 J. Nep Med Assoc 1998; 37:434-442

DOCTORS AND NURSES - NEPAL'S HRH POSITION

Dixit H*

"If you want to plan for one year sow weeds.
If you want to plan for ten years plant trees.
But if you want to plan for a lifetime, develop men."

— Chinese proverb.

ABSTRACT:

After the *'jana andolan'* of 1990 AD there was a spurt of activity for the setting up of medical colleges, nursing homes/clinics in different parts of Nepal. In addition to the single Institute of Medicine (IoM), six other medical colleges have been either set up or are in the process of doing so. This has meant that there is currently and will be more so in future, great demands for various grades of health workers or Human Resources for Health (HRH) to man and run the many health institutions being set up. Doctors and nurses, are just two of the categories for whom there will be a great demand. This article looks at this aspect and then reviews and discusses.

Key words: Doctors, nurses, paramedical workers, community oriented, medical council, education.

BACKGROUND :

The newspapers bring out news items regularly stating that the health institutions in rural areas do not have doctors or even other personnel to man them. It is in the light of supply of HRH and the opening of schools for health personnel that this article is written. Are these schools going to solve our problem of supply and distribution of health personnel and the attainment of Health For All ? Or are the new workers, mainly doctors going to migrate or emigrate to greener pastures ? Are they going to be the *lahureys* of the 21st Century, now that Gurkha recruitment to the British army is at a standstill ? Are the doctors going out even with the risk that they will be doing "non medical" work in foreign lands ? All this is very relevant as barriers to migration or emigration for doctors and other health workers are gradually being put up in almost all countries.

* *Prof. of Child Health, Institute of Medicine, Kathmandu.*

HRH DEVELOPMENT IN NEPAL :

The Institute of Medicine, established in mid-July, 1972 for the training of various grades of health workers has now been in existence for over twenty-five years. Even in those early years, campuses were started in different parts of the country with the objective of making health personnel education more widespread.

The medical course at the IOM was started in 1978. The first batch IOM's basic community oriented doctor came out in 1984[1]. Initially there was opposition to the IOM MBBS programme, the reason being that as this was "WHO inspired and community oriented" it would lead to the production of a sub-standard class of medical manpower. Contrary to this, those involved hoped that the future doctors from IOM, being personnel with a health background, would be more disposed when qualified to work in areas where they had spent their early years. It was also anticipated that as the Nepalese medical degrees was not universally recognised, the doctors trained in Nepal would be more likely to stay within the country.

The number of doctors and nurses that have been produced by the IoM since it's inception in the Certificate and Under Graduate levels to the periods specified is shown below.

Statistics of IoM Academic Programmes

Programme	Starting Year	Total Output*	Yearly Intake
Nurses-Certificate Level	1956	2803	250
MBBS Doctors	1978	338	40
BN Nurses	1978	394	40

* - Till end of 1997.

Even in those early years (1980), there was interest by various groups from outside of Nepal to set up medical colleges. Bearing in mind the fact that as the MBBS course of the IoM had just started, the Nepalese authorities were not keen to allow such efforts. Thus it was only in the nineties, after a lapse of many years that it was decided to set up at Dharan the B.P. Koirala Institute of Health Sciences (BPKIHS). This undertaking was with the help of the Government of India. At about this 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. Besides decreasing the amount of money being spent outside of the country for the health care of the Nepalese, the government would be providing health services to a substantial portion of the population, at no cost to itself. Thus different medical colleges came into being in the order given below :

1. BP Koirala Institute of Health Sciences (BPIKHS), Dharan[2]

This institute, which is autonomous and not under any University started with an annual intake of 30 students, currently 40, and is in the process of increasing to 50. There are special provisions for local candidates and as from the intake of 1996 it is taking regular fee paying students. It currently has a 150 bedded hospital and the additional 350 bedded complex is due to be finished by end of 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 bedded first stage is expected to be fuctioning at the start of 1998. There are currently about

three batches of 50 Nepalese students. Others are from the other SAARC 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. Others are mainly from India.

4. Nepalgunj Medial College, Nepalgunj

This, HMG/N approved medical college is being set up by a group of Nepali enterpreneurs grouped together in a body known as Lord Buddha Educational Academy. The medical college started functioning from December, 1997 with the first intake of 75 students.

5. Kathmandu Medical College, *Kathmandu*

This medical college too started functioning from Dec. 1997 with a first intake of 75 of which around 50% will be Nepalese. The second year's intake is slated to increase to 100 and part of the teaching hospital is due to be completed in the Tokha area in Kathmandu valley.

6. Nepal Medical College, Kathmandu

This private medical college too started functioning from the 1997/98 session with an annual intake of 75 of which most will be Nepalese. Whilst the initial plans are to use some of the hospitals of Kathmandu valley, the future hospital of this medical college is planned to be sited in the Bhaktapur area.

It is noteworthy that all the five private medical colleges are all under the non-governmental Kathmandu University.

OTHER VENTURES :

Announcements have been made periodically over the years of the Ministry of Health's (MOH) intention for conducting undergraduate MBBS classes and also post-graduate studies at the Institute of Medical Sciences to the based at Bir Hospital. The body responsible for this will be the Valley Group of Hospitals. This projected institution is stated to be autonomous also.

Another project which began with the intention of starting another medical college at Kathmandu is now planning to start initially as a dental institution to be named the Peoples Dental College, affiliated to Tribhuvan University.

Yet another proposal by the Universal Institute of Advanced Studies & Research Ins. for a medical college and hospital at Bhairahawa, near the birthplace of Lord Buddha has been submitted to the government and Tribhuvan University. Stated to be the only medical college promoted by Non-Resident Indians, it is proposed to be known as Universal Institute of Medical Sciences, Nepal.

NATIONAL REQUIREMENTS FOR DOCTORS :

What remains to be remembered in all this is that till Nov. 1996, Nepal had 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 did 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 graduates produced, leading thereby to under utilisation of doctors in the future. It seems that the wish of many young students and of their parents for their wards to pursue a course of study in the medical or engineering fields within the country has prompted many individuals to try to fulfil that demand.

Because of the excessive amount of capitation or medical "fees" in India, a recent trend has been for students to go to Bangladesh where the 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 prerequisites there is eleven years of schooling and as some Nepalese students 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 very in different countries and between the public and private institutions in the same country, there is a lot of sorting out to be done. This has led to the NMC to propose to the government to have licensing examinations in the coming years. In the light of all this, the ultimate objective should be to train all the MBBS level doctors within the country itself.

A study of the NMC register for 1997 sugests that out of the 2500 currently registered Nepalese doctors, about 400 or so are out of the country studying or working elsewhere. There are thus about 2100 working within the country. This includes dental surgeons plus also a number of expatriate doctors who have been given temporary registration.

The annual registrations done by the NMC since 1984 is as given in Table 1.[3]

Table 1.
Numbers of doctors registering annually.

Year	Nos.	Year	Nos.
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	1997	116

A further brakdown of the education and training details of the newly registered Nepalese doctors during the course of last four years is as given in the Table 2 below.

Table 2.
Training of doctors, country and year wise. [4]

Country	1994	1995	1996	1997
Nepal - IOM	33	15	20	20
India	56	53	32	63
Russia	24	29	23	18
Bangladesh	14	17	20	7
China	3	1	9	5
Pakistan	1	5	4	1
Others*	1	2	4	2
Total	132	122	112	116

**Countries training just one doctor a year include Austria, Germany, Hungary, Italy, Philippines, Rumania and the United Kingdom.*

FUTURE PROJECTIONS OF HRH :

It is always difficult to project accurate figures for the requirements of not just doctors but also other grades of health services manpower. The task becomes extremely difficult when there are no

certain plans for the future. However, some attempts have been made periodically. The updated Human Resources Master Plan draft document of June 1995 has made a detailed estimation of doctors and specialist requirements for the government sector, and projections for the future[5]. The figures cannot be accurate for specific requirements of the private sector such as nursing homes, private hospitals etc has not been made. In fact the new medical colleges are going to be the major consumers. What needs to be queried is whether it is rational for their HRH requirements be fulfilled by public funded government institutions ?

The enthusiasm for starting new institutions shows that uncertainities regarding viability of medical colleges is not a deterrent to prospective enterpreneurs. Are institutions of reputable standards being set up ? Will there be adequate number of teachers ? Queries of this sort are coming to the NMC and the Universities of Nepal.

The scenario for the production of doctors is changing. The current number of about 150 Nepalese students being trained annually in medicine will increase by about 100 within the next three years and more rapidly after that. 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 can be deduced from figures of current training as given in Table 3.

From about two years hence, there will be an average of 70 doctors from the two government institutions (IOM & BPKIHS) plus about 200 from the 5 private medical colleges expected to be functioning soon. 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, the main worry of the NMC and the Nepal Medical Association (NMA) is regarding the quality of the doctors produced by the private medical colleges. This applies to institutions outside of Nepal, where the facilities for training are said to be grossly inadequate.

NMC guidelines state that there should be a ratio of 1:7 hospital beds per student. The departments necessary and the breakdown of the 700 beds required for a student intake of 100 students is[6] :

Table 3.
Figures of doctors currently in training.

Institution	1st year	2nd year	3rd year	4th year	Final year
IOM	40	40	40	37	19
BKPIHS	40	30	30	29	x
MCOMS*	45	60	58	44	x
CMS-Nepal*	31	25	x	x	x
Nepalgunj MC*	28	x	x	x	x
Kathmandu MC*	24	x	x	x	x
Nepal Med. College*	70	x	x	x	x

**Only Nepalese citizens studying at the private medical colleges have been noted in this estimation. The Nepalgunj Medical College, Kathmandu Medical College and the Nepal Medical College, all started from the 1997/98 session.*

General Medicine	150
Surgery	170
Reproductive Health	100
Child Health	100
Orthopaedics	50
Psychiatry	25
Eye Diseases	25
ENT	25
Skin & STD	25
Dental	10
Emergency	20
Community Medicine Dept.	
Total	700 beds

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

NURSING MANPOWER :

As far back as 1978, the IOM started higher grades of study in nursing and medicine viz. MBBS and BN. With the stress in community orientation, the certificate level nursing curriculum was totally revised in 1987 so that nurses produced after doing this course would be able to function as staff nurses in hospitals as well as in the rural settings. The curriculum of this community oriented course has been well appreciated when presented at various nursing fora. It may possibly be a model in the future. The Bachelor in Nursing course presently has a common first year and is then separated out into a general hospital type or one in community nursing. The BPKIHS does BSc (generic) nursing.

A worry of the NMC about the projected teaching hospitals is the difficulty in functioning that is bound to occur. The current number of 250 nurses being trained annually is very meagre in terms of the likely increase in hospital beds over the next five years.

What are the contingency plans then ? Are they to :

a) Recruit nurses from out of the country.

Table 4.
Nursing Manpower (A) Certificate (B) Degree

A. Certificate

Institution	1st year	2nd year	3rd year
IOM Campuses	209	177	153
IOM Affiliated	45+30	45+39	45+38

B. Bachelor

Inst./Course	1st year	2nd year	3rd year	4th year
IOM/Post Basic	22	40	None	None
IOM/Aff/Post Basic	4	x	None	None
BPKIHS/Generic BSc	10	10	x	x

b. Get Assistant Nurse Midwives (ANM) to man the hospitals.
c. Utilise only nurse aids in such situation.

Who is thinking about all this ? Is it everybody's business but nobody's responsibility ?

To meet these demands, the existing nurse training institutions will have to be expanded and new ones opened in different parts of the country. To lessen the shortage, all new medical colleges should be made to start their own nursing schools.

The possibility of forming an Institute of Nursing by upgrading the Central Nursing Campus at Maharajgunj was under consideration some time back. The Ministry of Health (MOH) in May, 1996 announced the formation of a special 16 members task force to look into various areas pertaining to health. The areas to be looked ar were :

- the licensing and running of nursing homes.
- the establishment and running of private medical colleges.
- the establishment and running of various specialised institutes as announced from time to time.

Action on the recommendations is still being taken.

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[7]. However, about 50% of the doctor population is in the capital. This is simply because of a large number of health institutions being inside the Kathmandu valley. On top of this the central region of the country has 445 of the 874 government posts for doctors[8]. A very rough estimate of hospital beds in Kathmandu valley is put at about 2000 out of the total number of about 5000 beds in the whole country.

A question that immediately arises is whether the Government supported hospitals and teaching institutions are so overstaffed, that under utilisation of the technical personnel occurs ? Considering the relatively smaller numbers of personnel that they employ, are the private and semi-private institutions providing sub standard services ? Have the nursing and paramedical staff at such institutions been adequately trained in recognised institutions and are they registered in their respective Councils ?

The number of doctors working in any community can be shown as per one lakh of the population. In the case of Nepal it is stated that there are on average, 6 doctors per every 100,000 of the population. In rural areas the ratio is probably 1 per one hundred thousand 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 concession 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 as there is no enthusiasm to join government services.

Future projections for Nepalese doctors registering with the NMC can be estimated.

Marked increase will occur from 1999 onwards. The availability of Nepalese doctors between now and 2000 AD is :

1998	160
1999	265*
2000	265*

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

The figures for the four years 1994-97 were 132, 122, 112 and 116. The number of Nepalese doctors likely to register in the three years between 1998 and 2000 is estimated to be 690. Marked increase from newer private medical schools will be felt only from 2001 AD.

With the new medical schools and the new specialised Institutes plus the private sector nursing homes/hospitals vying for the services of the doctors there is going to be an acute shortage. The numbers of middle level workers such as nurses, laboratory technicians etc is not going to be available as there are not enough for the present existing services. The private sector being 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.

CONCLUSION :

In view of the unavailability of definite plans for the future it is difficult at this stage to form concrete ideas for the development of the various courses of studies for various grades of manpower.

What cannot be denied is the desire of many students to take up a career in the health field. Whilst this is welcome in the context of manpower shortages in the health field, there is a fear that excessive production of different grades of manpower may be at the cost of skill and capability. This demand has led to an increase in the number of institutions for imparting medical education. 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 sanctioned 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 inadequate, 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 countries or even in SEAR 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 here 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 ?

ACKNOWLEDGEMENTS :

My thanks are due to Prof. Ramesh Adhikari, Prof. Indira Singh, Dr. Mohan Joshi and to many colleagues who have gone through this paper and given suggestions.

REFERENCES :

1. Innovative Programmes of Medical Education in South-East Asia. 1993, WHO, SEARO Publication No. 21.

2. News Bulletin of BPKIHS, Vol. 1, No. 3 & 4, 1994. BP Koirala Institute of Health Sciences, Dharan.

3. Thapa, Munu. Equivalency of Qualifications and Degrees of Education and Training. Paper presented at the WHO Regional Meeting on Equivalence of Qualifications and Degrees for Education in Health Professions at Kathmandu, Nepal. Aug. 1996.

4. Nepal Medical Council Lists, 1986, 1994 & 1995. NMC, Kathmandu.

5. Human Resources for Health Master Plan. June, 1995. HIMDD/ERPHC (ODA).

6. Nepal Medical Council Guidelines, 1997. NMC, Kathmandu.

7. Health Information Bulletin, No. 3, 1992. MOH, Kathmandu.

8. Pradhan YV, Present scenario of physicians manpower, The Kathmandu Post, 30, Sept. 1997.