

## M.D. by thesis from general practice\*

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**SUMMARY.** The results of an enquiry into M.D.s from general practice in the five-year period 1968–1972 are given and compared with another survey covering the previous ten years. The total number of M.D. theses from all the universities of the British Isles in the five-year period of study was 723 and only 18 (2·5 per cent) were from general practice.

The upward trend seen in the latter half of the first survey was not maintained in this study period, although there were eight in the last year compared with only one in the first year. The reasons for the small number from general practice, and methods for improving the situation are discussed.

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### Introduction

In 1968 an enquiry was carried out on behalf of the Royal College of General Practitioners to examine the state of M.D. by thesis from general practice, in the ten-year period 1958–1967 (Williams, 1969). There were 1,478 successful M.D. theses from all the universities of the British Isles, but only 57 (3·9 per cent) were from general practice. In the second half of the study period, there were appreciably more theses from general practice than in the first half (34 and 23, respectively). It seemed important therefore, to repeat the enquiry to see if this encouraging trend has continued in the five-year period which followed (1968–1972).

Additional information, not asked for in the first study, was obtained in order to ascertain the failure rate amongst theses submitted from general practice compared with the total.

A separate enquiry was also carried out at the end of 1971, to establish the number of M.D.s by thesis from universities in other parts of the world, to include those from general practice in the previous 15 years. The figures for Holland covered the ten-year period of the first study.

### Method

At the end of 1972, the heads of departments of medicine in the universities of the British Isles were asked to help in this second enquiry, by supplying information about the total number of successful M.D.s by thesis from their universities in the five-year period 1968–1972, and by stating how many of these were from general practice. They were also asked for the total number of theses submitted, in order to calculate the failure rate. An assurance was given that this figure from individual universities would be treated as confidential, but that the rate for all the universities combined would be published, with the general practitioners' failure rate given separately for comparison.

A letter was then sent to each successful candidate from general practice, asking him to complete a questionnaire. He was asked for the title, the time taken to do the work,

\* An enquiry carried out on behalf of the Research Committee of Council of the Royal College of General Practitioners

how old he was when he proceeded M.D., and his reasons for embarking on this discipline. I thought it was important to find out if he had remained in general practice and if he had carried out further research, either in the subject of his thesis or in another field.

The 1971, 1972, and 1973 editions of the *Medical Directory* and the *Medical Register* were consulted with the librarian of the Royal College of General Practitioners and several informed colleagues in general practice. Some inaccuracies were discovered in figures supplied from some universities and these were corrected.

Information from universities in South Africa, Australia, New Zealand, Hong Kong, Singapore, Ceylon and Holland, was obtained in order to compare their figures for M.D.s by thesis from general practice with those of the British Isles.

## Results

### *Successful M.D.s from the British Isles*

The total number of M.D. theses from all the universities of the British Isles in the five-year period 1967–1972 was 723 but only 18 (2.5 per cent) were from general practice (table 1).

TABLE 1  
SUCCESSFUL M.D. THESES FROM THE UNIVERSITIES OF THE BRITISH ISLES 1968–1972 INCLUSIVE

<i>University</i>	<i>Number</i>	<i>Number from general practice</i>
Aberdeen	24	2
Belfast	40	1
Birmingham	39	0
Bristol	24	0
Cambridge	88	0
Dundee	14	1
Edinburgh	41	2
Glasgow	69	1
London	145	4
Liverpool	35	3
National University of Ireland	18	0
Leeds	12	0
Manchester	40	2
Newcastle	26	1
Oxford	72	0
Sheffield	21	1
Welsh National School of Medicine	15	1
	723 (100%)	18 (2.5%)

One practitioner had a commendation for his thesis. There were two women doctors among the successful candidates.

One of the doctors started his thesis while in general practice but left after three months to take up a post in industrial medicine, where he carried out his research. He was therefore excluded from the survey. Two other doctors, whose theses had been included by their university amongst those from general practice, were later found to have completed their work in a specialised department before entering practice, so they too were excluded. Four doctors known to the author as having proceeded M.D. by thesis from general practice, but who had not been included in that category by their respective university, were added to the list of successful candidates. The titles of some theses from general practice may be misleading, and could suggest that some of

them may have been written by a specialist, and this may be the reason for three of these theses being left out.

It was important to maintain accuracy as the numbers from general practice were so small.

*M.D. by thesis from general practice in other countries*

The number of successful M.D. theses from general practice in Holland in the ten-year period of the first study was 31 (Mulder, 1969) but, in relation to the general practitioner population of that country, the rate was approximately twice that of the British Isles. The reason for this difference is not known.

The number of M.D. theses from the other universities outside the British Isles for the 15 years before 1972 are given (table 2). The figures from Queensland are from 1962 because earlier data were not available.

TABLE 2  
M.D. BY THESIS FROM SOME UNIVERSITIES OUTSIDE THE  
BRITISH ISLES IN THE 15 YEAR PERIOD, 1957-1971

<i>Country or university</i>	<i>Total</i>	<i>From general practice</i>
New Zealand (incl. Otago)	84	4
Sidney	77	2
Melbourne	31	not known
Adelaide	60	not known
*Queensland	18	0
Capetown	85	not known
Pretoria	33	2
Ceylon	1	0
Hong Kong	9	1
Singapore	33	2

\* Number since 1962.

*Failure rate*

Out of a total of 889 theses submitted from the universities of the British Isles in the five-year study period, 723 were successful—a failure rate of 18·7 per cent.

The number of theses submitted from general practice was 28, with ten failures, but these figures are so small that two or three successes or failures would make an appreciable difference if they were expressed as percentages. Some of the universities were not certain of the number submitted from general practice.

*Annual figures*

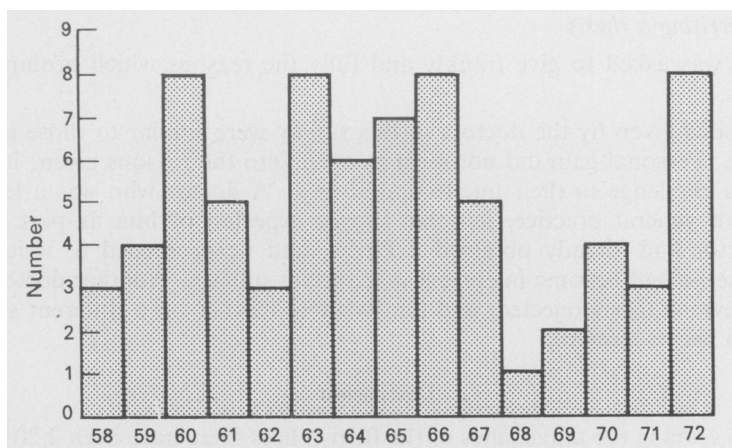
The average annual number of all theses in the first ten-year period was 147·8 with 144·6 in the present five-year enquiry.

Figure 1 shows the annual figures of successful theses from general practice for the 15 years 1958-1972 inclusive.

Although the last five-year period shows an appreciable reduction in M.D.s by thesis from general practice, nearly half of them were gained in the last year. This number was only equalled in three other years (1960, 1963 and 1966). In the first year of the present enquiry there was only one successful M.D. thesis from general practice.

*Subject matter of the thesis*

The titles of the theses covered a variety of subjects, some of which gave no indication of having been written by general practitioners, for example: "Body build in type 1 decompression sickness" and "A study of ear abnormalities associated with branchial fistulae and deafness".



Year of proceeding M.D.

Figure 1

The number of successful theses from general practice in the 15-year period 1958-1972.

Twelve of the theses had 'general practice' included in the title, for example: "Acute otitis media in general practice". One thesis, entitled "The aetiology of spontaneous abortion", had involved the doctor in virology, pathology, and genetics. Other theses included the study of anterior chest pain, the prescribing of psychotropic drugs, alcoholism, and hallucinatory reactions of bereavement. Another thesis was concerned with a study of a comprehensive cytological service in general practice. Two doctors had chosen an operational study: "Activity analysis in general practice" and "A time study of general practitioners and their consultations".

#### *Age at proceeding M.D. and the number of years after qualifying*

The ages of the general practitioners when they proceeded M.D. varied from 29 to 66 years (mean 42.7). In the previous study, the average age was 40.7 years.

The average interval of time between qualifying and proceeding M.D. was 18.5 years (range 7-45 years), in the previous study it was 15 years (range 6-60 years).

#### *Time taken to carry out the work*

The average time for carrying out the research and writing the thesis was 4.3 years. In the previous survey the time was 4.5 years.

#### *Encouragement for further research*

Sixteen (88.8 per cent) of the 18 successful candidates said that they had carried out further research after gaining their M.D. degree (previous study 83 per cent). Eleven of the doctors had carried out research in the subject matter of their thesis, 13 in other subjects and eight in both.

#### *Whether still in general practice*

All the doctors except one, who had retired by the time the enquiry was carried out, were still in active general practice. One doctor had become a professor of general practice and another a full-time lecturer in general practice. Two others were part-time lecturers in departments of general practice. One doctor, as well as being in general practice, also worked as a senior research fellow in a department of sociology in a non-medical school. Another doctor was a part-time lecturer in virology at a medical school. At least two doctors were regional advisers in general practice.

*Reasons for writing a thesis*

Each doctor was asked to give frankly and fully the reasons which prompted him to write a thesis.

The reasons given by the doctors in this survey were similar to those given in the previous one. Personal gain did not seem to enter into the reasons given; it seemed to be more of a challenge to their intellectual ability. A doctor who was a lecturer in a department of general practice, felt that it was expected of him as part of his job. Another doctor had already obtained a Ph.D., and he proceeded to write an M.D. thesis because he had become interested in a special subject. Another doctor said that he had a previous thesis rejected, and had written another on a different subject, but this time had been successful.

**Discussion**

In the last 15 years in the universities of the British Isles there have been 2,201 successful M.D. theses and only 75 (3·4 per cent) were from general practice. This small number from general practice was also observed in other countries. In the first ten-year study period, there was an appreciable increase in the number of successful M.D. theses from general practice in the second five years as compared with the first five years (34 and 23, respectively), but this upward trend has not been maintained in the last five-year period.

The numbers are so small and the time taken to complete a thesis so long, that to study the trend in five year periods may be too short. Nearly half of the theses in this study were gained in the fifth year, and only one in the first year (figure 1). The number expected in the sixth year would therefore be quite unpredictable. It is obvious, nevertheless, that the number from general practice is very small.

The number of failures from general practice was ten out of 28 compared with 166 (18·7 per cent) of the total 889 theses submitted. It is not known how many of these failed to reach the stage of being submitted: sometimes a candidate is advised not to go on with a thesis which is obviously not going to succeed—usually a wise decision. A doctor working in an academic department would find it easier to obtain advice than a doctor in an isolated practice. One doctor mentioned earlier in this paper, on the other hand, who had his first thesis rejected but succeeded with another on a different subject, was a country doctor in general practice over 80 miles from the nearest medical school.

Complete supervision as for a Ph.D. is not allowed, but it is folly not to seek enough advice. It is also important, when advice is sought, that the adviser takes the matter seriously, especially if a doctor is willing to take four years or so, writing a thesis. Such a person is worth guiding, and with reasonable ability and effort, should succeed. It is important however, that the standard of scholarship for an M.D. from general practice should be no less than that required for any other branch of medicine.

How important is an M.D. thesis? It is important to the individual candidate, because it gives him a feeling of satisfaction, having met a difficult challenge and succeeded. Also as important is its value to the profession, especially in the field of research. The evidence shown in this paper is that the doctor usually carries on research after completing his thesis. There is no doubt that the quality of research improves after going through this hard training.

In the last few years, the education of general practitioners has improved considerably. The academic standard and ability of the average student is far better than it used to be. Many more young doctors are entering general practice out of choice, and general practice is getting more of a share of the 'better' student. Many of these doctors therefore should be capable of carrying out research of a high standard.

### Conclusions

(1) There may be unsatisfactory monitoring of the work of some candidates, especially those working outside academic institutions. Although complete supervision as for a Ph.D. is not allowed for the more senior degree of M.D., a potentially good student should not be seen to have fallen by the wayside, through lack of encouragement, insufficient or unsound technical advice.

(2) The emergence of university departments of general practice, for the first time, has made it possible for medical schools to give instruction and advice in this important field of medicine. It is to those departments that the M.D. candidate of the future can look for help. There is already good evidence that this has come to fruition in some universities.

(3) The prime responsibility for the M.D. degree is rightly that of the respective university, but it is important that the general practitioners' own academic institution, the Royal College of General Practitioners, should make it known to its members that this discipline can be undertaken successfully from general practice.

Although it is not proper for the Royal College of General Practitioners to interfere with the directions given by the individual universities to their M.D. candidates, it is prepared to give advice if asked to do so. It also offers the services of its library, photocopying service, and the research advisory service. The research units of the College, in Birmingham, Dundee and Manchester, the Epidemic Observation Unit, and also the Research Foundation Board, all provides services for general practitioners.

(4) Finally, it seems appropriate for members of the University Departments of General Practice and the Royal College of General Practitioners to meet and discuss this important problem, in order to increase the number of good quality research workers in general practice.

### Acknowledgements

I am greatly indebted to the Deans of the Departments of Medicine of the Universities of the British Isles and those in universities in other parts of the world, who kindly provided me with the data for this survey. I would also like to thank those M.D. recipients who were so helpful in completing the questionnaire which was sent to them, and to many doctors with whom I discussed doctorates from general practice. Finally I wish to thank the Research Foundation Board for a grant which made this survey possible.

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## STAFFING THE NATIONAL HEALTH SERVICE

In 1973 the National Health Service employed 750,000 employees. For every doctor there are 12 nurses, three technical administrative staff, and ten general workers such as porters, cooks and laundry women.