Chapter 146

Major Reforms in Medical Education for an Interdependent World of 21st Century

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Health is not only a prescribed "human right" by various "Global Charters and Declarations", but in the domain of Indian constitution it has been attributed as a "fundamental right" vested with all its citizens. The concept of "welfare state" enshrined in the Indian constitution mandates the "state" to undertake the responsibility of realistic actualization of the same. As such, in addition the "state" constitutionally is also expected to ensure the fulfillment of "legitimate expectations" of its people in the context of envisioned "welfare state" vide the established legal doctrine of "legitimacy of expectations' of the citizens of the country".

In order to ensure that the fundamental right to health of all the citizens of the country is realistically actualized, it is imperative to have the required trained health manpower for the dispensation of the same in required numbers as well as capacity. It is for this very reason, the significance of medical schools as the "repository" of generation of trained health manpower needs to be appreciated in all its manifestations. The efficiency and the efficacy of the said trained health manpower is primarily dependent on the effective capacity vested with the medical schools in the country as the "foundries" for the same. Realistically speaking, it is the status of medical schools in their intrinsic health that goes a long way in deciding the nature and efficiency of the trained health manpower as an output generated by it. "Input" continuing to remain of quality, it is the efficacy of the "throughput", which realistically goes to decide the efficiency of the final output. In the instant case "medical schools" being the "throughput" need to be given diligent care for the purposes of making them an effective place for dispensation of the worthwhile task of generation of the trained health manpower so vital and significant for actualization of the constitutional concept of "welfare state" in terms of desired delivery of health care to all its citizens.

It is in this context that Dr D S Kothari in his historical education commission report of 1964 categorically stated that "destiny of India is shaped in its class rooms". He meant very loudly and clearly that future and fate of a nation is not dependent on how effective laws are being enacted for it, is also not determined on what are its materialistic gains, progress and prosperity; on the contrary it is dependent on shaping by the diligent hands of the teachers engaged in education for purposes of evoking the fate and future of the generations by not only entitling them to be conferred with academic distinctions, but also enriching them by such and round inputs, which could make them a revered personality and also a successful human being.

Education, thus in the Indian context by the founding fathers was not construed as a sole modality for the purposes of gaining the livelihood. On the contrary, it was a tool for actualizing the "relevance" of human life as a whole. The founding fathers in the constitution clearly mandated that education in free India would not be the monopoly of a handful of those who can afford it, but would be for actualization and creation of egalitarian India, where every deserving individual would be entitled for the same.

It was also mandated therein that it would be extended to them in a free flowing manner, so that even the weakest of the weak, poorest of the poor and remotest of the remote is also brought into the main stream of free independent India.

The contemplation of "equity, equitability and extension of opportunity" to all concerned beyond the limitations of "caste, color, creed, sex, religion, faith, belief, occupation, vocation, profession and geographical location" in the constitution is primarily to evolve the essence of envisioned "welfare state".

Education therefore is an avenue, which is supposed to extend to each citizen of free India toward attaining "esteem, pride, self respect" along with the gainful livelihood and adding "decency and dignity" to their lives. Higher education including the gamut of medical education therefore is endowed with these areas to be attained by the common man.

Medical education in the domain of higher education has altogether a more meaningful relevance. The concept of the welfare state as incorporated in the constitution means an all round development of all the citizens of the country. The two foremost parameters of development toward actualization of welfare state were identified to be "health and education".

When it comes to medical education, these two parameters get interlinked in as much as medical education turns out to be a "foundry" through which trained health manpower is generated, which ultimately turns out to be the backbone of effective health care delivery system ending up in extension of preventive, promotive and curative dimensions of health to all concerned.

It is in this context, the advent of medical education bears a monumental significance. The first medical college of modern medicine materialized way back in the year 1835 in Madras. This was followed by another medical college in Goa in 1840 and then medical colleges in Calcutta and Bombay along with the establishment of the premier universities in 1850 at Madras, Bombay and Calcutta respectively.

Since then the pace of growth of medical education in the country has been steady and continuous. Of the total number of medical schools in the world as on date, India has 355 medical schools, whereby nearly 13.5% of the global medical schools are in India. By virtue of this disposition India turns out to be the largest producer of trained health manpower as of now in the world with the annual intake capacity of the graduate MBBS course being well over 45,000 per year and the postgraduate avenues for degrees and diplomas.
taken together accounting to be 21,000. Resultantly, about 30,000 medical graduates are being added to the existing pool of medical manpower each year in India.

The growth of medical education also needs to be viewed in the context of “demographic dividends” that the population of all the countries have in their fold. There was a time when it was a consistent belief of all the Indians that growing population was one of the biggest “bane” for this country. However, it has crystallized that the Indian population in terms of the demography is unique in as much as 52% of the population today is below the age of 25 years and nearly 72% is below the age of 35 years, which means India is a unique country in terms of having the highest percentage of young people in its fold. It is also true that this uniqueness of the demography of Indian population would last be for about 15–20 years. This, therefore, turns out to be a really critical period, which could be availed by all of us to use and utilize this youthful population to its maximum in terms of transforming them into a precious human and intellectual resource.

It is in this context that Dr A P J Abdul Kalam, the former President of India, who emphasizes that we need to ignite the minds of the youth and appropriately tune and train them, so that they turn out to be a genuine asset for furtherance of the cause of “Mother India” on the path of it garnering “global supremacy”.

It is this youth, which is the “treasure” and which needs to be effective and articulated. Utilization of this youth in the portals of the medical schools and transforming them into the “trained health manpower” is one of the “crucial areas” which needs to be diligently planned and effectively executed.

It is also to be borne in mind that in terms of the generation of the “trained health manpower” in coming times, only four countries namely Brazil, Russia, India and China will have surplus of trained health manpower in times to come. Educational strength and capacity at our disposal makes us the most “dominant player” in health manpower in times to come. Educational strength and capacity at our disposal makes us the most “dominant player” in health manpower in times to come.

Medical education has to sustain to the objectives of higher education contemplated in First Education Commission report by Dr S Radhakrishnan, when he said that “higher education shall cater to training, research, extension culminating in sustainable development of the society.” In continuance of these objectives the “11th Five-Year Plan” has spelt out that higher education including medical education shall be governed by the trinity of “Access, Equity and Equality”. “Access” and “Equity” have been definitely governed by the laws operable in the country from the constitutional mandate. However, the real “touch stone” which is the matter of concern is of incorporation of “quality” in medical education. It is this concern for quality, which makes it imperative for all of us to grapple with this problem.

The two cardinal considerations, which therefore mandate major reforms in the domain of medical education in the country, are:
1. Catering to the global needs by the trained health manpower
2. Incorporation of desired quality concerns for the same.

It is an established fact that India being one of the largest generators of trained health manpower in the country and in view of the trends operational as of now in generation of the same globally, it is necessary that global perspectives and needs are accommodated in the training schedule to be carried out by the medical schools for generating the trained health manpower. This objective can exclusively be achieved by incorporating desired quality concerns, which will make medical schools quality centric and effective centers for generation of trained health manpower capable of catering to the global needs as a whole.

It is for this very reason the findings on observations that have been brought to fore by the Lancet Commissions in its report of 2010 need to be looked at dispassionately for the purposes of availing them as a basic and a core document for evolving major reforms in medical education. The Lancet Commission report categorically brings out that redesign of professional health education is necessary and timely in view of the opportunities for mutual learning, the joint solutions offered by global interdependence due to acceleration of flows of knowledge and technologies across borders, and the migration of both professionals and patients.

This vision on this count will require a series of instructional and institutional reforms, which should be guided by two proposed outcomes:
1. Transformative learning
2. Interdependence in education.

Transformative learning is about developing leadership attributes and its purpose is to produce enlightened change agents. It involves three fundamental shifts, from facts memorization to searching, analysis and synthesis of information for decision making; from seeking professional credentials to achieving core competencies for effective team work in health systems and from noncritical adoption of educational models to creative adaption of global resources to address local priorities.

Interdependence is a key element in a system approach because it underscores the ways in which various components interact with each other.

Interdependence in education also involves three fundamental shifts:
1. From isolated to harmonized education and health systems
2. From stand alone institutions to networks, alliances and consortia
3. From inward looking institutional preoccupations to harnessing global flows of educational content, teaching resources and innovations

This will necessitate reforms in the categories of:
• Instructional reforms
• Institutional reforms.

Instructional Reforms

The various instructional reforms, which could be incorporated in the context of observations brought to fore by the Lancet Commissions report could be as under:
1. National eligibility examination test for admission
2. Appropriate weightage to the qualifying examination
3. Incorporating weightage to attitudinal and aptitudinal test
4. Evolving competency-based curriculum
5. Matchable teaching tools, techniques and technologies
6. Corresponding evaluation methods
7. Academic ambience conducive to teaching and learning
8. Standing mechanism for curriculum update
9. Effective faculty training and orientation mechanisms
10. Diligent use of information technology
11. Minimization of didactic teaching
12. Inculcation of learner centric work culture
13. Promotion of interprofessional and transprofessional education
14. Emphasis on integrated teaching
15. Diligent incorporation of interdisciplinary approach

Institutional Reforms

In the context of the observation of the Lancet Commission that the institution reforms have to be undertaken in view of the fact that the concept of globalization has resulted in withering out of the geographical borders and has resulted in informational unification of the world. It is for this reason, it goes to state that “institutional reforms
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should align national efforts through joint planning especially in the education and health sectors, engage all stakeholders in the reform process, extend academic learning sites into communities, develop global collaborative networks for mutual strengthening, and lead in promotion of the culture of critical inquiry and public reasoning.

As such the “direction and nature” of the institutional reforms in the backdrop of the salient observations brought out by the Lancet Commission in its report should be:

1. Expansion from academic centers to academic systems
2. Linking together through networks, alliances and consortia
3. Nurturing of a culture of critical inquiry
4. Strengthened accreditation
5. Establish health professional education
6. Creation of appropriate consortia
7. Evolving meaningful linkages
8. Duel degree programs
9. Evolving meaningful international linkages
10. Creation of a handy global informational pool
11. Evaluating cost effectiveness
12. Emphasis on timely developmental appropriations.

The net purport is that the emerging features of globalization of medical education have to be deciphered “objectively” and the required “cues” have to be picked up by all concerned in order to evolve a “timely and a comprehensive strategy” for update of the model of medical education in India, so as to be enriched with “quality” in such a manner that it will go a long way in fulfilling the “legitimate global expectations” along with the expectations of our fellow beings in India. This will mean “appropriate update” of the policy in a “time bound manner” and also putting into place regulatory mechanisms; which would be conducive to these “directional changes”, which are “need based” and hence have to be timely incorporated, with a mechanism in place to monitor them periodically ensuring “actualization of desired outcomes” by incorporating “interim corrective measures” as well, wherever and whenever the need arises.

REFERENCES