

EDITORIAL

Medical manpower needs by the year 2000

Based on media reports late last year that there were no posts left for medical officers in the Public sector, the uninitiated may well misconstrue that we have an excess of doctors to our nation's requirements.

At independence in 1957 we had a total of 770 doctors with a doctor population ratio of 1:8091. In 1987 we had 5794 doctors registered and a markedly improved ratio of 1:2852 (Table I). Even if we were to aim for a modest 1:2000 ratio by the year 2000 when the population is estimated to rise to 22.5 million,¹ we will require to double our present number of doctors. We will need to register an additional 500 new doctors per year and not lose any for the rest of this century. Table II shows the sources of newly registered doctors which might suggest that the new registration is adequate.

Table I
Distribution of Doctors and Doctor Population Ratio in Malaysia
1957 – 1987

Year	Public Sector	Private Sector	Total	Doctor: Population Ratio
1957	300	470	770	1:8091
1960	350	580	930	
1965	560	830	1390	
1970 ^{xx}	725	1406	2131	1:4162
1971 ^{xx}	807	1563	2370	
1972 ^{xx}	1029	852	1881	
1973 ^{xx}	1357	942	2299	1:4184
1974 ^{xx}	1266	901	2167	
1975 ^{xx}	1324	1010	2334	1:4332*
1980	2062	1796	3858	1:3800*
1981	1986	1955	3941	1:3661*
1982	2034	2200	4234	1:3426*
1983	2045	2429	4474	1:3328*
1984	2061	2444	4505	1:3388*
1985	2228	2711	4939	1:3174*
1986	2376	2961	5337 ⁺	1:3018
	(as at 31.7.86)			
1987	2463	3331	5794 ⁺	1:2852

Source:

*Ministry of Health Malaysia; Annual Reports of 1982, 1983/84, 1985.

+ Malaysian Medical Council

xx Future of Health Services in Malaysia, MMA Publication, Kuala Lumpur 1980

Table II
Sources of Medical Practitioners Registered

Year	Local Graduates	Overseas Graduates	Foreigners (Contract)	Total
1981	117	215	37	429
1982	196	114	45	355
1983	265	134	48	447
1984	251	165	54	470
1985	267	203	37	507

Source: Malaysian Medical Council, Ministry of Health, Annual Report 1985

In its first 25 years, the Medical Faculty at the University of Malaya produced 2231 new doctors.² Between 1970 and 1987, however, there was an increase of only 3600 doctors, with the Universiti Kebangsaan accounting for about 800 new graduates and the remaining being foreign trained Malaysians or contract doctors amounting to about 200 per year. There is therefore a shortfall of about 2800 doctors in the same period, accounted for by emigration, retirement or death. It would therefore appear that all the doctors produced by the University of Malaya in the last 25 years barely compensated for the ones leaving service. Assuming a similar attrition rate, the actual number of new doctors required each year will be 660. With the Universiti Sains now graduating doctors and increased numbers returning from overseas, we may just about make it. But is 1:2000 a desirable target? It would put us on par then with what South Korea was in 1975³ and we would be lagging 30 to 35 years behind countries like Singapore, Brazil, Cuba and even Peru³ which have all attained this "target ratio" more than 15 years ago. Surely we ought to be doing better.

If the projections of our total doctor population is disconcerting, then the projection of our specialist manpower requirements is even more worrying. Table III shows the shortfall of specialists projected for the year 1995. We will need to train more than 2000 additional specialists by the year 2000. To date the University of Malaya has produced 29 pathologists, 22 psychiatrists and 117 public health specialists.² The Universiti Kebangsaan has started a long list of post-graduate courses and the numbers that have passed out are shown in Table IV. The Universiti Sains too has taken in its first batch of 4 candidates for their own 4 year Master of Medicine Course which has places for 8. By 1990, this medical school hopes to take in trainees for Masters degree courses in Obstetrics and Gynaecology, Paediatrics, Orthopaedics as well as General Surgery, with probably 8 candidates in each.

Based on the above figures, only very small numbers of specialists can be trained by the three medical schools. It will appear that we will need to continue to rely on overseas training and qualifications for specialist certification well into the 21st century. This avenue must not be viewed as a competitor of local courses. Indeed we must continue to encourage and promote this despite greater difficulty in getting places and escalating costs if we are to even meet our requirements partially!

Table IV
Postgraduate Programmes
Universiti Kebangsaan Malaysia

No.	Masters Course (M. Med; M.S.)	Year Started	Number at start of 1987/88 session				Number Graduated
			Yr I	Yr II	Yr III	Yr IV	
1.	General Surgery	1981/82	7	—	4	6	3
2.	Orthopaedic Surgery	1981/82	7	3	2	3	5
3.	Orthorhinolaryngology	1981/82	3	—	4	2	1
4.	Ophthalmology	1983/84	8	2	3	6	3
5.	Radiology	1983/84	1	8	5	10	11
6.	Paediatrics	1984/85	8	4	7	—	—
7.	Psychiatry	1985/86	7	4	2	—	—
8.	Anaesthesiology	1985/86	10	1	5	6	5
9.	Obstetrics & Gynaecology	1985/86	4	2	3	—	—
10.	Medicine	1986/87	13	5	—	—	—
			68	29	35	33	28

Source: Faculty of Medicine, Universiti Kebangsaan Malaysia, 1988

There are also plans by the existing three medical schools to operate independently and offer the same type of courses thus triplicating efforts and resources. With the limited experienced teachers we have, we should rethink our strategies so as to pool our manpower and training resources and to maximise the numbers of specialists we can “churn” out. More training posts need to be accredited and this could also include private institutions. As many trainees as possible should be allowed to sit for the postgraduate certification examinations so long as they satisfy the training requirements and such postings need not be within the University departments only. This would open up avenues for a larger number of candidates.

The present system of full-time attachment within a University department has been a major obstruction to the course becoming popular. There were proposals towards such liberalisation but no progress appears to have been made. Worse, the three medical schools give the impression that there has been a parting of ways and that each is in direct competition to set up as many courses as possible on its own.

It is evident from the staff lists of the three medical schools that there is a general shortage of teaching staff (even if new postgraduates were included) and it is a credit to them that they have been able to cope with the undergraduate teaching, let alone to train specialists. Further loading of responsibilities can only deteriorate standards. It is imperative for the Government and the Universities to realise that there are many senior specialists with considerable experience in the Ministry of Health hospitals and in the private sector who can and should be utilised. Trainees from these sectors tend to go for the membership or fellowship of overseas colleges (if they can afford it) as they are not eligible to sit for the local Masters degree examinations.

The large private sector must also play its part. Private sector specialists should not only take classes but also be made to provide attachments for trainees in rotation. Far from producing a fall in standards, this "opening up" of the system will allow larger numbers of trainees to become eligible to sit for examinations while exposing them to a wider spectrum of specialists, reducing problems of undersupervision and limited exposure. It is pertinent in this context to quote the eminent medical educationist Professor T. J. Danaraj.

"No one institution, whether Ministry of Health, University or professional group has the knowledge, expertise, staff and other facilities to train for the whole country nor must it arrogate these powers to itself. Resources must be pooled and specialty development should become a concern of all the above groups."

References:

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3. The Future of Health Services in Malaysia, Malaysian Medical Association, 1980 : p 31.
4. Danaraj T.J. Medical Education in Malaysia: Development and Problems, Pelandok Pub. 1988 : p 96

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