

PG medical training and accreditation: Responsibility of the Government for the adequate health service delivery

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ABSTRACT

On one hand there is obvious inadequate health coverage to the rural population and on the other hand the densely populated urban area is facing the triple burden of increasing non-communicable and communicable health problems and the rising health cost. The postgraduate medical training is closely interrelated with the adequate health service delivery and health economics. In relation to the prevailing situation, the modern medical education trend indicates the five vital issues. These are i). Opportunity needs to be given to all MBBS graduates for General Specialist and Sub-Specialist Training inside the country to complete their medical education, ii). Urgent need for review of PG residential training criteria including appropriate bed and teacher criteria as well as entry criteria and eligibility criteria, iii). Involvement of all available units of hospitals fulfilling the requirements of the residential PG training criteria, iv). PG residential trainings involve doing the required work in the hospitals entitling them full pay and continuation of the service without any training fee or tuition fee, and v). Planning of the proportions of General Specialty and Sub-Specialty Training fields, particularly General Practice (GP) including its career and female participation. With increased number of medical graduates, now it seems possible to plan for optimal health coverage to the populations with appropriate postgraduate medical training. The medical professionals and public health workers must make the Government aware of the vital responsibility and the holistic approach required.

Keywords: General practice, health coverage, medical education, PG training criteria, urban health

INTRODUCTION

The health coverage of the population, especially rural one, is still inadequate in the developing countries. How to achieve it or how to strengthen primary health care has rightly been a real concern.^{1,2} Creation of separate cadres of health care workers or separate course for rural people and other aspects are considered. However leadership by well trained medical professionals, i.e. fully trained General Practitioner, will be required to manage the varied aspects and rural population need not receive the care different from the population in the urban areas. The rural population is not static and the people will travel to urban areas for health care of the relatives, particularly children or working male. With family planning getting easily accessible, the people may do anything for their limited number of children. Why is the gap felt more now between the medical graduates and primary health care?³ In the past after graduation the doctors were expected to practice independently with or without having some experience in hospitals. But with increasing vastness of medicine, the changing concept of learning and medical education and increasing focus on safety and rights of patients, such independent practice for any medical graduate is not possible now. In rural areas a medical graduate is expected to manage from medicine to surgery, pediatric to geriatric, orthopedics to obstetrics, and postmortem to public health programme

administration virtually without any formal training. Due to the combination of feeling of inadequacy, fear, guilt, uncertain career and frustration, medical graduates are, not surprisingly, likely to be discouraged to go for rural service. The importance of appropriate training and planning for their career is vital to encourage medical professionals to work in any area or field.

Strengthening primary health care is related to the integration of medical training, community service need and health administration.³ The quality of both medical training and health services are closely interlinked. The concepts and practice of training, learning, and assessment in medical education have changed dramatically over the recent decades.⁴ After the undergraduate medical education, the medical doctors now need to undergo the structured training programme, commonly called residential training or simply residency, in different specialties for the appropriate and evidence based care of the patients. Most of the theories of learning are incorporated in various forms in the structured residential training at different stages. The focus is on active learning, rather than on passive teaching and on developing skills of reflexivity, not just remembering. With the opportunity to work in the field of teaching and learning of residents and medical education for two decades, I have observed important

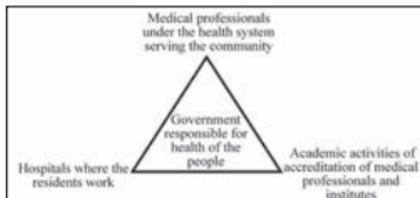


Fig. 1: The major concerned foci involved in the residential training and health care deliver to the people, both of whose qualities are closely interlinked, with the Government in the central ultimately responsible for health of the people.

Lessons to incorporate evidence based medicine concepts and practices into the medical education for appropriate health service delivery to the people. The necessary bibliography also applicable to the discussion below is indicated in the review with explanations.⁴ In relation to our prevailing situation particularly the need to integrate medical education and health service, the five vital issues are discussed below with a view to suggest solutions and plans urgently required. With increased number of medical graduates, now it seems possible to formulate adequate and appropriate health coverage to the populations including the rural ones within a few years with appropriate planning of the postgraduate medical training and urgently implementing the plans.

1. Opportunity needs to be given to all MBBS graduates for General Specialist and Sub-Specialist Training inside the country to complete their post graduate medical education: There is continuum of undergraduate (UG) medical education and postgraduate (PG) training. All the medical graduates with MBBS need to be given the opportunity of structured residential postgraduate training in a subject by the Government to complete their post graduate medical education. The current concept is to complement the UG medical education MBBS with the structured residential training of General Specialist Training followed by a appropriate Sub-Specialist Training by considering the rapid expansion of medical knowledge and medical procedures. Such training needs to be planned to be given inside the country considering the increasing number of medical institutions, hospitals, specialty services, population size and the requirement on one hand and the relatively less number of medical graduates on the other hand. Outside the country, the hands-on residential General Specialty Training followed by as required Sub-Specialty Training are difficult to get. Though such hands-on residential trainings are possible in the health care advanced countries, the medical professionals who get opportunities to go there are mostly unlikely to return later. So opportunity

for the quality General Specialty and Sub-Specialty Training inside the country is a priority. If we don't do so, it will only force the medical graduates to get whatever possible trainings and degrees from outside the country at unnecessary cost which collectively is a significant loss of foreign exchange for the country. The confusion is caused here by the various names of the degrees and the inappropriate application of many of the undergraduate medical education regulations and concepts to the postgraduate structured residential training without distinguishing such aspects. **The major aim** of medical education policy now is basically to plan the completion of the continuum of undergraduate medical education by structured residential postgraduate training inside the country for all the medical graduates before they practice independently. The quality of health service and residential training are closely related. Achievement of the major aim is interlinked with other issues discussed below, which have their own importance as such.

2. **Urgent need for review of PG residential training criteria including appropriate bed and teacher criteria as well as entry criteria and eligibility criteria:** With the concepts of "Meeting the required standards", "fitness for purpose" and criterion-referenced training and assessment, the criteria of PG training for specialist registration now customarily spell out the following two points:
 - **Appropriate Entry Criteria required for enrollment** in any General Specialty or Sub-Specialty Training programme, e.g. need to complete relevant general specialty training to enter into any sub-specialty training the trainees.
 - **Eligibility Criteria for its certification** e.g. residential training (indicating actual working under supervision with hands-on experience), work-load and exposure, duty schedule, rotation in the required subjects, **procedures requirements** (e.g. minimum numbers of most important top 10 procedures), formal teaching learning activities, assessment, mandatory trainings (e.g. ACLS) and others (the criteria are discussed in detail and are available for free download in the reference).⁴

Such criteria not only increase the quality of the training but also provide the opportunity to the much larger proportion of residents helping to fulfill the major aim of medical education policy, i.e. to provide quality training to all medical graduates before they practice independently. The PG medical education criteria should focus on the need of the quality training of the residents to learn and practice as per the available services in the country. The

medical curriculum is directed by the community situation and need.⁶ The PG training criteria mostly focused on theory and clinical exit examinations and bed and teachers' criteria, thus, urgently need to be reviewed considering different aspects particularly the eligibility criteria for its certification. Some of them are highlighted below.

- **Bed criteria:** With increasing sub-specialization and procedure specialization, there is now evolving newer field of **Hospitalist or Acute Physician** to manage in-patients.⁷ The management of the patient as a whole may not be possible without the care of such Generalists and the trend is to manage the patients under Generalists with simultaneously required consultations and care of the Specialists. Bed criteria may, thus, need to be reviewed, including in Ophthalmology, Dermatology and other sub-specialties where service and training are based mostly on ambulatory care and/or on referral patients for joint management and procedures.
- **Teachers' criteria:** Similarly paper publication criteria, and even requisite certification of adequate research training including Ethics and Biostatistics, may be appropriate for higher or the highest academic faculty position. Conducting research study is also linked with fund generation in the industrialized countries. It is not considered essential for the faculty requirements for the specialist to provide the required clinical training in a specialty in which they are 'officially' allowed to provide the required service to the people. Even now those faculties qualified from different health care advanced countries may not have the publication of dissertation study. This is as such not related to the focus of the training of the residents and thus not considered necessary in the such countries. Due to the current existing minimum criteria required here to enroll residents there is scarcity of teachers, when the need of today is to provide the opportunity of residential training to 'all' medical graduates, not just a few ones, to complete their continuum of medical education before they practice independently. The existing teaching faculty designations itself appears to be linked more with the research works and paper publication, rather than with educational activities. The quality of training of residents has always been a concern. But the quality of training of residents depends on the fulfillment of the eligibility criteria for their certification and the 'educational', not research, background of the teachers. Even for learning of trainees, particularly at the General Specialist Training and overburdened type of Sub-Specialty Training levels with other numerous essentials to learn, the library dissertation, general review, systematic review, meta-analysis,

and/or training on evidence-based medicine appear alternatives, safer also for patients, than the original study on patients attending health institutes for treatment.⁴ The unit-chiefs and similar consultants allowed to manage a unit and provide adequate service to the patients are considered eligible to be the faculty to provide the required training to the PG residents in their specialty and unit. The fulfillment of required workload and other requirements of the training are considered relevant to decide the number of residents for training. Thus the focus will be on the quality training of residents providing increased opportunity to them as far as possible.

- **Exit and other examinations:** The exit examination of clinical practical component has the required useful educational impact in the training of the residents. For quality assurance the exit assessment for certification by external examiners needs also to focus on verification of achievement of fulfillment of all the eligibility criteria for certification. Regarding theory assessment, early in-training assessment of the basic knowledge to apply during the training is emphasized now. A lack of solid base of knowledge foundation, including applied basic science, during the clinical training programme is a serious handicap for learning the concepts of the subject. If the students can correlate and apply their knowledge to the patient care related to the subject of postgraduation during the context of their training, then they are likely to comprehend the concepts and principles of the specialty. For this purpose, the students have to acquire the required base of knowledge on time during the initial phase of training itself.⁴ The theory assessment may be conducted earlier component-wise, e.g. on yearly basis.
 - **Fully equipped skill laboratory:** In the context of medical training, there is also a need of fully equipped skill laboratory in the country for safe and appropriate training of medical students, interns and the residents considering the safety of patients and the learning curve to achieve appropriate competency. Even a few such fully equipped skill laboratories with all the modern facilities, e.g. complex manipulation simulators, integrated procedure simulators, virtual laparoscopic and other procedure trainers and other virtual reality simulators, considering all levels of trainees and procedures could help a lot to start the provision of training in rotation.
3. **Involvement of all available units of hospitals fulfilling the requirements of the residential PG training criteria:** All available units of hospitals in different parts of the country, having the required adequate facilities of workloads and fulfilling other

requirements can be involved in residential PG training of different programmes and universities with the cost of hospital services remaining as per the government regulations. Such accreditation of different hospitals involved in the residential training is done in the health care advanced countries. In our region also, the College of Physicians and Surgeons in Pakistan, Bangladesh and India, National Board in India, and National Academy of Medical Sciences (NAMS) which was earlier PG Medical Education Coordination Committee (PGMECC) in Nepal similarly include various hospitals for the residential training programme. The specialist and consultant medical professionals in the training hospital can be given the appropriate teaching faculty designation, apart from their regular hospital appointment posting. This is in contrast to the single combined posting-designation of faculties in the medical college, where all the posts created for appointment of the faculties are the teaching ones only. It is necessary to expand the previous usual practice of 'closed-wall' system of postgraduate training in the medical college to the modern concept of the 'open-wall' system involving different hospitals due to the rapid expansion of medical fields and difficult to keep all the facilities and to cater all the residents under one roof. Such involvement of the hospitals fulfilling the required criteria for the PG residential training programme would not only increase the opportunity of postgraduate residency to the medical graduates in Nepal but also improve the academic environment and quality of the service of the units.

- 4. PG residential trainings involve doing the required work in the hospitals entitling them full pay and continuation of the service without any training fee or tuition fee:** PG residential training is incorporated with the required job of the hospital. The residents work hard full time with extra night duties and take care of the patients in the hospitals considering all the evidence-based medicine (EBM). The residential training is well-structured with activities they will be doing during the training and later like any medical professionals in that field. The academic activities help to improve the quality of the hospital and the consultants and specialist involved. Such academic activities and their assessment are the part of the expected academic components of the job of the medical professionals in the concerned specialties. Thus the residential PG training for medical practitioners is not an extra or optional one. It is the part of not only the basic medical education but also the job of the medical professionals. It is required for all the medical professionals for the quality service

and safety of the patient. As a part of life-long learning requirement, the structured residential trainings in General Specialty and Sub-Specialty are now further evolving into the regular or periodic accreditation of all medical practitioners, including the seniors, experts or Professors. Thus symbolically all medical practitioners are also learner or trainees requiring to be continuously updated in their fields while doing their job for which they get the payment like the residents and the academic bodies need to accreditate them periodically.

The different partners and stakeholders involved in the PG residential training need to be considered for its management in the most cost-effective way. In the management of the structured residential PG training, the major foci involved are the medical professionals serving the community, the hospitals where the residents serve, and the academic activities of accreditation of the trainees and training institutes. As such the ultimate responsibility is of the Government, particularly health ministry, which heads and regulates, and even directly leads many of the universities and hospitals in the country affecting the health of the people. In other words, the Government is at the center of all the three major foci involved in the residential training of the medical graduates (Fig. 1). Further the medical council in the country has also the added responsibility of regulating the PG training, apart from the registering the medical graduates.

- 4.1 Hospitals where the residents work:** The residents are the part of the hierarchical system of job management in the hospitals. If there is no resident in the hospitals, the jobs need to be done by other medical professionals. The payment by the hospitals to the medical professionals, whether enrolled in any training or not, is the expected one for doing the job. The hospitals need to pay the residents for their service, e.g. by matching the work-load and exposure to the training needs of resident. Academically enrolled residents are more likely to work hard to fulfill their requirements and to learn from their faculties. The teaching, learning and supervision to residents or other juniors are routine responsibility of faculties and consultants. The pay to the faculties is decided by the prevailing trend for the payment to the experts, working hours, and the other responsibilities of the faculties. The residents share the burden of work of faculties saving the faculties' time for other activities in the institutions. The presence of residents and academic activities increase both the quality and the quantity of work from which the hospitals benefit

much. Hospitals all over the world indeed work hard to fulfill the requirements of accreditation for the residential programmes for the access to the valuable trainee junior human resources.

4.2 Medical professionals serving the community:

Structured-residential PG programmes involve doing the required work entitling the full pay and continuation of the service without any training fee or tuition fee. There is much difference between the formal education (including MBBS) and the residential training of the PG residents. The residential PG training programmes inside the country serving the local populations involve doing the actual work required for the hospitals for which the persons get the payment. Medical education requires a long period of continuous training and discipline. By the time a medical graduate completes the General or Specialist PG Training, he/she will be 30 to 35 years old. A few more years of working and training may be required for adequate experience. Thus, after medical graduation at about 25 years of age, when all their non-medical friends start earning with full career prospective of reaching the top level of their field in one or two decades without mandatory need of further training or education, the medical graduates continue to require significant investments for many years. What could be the possible implication? The postgraduate residential training is linked with the quality of hospital and the service to the people. Medical professional also belongs to the general community and is the most influential one in the health care delivery to the people and thus ultimately the community also bears the cost. With their 'triple' responsibilities towards parents, husbands and starting family, the women medical graduates face further dilemmas and frustration, which also could be one reason of relatively less proportions of females in various specialities, as compared to their proportion at MBBS level.

4.3. Academic activities for accreditation of the trainees and the hospitals and institutes:

The major activities for the accreditation of the trainees and the training hospitals are formulation of the appropriate criteria, monitoring, and assessment. The formulation and monitoring of the criteria are the directly beneficial and expected academic activities of the faculties of the concerned specialities. It can be achieved with the appropriate support from the sources as decided by the Government. The hospitals also get much benefited by the academic programme residential PG training and so the hospitals or Government on their behalf may support the required academic aspects. Apart from the postgraduate residential training, the

examination sections of the universities are running various other programmes as well and the cost is as such being shared by different programmes even now. The visits of external examiners from one hospital to the others are like the visit of officials and experts of almost every government and private office in the country as a part of the job of the appointing institute for different administrative, public health or other academic activities. The cost for such visits and various other academic activities needs to be included in the regular budget of the appointing institute itself and as required, the Government can provide support. The costs can further be shared by common entrance and exit examinations of PG residential training saving unnecessary duplication of efforts and resources as well as increasing the quality of education. The other current modality used in many countries is the formation of different accreditation bodies for medical professionals and for training-hospitals to manage the entrance, supervision, and exit assessments for respective subjects. With such management, all the medical graduates are provided the opportunity to complete their structured residential training before they practice independently and the residents are given adequate payment and career opportunities even in the capitalist countries, where the cost of other formal higher education including MBBS is very high. To learn to manage such aspects, the experts in the Government, with other experts of medical professional bodies, may visit the countries which are adequately paying the residents and providing the opportunity of structured residential training to all medical graduates. The support and expertise can also be requested from such countries. In our own region, the College of Physicians and Surgeons in Pakistan, Bangladesh and India, National Board in India, and National Academy of Medical Sciences (for the Government and institutional doctors) with earlier PG Medical Education Coordination Committee (PGMECC) in Nepal have indeed proved the possibility of managing training in wider scale maintaining the standard of the residential training at the reduced academic cost of training and accreditation. Moreover with the concepts of need of continuing accreditation of all the medical professionals including seniors and professors, the need to prepare and plan to manage such aspect of accreditation for future is also obvious.

Government—the ultimate central body responsible for the training of medical professionals and health of the people: Government is the ultimate regulating body and responsible for distribution of tax paid by the

people or the aid given by various donor agencies for the welfare of the people. It also heads and regulates, and even directly leads many of, the universities and hospitals in the country. It is indeed pertinent to note that previously Government here used to regularly send the medical graduates for PG training even in the health care advanced countries like UK at expensive scholarship schemes. On the other hand now the residents have to pay exorbitant fees even while serving the people in their own country! They have also to wait for years to get the institutional or Government permission to continue and complete their residential training in a specialty. The delay will only create different personal and social difficulties to take such training. The opportunity of the training in continuation will help the medical professionals to concentrate and develop their field of expertise with ultimate benefits to the institutes and the community. Health of the people is the fundamental responsibility of the Government. The most important quality of the health service is its delivery by the medical professionals after doing the structured residential training in their fields. The quality and quantity of health delivered to the people can only be effectively improved by **taking the responsibility of and by managing the PG medical training by the Government** providing such opportunity to all the medical graduates inside the country.

- 5. Planning of the proportions of General Specialty and Sub-Specialty Training fields, particularly General Practice (GP) including its career and female participation:** With the provision of appropriate residential PG training to all medical practitioners with adequate payment and career, the Government also needs to decide the proportions of General Specialty and Sub-Specialty fields where such training needs to be planned. Training of the medical professionals should be planned as per the community need and situation. Among the various General Specialties and Sub-Specialties, the most important for the community is the General Practice (GP), as given preference all over the world. The other vital issue is proportion of female participation in the health in various General Specialty and Sub-Specialty fields. The stakeholders like the concerned ministries, medical council, and other required bodies should discuss and plan for future the proportions of trainees in various specialties including GP required for the community. The basic **rationale** behind the current practice of nomination of President, Registrar and many members of the medical council by the Government clearly indicates the responsibility of medical council as well to help planning such

proportions of medical professionals according to the national need.

- MD General Practice (GP) and its career:** MD (GP) is the modern structured residential training programme for General Practice (GP) like the unstructured rotation 'experience' in major fields given to the majority of medical practitioners in the olden times before they practice independently. Now such unstructured training has gradually evolved into the structured residential MD (GP) programme. The confusion is created by the various names of the degrees. **Maternal and Child Health (MCH)** is a major health issue in rural community. MD (GP) can be easily given extra training in obstetrics and/or anesthesia if required. Densely populated urban areas, with significant proportions of un-affording, migrant, and marginalized community, share much of burden of both non-communicable (NCD) and communicable diseases as well as other MCH problems. These populations require close monitoring of adherence to management and follow-up, like HIV/AIDS, TB, MCH, ANC, family planning, hypertension, diabetes, CVDs and other common illness. Managing such varied health burdens requires network of Urban Health Centers led by well trained MD (GP). Such **well trained MD (GP) with the network of Rural and Urban Health Centers** can also easily implement the guidelines produced by various vertical national programmes and academic bodies. Thus all vertical health programmes can also effectively act through the horizontal network of Rural and Urban Health Center led by MD (GP) increasing their efficacy and decreasing the duplication of work and the cost of the Government for implementation of different vertical programmes at the peripheral, i.e. front, level. In such Rural and Urban Health Centers, the residents of MD (GP) may also be posted as per the training requirement. Senior GP with their years of experience of national health problems in both rural and urban parts would also be the most appropriate personnel for further training of some months in **Public Health (MPH) or Health Service Administration** to take the leading role in health service management and public health in future, which may need to be planned in the phase-wise manner considering the existing situations and human resources. The provision of postings in Rural and Urban Health Centers as well as in Health Service Administration and Public Health for MD (GP) up to the senior most level like other medical specialties would also provide adequate career opportunity and incentives for them, apart from much ultimate benefit to the community.⁴

- One or two well trained GP can easily practice in Rural or Urban Health Centers. Significant proportions of medical graduates may need to be given such structured training of MD in GP. MD (GP) programme is already running in the country. Now with the need of fulfillment of the increased number of MD (GP) even extra experts may be requested from the countries managing such network of GP all over the community. Supports could be effectively mobilized by coordinating and consolidating the adequately available resources of MDG, PHC, MCH, HRH, HIV/AIDS, TB, NCD, WHO, and other international programmes of the UK, US, Australia and others. Within three to four years with the increased number of well trained GP, the system will be firmly established. With the appropriate career prospective, the increased number of such well trained GPs can provide the required service in the various parts of the country helping to solve the different health problems and programmes, for which varied independent crisis management plans have to be otherwise considered. Considering the current dire need of MD (GP), immediately after the medical council registration with clearance of its licensing examination the admission for MD (GP) could be considered with separate entrance track with interview with or without other methods as recommended by the International Symposium on Building up GP for Nepal in 2006.⁸
- **The proportion of female medical professionals in all the specialties:** The central and vital role of women as nurses in the health care delivery indicates the value of women medical practitioners and the necessary planning required to encourage and maintain their appropriate participation in different specialties. Appropriate planning, including the reservation of seats, needs also to be made to encourage female medical graduates to join different specialties, like GP, surgery, medicine, orthopedics and others, where there is much gender disparity in the proportions of practitioners and trainees. The female participation helps to improve the care of people, especially the sick patients. It will also make easier for women, with varied culture in our country, to seek with less hesitation the medical help, which may include intimate questions and/or chest, hernia, rectal, or groin examination. Because of anticipated awkwardness or uncomfortable feeling to undergo breast, rectal, pelvic, groin, or even general examination by a male doctor, many women may avoid seeking medical help.

CONCLUSION

Health is the fundamental right of the people. The quality of both medical training and health services are closely interlinked. There is need of planning to provide

comprehensive health care to the people, whether in rural or urban areas, under the able-leadership of well-trained medical professionals. It is pertinent to repeat here that the importance of dealing with uncertain career is vital to encourage medical professionals to work in any area or field. The rural people also deserve the quality health care. Moreover the densely populated urban areas, with significant proportions of un-affording, migrant, and marginalized community, share much of burden of both non-communicable and communicable diseases as well as other MCH problems. The health situation of the urban poor depicting 'scarcity in the midst of apparent plenty' equally warrants attention. It is also a priority to appropriately train our future generation of medical professionals with ultimate consideration of and benefit to the community. The medical training, community service need and the health administration and postings are all closely interrelated and have to be given due attention as a whole by the Government. The quality and quantity of health delivered to the people can only be effectively improved by taking the responsibility of and by managing the PG medical training by the Government providing such opportunity to all the medical graduates inside the country. The medical professionals and public health workers must make the Government aware of the vital responsibility and the holistic approach required.

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