
Medical Education

Reasons for doctors' career choice and change of choice

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Abstract

In a study of doctors who qualified from British medical schools in 1974 and 1977, which was carried out five to 11 years after graduation, frequent changes of career choice were found. Most of these changes occurred at a relatively early stage. There was a shift of choices towards general practice, and to a lesser extent other specialties, predominantly from medicine, surgery, and paediatrics. Great importance was attached to self evaluation of aptitude and ability as a factor in determining the choice of career and also to awareness of promotion prospects and difficulties. The absence of or failure of careers advice to influence choice of career was notable as was the little importance attached to financial circumstances. Domestic circumstances were an important determinant, particularly for general practice and for women doctors. Among those who qualified in 1980 and 1983, at the preregistration stage, domestic circumstances were less important than they were for slightly older doctors, but undergraduate experience had a greater influence. Contact with a particular teacher or department was not, however, a notable element in this.

Introduction

In 1979 we surveyed the careers of doctors who qualified in Britain in 1974.¹ Respondents who had changed their choice of career since the preregistration year were asked to indicate from a list the reasons

that had influenced them. Of 1762 doctors who replied, 75% of the identified qualifiers in 1974, 41.3% gave reasons for a change of first choice of career. Postgraduate experience, awareness of promotion prospects and problems, and self appraisal were the most common factors. Altered domestic circumstances featured less prominently, and careers advice or altered financial circumstances had comparatively little influence. For each broad specialty group we analysed gains and losses of potential recruits, as judged by shifts in career choice.

We have continued to send questionnaires at two yearly intervals to doctors who qualified from British medical schools in 1974, 1977, 1980, and 1983.^{2,3} Since 1979 the questionnaires have included questions about factors that influenced choice of career regardless of whether any changes of choice occurred, thus giving all our respondents a chance to comment.

Method

We have always asked if career choices were made "definitely," "probably," or "not really." Since 1974 there has been slight evidence of increasing definiteness of choice at the preregistration stage, as reported previously,^{3,10} but there is still much indecision and scope for reconsideration during the early years after qualifying. For this paper choices were assigned to a specialty regardless of whether they were given as definite, probable, or "not really."

For our questionnaire surveys we identified 2350 doctors who qualified in 1974, 3159 in 1977, 3447 in 1980, and 3847 in 1983. Response rates have always been in the range of 80-90%. For the surveys relevant to this paper 97.9%-99.4% of respondents gave a "valid" first choice of career, though we have included indefinite choices.

Results

CHANGES OF CAREER CHOICE

The 2350 doctors who qualified in 1974 were followed up for 11 years after which time 310 doctors, 31% of the 1006 respondents who gave valid replies

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for all our two yearly surveys, retained their original choice of career. Three hundred and four (30%) had changed their choice once, 300 (30%) changed two or three times, and 92 (9%) changed four or five times. Most changes occurred early. Seven years after qualifying 673 (67%) respondents had made one or more changes.

For 1859 respondents who qualified in 1977 and were followed up for seven years there was a similar pattern, and it seems that changes are likely to be relatively infrequent after seven years from qualifying. In both cohorts just over half of respondents changed their choice between one and three years after qualifying, and about a third made a change or a further change during the following two years.

Respondents were given complete freedom to indicate their choice of specialty, and these changes relate to 82 coded specialties. The figures include changes from tied to untied choices, and vice versa, thus maximising the "changes of choice" reported.

Table I compares first choices of career one and seven years after qualifying for 1670 doctors who qualified in 1974 who gave valid choices at both the relevant times. To avoid formidable complexity choices are grouped into "mainstreams"; "changes" are in this respect under-represented in table I. When two mainstreams were given by a respondent as equal first choices each was allocated half a choice; when three were bracketed as equal first choices each was allocated a third of a choice. A change from a tied to an untied choice or from a double to a triple tie or vice versa is shown proportionately. By reading across the rows of table I it is possible to see how many first choices (corrected for ties) were lost from a specialty to each other specialty. Reading down the columns shows how many choices were gained by a specialty from each of the other specialties.

The doctors who qualified in 1977 showed great similarity to the doctors who qualified in 1974 (table I) in the distribution of career choices, the pattern of changes, and, allowing for the effects of small numbers in some mainstreams, in the degree of persistence of different choices. The most obvious feature in both cohorts is movement towards general practice coupled with a very high persistence of initial choices for general practice. Most other mainstreams show some gain in their proportion of choices. Gains for general practice are predominantly from medicine, paediatrics, and surgery. Radiology and radiotherapy gain largely from medicine, general practice, and surgery; anaesthetics attracts most new choices from surgery and general practice but also loses substantially to general practice.

Movement into pathology is mainly from medicine. Only about 40% of initial choices for radiology and obstetrics and gynaecology and less than 40% of those for medicine and paediatrics persist after six years. In general practice over 80% of the choices given in the preregistration year persist six years later.

REASONS FOR CHOICE AND CHANGE OF CHOICE

Table II shows factors regarded as being of "major importance" by 3053 male and 1396 female respondents seven years after qualifying. For this analysis 1974 and 1977 respondents are combined and are considered to belong to the mainstream of their first choice at the time of the seven year reply. Where there were ties of choice over more than one mainstream reasons were apportioned between the mainstreams concerned.

Domestic circumstances were of greatest importance among those choosing general practice and community medicine. They were also rated as important by a higher proportion of women than men for all except non-medical choices of career. Financial circumstances were not generally regarded as of great importance except for men choosing general practice and, interestingly, in the various "other" medical and non-medical career choices. Promotion prospects and difficulties seemed to be emphasised more by doctors choosing less competitive specialties. Self evaluation of aptitudes and ability were clearly important throughout and emerged most highly in psychiatry. Advice from others was generally accorded little importance.

Undergraduate experience was notably relevant in obstetrics and gynaecology and also in psychiatry. If the "major" disciplines of medicine and surgery had any dominant influence on undergraduates this seemed not to persist seven years after they left medical school. Undergraduate experience or contact with a specific department or person was generally not important in the choice of general practice as a career among these graduates of the mid-1970s. Inclinations before entering medical school were rated most commonly as being important in psychiatry and general practice. Experience of a previous career choice had its greatest influence among those who chose community medicine, among women who chose psychiatry, and for "other" medical or non-medical careers where "other reasons" for the choice were also prominent.

There were few notable differences between the 1974 and 1977 respond-

TABLE I—First choice of career corrected for ties by doctors who qualified in 1974: changes of mainstream between 1975 and 1981. (Figures are numbers of choices, corrected for ties, rounded to nearest whole number)

| | Choices in 1981 | | | | | | | | | | | | | 1975 total (%) | | | |
|----------------------------|-----------------|-------------|------------|----------------------------|--------------------------|------------|--------------------|-----------|--------------|-----------|--------------|---------------|-------------|----------------|---|---|--------------|
| | Medicine | Paediatrics | Surgery | Obstetrics and gynaecology | General practice ± other | Psychiatry | Community medicine | Pathology | Anaesthetics | Radiology | Radiotherapy | Other medical | Non-medical | | | | |
| Choices in 1975: | | | | | | | | | | | | | | | | | |
| Medicine | 146 | 17 | 14 | 2 | 122 | 14 | 3 | 14 | 10 | 12 | 6 | 9 | — | — | — | — | 368 (22.0) |
| Paediatrics | 7 | 38 | 2 | 1 | 48 | 1 | 9 | 1 | 2 | 2 | 2 | 1 | — | — | — | — | 114 (6.8) |
| Surgery | 11 | 1 | 153 | 2 | 59 | — | 2 | 5 | 20 | 4 | 2 | 2 | 1 | — | — | — | 261 (15.6) |
| Obstetrics and gynaecology | 4 | 1 | 4 | 27 | 19 | 1 | 2 | 1 | 3 | 2 | — | 2 | — | — | — | — | 65 (3.9) |
| General practice ± other | 13 | 4 | 7 | 8 | 480 | 20 | 16 | 7 | 18 | 6 | 2 | 4 | 7 | — | — | — | 592 (35.4) |
| Psychiatry | 1 | — | — | — | 11 | 39 | 3 | 1 | 1 | — | 1 | 1 | 1 | — | — | — | 58 (3.5) |
| Community medicine | — | — | 1 | — | 4 | 1 | 2 | — | — | — | — | — | — | — | — | — | 9 (0.5) |
| Pathology | 7 | 1 | 2 | — | 10 | 1 | 4 | 33 | 2 | 2 | — | 1 | 1 | — | — | — | 61 (3.7) |
| Anaesthetics | 2 | 1 | 1 | — | 16 | 1 | — | 1 | 45 | 1 | 1 | 1 | 1 | — | — | — | 70 (4.2) |
| Radiology | 2 | — | — | 1 | 7 | — | — | — | 1 | 9 | — | — | — | — | — | — | 22 (1.3) |
| Radiotherapy | 2 | 1 | — | — | 5 | 2 | 2 | 1 | — | — | 1 | — | — | — | — | — | 14 (0.8) |
| Other medical | 2 | 1 | 3 | 1 | 14 | 1 | 2 | 1 | — | — | 1 | 8 | — | — | — | — | 32 (1.9) |
| Non-medical | 1 | — | — | — | 2 | — | — | — | — | — | — | — | 3 | — | — | — | 6 (0.4) |
| 1981 total (%) | 197 (11.8) | 63 (3.8) | 186 (11.1) | 43 (2.5) | 797 (47.7) | 78 (4.7) | 42 (2.5) | 64 (3.8) | 103 (6.2) | 38 (2.2) | 16 (1.0) | 29 (1.7) | 15 (0.9) | — | — | — | 1670 (100.0) |

Note: Changes of less than 0.5, including zero changes, are shown by a dash.

TABLE II—Factors influencing choice of career for 3053 men and 1396 women with valid career choices, by specialty: 1974 and 1977 respondents combined. (Numbers are percentages of respondents who considered given factors to be of major importance. Allocation of reasons to mainstreams allows for tied choices of career)

| | Medicine | | Paediatrics | | Surgery | | Obstetrics and gynaecology | | General practice ± other | | Psychiatry | | Community medicine | | Pathology | | Anaesthetics | | Radiology | | Radiotherapy | | Other medical | | Non-medical | |
|----------------------------------|----------|----|-------------|----|---------|----|----------------------------|----|--------------------------|----|------------|----|--------------------|----|-----------|----|--------------|----|-----------|----|--------------|----|---------------|----|-------------|----|
| | M | F | M | F | M | F* | M | F* | M | F | M | F | M* | F | M | F | M | F | M | F* | M* | F† | M | F† | M† | F† |
| Domestic circumstances | 21 | 43 | 16 | 31 | 16 | 40 | 15 | 22 | 49 | 68 | 14 | 42 | 39 | 75 | 31 | 39 | 15 | 36 | 32 | 38 | 14 | 33 | 35 | 46 | 53 | 42 |
| Financial circumstances | 6 | 3 | 4 | 0 | 7 | 2 | 6 | 3 | 28 | 9 | 4 | 6 | 5 | 10 | 6 | 2 | 7 | 7 | 6 | 0 | 0 | 0 | 26 | 16 | 48 | 10 |
| Promotion prospects/difficulties | 40 | 38 | 19 | 12 | 29 | 34 | 26 | 9 | 49 | 41 | 30 | 32 | 43 | 32 | 51 | 39 | 43 | 40 | 76 | 60 | 48 | 38 | 51 | 36 | 38 | 10 |
| Aptitude/ability | 65 | 63 | 64 | 62 | 73 | 75 | 67 | 65 | 64 | 69 | 81 | 83 | 70 | 60 | 71 | 67 | 80 | 70 | 51 | 45 | 58 | 74 | 69 | 72 | 58 | 61 |
| Advice | 20 | 17 | 21 | 10 | 23 | 16 | 13 | 18 | 5 | 6 | 4 | 11 | 12 | 4 | 13 | 7 | 10 | 9 | 13 | 13 | 14 | 2 | 20 | 10 | 0 | 10 |
| Undergraduate experience | 17 | 18 | 26 | 25 | 25 | 27 | 48 | 35 | 10 | 11 | 34 | 29 | 2 | 7 | 17 | 24 | 23 | 14 | 6 | 8 | 11 | 12 | 19 | 8 | 7 | 19 |
| Department/teacher contact | 44 | 35 | 43 | 27 | 32 | 40 | 40 | 29 | 6 | 6 | 33 | 27 | 14 | 12 | 33 | 27 | 26 | 23 | 16 | 30 | 35 | 26 | 14 | 14 | 2 | 0 |
| Premedical school inclinations | 4 | 1 | 5 | 8 | 15 | 4 | 6 | 9 | 21 | 15 | 30 | 18 | 19 | 13 | 9 | 11 | 4 | 0 | 1 | 0 | 3 | 5 | 22 | 6 | 10 | 19 |
| Experience of previous choice | 20 | 23 | 19 | 11 | 18 | 20 | 12 | 18 | 20 | 22 | 22 | 31 | 37 | 30 | 17 | 16 | 20 | 14 | 23 | 13 | 17 | 31 | 38 | 44 | 43 | 39 |
| Experience of present choice | 54 | 52 | 59 | 55 | 58 | 58 | 53 | 60 | 44 | 50 | 52 | 60 | 37 | 49 | 50 | 51 | 58 | 59 | 40 | 48 | 54 | 67 | 57 | 56 | 35 | 48 |
| Other reasons | 13 | 6 | 13 | 7 | 7 | 8 | 7 | 6 | 8 | 7 | 11 | 8 | 26 | 13 | 10 | 8 | 9 | 10 | 8 | 8 | 8 | 10 | 29 | 32 | 45 | 29 |

*Percentages based on fewer than 50 choices corrected for ties.
†Percentages based on fewer than 25 choices corrected for ties.

ents. In obstetrics and gynaecology and paediatrics the influence of inclinations before entering medical school differed among women in the two cohorts, but the numbers of female respondents with these choices were fairly small.

Taking all specialties together, for the two sets of graduates separately, the proportions of respondents who regarded various factors as being of major importance in career choice remained remarkably constant in the replies given between five and 11 years after qualifying. As might be expected, the only exception was that experience of the current choice of career tended to become a more important factor as the time since qualifying increased.

MORE RECENTLY QUALIFIED DOCTORS

When our 1974 and 1977 respondents were reporting on their career choices seven years after qualifying the graduates of 1980 and 1983 were at the preregistration stage. In their evaluation of the influences on career choice, which was done immediately after leaving medical school, perceived aptitude and ability was most frequently regarded as of major importance. Promotion prospects and difficulties seemed to be regarded about the same as by the more senior 1974 and 1977 qualifiers in the early 1980s. Undergraduate experience was rated as of major importance by 1158 (41%) of the 1980 qualifiers who responded in 1981, and by 1414 (45%) of the 1983 qualifiers who responded in 1984, thus showing much greater influence than after several years of postgraduate medical practice. But contact with a particular teacher or department was not a notable element in this. Domestic circumstances seemed to be less important than for older graduates.

Discussion

Many studies have been published in many countries on career choice among medical students and doctors.¹¹⁻²¹ Personality factors contribute to career choice but extrinsic factors also operate, and increasingly so, during the early years after graduation. Throughout this paper we have referred to career "choices," but we are well aware that chance or the pressure of circumstances often play at least as large a part in determining what doctors do with their lives as a positive and determined preference for particular work. Indeed, the uninhibited career choices of young doctors form a distribution which is far from matching the needs of the service and the community.²² Making the dreams of every medical graduate come true, if it were possible, would lead to chaos. Whether the doctors who succeed in obtaining various career jobs are the best suited candidates for them by their character and ability, their need for employment, or their potential long term work contribution is an interesting and highly debatable question. A survey of our respondents in 10 or 20 years' time would perhaps yield much useful information about job satisfaction, stress, mobility, and employment among the middle aged doctors in our society.

We also realise that especially when career choice is still indefinite, as it often is before a doctor is fully registered,^{13,22} the preferences that the respondents put down may reflect the job they were then doing. Change of choice may be little more than a shift from one inchoate vision to another, or from one exciting and rewarding specialty to the next. That a choice is expressed as less than definite may show not so much lack of enthusiasm for a particular career as doubt about its feasibility. This we feel helps to justify including indefinite choices in the data presented here.

A general point that comes out strongly from this study is the lack of influence attributed to career advice. This is hardly surprising because much advice is at present haphazard or prejudiced in favour of a specific career. In many cases doctors have felt safer fending for themselves by all means available to them, and the importance of this is often seen as the soundest of all advice. But guiding people

about how to get a particular job or succeed in a given specialty is fundamentally different from counselling them about how to understand their strengths and weaknesses, how to come to terms with their professional lives, and how to give their most valuable contribution to medicine in the light of the many needs that society has of qualified doctors. Here is the ultimate challenge of "career choice," which entails looking hard at the way our system operates and at the true potentialities of the people within it.

The reasons for trends in career choice are often complex, and a more particularised breakdown of the information is necessary for a better understanding. For example, knowledge of the prospects for promotion may be a positive factor in moving into a specialty or a negative factor in moving out of one; there are substantial differences, in ethos and in other respects, between specialties within a mainstream—for instance, accident and emergency and neurosurgery, or dermatology and cardiology. Additional experience of a previous choice of career can be assessed as a factor only when the previous choice is known.

It was not possible to pursue these considerations in this paper nor have we drawn upon the comments of our respondents, which sometimes cast a different light on the motives underlying career decisions. We hope to report in more detail on aspects of our data in due course.

We thank the Department of Health and Social Security for continued support for our studies and for much helpful discussion.

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(Accepted 16 March 1988)