

# CAREER CHOICES OF MALAYSIAN MEDICAL STUDENTS

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## INTRODUCTION

The history of medical education in Malaysia is a relatively short one. From 1905 until 1964, Malaysian doctors were trained either at the King Edward the VII Medical College in Singapore or overseas in other Commonwealth countries. In 1964, the Faculty of Medicine was set-up in the University of Malaya in Kuala Lumpur and admitted its first class of 46 students (Faculty of Medicine, University of Malaya-1975). Since then, the admission rate has increased to 126 each year. Students graduate after a five-year integrated course. A total of over 1,200 students have graduated with the Bachelor of Medicine and Bachelor of Surgery degrees since 1969. During this decade, the graduates have gone on to careers in Medicine ranging from open-heart surgery to immunology, psychiatry and general practice. Some have done so by design, others by circumstance and yet others by accident. No doubt, some have gone on to non-medical careers. However, figures of who went where into what are understandably difficult to obtain in a developing country especially as there has been a fairly free flow of medical graduates worldwide in the seventies.

Numerous studies on reasons why students choose Medicine as a career by Thelens (1957), Bloom (1971) and Rao (1976) and others on what careers medical graduates choose (Royal Commission on Medical Education, 1968; Martin & Boddy, 1962 and Ogstons, 1970) have been done in other countries. A survey conducted by the MMA (1980) on medical students' reasons for choosing a medical course showed that interest in Medicine and helping people ranked high among the reasons for the choice. However, once the medical profession is chosen as a career, students often choose to go into sub-specialities or different types of medical work.

In a developing country such as Malaysia, with a shortage of medical graduates and consequent shortages of trained specialists, the optimum utilisation of the limited medical manpower is important. It would therefore be useful to know not only the total number of doctors existing in the various sub-specialities on graduation, but also the future career plans of medical students prior to their graduation. Studies in other countries have shown similar surveys to be useful (Hutt, 1976).

## Purpose of this Study

This survey was undertaken to obtain an idea of the future career plans of final year medical students in the University of Malaya. In particular, the survey attempted to look at the interest that students had in the various sub-specialities open to them during the first years after graduation. This is a period during which many have the most opportunities to choose a more permanent career in Medicine.

## MATERIALS AND METHOD

This study was conducted as part of career counselling small group discussions conducted with medical students during their clerkship in Psychological Medicine. It consisted of a seventy-five minute discussion on aspects of career choice openings available to new graduates and factors that determine career choice among doctors. Prior to the commencement of the discussion, a one-page questionnaire was handed to the students and its purpose explained. Completion of the questionnaire was voluntary and anonymity was ensured by absence of identifying data. The questionnaires were collected and data from them collated and analysed. These are presented and discussed.

## RESULTS

### Sex and Age

There were 96 respondents to this survey of which 79(82.3 percent) were male and 17(17.7 percent) female students. Of these 83(86.5 percent) were aged 25 and

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**TABLE I**  
**MALAYSIAN MEDICAL STUDENT'S AGE GROUP**

Age in Years	Number	%
23	20	20.8
24	41	42.7
25	22	22.9
26	7	7.3
27	4	4.2
DK	2	2.1
Total	96	100.0

below. The mean age was 24.2 years.

#### Scholarships or Sponsorships

The majority of students were funded for their university course either by a scholarship or loan. There were 60 (62.5 percent) on such assistance. These forms of assistance usually but not invariably entailed a financial bond, loan repayment, a service bond or combination of the two. There were 40 students who had financial bonds ranging from (M)\$3,000 to (M)\$70,000 and service bonds ranging from three years to ten years. Of the 40 who had to serve for a period of time in public service, 29 (72.5 percent) had to serve from 5-10 years while the rest were required to serve 1-5 years. The service bonds required the students to serve the state or federal government for the duration of the bond. Any breach of the bond could result in legal action.

#### Interest in Clinical Subjects

At the final year of their medical course, the students were asked if they had a favourite clinical subject, 42.7 percent named Internal Medicine as their favourite subject, 16.7 percent Surgery and 9.4 percent Obstetrics and Gynaecology. A further 7.4 percent said their favourite was Paediatrics.

#### Housemanship

There were only 4.2 percent of the students who had not decided which disciplines they would choose to do their two periods of six months internship in. Among the remainder, Internal Medicine led the list being chosen 69 times, Surgery 52 times, Obstetrics and Gynaecology 39 times and Paediatrics 24 times. Orthopaedics was not chosen by any of the students though this is available in

**TABLE II**  
**FAVOURITE CLINICAL SUBJECT OF MEDICAL STUDENTS**

Subject	Number	%
Medicine	41	42.7
Surgery	16	16.7
Obstetrics & Gynaecology	9	9.4
Paediatrics	7	7.3
Pathology	2	2.1
Social & Preventive Medicine	1	1.0
Orthopaedic Surgery	1	1.0
Psychiatry	1	1.0
Nil	18	18.8
Total	96	100.0

some centres as part of the pre-registration housemanship training.

#### Three Year Pre-Registration Residency

In Malaysia, all doctors have to serve a three-year period of residency in a public hospital or medical centre before they are fully registered. The students were asked to list in order of preference their choice of discipline for this three-year period. A total of 50 (52.1 percent) reported they had plans for the three years, 16 had decided for parts of the period but 32 (33.3 percent) had not made any plans. Of the 64 who had made plans for the first year, and 41 or 64.1 percent listed internal medicine as their choice. Surgery was chosen by 15.6 percent.

**TABLE III**  
**CHOICE OF POSTINGS FOR HOUSEMANSHIP**

Discipline	1st Choice (%)	2nd Choice (%)	Total
Medicine	51 (55.4)	18 (19.5)	69 (37.5)
Surgery	12 (13.0)	40 (43.5)	52 (28.3)
Obstetrics & Gynaecology	16 (17.4)	23 (25.0)	39 (21.2)
Paediatrics	13 (14.2)	11 (12.0)	24 (13.0)
Orthopaedics	—	—	—
Total	92 (100.0%)	92 (100.0%)	184 (100.0%)

**TABLE IV**  
**DECISION STATUS FOR THREE YEARS RESIDENCY**

Decision Status	Number	%
Decided For All 3 Years	50	52.1
Decided For 2 Years	9	9.4
Decided For 1 Year	5	5.2
Undecided	32	33.3
<b>Total</b>	<b>96</b>	<b>100.0</b>

For the second year, 59 students had made choice of the disciplines. Nineteen (32 percent) chose internal medicine. This was followed by paediatrics (25.4 percent) and obstetrics and gynaecology (23.7 percent) and surgery was chosen by 11.9 percent.

For the third year of the residency, there were only 50 students who had made plans. Of these, 24(48 percent) chose internal medicine. Surgery and paediatrics were chosen by 16 percent and obstetrics and gynaecology by 14 percent.

#### Choice of Ultimate Medical Career

The questionnaire also made reference to the students' choice of an ultimate career in Medicine after the three years of residency. Forty-three of the students indicated that they had decided on an ultimate career at this stage while 53(55.2 percent) had not made that decision. However, when asked to list their choice of ultimate career in order of preference, only 7.3 percent failed to list any choice of ultimate careers. Of the remainder, eight had no second choice and 14 had no third choice.

#### Medicine

Thirty-six of the students listed internal medicine as first choice. Medicine was chosen by 20 as second choice and 8 as third choice.

#### General Practice

General practice was chosen 49 times though it was the first choice of only eight students.

#### Paediatrics

Paediatrics was the first choice of 13 students and was chosen forty-one times.

**TABLE V**  
**CHOICE OF DISCIPLINES FOR THREE YEARS RESIDENCY**

Disciplines	1st Year	2nd Year	3rd Year	Total	%
Medicine	41	19	24	84	29.1
Surgery	10	7	8	25	8.7
Obstetrics & Gynaecology	3	14	7	24	8.3
Paediatrics	8	15	8	31	10.8
Orthopaedics	1	—	1	2	0.7
Ophthalmology	1	—	—	1	0.3
Radiology	—	1	—	1	0.3
Social & Preventive Medicine	—	1	—	1	0.3
Psychiatric	—	1	2	3	1.0
Anatomy	—	1	—	1	0.3
Don't know	32	37	46	115	39.9
<b>Total</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>288</b>	<b>100.0%</b>

#### Surgery

Surgery which was the first choice of 13 students was chosen only 24 times.

#### Obstetrics and Gynaecology

Seven students put obstetrics as their first choice but it was chosen 32 times. Among other popular careers were research and university careers chosen 17 times, social and preventive medicine chosen 11 times and psychological medicine chosen 10 times.

#### Psychological Medicine

A separate question on the interest in Psychological Medicine showed only 2 were firmly interested in it as an ultimate career though thirty had some interest in it.

#### DISCUSSION

This study sampled the choices of final year medical students on three phases of a formative period in their careers — the internship and a three-year period of residency and their ultimate career choice. The students of a mean age of 24.2 years came from a sample of medical students in a Malaysian Medical School and were largely dependent on non-parental sources of support. This may be a factor in the choice of a career or postgraduate experience as scholarships and bonds may be related to places of work.

During their final year with least influence of subsequent commitments such as bonds, their interests were mostly in medicine (42.7 percent), surgery (16.7 percent), obstetrics and gynaecology (9.4 percent) and paediatrics (7.3 percent). However, it is interesting that three other major disciplines like orthopaedics, psychiatry and social and preventive medicine were the

TABLE VI  
CHOICE OF ULTIMATE CAREERS

Disciplines	1st Choice	2nd Choice	3rd Choice	Total	%
Medicine	36	20	8	64	22.2
General Practice	8	11	30	49	17.8
Paediatrics	13	19	9	41	14.2
Obstetrics & Gynaecology	7	11	14	32	11.1
Surgery	13	9	2	24	8.3
Teaching & Research	5	6	6	17	5.9
Administration and Preventative & Social Medicine	2	4	5	11	3.8
Psychological Medicine	2	5	3	10	3.5
Armed Forces	—	2	3	5	1.7
Others	1	1	2	4	1.4
DK	7	8	14	29	10.1
Total	96	96	96	288	100.0%

favourite of only 5 percent of the students. More interesting perhaps is the figure of 18.8 percent who had no favourite subjects by their final year in Medicine.

The choices of disciplines for internship is restricted to medicine, surgery, obstetrics and gynaecology in all centres and recognised for the purpose in Malaysia, and paediatrics and orthopaedics are available in some hospitals. Within these restrictions, it was found that internal medicine was the first choice of 51 students and second choice of a further 18 students. Surgery was first choice of 12 and second choice of 40. Obstetrics and Gynaecology was chosen by 16 (first choice) and 23 (second choice). Here again, the interests seem to be internal medicine, surgery, obstetrics and gynaecology and paediatrics. There was no respondent in favour of orthopaedics.

It is in the choice of disciplines for the three year pre-registration period that opportunities are available to recent graduates to work in any discipline provided they are within the public services. As such, general or family practice in the private sector is obviously ruled out. Again, the responses were heavily in favour of medicine — it being chosen 85 times. This followed by paediatrics 31 times, surgery 25 times and obstetrics and gynaecology 24 times. Orthopaedics was chosen twice, social and preventive medicine once and psychiatry thrice. The response to the students' choice of an ultimate career is interesting. Though it may not be entirely indicative of their ultimate career choice, it provides a glimpse into the preference of final year medical students.

The part of the study which dealt with choice of an ultimate career showed up some interesting results. These relate to the first choice, second and last choice and overall number of times a career was chosen. The students were not in any way restricted in the subjects of

TABLE VII  
INTEREST IN A PSYCHIATRY CAREER

Interest in a Psychiatry Career	No.	%
(1) Yes, definitely	2	2.1
(2) Psychiatry is one of the specialities I would consider	30	31.3
(3) I am not very interested in Psychiatry	44	45.8
(4) No, definitely not	20	20.8
Total	96	100.0%

careers they could choose as the list was comprehensive and had options as "other (specify)", "not sure", "do not know" etc. Medicine was chosen as a speciality the most number of times and also the discipline of first choice among the largest number. Paediatrics and surgery tied for second place among first choices but paediatrics was chosen forty-one times over surgery's 24 times. General practice was the first choice only 8 times but was chosen 49 times, thus coming out second among the number of times a career was chosen. From these, it appears that internal medicine, general practice and paediatrics figure prominently among the students where choice of career is concerned. The high preference for general practice as a career while related to the students' concepts of an ultimate career must also be weighed against the relatively scanty exposure they have to this branch in their curriculum. The relationship of their choices to their curriculum is a complex one and one that is not easily explainable in terms of time spent on a posting. There are financial, status, family and other considerations that educators have to reckon with.

From the above, it appears that the traditional disciplines of most interest appear to be dominated by internal medicine, surgery, obstetrics and paediatrics. This may be related to the fairly long postings in these disciplines throughout the medical course but the same argument does not seem to support disciplines such as orthopaedics, social and preventive medicine where considerable time is also spent.

The reasons for the choices may also of course be related to other more practical and pragmatic reasons. These would include the student's views of employment prospects in different fields, friends or teachers in these disciplines and other family or personal factors. It is interesting that paediatrics, a discipline in which there is a comparative shortage of specialists in the country was

chosen 31 times and rated second to medicine and ahead of surgery and obstetrics and gynaecology.

Another interesting point is the relatively large percentage of students (33.3 percent) who had made no plans for the three years after their internship. However, this may be considered acceptable in view of the fact that many choices are only made by doctors during their internship or after practical working experiences in the disciplines of their choices.

## CONCLUSION

This paper is a brief preliminary survey of medical students' views of their future careers and obviously cannot be taken as the final plans they have made. The periods of internship and residency will no doubt help consolidate or change their views as will other social and economic factors. A substantial number of them will also have to pay heed to their financial and other tenure commitments of loans and scholarships to which they are party. But some of the above results may be of use both to the medical educators as well as medical planners as the students' interests may be closely linked to what medical students choose as their careers.

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## REFERENCES

- Bloom, S. (1971), *The Medical School as a Social System — A Case Study of Faculty-Student Relations in Milbank Memorial Fund, Quarterly*, 49, 196.
- Faculty of Medicine, University of Malaya (1975), *Report on Establishment and Progress*, Central Printing Unit, Faculty of Medicine, University of Malaya, Kuala Lumpur, pg. 3-6.
- Hutt, R. (1976), *Doctors' career choice. Previous research and its relevance for policy making*. IN: *Medical Education* Nov. 1976 Vol 10, No. 6 p. 463-473.
- Malaysian Medical Association (1980), *The Future of the Health Services in Malaysia. A Report of a Committee of Council of the Malaysian Medical Association*.
- Martin, F. and Boddy, F. (1962), *Career Preferences of Medical Students — Sociological Review, Monographs*, No. 5, p. 21.
- Ogston, D., Ogston, W., *et al* (1970), *The Origin and Employment of Medical Graduates of the University of Aberdeen, 1931-69, Lancet IV*, p. 360.
- Rao, T. (1976), *Career Decisions by Medical Students — A Profile from India, Medical Education*, 10, 284-289.
- Royal Commission on Medical Education (1968), *Cmd 3569, HMSO, London*.
- Thelens (1957), *Some Comparisons of Entrants to Medical and Law School in The Student Physician* (Ed. R.K. Merton, G.G. Reader and P.L. Kendall), Harvard University Press, Cambridge, pp. 109-129.