Structural Reforms in Planning & Management of Professional Education*

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Abstract

The professional education in health sciences in our country has not kept pace with the rapidly changing scenario and remained static. Recommendations made by several expert committees in the past could not be implemented due to various reasons in spite of the presence of regulatory bodies and universities.

In recent times, higher education including professional education in our country is facing a lot of criticism not only from the medical fraternity but also from the general public. Keeping in view the present situation, the National Knowledge Commission, Yash Pal Committee and the Task Force of the Ministry of Health & Family Welfare have submitted their respective reports recommending that there is an urgent need for structural reforms to fulfill the national health policies.

After having discussed the modalities given by the aforesaid committees, it is suggested to have a three-tier structure with an autonomous apex body at the centre (NCHRH) playing the main regulatory role as a controlling authority, Universities of Health Sciences (UHS) in each State as an implementing agency with its own autonomy and flexibility and the third as an intermediary nodal body (HEGC/HSGC) to serve as a monitoring and funding agency whose recommendations shall be mandatory and not recommendatory. Even in the absence of a new apex body and with the continuance of the existing professional councils, the monitoring and funding agency will be able to give the desired results. However, implementation of strategies thus identified and described requires innovative thinking, co-operation among the professionals and the political will.

Keywords: Professional Education reforms, Health Sciences reforms, Structural reforms in Medical Education

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Preamble: Professional Education in Health Sciences- Current scenario

Higher education in India is a highly developed system offering facility of education and training in almost all aspects of human creative and intellectual endeavors such as: arts and humanities; natural, mathematical and social sciences; professional sciences like engineering, medicine, dentistry, agriculture, education; law; commerce and management; music and performing arts; national and foreign languages; culture; communications etc. and it is the third largest in the world, after China and the United States (1, 2). The entire higher educational institutional framework such as universities and Institutions of National Importance are under the purview of the UGC as a department of the Ministry of HRD, GOI.

Though the professional education is an integral part of higher education, it has evolved itself into a distinct and divergent streams individually monitored by their respective apex bodies. The professional education in various sciences other than the health sciences are controlled either by the Ministry of HRD through AICTE or by other statutory councils like DEC, ICAR, BCI and NCTE etc. On the other hand,

Health Sciences Education (HSE) coming under the purview of the Ministry of Health & FW is controlled by several apex bodies like MCI, DCI, INC, CCH, and CCIM, while the Pharmacy education is under AICTE and the Rehabilitation Council of India is attached to the Ministry of Social Justice and Empowerment. At the State level, the respective State Governments and affiliating universities also play an important role.

All the controlling authorities of professional education in health sciences are vested with statutory powers with the objectives to maintain uniform standards of education, to grant recognition to the degrees awarded by various Universities of India and abroad, to register eligible candidates in their respective professions and also to ensure that the qualified and registered professionals follow the code of ethics while practicing their respective professions. They are the main functionaries to improve the health care delivery through the skills of the professionals concerned. These skills such as What, How and When they do it, are acquired through quality of education and training of professionals keeping in view the ultimate beneficiaries, the public at large, who are

to reap the fruits of these skills (3). Whichever is the controlling authority, the basic role of these bodies is to improve the quality health care delivery system and the said health care in turn depends upon the quality of education and training.

Present situation

As early as 1980s, the Late Prime Minister Mrs. Indira Gandhi while delivering her Foundation Day Address of the Lady Hardinge Medical College, New Delhi, the media, professionals and academicians have expressed their serious concern over the deterioration of standards of medical education. In the year 1998, the Parliamentary Standing Committee on Human Resource Development stated clearly in its report that it was "perturbed to note that the standards of medical education in both the Government and private medical colleges is going down" (4, 5). It is well known that the standards of medical education vary from place to place and the sentinel bodies seem to have failed to rectify the situation so far. Conventional Universities do not consider professional education in health sciences as University level education that can generate newer knowledge by integrating principles of applied human biology, sociology, managerial sciences, communication and bioengineering technology and other newer disciplines such as bioinformatics, nanotechnology etc. but feel that it is a vocational education involving skills to treat sickness with service motto having intellectual & ethical inputs. As such these general universities are not able to keep pace with changing scenario of health sciences education (6).

Situation Analysis

In the year 1983, a Review Committee on Medical Education recommended the creation of Medical and Health Education Commission for the coordination, planning and implementation of various medical and health educational programmes in all branches of health sciences, planning for the development of health manpower, allocation of funds and disbursement of grants to medical and health institutions etc as well as establishment of Universities of Health Sciences to bring about coordination between the various education and training institutions of the modern and Indian Systems of Medicine, nursing, pharmacy and paramedical sciences (7).

In 1986, an Expert Committee for Health Manpower Planning, Production

and Management under the chairmanship of Prof. J.S.Bajaj critically studied the then prevailing situation along with the available reports on medical education in the country and made very important recommendations such as: (a) Health manpower surveys establishment of health manpower cells both at the center and the states. (b) Vocationalization of health related fields in education at 10+2 level and (c) National policies on health manpower, medical and health education. Apart from these recommendations, the Committee strongly recommended immediate creation of Health Education Commission or Education Commission for Health Sciences at the center conceptualizing in detail the operational framework of this body vis-à-vis the role of the existing professional councils as support mechanism and establishment of Universities of Health Sciences in each state in an ideal manner having a physical and academic environment where all faculties of health sciences can interact together (8, 9).

In spite of these recommendations, either due to part implementation or no implementation, the present day situation of professional education in health sciences with special reference to medical education in our country is rather alarming due to several factors.

It has been observed that institutions imparting education in health systems are unable to maintain high standards due to lack of facilities for faculty development programmes, for multidevelopment approach to the prevailing socio-economic conditions and due to lack of incentives for research activities. There are no adequate facilities to meet rapid advances in biomedical and new emerging high technologies. Added to this there is a basic shift in the set goals with emphasis on prevention and health education rather than diagnosis and treatment (10). It is also to be noted at this stage that Universities established based on profession like agriculture, engineering yielded better results, which makes the case more in favor of starting Universities for health sciences (11).

Objectives and Plan of Action to establish an Ideal type of University of Health Sciences

While establishing the University of Health Sciences, the following objectives have to be kept in mind to make this institution an ideal one. The university so established should be able to maintain uniformity of all educational processes by enhancing the quality of

education in all disciplines; and to upgrade the skills and competence of professionals including paraprofessionals in health systems. In addition, the university should be able to plan and monitor health man power requirements of the country, start new courses in innovative fields and last but not the least, make every effort to promote inter and intra-disciplinary research in all

fields of health sciences by establishing various study centers of excellence as constituent colleges of the university (12,13).

The objectives and the respective plans to achieve the aforesaid objectives to make the University of Health Sciences an Ideal one is shown in the Table 1 below.

Table 1: Objectives and plan of action for establishment of an ideal University of Health Sciences

Item	Objective	Plan of Action
1.	To maintain uniformity of all educational processes	Affiliate all colleges imparting education in health sciences in the State – Medical, Dental, Nursing, and Pharmacy, Para-Professional etc. to ensure uniform curricula across the State and to maintain high standards.
2.	To enhance quality of education in all disciplines	Modernize teaching by restructuring curricular and training programme based on the national needs and priorities through communication technology to evolve credible and objective methods for admission, evaluation and certification and to develop linkages with other systems of Medicine i.e. traditional systems and integrate knowledge of Social & Behavioral sciences/ Bio-informatics etc.
3.	To train professionals as competent teachers	All professionals dealing with education to be trained as competent teachers by imparting regular training in educational technology/research / curricular planning / audiovisual /

		evaluation methods through introduction of newer teaching methods.
4.	To update skills and knowledge of profess- ionals through self- instructional means/ teaching materials/ information system	Suitable facilities have to be provided through certain identified agencies to organize and support regular Continuing Medical Education as well as Continuing Multi-Professional Education Programmes for all levels of professionals.
5.	To plan and monitor health man power requirements	A well-planned health information system is to be kept in position so that required categories and numbers can be produced. At the same time need for establishment of new institutions can be scientifically assessed and started taking into consideration the factors like disease burden, geographical considerations and regional imbalances.
6.	To promote research activity in inter and intra-disciplinary fields (Basic / Clinical / Experimental)	Research aptitude need to be developed from the undergraduate level and incentives and encouragement to be given to the faculty through deputations for advance training programmes, postgraduate training leading to Masters and Doctorate degrees in specialized fields.
7.	To start new courses in innovative fields	With the development of newer technological methods, the health systems need to be expanded by starting new courses through transfer of knowledge and technology in fields such as Community health / Social & Behavioral sciences, Medical pedagogy, Health Administration, Health management, Bioinformatics and related Para-professional courses by establishing new faculties in health sciences.

8.	Establishment of Study Centers of Excellence	(a)	Center for health systems and health management
	to fulfill the above objectives	(b)	Center for education technology (Medical Pedagogy)
	objectives	(c)	Center for Planning and Development of Human Resources for Health
		(d)	Center for population sciences
		(e)	Center for Continuing Education in Health Sciences
		(f)	Center for complementary medicine
		(g)	Center for postgraduate basic medical sciences

Role of Study Centers

The job descriptions of these centers are well defined and aimed at creating a physical environment where all faculties of health sciences can interact and also act as a model for education and training of health care teams through multiprofessional and inter-professional education (12,13).

- (a) Center for health systems and health management with functional units dealing with health economics, health technology and health management shall carry out continuing research and analyze the cost benefits and cost effectiveness of various health and family welfare programmes.
- (b) Center for education technology (Medical Pedagogy) will be able to

- inculcate computer knowledge in medical students and at the same time expose the medical faculty to the emerging technologies in informatics, telemedicine and distance learning so that they can act as facilitators for the use of these technologies by the students.
- (c) Center for Planning and Development of Human Resources for Health will be able to provide necessary data regarding available and required manpower profiles on a scientific basis so that the administration can plan for either starting of new institutions or strengthen the existing institutions in those areas where health manpower is inadequate in quantity and quality.

- (d) Center for population sciences will be able to develop a comprehensive health policy for the nation through studying population issues of national importance such as epidemiology, demography and other factors like sociological and behavioral aspects which serve as determinants of reproductive and child health and geriatric issues.
- (e) Center for Continuing Education in Health Sciences at the university level is expected to continuously monitor the competence, knowledge and skills of health professionals at all levels to enable upgrading of skills and knowledge on a regular basis.
- (f) Center for complementary medicine has to develop the traditional or Indian systems on scientific basis by integrating them on modern scientific outlook with add on research methodologies in their respective fields. The artificial divide between these systems and the modern system of medicine needs to be progressively demolished so that all traditional systems constitute a unified faculty of complementary medicine interacting closely with the conventional faculty of mainstream medicine.

(g) In addition to these centers, with the realization that there is dearth of qualified teachers, particularly in preclinical and Para-clinical subjects, a Centre for Postgraduate Basic Medical Sciences has to be established to inculcate interest amongst junior professionals and to encourage them to take up teaching and research as career and also to produce core research group of teachers cum scientists.

As such there is a definite need to establish University of Health Sciences as an autonomous body in each state in the country with an ideal infrastructure having the aforementioned study centers of excellence as constituent departments of the University and all medical, dental, nursing and allied professional colleges as affiliated colleges coming under the academic control of the university as prerequisite. Such a university, in addition to having autonomy and infrastructure, should be empowered with flexibility to add new programme dimensions in the years to come and provided requisite financial resources for the purpose of institutional strengthening and capacity building.

Till now, seven States i.e., Andhra Pradesh (1986), Tamil Nadu (1988), Karnataka (1996), Maharashtra (1998), Punjab (1998), West Bengal (2003) and Rajasthan (2009) have established the statewide affiliating Universities of Health Sciences with the objective of developing an Ideal type of University of Health Sciences. However, these universities though have partially fulfilled the objectives of an ideal University of Health Sciences, have not made major impact as yet, either because the period is too short to assess the impact or the requirements for an ideal university as envisaged have been given a go-bye. There are several known and unknown causes for such a situation.

Drawbacks

In our country not only these universities but also most of the general universities of long standing with few exceptions are neither able to maintain high standards of education nor keep pace with the advances in higher education. In 2007, our Prime Minister Shri Manmohan Singh said, "Our university system is, in many parts, in a state of disrepair... In almost half the districts in the country, higher education enrolments are abysmally low, almost two-third of our universities and 90 per cent of our colleges are rated as below average on quality parameters... I am concerned that in many states university appointments, including that of Vice-Chancellors, have been politicized and have become subject to caste and communal considerations, there are complaints of favoritism and corruption" (14).

As such, higher education including professional education in our country is facing lot of criticism from the public in general and medical fraternity in particular. The identifiable draw backs such as lack of political will, weak implementation of policies and above all want of overseeing mechanisms in place resulted in lack of infrastructure facilities, limited flexibility, curtailed autonomy, meager financial support and poor funding. Of late, some more factors like privatization cum commercialization of professional education, many a time being considered as profitable business leading to unethical practices also added to the woes of these universities and also resulted in mushrooming of new colleges irrespective of their need or not (15). Several National Health Committees have made recommendations in right direction with right concept but most of them are yet to be implemented or only partly implemented resulting in the present situation in most of the institutions with very few exceptions (16).

Recent Developments

The National Knowledge Commission established by the Prime Minister of India in the year 2005 under

the Chairmanship of Sri Sam Pitroda to recommend and undertake reforms in order to make India a knowledge-based economy and society (17) and a Committee to Advise on Renovation and Rejuvenation of Higher Education appointed by the Ministry of Human Resources Development, GOI under the Chairmanship of Prof. Yash Pal, 2009 (18) have submitted their recommendations and an off shoot of the later a task force constituted by the Ministry of Health & Family Welfare, GOI to reform the current regulatory framework and enhance the supply of skilled personnel in the health sector, under the chairmanship of Shri Naresh Dayal, Union Health Secretary, 2009 (19) has also submitted its report, on which a Draft Bill is put up for suggestions and comments.

National Knowledge Commission (NKC) 2006-2009

The NKC has in its report proposed a standing committee for medical sciences within the structure of Independent Regulatory Authority for Higher Education (IRAHE). The primary function of the standing committee will be to ensure that medical practice and teaching is continuously updated to maintain minimum quality standards. The committee is also supposed to

formulate the guidelines for deciding the common entry criteria for admission into institutions all over the country both in the government and private sectors. It is also responsible for monitoring the standards and settling the disputes. The commission did not recommend taking over of the functions of the existing apex bodies (17).

Yash Pal Committee, 2009

The committee recommended establishment of a de novo regulatory body named National Commission for Higher Education and Research (NCHER) under which the various functions of the existing regulatory agencies of professional education including medical education would be subsumed and powers taken over by NCHER to monitor, regulate and grade the institutions. It also suggested creation of state level NCHERs and at the same time leaving the universities to encompass all disciplines and their interfaces with academic decisions entirely being left to them. However, the professional councils with curtailed powers shall look after the fitness of the people practicing in their respective fields by way of conducting regular qualifying tests for certification of professionals and prescribing syllabi for such examinations (18).

Task Force of the Ministry of Health & Family Welfare, GOI, 2009

Force in its report Task recommended setting up of the National Council for Human Resources in Health (NCHRH) as an over-arching regulatory body as compact autonomous body, independent of government controls, with adequate powers including quasijudicial, functioning within the health education polices of the government to develop and strengthen medical education to meet the country's health needs under the Ministry of Health. It will set standards of health and medical education and regularly redefine the nature and content of educational programmes. While repealing all the regulatory bodies now in force, it will have various sections representing all the systems including medicine, nursing, dentistry, public health, hospital management and allied sciences to discharge its functions (19).

Keeping in mind these recent reports emanating from the Government of India sources to usher in far reaching structural reforms for betterment of the professional education in general and health sciences in particular in the country and keeping in view of the past experiences, several questions do arise in our minds to react on the proposed draft bill on the subject.

- Will the NCHRH be, as a single body, able to resolve the problems and cope up with the emerging challenges of different systems of medicine and allied medical and paramedical sciences?
- 2. Should it be a coordinating body playing only the role of a regulating and controlling agency?
- 3. What should be role of Universities of Health Sciences?
- 4. What are the financial implications and who will be responsible for funding the entire network?

To answer these questions, we may have to keep in view the present functioning of the systems of medical and health education in the country and their governance in diversity and hope that the proposal of establishing of NCHRH at the centre will become a reality.

It is fondly hoped that this new step to reform professional education in health sciences as per the recommendations of the Task Force by creating NCHRH will grant full autonomy and required flexibility to Universities, which will function as self-regulatory bodies fully vested with all academic responsibilities. Whether this is going to be the viable alternative is a matter of debate. To make it viable, the

Government of India should make it mandatory that every state in the country should establish a Health University, which will work in cohesion with NCHRH to improve education in health sciences through uniform curriculum, training of graduates and improvising the teaching techniques. In addition, the Health Universities may be supported financially by setting up a Health Education Grants commission/Health Sciences Grants Commission (HEGC/ HSGC) either independently or under the banner NCHRH, with well defined and clear cut responsibilities without eroding into its autonomy. At this stage it is also imperative to discuss its role vis-à-vis Universities of Health Sciences already established and to be established in each State along with the suggested modalities of structural reforms in planning and management of professional education in health sciences.

Suggested Modalities

Role of NCHRH: NCHRH shall be an autonomous Apex Body of the MH & FW, GOI, with adequate powers including quasi-judicial and functions as a regulatory authority in place of existing councils within the broad framework of medical and health educational policies of the government. It should have standing committees or Boards representing all professional health

streams of education to regulate and control the system as a whole towards effective maintenance of standards. The NCHRH should implement the policies of the government through the Universities of Health Sciences serving as nodal agencies (Fig.1 & 2).

Role of Universities of Health Sciences: Each State should establish an Ideal University of Health Sciences in the real sense as described/envisaged, affiliating the entire medical and allied sciences institutions and not as mere examining bodies to confer degrees. All the Universities of Health Sciences in the country should be linked with NCHRH and shall come under its purview as nodal points in each State, without getting eroded of their autonomy as far as academic matters and be accountable only to NCHRH as far as recognition and accreditation and in fulfilling its objectives (Fig.1 & 2).

Role of Health Education Grants
Commission (HEGC)/Health Sciences
Grants Commission (HSGC)Modalities of monitoring and funding:
Professional education in health sciences
is mainly funded by State Governments
except CGHS Institutions and
Autonomous Institutions such as AIIMS/
PGIMER. Similarly as on today the
Universities of Health Sciences in the
States are funded only by the State Govt.

and partly support themselves through self resources such as affiliating fee, tuition fee etc., and very little from the UGC. Under these circumstances, for successful functioning and governance, an organization similar to UGC by name Health Education Grants Commission (HEGC)/Health Sciences Grants Commission (HSGC) is to be formed to serve as an intermediary agency between NCHRH and Health Universities as a monitoring and funding agency. HEGC/ HSGC shall function either as an autonomous intermediary body with dual functions of monitoring and funding, whereas the other the proposed Council i.e. NCHRH shall be a Regulatory body. It can have 4-5 regional centers distributed all over the country to cater to the needs of all the universities to serve as a link between the Apex Body NCHRH and UHS / Institutions (i) to carry out the monitoring functions through regular inspections of infrastructure facilities as well as the standards and (ii) to serve as a funding agency to extend adequate financial support by way of release of grants and its observations are to be binding or mandatory and not recommendatory. Even in the absence of a new apex body NCHRH and with the continuance of the existing councils, this monitoring and funding agency will be able to give the desired results. The Professional Councils may continue as regulatory, registering and Re-certification bodies without encroaching neither on the autonomy of the universities nor the functions of the HEGC/HSGC (Figure 1 & 2).

Summary and Conclusions

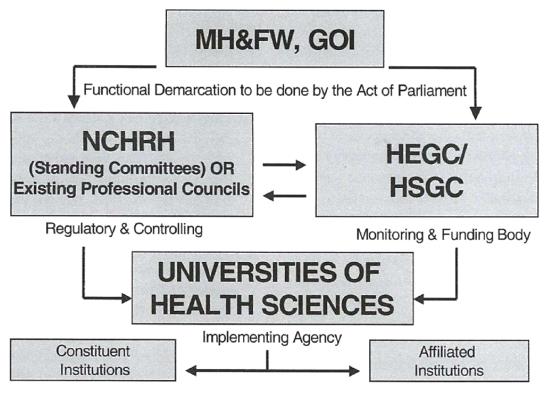
From the foregoing analysis of the situation and discussion, there is a felt need for carrying out the following structural reforms in planning and management of professional education in Health Sciences:

- Establish an Apex Body such as NCHRH with full autonomy with Ministry of Health, GOI and in case this is not feasible the existing councils can continue without the mandate of monitoring the system,
- ii) Create a new organization namely Health Education Grants Commission/Health Sciences Grants Commission (HEGC/HSGC) as a monitoring and funding agency with statutory powers to serve as a Watchdog Organization of the system, whose recommendations shall be mandatory and not recommendatory.
- iii) Expedite establishment of an IDEAL University of Health Sciences in every State with proper infrastructure.

- iv) Demarcate the functions/ responsibilities in a clear-cut manner through legislation without eroding into the autonomy of each of these organizations
- v) Develop well-defined structured linkages between them, the details of which can be worked out.

At the same time, Professional Educationists in Health Sciences should

Figure 1: Flow Chart showing the proposed structure and governance



Legend to abbreviations:

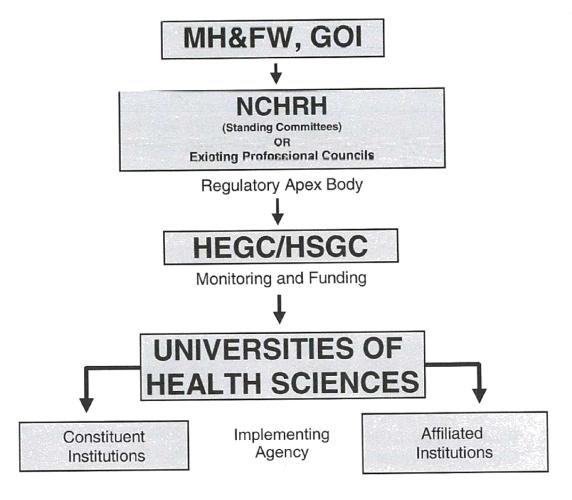
MH&FW, GOI: Ministry of Health & Family Welfare, Government of India

NCHRH: National Council for Human Resources in Health

HEGC: Health Education Grants Commission

HSGC: Health Sciences Grants Commission

Figure 2: Depending upon the nature of autonomy to be conferred, an alternate flow chart showing the proposed structure and governance



Legend to abbreviations:

MH&FW, GOI: Ministry of Health & Family Welfare, Government of India

NCHRH: National Council for Human Resources in Health

HEGC: Health Education Grants Commission

HSGC: Health Sciences Grants Commission

respond with sensitivity and responsibility to make the NCHRH-HEGC-UHS axis a reality and for the system to succeed in fulfilling the objectives and to function satisfactorily. All out efforts should be made by all the authorities concerned to strengthen the system to achieve the desired objectives in the country. However, implementation of strategies so far identified and described requires innovative thinking, co-operation among the professionals and last but not the least "the political

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will". These are the essential elements to bring out reforms in planning and management of professional education in health sciences.

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