had gone into surgery and only one woman (1.3 per cent) was working in this specialty ($p = 0.0001$), and then only one session per week. Unlike the previous case, where the female preference for community medicine appears primarily a result of circumstances, which emerge usually after qualification and as a result of marriage and family, the striking lack of

female interest in surgery appears consistent from the early undergraduate years. Whether women veer away from surgery, anticipating at an early stage the keen competition for surgical posts and the long intensive training which does not lend itself to interruption or part-time work, whether they are conditioned from an early stage to regard surgery as a male-dominated domain, or whether they dislike intrinsically the nature of the work, is open to conjecture. Whatever the explanation, the small number of women in surgery is a universal fact. Stanley and Last (1968) noted that "women, on the whole inclined towards careers either outside hospital or in specialties within the hospital system that were less demanding in terms of clinical responsibility". Research done in the United States (Kosa and Coker, 1965; Phelps, 1968; Westling-Wikstrand et al, 1970; Shapiro et al, 1968; Powers et al, 1969) confirms this pattern which is presumably due in both countries to the resistance in hospitals to more flexible working hours and part-time training, and to the lack of provision for child care.

Marital State

On the basis of our results, marital state appeared to have no bearing on choice of specialty among male doctors. On the female side, one cannot generalise because of the very small numbers of single women (12 out of a total of 80 female respondents). Seven of the 12 were working in hospital; the other five who were working outside hospital were all in general practice or in the case of one woman, combining the two.

Of the remaining 68 female respondents, 62 were working, 56 of whom were married, 4 widowed and 2 divorced. Assuming for the sake of argument that the choice of specialty and careers of the widowed and divorced women have also been subject at some stage to the influence of marital state and possibly children, we shall include these six with the 56 married women. Twenty-two (35.5 per cent) were engaged solely in hospital specialties, 33 (53.2 per cent) were engaged in general practice (16), community medicine (12), or both (5). Five (8.1 per cent) were general practitioners with sessions in hospital. The remaining two (3.2 per cent) were employed by the Blood Transfusion Service and the DHSS (on medical referee work). Two of the women included above (one in hospital medicine, one in general practice) were doing additional work, one in the field of medical education, examination and evaluation techniques, and the other as a part-time police surgeon. To summarise, 35.5 per cent were engaged solely in hospital medicine, and 64.5 were engaged either solely or primarily in branches of medicine outside the hospital.

Although the number of single women is very small, the figures would appear to suggest a pattern that differs from that of the married women. The distribution of specialties among single women does not differ radically from that of the male doctors (except in respect of surgery). One might say that it is apparently not so much a woman's sex as her marital state which exercises most influence on her choice of specialty.

Place of Residence

Of the total number of respondents irrespective of origin or nationality (357), 58 per cent were living outside Northern Ireland. This includes, of course, graduates from abroad who have returned to work in their own country. Of more interest to those concerned about medical manpower in this country is the present location of

those who were resident in Northern Ireland before going to QUB, summarised below in Table IV.

Of those resident in Northern Ireland before going to QUB, 170 (53.6 per cent) are now living outside the province, the most popular destinations being Great Britain (22.4 per cent) and Canada (16.4 per cent). Other developed countries favoured by emigrants from Northern Ireland were the United States (5.4 per cent), Australia (2.2 per cent) and New Zealand (1.3 per cent). Seven (2.2 per cent) had gone to various parts of Africa, and three (0.9 per cent) to parts of Asia.

TABLE IV
Present location of those resident in N. Ireland before going to QUB

<i>Country living in</i>	<i>Northern Ireland</i>	<i>Rest of UK & Republic of Ireland</i>	<i>North America</i>	<i>Australia and N. Zealand</i>	<i>Africa and Asia</i>	<i>HM Forces</i>
Number and percentage	147 (46.4)	77 (24.3)	69 (21.8)	11 (3.5)	10 (3.1)	3 (0.9)

Little work appears to have been done on emigration patterns elsewhere in the British Isles but it is probably of little benefit to compare statistics on emigration, since many of the governing circumstances are unique to us; notably the insular geographical position of our country, our peculiar divided cultural inheritance and our political problems. Nonetheless consideration of other relevant work is of interest. Scottish Council reported (1979) that between 11 and 14 per cent of the 1964 graduates of the Scottish medical schools and approximately 8 per cent of the 1970 graduates had emigrated. Our figures are startlingly high in comparison. However, our situation is probably more comparable with that of Eire. There Joyce and Murphy (1972) showed that over the previous twenty years, approximately 15 per cent of Irish born graduates had emigrated to North America and that approximately 33 per cent were resident in Britain, totalling over 48 per cent outside Ireland.

Of the Ulster-born doctors who were living outside the British Isles (90 excluding those in HM Forces), 88.9 per cent were in developed countries and 11.1 per cent in developing countries. Oscar Gish found that 30 per cent of the subjects in his survey (1970) of all British and Irish-born doctors leaving Great Britain between 1962 and 1967 were destined for developing countries. The figures are not comparable, however, as our statistics tell us only how many are in developing countries at the moment and do not include those who have gone for a short period and returned. Gish found that, of more than 200 who emigrate from Great Britain to developing countries each year, "an almost equivalent number come back to Britain". Of the 63 per cent in Gish's survey who left for developed countries, 34 per cent went to Canada, 24 per cent to the United States and 32 per cent to Australia and New Zealand. His survey showed that only about one-third of these emigrants to developed countries return.

TABLE V
Emigration rate of doctors resident in N. Ireland before going to QUB

	1950	1955	1960	1965	1970
Total number of graduates resident in N. Ireland before going to QUB	76 (100.0)	66 (100.0)	44 (100.0)	41 (100.0)	90 (100.0)
Number of above who have left N. Ireland	48 (63.2)	42 (63.6)	22 (50.0)	18 (43.9)	40 (44.4)

Table V shows that the rate of emigration of doctors originating from Northern Ireland has declined a little over the past twenty-five years.

While it is still possible that more of the 1970 graduates will emigrate, the trends in Table VI suggest otherwise. In the past, the vast majority of doctors who have left Northern Ireland have done so within eight years of graduation, (i.e. before being appointed to a career post), whilst the peak period for emigration has been on average within the first three years after graduation. The 1970 cohort follows the general pattern, a very large proportion of them emigrating as house officers and senior house officers or newly appointed general practitioners, but after the first three years the rate dropped considerably.

In compiling Table VI from the detailed figures on every year from 1950 to 1977, it was decided to choose the groupings 0 to 3 years, 4 to 8 years and over 9 years after graduation, as the information fell so clearly into that classification. These groupings also correspond loosely with the house officer and senior house officer, registrar and senior registrar and consultant or career post periods, although this was not the basis on which they were chosen.

TABLE VI
Emigration of N. Ireland doctors: number of years after graduation

<i>Year of graduation</i>	<i>0—3 years</i>	<i>4—8 years</i>	<i>8 years +</i>
1950	33 (68.8)	10 (20.8)	5 (10.4)
1955	26 (61.9)	11 (26.2)	5 (11.9)
1960	10 (45.5)	9 (40.9)	3 (13.6)
1965	9 (50.7)	8 (44.4)	1 (5.6)
1970	33 (82.5)	7 (17.5)	

The factors influencing the decision to leave the province are discussed more fully in the next section, but it is worth mentioning at this point two in particular, (1) lack of job opportunity in the early 'fifties and (2) the "troubles", which elucidate the peak figures for emigration for the 1950, '55 and '70 cohorts, within the first three years of graduation. As might be expected, the majority of doctors coming from elsewhere to study at Queen's (not included in Table VI) returned to their own country within three years of graduation.

It is interesting to note that the emigration rate of Scottish doctors forms a totally different pattern. Scottish Council found in its study of the 1962 graduates of the Scottish medical schools that "there appeared to be two main peaks, one being between three and six years after graduation and the other ten and eleven years after". In its subsequent study (1977) of the 1965 and 1970 graduates, Scottish Council reported an increase in emigration after eight to ten years among the 1965 graduates. Emigration of the 1970 cohort was fairly evenly distributed over the five years after graduation. In his study of all doctors born and qualified in the British Isles (including Eire) leaving Great Britain between 1962 and 1966, Gish found the following in relation to the number of years between *registration* and leaving: between 0 and 4 years 26 per cent, between 5 and 9 years 29 per cent, between 10 and 14 years 17 per cent and 15 years and over 29 per cent.

These varying trends in emigration rates would appear to suggest an underlying difference in motivating factors. In general it would appear that lack of opportunity at higher grades in hospital medicine is a more compelling reason for the doctors covered by Scottish Council's survey and that of Gish, than for Northern Ireland doctors.

Factors Influencing Decision to leave the Province

Those who were living outside Northern Ireland were asked to indicate on a given list factors which influenced their decision to leave the province. The list comprised the first seven reasons which appear in Table VII, plus "Others". Two main themes recurred so frequently under "Others" that these have been listed separately as factors 8 and 9. A number of doctors who graduated in the 'fifties spoke of the difficulty in obtaining posts in hospital medicine in Northern Ireland at that time (one used the phrase "closed shop"), of the shortage of posts in general practice and the restriction on opening new practices. The other recurrent reason for leaving, predominant obviously among the 1970 graduates, was the political situation and sectarian violence in this country, and the effects it might have on their children. As early as 1950, a few claim to have left because of the "undesirable community relations situation existing even at that time"; a few were looking for a "better political, social and cultural climate overseas", and "freedom from the stultifying parochialism of Northern Ireland". (These points have all been included under factor 9). Where more than one reason for leaving was given by a respondent (as was frequently the case), he appears more than once in Table VII and in the paragraph following on the subject of "other reasons".

Other reasons listed under "others" were as follows. Twelve doctors (mainly 1970 graduates, some in HM Forces, some not, specified a desire to travel, a "wanderlust". Another eight (mainly 1955 graduates) said they left to obtain training not available here at that time, without a view to returning. Specialties

TABLE VII
Factors influencing decision to leave the Province

	1950	1955	1960	1965	1970	TOTAL
1. Return to work in own country	1 (2.0)	5 (10.2)	5 (16.1)	11 (33.3)	1 (2.3)	23 (11.1)
2. Professional advancement	20 (40.0)	13 (26.5)	17 (54.8)	10 (30.3)	10 (22.7)	70 (33.8)
3. Better working facilities	11 (22.0)	12 (24.5)	3 (9.7)	5 (15.2)	9 (20.5)	40 (19.3)
4. Greater financial rewards	11 (22.0)	13 (26.5)	10 (32.3)	5 (15.2)	13 (29.5)	52 (25.1)
5. To obtain specialist experience	4 (8.0)	2 (4.1)	5 (16.1)	8 (24.2)	4 (9.1)	23 (11.1)
6. Greater job satisfaction	12 (24.0)	19 (38.8)	6 (19.4)	9 (27.3)	13 (29.5)	59 (28.5)
7. Marriage or family considerations	5 (10.0)	13 (26.5)	7 (22.6)	4 (12.1)	14 (31.8)	43 (20.8)
8. Unable to obtain suitable post in N.I.	14 (28.0)	9 (18.4)	1 (3.2)	1 (3.0)	0	27 (13.0)
9. Community relations, violence and effects on children	1 (2.0)	5 (10.2)	1 (3.2)	1 (3.0)	16 (36.4)	24 (11.6)
10. Others	4 (8.0)	10 (20.4)	3 (9.7)	4 (12.1)	8 (18.2)	29 (14.0)

The percentage figures in Table VII are based on the total number (207) living outside Northern Ireland.

mentioned were tropical medicine, skin pathology and psychiatry (this was in 1956, when QUB had no Department of Mental Health), and vocational training for general practice, before the GP training scheme was underway in Northern Ireland. Five doctors (fairly evenly distributed among the five cohorts) left to do medical missionary work. Three (all '50 graduates) left out of dissatisfaction with NHS conditions. Two 1970 graduates (husband and wife) left because the husband was advised that he was at risk working in Northern Ireland and one 1955 graduate left because of our "miserable" climate.

Ultimate Plans for Location of Practice

The vast majority of those who are now living outside Northern Ireland have no plans to return: some were emphatic about this. Of the 170 Ulster-born doctors at present outside the province, 120 (70.6 per cent) do not intend to return. Only 5 (2.9 per cent) said that they definitely intended to return; another 10 (5.8 per cent) said that they probably would, and 35 (20.6 per cent) said they might possibly return. Many of the latter added that the decision to return depended on a satisfactory

outcome to our political problems. Three who do not intend to return to work in Northern Ireland said they plan to settle here in retirement, and another two pointed out that they enjoy frequent holidays here, but would not contemplate working in this country.

Specific Comments made by Respondents

Most of the comments concerned topics which recurred with each of the cohorts, and which fall into the following broad categories.

- (a) Twenty-six pointed out that the factors influencing their decision to leave the province were different from those affecting their return.
 - (i) Eighteen said that, although the unstable political situation was not the major reason for leaving, it would now present the major difficulty to returning. Two compared the quality of life here favourably with the affluence of the United States, where they found that many facets of their life-style detracted from personal professional satisfaction.
 - (ii) Six who were interested in returning spoke of difficulty in securing a post. Two had already been unsuccessful in application for consultant posts (one alleged this was due to religious discrimination); the others said that very few posts were advertised, appearing only occasionally in the British Medical Journal, and then with such a short period to the closing date for applications that prospective candidates abroad do not know about them in time. One respondent also claimed that the method of appointment to NHS posts was arranged to favour pre-selected candidates.
- (b) Sixteen gave information about their past career, about the work they had been engaged in (i.e. general practice before administration) or about periods spent abroad before settling permanently in Northern Ireland.
- (c) Nine paid tribute to the “invaluable” and “first-class” training they received at QUB, which they have found has given them “a tremendous start on colleagues from other universities”.
- (d) Seven asked if they might have a copy of the summary of the findings of this survey.
- (e) Five said that they had left Northern Ireland originally with the intention of returning but that circumstances and opportunities which arose persuaded them to remain away.
- (f) Two practising abroad, one in Canada, the other in the United States, contrasted their present freedom to practise how and where they wished, with what they saw as excessive “non-medical (non-physician) interference and control in medicine” in this country. Another two who are still in Northern Ireland, in general practice, spoke of their “growing disenchantment with the NHS as a reasonable paymaster”. Their “inability to practice good GP, due to too heavy a work load and inadequate investigatory facilities” was becoming more irritating.
- (g) Two 1955 graduates, both of whom had emigrated to Canada, mentioned that they had since returned to the province to take part in postgraduate courses which they had greatly enjoyed, one in general practice, the other in anaesthetics.

Other comments from respondents include one from a 1950 graduate, now resident in Canada who said that he would like to receive more communication from QUB. More could be done for the university, he felt, if the overseas alumni were organised. His suggestion would obviously apply more to Canada than any other country abroad, the relatively high proportion of Queen's graduates there undoubtedly contributing to the feeling of fraternity. One of the 1960 graduates commented on the strong contingent (25) of Queen's graduates in Brampton, Ontario, population 100,000. All were active, he said on the local hospital staff and three had been chiefs of departments in the 500 bed hospital.

A 1950 graduate (also living in Canada) was of the opinion that graduates should not be given their final diploma before they had given the province a reasonable return for their education and training. Whether this should also apply to other professions, or indeed all who enjoyed the benefit of tertiary education, he did not clarify.

Still on the topic of emigration, a 1955 graduate felt justified in having made his decision to leave, although it would have been much easier, he said, had he been younger (he left in 1972, at the age of 41). Another 1955 graduate said that he had had to return because of a family crisis, and that he would definitely not have returned otherwise. Conversely, a 1960 graduate who is practising aviation medicine in the RAF protested that emigration was not his intention, but an unfortunate consequence of postings.

Referring to his choice of specialty, a 1960 graduate whose father was a general practitioner, observed that although he had followed on in his father's practice, he was now quite sure that, had he not had the practice, he would have done paediatrics.

SUMMARY

Questionnaires were distributed between September and October 1977 to 394 doctors who had graduated from Queen's in 1950, 1955, 1960, 1965 and 1970, in an attempt to collect information on their chosen specialty/ies and location of practice. Replies were obtained from 357, 88.6 per cent of those believed to be alive.

The majority of the respondents (75.9 per cent) were between the ages of 23 and 25 on graduation. Among the 1950 graduates, there was known to be a number of ex-servicemen, although the percentage of 1950 graduates aged 26 or more (24.4 per cent) did not exceed the average percentage for the five cohorts (20.4 per cent) as much as might have been expected. An average of 22 per cent of the respondents were female—an exact reflection of the proportion of the total number of graduates who were female. The vast majority were married (89.6 per cent) and came from Northern Ireland (88.8 per cent).

Only 6 (all women) of the 357 respondents were not engaged in some form of medical work at the time of completing the questionnaire. Almost 40 per cent were in general practice; second most popular was anaesthetics with 10.4 per cent, and medicine, surgery and community medicine ranked equal third, each attracting 8.1 per cent of the respondents.

The sex of the respondents appeared to influence their choice of specialty in that a significant difference was found in the proportion of men and women engaged in

community medicine and in surgery. Speaking in terms of percentages, community medicine attracted seven times as many females as males, and surgery attracted seven times as many males as females. All the women who were practising community medicine were either married or widowed, and there is evidence (ref Scottish Council 1979) to support the view that the choice was based primarily on availability of part-time work and compatibility with family commitments. The virtual absence of women in surgery, on the other hand, would appear to be due to an intrinsic lack of interest as well as practical difficulties with inflexible training programmes and domestic responsibilities.

Less than half (46.4 per cent) of those resident in Northern Ireland before going to Queen's (317) were still living here; 24.3 per cent were in Great Britain or Eire, and 29.3 per cent were abroad. Of the latter, the greatest concentration (52) was in Canada, 17 were in the United States, 11 were in Australia or New Zealand, and 10 in Africa or Asia.

The data indicated a gradual decrease in numbers leaving the province, from approximately 63 per cent of the 'fifties graduates to approximately 44 per cent of the 1970 graduates, at the time of completing the questionnaire in 1977. The vast majority who left did so within eight years of graduation, and the peak period for emigration was within the first three years. The trends in emigration formed a clear pattern, and one that differed from patterns which emerged from similar studies in Great Britain, suggesting an underlying difference in motivating factors.

The most commonly quoted reasons for leaving the province were professional advancement, greater job satisfaction and greater financial rewards, in that order. The sectarian violence rated eighth on a list of ten factors influencing the decision to leave. The vast majority of voluntary exiles (over seventy per cent) do not plan to return. Only about 3 per cent had definitely decided to return and many of the remaining twenty-five per cent of "possibles" and "probables" said that the decision depended on a satisfactory outcome to our political problems.

The topics which recurred most frequently in the comments made by the respondents were (i) the factors influencing their decision to return to the province and (ii) additional information about their past career.

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