Review Article

Nurturing of self-sustained medical education and health-care enterprises: An essential desideratum for India to emerge as a global economic power

T. D. Dogra¹, Keshav Kumar Agrawal², Astha Chaudhry³

¹Forensic Medicine and Toxicology and Advisor, Internal Quality Assurance Cell, Former Vice-Chancellor, SGT University, Gurgaon, Haryana, India, ²Department of Surgery, Varun Arjun Medical College Shahjahanpur, Uttar Pradesh, India, ³Department of Oral Medicine and Radiology, Faculty of Dental Sciences and Member Secretary, Internal Quality Assurance Cell, SGT University, Gurgaon, Haryana, India

BACKGROUND AND HISTORICAL REVIEW

Ayurveda is the oldest treatise on medicine and surgery. The pioneer physicians and surgeons such as Dhanvantari, Charaka, and Sushruta made it popular spreading it to the Middle East and Europe. Alexander and subsequent Greek rulers of Northern India had continuous knowledge transfer and interaction of Ayurveda and its principles developing it to the present-day modern system of medicine. Buddhism further spread it to China and Far East.

The medical education system in India has grown tremendously post the national health survey undertaken by Bhore committee and subsequently with the development of national health-care plan. Moreover, through recommendations of various committees set on various aspects of medical education and health care in India constituted by Government of India time to time. The provision of health-care services that cater to the enormous population of our country has been made possible by the equal contribution of the unaided medical colleges that are run by societies or trusts. These private medical institutions are self-sustaining without any financial aid from government but are contributing enormously not only in the provision of health-care services to the community where they are located but also in the overall economic development of that particular area by creating ample employment and opportunities for the people residing, nearby leading to sustenance of thousands of families, thus leading to the development of that particular area and nation at large. This article is aimed to highlight the role of self-sustained medical institutions in the overall growth and economic development of the nation. It also stresses on the challenges faced by these institutions due to the restrictive and suppressive policies that hamper the growth and self-sustenance of these institutions and thus suggests an equal partnership model to function effectively in the overall enhancement of medical education standards as well as health-care facilities to cater to all sections of society and nation.

KEY WORDS: Bhore committee, medical education, private medical colleges

Bengal was established followed by medical colleges in Mumbai and Chennai.

In 1947, when India achieved independence, there were only 15 established medical colleges and at that time, total student intake was 1000.

The British government in India in the year 1943 constituted BHORE committee under chairmanship of Sir Joseph William Bhore. The development committee performed a health survey for 2 years to assess health condition of India. The committee submitted report in 1946 (1943–1946) and was also called as 300 million plan as population of united India at that time was 300 million.[1]

Survey of the then existing position regarding the health condition of peoples of India as well as the existing position of the health organization in the country was the major aim of the BHORE committee. Based on the report, recommendations for future health development were to be made with a view to improve the public health system in India.

The report was printed in four volumes. It laid out the proposal for a national program of health services in India and also stressed the importance of integration of preventive and curative treatment in subjects.

It said, “If it was possible to the evaluate the loss, which this country annually suffers through the avoidable waste of valuable human material and the lowering of human efficiency through malnutrition and preventable morbidity, we feel that the result would be so startling that the whole country would be aroused and would not rest until a radical change had been brought about.”

Some of the important recommendations of the Bhore Committee were as follows:[1]

1. Integration of preventive and curative services at all administrative levels
2. Development of Primary Health Centres (PHCs) in two stages
   a. Short-term measure – It was suggested that one PHC for a population of 40,000 and each PHC to be manned by a set of two doctors along with one nurse, four public health nurses, four midwives, four trained dais, two sanitary inspectors, two health assistants, one pharmacist, and 15 other Class IV employees. It was first established in 1952. For the support of PHCs, secondary health centers were also envisaged and their work was also to coordinate and supervise their functioning
   b. A long-term program is also called the 3 million plan which was aimed with setting up of primary health units with a capacity of 75 beds in each hospital for each 10,000–20,000 population and 650-bedded hospital as a secondary unit, again regionalized around district hospitals with 2500 beds.
3. There was a major change in medical education where 3 months training in preventive and social medicine to prepare “social physicians” was incorporated
4. There was also abolition of the licentiate in medical practice (etc.) qualifications and it was replaced by a single national standard Bachelor of Medicine and Bachelor of Surgery (MBBS) degree
5. Creation of a major central institute for postgraduate medical education and research which was achieved in 1956 with the All India Institute of Medical Sciences (AIIMS).

### PROGRESSION OF MEDICAL EDUCATION IN INDIA

The number of medical colleges in India from 1947 till 2014 is as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23</td>
<td>86</td>
<td>112</td>
<td>143</td>
<td>262</td>
<td>395</td>
</tr>
</tbody>
</table>

The categorization of medical colleges in private and government sector is as follows:

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>2006</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>47</td>
<td>131</td>
<td>214</td>
</tr>
<tr>
<td>Government</td>
<td>109</td>
<td>131</td>
<td>181</td>
</tr>
</tbody>
</table>

As per Medical Council of India,[2] at present, there are about 542 medical colleges, of which government colleges are 258 and private medical colleges are 242. The total output of graduates is 79,855.


### PRESENT-DAY DOCTOR POPULATION RATIO

In 2017, Minister of State for Health, Ms. Anupriya Patel said as per information provided by the Medical Council of India, there were a total of 1,022,859 allopathic doctors registered with the state medical councils or Medical Council of India as on March 31, 2017. Assuming 80% availability, it is estimated that around 8.18 lakh doctors may actually be available for active service. It gives a doctor-population ratio of 0.62:1000 as per current population which is estimated to be of around 1.3 billion.[3]

The doctor-population ratio of the some of the countries are as follows: Australia – 3.374:1000, Brazil – 1.852:1000, China – 1.49:1000, France – 3.227:1000, Germany – 4.125:1000, Russia – 3.306:1000, the USA – 2.554:1000, Afghanistan – 0.304:1000, Bangladesh – 0.389:1000, and Pakistan – 0.806:1000.
CONTRIBUTION OF SELF-SUSTAINED MEDICAL EDUCATION AND HEALTH CENTRES IN PRESENT TIME

Present Time Contribution of Self-sustained Medical Institution in India

The contribution of SSMIs in India is immense. Not only in terms of numbers of doctors produced but also, in the services, rendered to the community. These services are not limited to only health care but include economic development and employment opportunities in the entire surrounding area that ultimately leads to the growth of community and nation at large.

The self-sustained medical colleges (SSMCs) have significantly contributed in achieving the present doctor-population ratio as evident by the total number of MBBS graduate output of 35,340 as compared to about 38,787 MBBS graduates by government colleges contributing to about 47.6% in the total number of MBBS doctors produced every year in the country. Government alone would never have been able to achieve this present scenario of availability of doctors for health care.

Self-sustained medical institution is sharing almost 50% of health-care burden, particularly in far-flung areas where government agencies would have never reached. In fact, rural population in India is getting affordable services at SSMCs due to the strategies adopted to attract more and more patients for appropriate training of their students. Furthermore, medical regulatory bodies do not permit SSMCs to run paid nursing homes. As a result, they have to provide medical services at highly subsidized charges. Furthermore, the services to the rural population are provided at their door steps consuming enormous resources and energy.

A large number of investigating laboratories are available at every SMMC that provides services at nominal charges to the common person and poor people. The emergency care and trauma center in SSMI caters the injured or road traffic accident victims contributing to the service provision at the time of need for better survival.

All SSMCs are participating in all the national health programs without any major subsides from government.

Any medical college provide employment to at least 1000 doctors by way of faculty, junior resident, senior residents, tutors, and house officers to take care of the patients. The employment is also available to another 2000 persons as ancillary staff, namely, technicians, orderly, attendants, house keepers, guards, nursing staff, operation theater assistants, and other in-numerable opportunities that are created in the health-care sector.

The maintenance of building infrastructure, construction, and its maintenance needs large number of labor and various kinds of engineering staff. These employment opportunities are very well increased with the development of private medical institutions.

At any given time of day or night, about 1200 people reside in college campus needing regular assistance and various kinds of services which further increase the employment and business opportunities in the nearby areas.

Every day the footfall of about 5000 patients along with their relations/attendants in outpatient department or as in patients leads to the development of various kinds of ancillary services to cater to all the needs of the people attending it as well as for the surrounding community who gets indirect benefits. The supply of daily human needs and supplies of different items for students and hospitals such as consumables, medicines, daily use items, food materials, stay facilities, and supply of different materials, books, and stationary provides employment opportunities to poor people to run their families effectively.

As soon as, a medical institution is developed in an area, restaurants, coffee shops, vegetable sellers, sweet shops, and all other financial activities start enriching the area.

The economic development in the surrounding area can easily be appreciated by a single visit to area where SSIs are located. Pharmacy, PG guest houses, hotels for students, and public visiting hospital or university help the nearby area to develop in all respects.

In general, the SSMIs are situated in the rural area of district headquarters or outside of city, much away from district hospitals and have an annual intake of approx. 100–150 students and have an associated 550–700-bedded hospital, including beds in casualty and intensive care units. Thus, SSMIs provide the required medical facilities and choice to the incoming patient to choose from the existing government or self-sustained hospital.

In India, approx. 70% health care is provided by self-sustained sector and 30% by govt. sector. People rely more and have good faith in self-sustained health care as compared to district hospitals. Each SSMC gives health services to approx. 5 lakhs population of that area. Therefore, the self-sustained health institutions should not be seen as a singular activity but as a source of multifarious resource activities ranging from education, social, and economic developing model of the locational area.

CHALLENGES “OF” AND “BY” THE GOVERNMENT

The government has its own limitation in terms of finances, policies, administration, and political reasons to keep abreast with the recent advancements in medical education and ever developing health-care sector, particularly in instrumentation both diagnostic as well curative. On the other side, self-sustained setups are in competition to update as early as possible to be at par with the best of the practices both in medicine and education.

In the science of imparting education globally, India, particularly government medical education, is lagging far
behind to the modern system of education being followed in rest of the world.

The SSMCs are adopting newer teaching/learning techniques at a heightened pace through academic collaborations and interactions with eminent universities and institutions in different parts of the world.

The health education and care cannot be imparted by government alone in vast country like India, the present people’s participatory model of sharing of 50% medical education by self-sustained sector is an ideal model for any country.

However, in spite of tremendous contribution in health-care services, provision, and economic development of community by SSMIs, the restrictive public policies may halt the tremendous growth achieved in the private health sector, generating multifarious employment opportunities. In any good nation, it should engage 6% of its population in medical education and health care to provide reasonable health care to its people.

Hence, SSMIs need to be encouraged and given free hand financially with more and more autonomy in functioning for its rapid growth. The suppressive rules and regulations are no way going to help in developing the existing or coming up institution. This vast resource being created by people should not be demotivated, demoralized, and put to financial crisis making running and development impossible or bringing down the standards of education and care by framing unrealistic rules prohibitor of development.

GOVERNMENT VERSES SSMIS
EXPENDITURE TO PRODUCE ONE DOCTOR

According to the study conducted by Dr. Shakti Gupta, HOD, Hospital Administration, AIIMS, New Delhi, an authority on medical administration in India published in Times of India, January 8, 2009. Expenditure on producing one Doctor at AIIMS is 1.7 crore.[4] Thus, an average medical college without superspecialties should incur about 1 crore rupees per MBBS graduate.

However, in spite of this huge tax payers expenditure, the government fails to provide health care/education services even commensuration of the expenditure.

To share such a burden alone for a government in medical education/health care is an impossible task, particularly in view of poor tax collection in comparison with the developed world, neither in past and nor in present times nor likely in future time, the way we willingly or unwillingly have entered into market economy of contemporary world. Moreover, it is not desirable also as health-care needs of our country are so diverse in geography and demography and so variable requiring the different kind of assertion in different areas.

The ancient nation of India from the time unknown, socially so organized and tuned to the concept of service of fellow living beings including animals, is ingrained in the collective behavior of our society. Therefore, the history of charitable trusts for medical education and health care is as old a tradition as our civilization.

Even before British thought of medical education in India, the Parsi community of Bombay had proposed a medical college in Bombay in 1822.

THE CULTURE OF SUSPICION FOR CHARITABLE TRUSTS

Often people doubt and see the medical and health care institution run by charitable trusts with suspicion of being a commercial, benefit-oriented activity. This unreasonable and unfounded bias is highly unfortunate and reflects poor attitude of our society.

Charitable education trusts are “no loss,” “no profit” activities recognized world over and responsible for creating world’s best Institution, it is worth mentioning if there are any saving, it goes for the development and enrichment of its academics and in no way to anybody’s personal pockets.

Establishing medical education and health care institutions self-sustained through charitable trust has been our culture and is a spontaneous and spiritually satisfying activity.

THE WAY FORWARD

India is facing shortage of 600,000 doctors and 2 million nurses.[5] In India, 65% of health expenditure is out of pocket, and such expenditures push some 57 million people into poverty each year.

The vastness of health care and medical education of our nation needs a pragmatic and workable model to provide health care to all.

Further, ongoing pandemic of COVID-19, pandemic has proved beyond doubt about the urgent need of development of self-sustained peoples participatory approach to readily cater the needs of such massive population particularly in such pandemic crisis.

The integration of self-sustained/unaided medical sector with the health-care model/plan of India is in the interest of medical education, health care, and community of India at large.

Our commitment and duty toward the WHO and our nation are also to preserve peoples’ right of choice to visit a government or a self-sustained peoples participatory health-care setup, whichever, he finds suitable and affordable.[6-12]

CONCLUSION

There is an equal contribution of private medical colleges which are self-sustaining without any financial aid from government.
They are helping in building the nation not only by contributing in the strengthening of the health care but also in the economic development of the area by creating ample employment. In the current scenario of COVID-19 pandemic, it has further proved the need of self-sustained people's participation to tackle the crises.

REFERENCES