Training of Doctors in Nepal

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"Make up your mind how many doctors the community needs to keep it well. Do not register more or less than this number".

G.B. Shaw
Preface to **The Doctor's Dilemma.**

Abstract

Post 1990 AD has seen a spurt in activity in the setting up of medical colleges, nursing homes and clinics in different parts of Nepal. In addition to the single Institute of Medicine (IOM), four other medical colleges have been either set up or are in the process of doing so. This means that there will be great demands for various grades of health workers to man and run the many health institutions being set up. Doctors are a category for which there will be a great demand and shortfall.

Key words: Doctor, community oriented, medical council, medical education.

Background

Dr. V. Ramalingaswami in his address at the Acapulco Conference at Mexico in 1986 said:

"It was once believed that the best way to get doctors to go to rural areas was to overproduce them, and oversupply the urban areas with them, in the hope that through sheer pressure they would gravitate to peripheral areas-an expensive and wasteful method, which nevertheless seems to have led to better distribution in some cases, while not in others [1].

It is in this light that the opening of medical colleges must be looked at. Is it an answer to the problem of distribution of doctors and the attainment of Health For All? Or are the new doctors going to migrate or emigrate to greener pastures? Are they going to be the Nepalese "guest workers" of the 21st Century? Are they going to be performing "non medical" work in foreign lands? All this is very relevant now that barriers to migration or emigration for doctors have been or are gradually being put up in many countries of the developed world.

HRH Development in Nepal

The Nepel Health Care system at present is mostly Government run while only a small percentage is private. Of the total number 5,275 hospital beds, the Ministry of Health provides the Government's share of 3,522 or about 2/3 of total beds. This ratio is being maintained. A number of other hospitals are under the University or Government aided teaching institutions, besides those established for the military and the police. The private sector comprises those run by Non Government Organizations (NGOs), such as Mission groups, Lions, Eye Sight Association and private nursing homes. The government run hospitals charge for some services but even these minimal charges can be waived by the attending doctor when the situation warrants it. The newly sanctioned medical schools in different parts of the country will increase the coverage of the health

services but at the same time lead to a more costly health service as the overall expenditure for health services provided rises.

The Institute of Medicine (IOM) was established in mid-July, 1972 for the training of various grades of health workers. After its establishment the IOM in an effort to make health personnel education more widespread, started campuses in different parts of the country.

The medical course at the IOM was started in 1978. The first batch of IOM's **basic community oriented doctors** came out in 1984[(2)]. Initially there was opposition to the programme itself, in that this being "**WHO inspired and community oriented**" was going to produce a **second class of medical manpower**. The hope of those involved in the training of doctors was that the products of the IOM, especially those who came from among the middle level workers, would be more disposed to work in areas where they had spent their early years. It was also felt that as the medical degree was not universally recognised, they would be more likely to stay within the country.

Even in those early years (1980s), there was interest by various parties outside the country to set up medical colleges. As the IOM had just been established the authorities felt that the time was not ripe. Thus it was only in the nineties, after a lapse of many years, when it was decided to set up with help from the Government of India, the B.P. Koirala Institute of Health Sciences (BPKIHS). At the same time the idea was mooted that having private medical colleges will not only bring about a boost in the economy but that a good service sector could be created in the health field as well. As a result not only would money previously going out of the country be retained within, but the government would also be providing health services to a substantial portion of the population. Thus different medical colleges came into being in the order given below:

1. **BP Koirala Institute of Health Sciences (BPKIHS), Dharan[(3)]**. This institute started with an annual intake of 30 students, currently is at 40, and is in the process of increasing to 50. There are special provisions for local candidates and prince 1996 it has been taking in regular fee paying students. It currently has a 150 bed hospital and an additional 350 bed complex is due to be finished by 1998.

2. **Manipal College of Medical Sciences (MCOMS), Pokhara.** The building of the new hospital is well underway and alternative arrangements have been made for clinical training at the government hospital. The initial 150 bed first stage is expected to be functioning in December, 1997. There are currently about three batches of 50 Nepalese students. Others are from the other SAARC (South Asia Association for Regional Cooperation) countries and also further afield.

3. **College of Medical Sciences-Nepal, Bharatpur**. The medical college was allowed to start functioning as from August of 1996. There is a clause in the agreement of this college by which the Nepalese students account for about 25% of the annual intake. There are also special provisions for local candidates. Currently there are about 25 Nepalese students attending each year. Others are mainly India.

4. **Nepalgunj Medical College, Nepalgunj**. This, HMG/N approved medical college is being set up by group of Nepal entrepreneurs grouped together in a body known as

the Lord Buddha Educational Academy. The medical college is due to start functioning from December, 1997.

Other ventures

The meeting of the Higher Technical Education Promotive & Monitoring Committee (HTEP&MC) in November, 1996, approved the granting of a letters of intent to both the **Kathmandu Medical College** (Charity International) and the **Nepal Medical College** for the establishment of two additional private medical colleges on the outskirts of the capital. Both of these colleges are in the process of getting permission from the Nepal Medical Council (NMC) to start classes beginning with the 1997 session and their intake of Nepalese students estimated is to be about 37 and 50, respectively.

Announcements have been made periodically of the Ministry of Health's (MOH) intention for conducting undergraduate MBBS classes and also post-graduate studies at the Institute of Medicine based at **Bir Hospital**. The body responsible for this will be the Valley Group of Hospitals.

Another project which began initially with the intention of starting another medical college at Kathmandu is now planning to start as a dental institution to be named the

Peoples Dental College.

Yet another proposal by the Universal Institute of Advanced Studies & Research Inc. for a medical college and hospital at **Bhairahawa**, near the birthplace of Lord Buddha, has been submitted to the government and Tribhuvan University.

National Requirements for Doctors

What needs to be remembered in all this is that up until November 1996, Nepal had only two institutions producing doctors. The sudden spurt of activity to open private medical colleges spurred the Nepal Medical Council to express concern about the quality of graduates to be produced by such health/academic institutions, which may not have proper facilities for service nor for training. This led to widespread concern about standards. The worry was also whether there would be enough work for the graduates produced and whether there would be under-utilisation of doctors in future years. This caused a slowing of the pace for setting up new medical colleges. On the other hand there was an expressed wish of many young students and of their parents for facilities for education in the medical or engineering fields within the country.

Because of the excessive amount of capitation fees or medical "fees" in India, a recent trend has been for students to go to Bangladesh where duck costs are less. A large number of Nepalese are going to the former USSR or to the CIS and some of the newly founded Republics to study medicine. The prerequisite there is eleven years of schooling and as a fair number of Nepalese have entered after just 10 years of schooling, there is definitely going to be the question of recognition by the Nepal Medical Council. As standards of medical education vary in different countries and between the public and private institutions in the same country, there is a lot of sorting out to be done. There is a

proposal to have licensing examinations in the coming years. In light of all this, the ultimate aim should be to try to train all the doctors within the country itself.

A study of the NMC register for 1997 suggests that out of the 2,500 currently registered Nepalese doctors, about 400 (16%) are out side the country studying or working, leaving about 2,100 working within the country.

The annual registrations done by the NMC since 1984 is as given in Table 1[4].

Table 1. **Number of doctors registered annually**.

Year	No.	Year	No.
1984	143	1991	140
1985	124	1992	133
1986	152	1993	117
1987	120	1994	132
1988	142	1995	122
1989	94	1996	112
1990	142	Total	1,673

NB. There were about 800 doctors registered before 1984.

The education and training details of the Nepalese doctors during the course of last three years are as given in Table 2 below. Only about 19% of Nepalese doctors are trained in Nepal, by the IOM.

Table 2. **Training of Nepalese Doctors, country and year wise**

Country	1994		1995		1996	
	No.	%	No.	%	No.	%
Nepal-IOM	33	25.0	15	12.3	22	19.6
India	56	42.4	53	43.4	32	28.6
Russia	24	18.2	29	23.8	23	20.5
Bangladesh	14	10.6	17	13.9	20	17.9
China	3	2.3	1	0.8	6	5.4
Pakistan	1	0.8	5	4.1	4	3.6
Others +	1	0.8	2	1.6	5	4.5
Total	**132**	**100.0**	**122**	**100.0**	**112**	**100.0**

+ - Countries training just one Nepalese doctor a year include Austria, Germany, Hungary, Italy, Phillippines, Rumania and the United Kingdom.

Future Projections of Physicians

It is always difficult to project accurate figures for the requirements of not just doctors but also other grades of health services manpower. This task becomes extremely difficult when there are no certain plans for the future, although some planning attempts have been made periodically. The updated Human Resources Master Plan draft document of June 1995 has made a detailed estimation of doctor and specialist requirements and projections for the future for the government sector[(6)]. The figures are not accurate for serious consideration has not been made of the requirements of the private sector, such as nursing homes, private hospitals, etc. Besides the requirement for staffing the medical colleges that are being set up is going to be enormous. Is their output going to be enough for their own requirements?

This state of uncertainty regarding the establishment of medical colleges in the private sector has not been a deterrent to other prospective entrepreneurs. Are they setting up institutions of reputable standard? Will these institutions have adequate numbers of teachers? Queries of this sort are coming to the NMC and the University of Nepal. Whilst the IOM is the only local producer of doctors at present, the scenario will soon change. The current number of about 150 Nepalese students being trained annually in medicine will increase by about 100 Nepalese students as new institutions function fully. The production of medical manpower will increase rapidly in the next few years. Is it because the doctor's life is seen to be financially attractive and the profession lucrative? The number of doctors expected to be produced is as given in Table 3.

Table 3. Figures of doctors currently in the training, 1997.

Institution	1st Year	2nd	3rd Year	4th Year	Fin. Yr.
IOM.	40	40	40	37	19
BPKIHS.	40	30	30	29	-
MCOMS.*	45	60	58	44	-
CMS-Nepal.*	25	25	-	-	-
Nepalgunj MC*	50	-	-	-	-
Total	**200**	**155**	**128**	**110**	**19**

* Only Nepalese citizens studying at the private medical colleges have been noted in this estimation.

In about two years hence, there will be an average of 90 students from the two government institutions (IOM & BPKIHS) plus about 150 from the 3 private medical colleges expected to be functioning soon. Not knowing what the final tally of medical colleges will be, it is difficult to forecast with certainty the output of the private institutions. Including doctors trained outside of the country, there will be a minimal addition of about 400 doctors a year. Whilst these doctors will be absorbed in the initial years and for a good many years after that, the main worry of the NMC and the Nepal Medical Association (NMA) regards the quality of the doctors produced by the private medical colleges within and outside the country. Facilities for training of doctors outside of the country are not subject to NMC rules.

NMC guidelines stipulate that there should be a ratio of 1:7 hospital beds per student. The departments and the breakdown of the 700 beds required for a student intake of 100 students is shown in Table 4 [7].

Table 4. Departments and bed breakdown of a 700 beds hospital for 100 medical students.

Department	beds	%
General Medicine	150	21.43
Surgery	170	24.29
Reproductive Health	100	14.29
Child Health	100	14.29
Orthopaedics	50	7.14
Psychiatry	25	3.57
Eye Diseases	25	3.57
ENT	25	3.57
Skin & STD	25	3.57
Dental	10	1.43
Emergency	20	2.85
Community medicine Dept.		
Total	700	100.00

As per these same guidelines there should be a teacher at the Professor, Associate Professor and Lecturer level for every 15 students in almost all departments except for perhaps skin and STD, dental and forensic medicine.

Even if the teaching complexes including the big hospitals, are built within the planned time schedule it is almost certain that these hospitals will not be functioning. This is because there will not be enough nurses and other manpower to ensure that the hospitals function satisfactorily. The current number of 250 nurses being trained annually is very meagre.

What are Rational Requirements?

The doctor per population ratio as given in the Health Information Bulletin No. 8 of 1992 is 1:15,800 of the population[8] . This however is a very misleading statistic for it hides the reality of about 50% of the doctor population being in the capital whilst the rest of the country, especially the rural areas have very little representation.

But one cannot expect otherwise when 445 of the 874 government posts for doctors are in the Central region where the capital is situated[9]. A very rough estimate of hospital beds in Kathmandu valley is put at about 2,000 (40%) out of the total number of about 5,000 beds in the whole country. The institutions located in the valley are said to utilise as much as 60% of the total manpower in the country.

Are the Government supported hospitals and teaching institutions over staffed, so that under utilisation of technical personnel occurs? Are the private and semi-private

institutions providing substandard service with minimal and perhaps inadequately trained staff?

The number of doctors working in any community can be shown as one indicator of the level of development in a given population. In the case of Nepal it means that there are on average, 6 doctors per every 100,000 population. In rural areas the ratio is probably 1 per 100,000 population! This ratio will not be immediately changed. It will persist until such time as pay and facilities for living, lodging, and career development for those serving in rural areas are better than for those in the cities. As providing concessions on these matters is seen as "**being soft**" by the governmental authorities, it is likely that the manning of governmental posts will never be satisfactory. Proof of all this is evident in the fact that many of those selected for posting in government health institutions have not taken up this option. Even the passage of the Health Act is not helping much for there is not much enthusiasm to enter government services.

Future projections for Nepalese doctors registering with the NMC can be estimated to a certain extent. A marked increase is predicted from 1999 onwards. The estimate of locally produced or returning Nepalese doctors between now and 2000 AD would be:

Table 5. Estimate of future supply of doctors

Year	Number
1997	133
1999	265*
2000	265*
Total	823

(* The possible breakdown is IOM 40, BPKIHS 30, MCOMS 50, from CIS (former USSR) 50, from India 50, form Bangladesh 40 and other countries about 5).

The figures for the three years 1994-96 were 132, 122 and 112. The number of Nepalese doctors likely to register in the four years between 1997 and 2000 is estimated to be 823. Marked increase form newer private medical schools will be felt in 2001 AD.

With the new medical schools and the new specialised institutes plus the nursing homes of the urban centres vying for the services of the doctors, there are not going to be very many left for service in the districts as per the intention of the government.

The numbers of middle level workers such as nurses, laboratory technicians etc. in not going to be available as there are not enough for the present existing services. The private sector is more attractive than the government one and so the reality that will be faced soon is that there will be a gross shortage of middle level workers. In such a situation, the planned new institutions will not be able to function and the standards in existing ones will drop because of inadequate numbers of staff. There will be a vicious circle. To continue functioning, certain compromises will have to be made, leading to poor services being offered. Manning of the hospitals in the district is going to be harder.

Future Action on Other HRH Categories.

It is difficult at this stage to form concrete ideas for the development of the various courses of studies for various grades of manpower in view of the unavailability of definite plans for the future. In the wake of these and subsequent mismatches of available health manpower, planning exercises have been done on a number of occasions in the past.

The massive requirement for various grades of manpower is going to be very acute during the course of the next ten years. The demands of the private nursing homes, the medical colleges and the specialist hospitals/institutes is going to be large. The area of the most acute need is possibly going to be in nursing. As the major requirement of nurses is going to be in the hospitals that are coming up in the private sector it is rational for the authorities to make the starting of a nursing school also a compulsory undertaking by these new training institutions.

Conclusion.

What cannot be denied is the influence of the IOM on medical education in this country. The concept of the health team approach and the career ladder for the middle grade workers led to the study of medicine to become more broad-based and not restricted to those living in the urban centres of Nepal. Though initially there was talk that this manpower may be substandard, the present reality is that the manpower produced is comparable to those of standard institutions elsewhere.

Coupled with the existing reality of manpower shortages in the health field, there is a desire of many students to take up medicine as a career. This has led to an increase in the number of institutions for imparting medical education. Worries about the direction medical education may take exists. With the policy of liberalisation there has been the granting of permission to open various categories of schools for various grades of manpower. Some of these which have been sanction by the Council for Technical Education and Vocational Training (CTEVT) are very substandard and should not be functioning. But they are, and are going to produce workers who will be practising at grass root levels with drugs about which their knowledge is in adequate. What the present requirement of these type of workers is and what it will be in 5, 10 or 25 years time has not really been worked out. What will be the standard of the doctors, nurses and other categories of health workers produced does not seem to be the worry of the authorities.

What is definite is that there is going to be massive shortage of doctors and nurses. Is this shortfall going to be solved by importing HRH into Nepal? Is this not contradictory as the Nepalese themselves are hoping to go out to greener pastures? Or is this a scenario familiar to SAARC or even in SEAR (South East Asia Region) where the locally trained manpower is attracted to going out, creating perpetual shortage in the countries which train the manpower?

With such a background, the reality is that Nepalese medical graduates produced hear are now going out to other countries for further study and training. Should this be a cause for worry? Is this a drain of scarce resources that the country cannot afford or a blessing in

disguise in that the manpower which the government cannot employ nor the country sustain are going elsewhere?

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