

Training Doctors for Tomorrow

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1. Introduction

For the past many years, the ills of medical education in India have been debated by Government committees, non-governmental organizations, professional bodies and medical educationists. Criticism has, in fact, spared no aspect of medical education. The fall in academic standards, a corrupt examination system, commercialization in medical colleges, unethical practices by the academic community, conflicts in regulatory jurisdiction and dichotomy between medical training and societal needs are only a few among the many ills which have drawn adverse attention. From all accounts, medical education keeps company with higher education which is acknowledged to have become disoriented and dysfunctional in India.

2. Historical

The present system dates back to the establishment of the Medical Colleges in Calcutta, Bombay and Madras in the latter half of the nineteenth century by the colonial administration. The syllabi and training in the Colleges closely followed the pattern which prevailed in London and

Based on the Shantilal Sheth Oration, XXXIII National Conference of the Indian Academy of Pediatrics, 1996.

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Edinburgh at that time and the medical degrees were accepted automatically for registration by the General Medical Council of Britain. The Medical Council of India was not established until 1933 as a statutory body under the provisions of the Indian Medical Council Act and charged with the responsibility for upholding a uniform standard of qualification in medicine in all provinces and recognizing medical qualifications obtained outside British India. In the nineteen thirties, the Medical Council of India (MCI) had to deal with no more than 13 medical colleges in the country. The number grew to 25 at the time of independence and soared to 150 in the nine-teen-nineties: it threatens to rise even higher in the years ahead.

The Medical Council Act of 1933 was amended in 1954 with expanded objectives and functions and the stipulation that the members of the Executive Committee shall be elected by the general body. In 1987, the Government of India brought forward another amendment in the form of the Indian Medical Council (amendment) Bill which was studied by a select committee. This bill which has several innovative features has not yet been enacted and its fate remains uncertain.

3. Medical Education Today

Nowhere is the distinction between undergraduate and postgraduate education sharper than in the field of medicine. While the undergraduate course aims to produce a physician with adequate knowledge of health and disease, reasonable medical skills and healthy attitudes to patients and their family, the post graduate courses seek to do more

and aim to produce specialists in a variety of medical and surgical disciplines.

3.1 Undergraduate Medical Education

The necessity to attune the undergraduate curriculum to the notably rural character of the Indian population was recognized even prior to independence by the Bhole Committee and subsequently, by various other committees of the Government of India. The central concern of these committees was always to ensure that the curative approach did not overshadow prevention. As recently as 1994, the MCI carried out a national exercise to tailor the undergraduate curriculum for the changing educational needs. As the recommendations of the MCI workshop constitute a virtual charter for medical education in India, they are summarized in the following paragraphs.

The duration of the MBBS course will continue to be four and half years followed by one year of internship. The course will consist of three phases—preclinical of one year, paraclinical of one year and clinical of two and half years. The preclinical course will cover anatomy, physiology and biochemistry with emphasis on integrated teaching and the avoidance of compartmentalization. The paraclinical phase will allocate equal time for pathology, microbiology, pharmacology, community medicine and forensic medicine. Efforts will be made every five years to update the curriculum by including, for example, newer subjects such as molecular biology, medical physics *etc.* in the preclinical; transfusion medicine *etc.*, in the paraclinical; and critical care medicine, geriatrics *etc.*, in the clinical phase. While these additions were acknowledged to involve the jettisoning of obsolete subjects, the latter were not identified.

For teaching, the work shop recommended active learning by the

student the expense of didactic teaching and full utilization of modern education technology. Integration was recognized the hallmark of good teaching at the level of the organ, disease and process, programme of regular training for medical teachers and the establishment a medical education unit in every college were also recommended for general acceptance. Above all, the overriding importance of clinical clerkship in the development of a physician was emphasized.

In the evaluation of candidates, internal assessment on a continuous basis was strongly urged and the need for introducing a standardized national examination which would serve for the final MBBS well as the postgraduate entrance was recommended. Detailed guidelines for enhancing the educational content of internship were also formulated during the workshop.

These recommendations constitute clear improvement over the existing (curriculum and aim at producing a caring doctor competent to deliver high quality care and able to contribute to the advancement of medical science. However the implementation of the recommendations has been held up pending their approval by the Government of India. Therefore medical colleges in India continue to implement the old curriculum subject to facilities and resources at their command These vary greatly because the medical colleges include a great majority in the states sector and a smaller number in central and private sectors with varying resources and constituencies. While all colleges in the central and private sectors may claim world class in facilities and performance, the majority in the states sector would rate below average by any standard. In the absence of a system assessment and accreditation, the objective rating of undergraduate medical education in the

medical colleges remains impossible at this time.

3.2 Postgraduate Education and Training

Postgraduate medical education is regulated by the Postgraduate Committee of the MCI which lays down detailed regulations and guidelines on the courses leading to postgraduate diplomas (*e.g.*, DA, DCH *etc.*) and degrees (*e.g.*, MD, MS) as well as degrees in super-specialties (*e.g.*, DM, MCh). The regulations cover every aspect of training including the qualification of teachers and candidates, teacher/candidate ratio, syllabus and training programme, method of examinations and so on. Even though the MCI is supposed to 'advise' the universities in securing 'uniform higher standards for postgraduate medical education', the advice, in practice, becomes directions for the medical colleges and universities. The standards of postgraduate training vary even more than at the undergraduate level.

In parallel with the MCI scheme, the National Board of Examinations (NBE) set up by the Ministry of Health conducts postgraduate examinations in all medical subjects at the national level and awards diplomas known as Dip NB. The NBE has laid down training requirements for the candidates in various specialities and prescribed accreditation procedures for teaching and non-teaching hospitals for the purpose of training. The NBE was set up primarily to introduce a national examination of high standard at the postgraduate level as an alternative to the postgraduate examinations of varying quality offered by the universities in the country.

Even though the examinations of the NBE are acknowledged to be of high standard, and no more than 50% of the postgraduate degree

holders manage to pass the examinations of the Board, the diplomas of the Board have not yet been given equivalence with the postgraduate degrees awarded by the universities! Most, if not all, teaching institutions and Public Service Commissions continue to insist on postgraduate degrees as essential qualifications for any teaching appointment.

4. Medical Council of India: Functions

As the statutory body for medical education, the MCI carries out the following functions: (i) Inspection of institutions with a view to maintaining proper standards, (ii) Granting permission to start Postgraduate Courses. (iii) Recognition of Indian and foreign medical qualifications. (iv) Maintenance of an all India medical register.

Besides the above functions, the Government of India have, by regulations, added the following functions to the MCI.

- (i) Recommendations on graduate medical education dealing with the procedure for admission to the MBBS course, duration of the course, rules regarding the migration/transfer of students from one recognized college to another, broad curriculum contents, procedure for the appointment of examiners, the scheme of the examination, details about internship *etc.*
- (ii) Recommendations on postgraduate medical education indicating the various specialities for which postgraduate courses may be conducted, minimum requirements for a postgraduate center, criteria for the selection of candidates, period of training and the method of training, appointment of examiners and the extra minimum staff required for conducting the postgraduate courses in an undergraduate medical college.

- (iii) Recommendations on the qualifications for appointment of persons to the posts of teachers in medical colleges and attached hospitals for undergraduate and postgraduate teaching.
- (iv) Schedules to the IMC Act 1956 providing recognized qualifications by university/institution, both undergraduate and post graduate.
- (v) Recommendations on the minimum standards required for a medical college for 100 admissions annually giving the requirement in respect of recommendation, staff and equipment required.
- (vi) Code of medical ethics giving in detail the responsibilities of doctors, the duties to patients, duties to the profession at large and matters relating to the issue of certificates, reports and other documents by registered medical practitioners and the procedure for disciplinary action for offense and professional misconduct.

Pending the enactment of the Indian Medical Council Bill, 1987, the prior permission of the MCI has also been made mandatory by an Ordinance for opening a new medical college, higher courses of study or for increasing the number of seats for students. The role of MCI is therefore pre-eminent in the field of medical education even though it remains an advisory body and its decisions are subject to the approval of the Ministry of Health. It does not enjoy the autonomy or authority which characterizes the functions of the UGC or AICTE.

5. Medical Education: Regulatory Bodies

Since medical education falls within the jurisdiction of the Ministry of Health, its course and development have been

dissociated from the mainstream of higher education in India. The movements and experiments which influenced higher education in India in the last two decades have bypassed medical institutions whose affiliation to the universities is more formal than substantial. The concept of autonomous colleges, inter-university centers for research, UGC/CSIR examination for fellowship aspirants, mechanism for assessment and accreditation, distance education and many other progressive ideas remain foreign to the medical domain.

The Ministry of Health, Government of India is the central authority for medical education in so far as its jurisdiction covers the MCI, the two institutions of national importance at Delhi and Chandigarh and several other teaching institutions nationwide. Since medical education is included in the concurrent list, the State Governments too have a role in its promotion and control through the large number of medical colleges and associated hospitals within their areas of jurisdiction. The third center of authority which has intervened decisively in regulating admissions, determining fee structure, conduct of examination fixation of the percentage of foreign students and other issues relating to medical education is the judiciary which has played an increasingly active role in recent years. In contrast, the Universities has little role in shaping or regulating medical education, their role being limited to the conduct of examinations and conferment of degrees. Nor do the professional associations of physicians, surgeons and specialists have any role in shaping educational policy unlike their counterparts in the UK or the US. Like many other areas of human endeavour in India, medical education remains over-regulated and overcentralized with all the attendant ills.

6. Problems Engulfing Achievements

The phenomenal increase in the number of medical colleges and the yearly output of 15000 doctors, the advent of training programmes in every speciality, the creation of a National Board for conducting postgraduate examinations are examples of major achievements. However these have been over shadowed by serious ailments, a few of which are discussed below.

6.1 Poor Quality

It is widely acknowledged that the standards of medical education have fallen in inverse proportion to the great increase in the number of medical colleges. According to the President of the Medical Council many medical colleges have affiliation with general universities, but are actually devoid of organic union with these seats of learning. The lamentable state of education in our country has been the direct result of this inherent weakness. The prevailing situation has gradually deadened all sense of responsibility in the administration and the faculty. Since medical colleges were responsible neither to the public nor to the profession, they tended to lapse into a state of laxity (1). Given the fact that the students are admitted through a highly competitive entrance examination, the medical graduates are nevertheless poorly equipped to deal with emergencies in an accident room, attend to deliveries or manage common health problems in a village. It is not often realized that the reluctance of young doctors to serve in the primary health centers and villages is not so much due to the lack of amenities as to the lack of confidence in managing clinical problems on their own. Thanks to the young age at which they enter the medical college after 10+2 and the unsatisfactory process of training, our fresh medical graduates are less mature and less confident

in serving patients than their counterparts in the English speaking world whose pattern of medical education we have adopted. No wonder our medical degrees are not recognized in most countries of the world.

The progressive erosion in quality has many facets. Until an Ordinance made the prior approval of the MCI obligatory for opening a medical college, numerous colleges were opened in the public and private sectors with poor planning, and the affiliation of universities extracted by influential people who had little vision or interest in education. In the hands of these educational entrepreneurs, medical colleges became a tool for making quick profits and peddling influence. Merit was given the go-by in admissions with state authorities vying with each other in raising the percentage of reservations. Indeed, the competitive exercise in raising the percentage of reservation was one of the issues which invited early judicial intervention in medication education. No less harmful was the policy on the promotion and transfer of medical teachers, which had less to do with merit or academic needs than with politics and corruption.

Barring exceptions, medical colleges could not provide the academic or clinical facilities which are indispensable for the maintenance of high standards. Even the colleges which enjoyed the recognition of the MCI could not generally claim, for example, to have a modern library service with current editions of books, latest issues of journals and facilities for literature search. Laboratories in the pre and paraclinical disciplines were poorly equipped with little motivation for the staff for implementing integrated teaching. A great many colleges had part-time clinical teachers who had little time to teach while 'full time' teachers served part-time in

reality. Teaching was targeted more on the know-how and techniques for passing examinations than on the acquisition of basic medical skills and the development of the right attitude to the practice of medicine.

Above all, educational institutions at all levels were conspicuous by the absence of professional management. They copied the practices in the Government with the result that 75% or more of the annual budget was claimed by wages. Quite often, institutions diverted funds from the Plan account to Non-plan to meet the ever-increasing demand for wages. Autonomy was non-existent. With hardly sufficient funds to pay for wages, utilities and rations, institutions were unable to purchase adequate supplies of books, drugs, disposables, spares, instruments and audio-visual aids or replace obsolete equipment. Under such conditions medical teaching could not but degenerate.

6.2. Weak Creativity

It is undeniable that no medical contribution from India had a major impact on the course of global medicine since western medicine entered India in the nineteenth century. This is true not only in regard to technology and therapeutics but also in regard to medical concepts. When original contributions did occasionally blossom in India, they could be traced to a Ross, Donovan or Haffkine who were not Indians or products of Indian training. The lack of creativity is particularly disturbing because the brightest students enter the medical colleges. In a world driven by knowledge, a nation which relies forever on intellectual free-ride is condemned to languish.

There are several circumstances which inhibit creativity in our educational system. The age and level of education at which candidates enter the medical college

find them ill-trained to use the mind in learning the theory and practice of medicine. Didactic teaching reigns supreme, what with classes for hundreds of students who have little chance for critical discussions and plenty of worries about examinations. The curriculum is too packed to provide a window on research or on the history and motivation of great discoveries. Thanks to populist educational policies, the gifted may find no encouragement and may be hammered into uniformity by the educational establishment. Society admires and rewards the useful, if not of glamorous, specialists in preference to the medical scientists who toil in the vineyard of research: this is not lost on the medical student. Lastly, educational policies in developing countries like India are unduly influenced by international agencies and foreign experts who have no reason to nurture originality among our young students. The lack of originality is not a matter of national pride alone. Consider the technologies which sustain the practice of medicine at all levels from the rural dispensary to the tertiary hospital. Medical instruments and devices, for example, are almost wholly imported at a cost of 10,000 million rupees, and the yearly bill continues to mount. Since research and development effort and industrial production for these technologies hardly exist in India, we have a situation when the day to day needs for patient care must be met by imports which may range from tracheotomy tubes to dental materials. What message does this convey to the medical student who is neither inspired to conceptualize new devices nor trained to take part in their development? This is by no means an isolated example because the situation is no different with regard to drugs, vaccines and other essential items for patient care. Original investigations into clinical phenomena share the same kind of neglect. The cost of ignoring the spirit of investigation will be prohibitive because ruin is the destination of a large nation

which regards the borrowal of knowledge as its permanent policy.

6.3. Lack of Access

It is a disturbing reflection on the expansion of our medical educational system that the rural people continue to have low access to health care. The Primary Health Centers (PHCs) may be located in the wrong place for political reasons; the staff of the PHC may be more concerned with family planning than with immunization or the provision of health care; most of the budget may be consumed by wages with little left for the purchase of drugs, bandages and dressings; and what is more important, a psychological gap may separate the PHC from the young doctor. The environment during the years of training encourages the student to view the medical profession more as a lucrative career than as a socially important vocation. According to Antia(2), the uncontrolled growth of private enterprise in health care and medical education and the nexus between the corporate sector, politician, pharmaceutical industry and the medical profession pollute the moral environment which nurtures the student. He does not mince words in declaring that the young physicians today are not only ill trained to take care of the problems at the PHC level but have also imbibed values, in the course of medical education, which alienate them culturally from the rural people and the urban poor. No medical educationist can ignore so severe an indictment.

Not all the problems which assail medical education in India can be discussed at this section. A few have been highlighted to show that our efforts to solve them through committees and foreign aid have been unsuccessful. No wonder there is unmistakable loss of public confidence in the

medical profession and wide spread concern over its declining standards. The coverage of the profession by the Consumer Protection Act is no more than the symptom of a deep seated malady.

7. A Plan for Recovery

Since the maladies are known a plan for treatment and recovery must be outlined and worked for. The elements of a strategy which addresses the problems of quality, creativity and access are discussed below

7.1 Education at the Undergraduate Level

Given the young age and academic attainments of the students who enter the medical college and their alienation from rural India, it is prudent for those selected to undergo a carefully structured, premedical year in a rural health programme such as those run by voluntary organisations in many parts of India. The programmes at Mandwa, Gadchiroli, Jamkhed, Munnar and many other locations are outstanding examples of community based health action where the young premedical candidates will receive their initiation into medicine through an understanding of the Indian village. To understand the Indian village is to change forever the outlook of the young premedical candidate who will no longer treat medicine as a lucrative business or see it through the eyes of a westerner. If the premedical students at Johns Hopkins are encouraged to spend a year in humanities to broaden the sympathies and interests of the Hopkins graduates, how much more appropriate would it be for the aspiring medical student in India to learn about the society whom he or she wishes to serve? The suggested experiment in a rural programme must be completely supervised by the non-governmental group and the statutory council and medical college should have no role in it.

Going much beyond the courses taught in social and preventive medicine, what is proposed will shape the philosophy and approach of the Indian physician in the 21st century? It is a far cry from the absurd noises being made about the 'compulsory posting' of new graduates in the villages for three years before they would be entitled to receive their MBBS degree!

7.2 Quality of Services

The quality of hospital services and the standards of pre and paramedical departments undoubtedly call for speedy upgradation. While additional funds will be required, much more than money is involved in a recasting exercise. Apart from the emphasis on merit in the selection and promotion of teaching staff, good management is mandatory if the additional funds are to produce results. This will involve, in turn, attention to the minimum percentage of hospital revenues recoverable from patients, quantum of student fees, maximum wages as a percentage of hospital expenditure, policy on purchase and service contracts, inventory control, personnel motivation and a lot of other things which make an organization efficient and mobile. Obviously these measures will imply that medical colleges will have considerable autonomy within the broad framework of rules and guidelines. Though autonomous, medical colleges will be accountable, not only to the Finance Department but also to the students, to the patients and to the community at a large. An empowered council with the Dean as the Chairman and members representing the Government, university, faculty, public *etc.*, should be considered for the administration of medical colleges which have no autonomy whatsoever at the present time.

7.3 Nurturing Creativity

A new approach is essential to nurture

creativity and the spirit of enquiry among the medical students. Two hundred students should be selected every year through a talent examination at the national level as soon as they enter the first year and provided graded courses in physics: biochemistry, research methodology, history of discoveries, biostatistics *etc.*, as well as summer postings in good laboratories under established investigators through out the medical course. This will run in parallel with the regular medical course like the NSS programme and will not prove burdensome to the bright students. Their entire tuitions fees and living expenditure must be met by scholarships and they should be assured full time appointments or career investigatorships on graduation. To answer the question 'where will they find appointments of investigatorships?', the medical talent scheme should have a concurrent scheme to select at least one medical college in each state—preferably one for ten million people—for upgradation. In due course this network of upgraded colleges would absorb the talent scholars on the faculty whose output in terms of research and teaching will become highly significant in 15 years. Given the financial and other advantages and the long term benefit to medical education, many state governments are likely to transfer at least one medical college for the scheme of upgradation since the gains will greatly outweigh the 'loss' in authority for the appointment and transfer of staff.

To finance the programmes in rural living during the premedical year, award of scholarships during the medical course and the upgradation of the medical colleges, a new Grant Agency should be set up by the Government of India. For the upgradation programme to succeed, it should meet the entire capital and recurring cost of the pre and paraclinical departments and 50% of the recurring costs of the teaching hospital. If the grants are awarded on appropriate conditions and the Agency functions

efficiently, the benefits of the scheme will greatly outweigh the cost which, in any case, will be small in comparison with the expenditure on central universities and technical education.

8. University-Medical Council Relationship

Since the MCI regulates virtually every aspect of medical education, the degrees included in its First Schedule are automatically accepted by the State Medical Councils for registration. However the stipulation of the Medical Council in regard to the number of seats, teacher: student ratio, hospital facilities *etc.*, are violated by the majority of medical colleges - private as well as Government - who get away with it due to the influence of pressure groups. Being an advisory body, the MCI can do little to take corrective action. Furthermore the inherent administrative weaknesses and poor infrastructure of the MCI have made it an ineffective instrument in monitoring the performance of the Medical Colleges. On the other hand, the universities to which the colleges are affiliated have little academic authority over the colleges and do no more than conduct examinations and award degrees. They have no role in trying out new curricula or introducing academic modules that may be appropriate to their geographic location in this land of great diversities. The present system suffers from too much rigidity and overcentralization.

A formula on the appropriate roles of the MCI and the universities needs to be worked out and implemented if medical education is to free itself from the present rigidity and resistance to change. A solution which has been successfully adopted in the UK is for the Medical Council to design a core curriculum which claims two thirds of the total and seeks to

provide for the acquisition of basic knowledge, medical skills and attitudes by the young doctor. The remaining third is left for study modules which should be designed by the universities who may wish to take advantage of their social, scientific, industrial and cultural circumstances for shaping them. There is no reason why these modules should not be as interesting as the core curriculum and why they should not produce better doctors.

Since medical colleges vary greatly in the standards of training, the present practice of the automatic acceptance of all the degrees awarded by them for registration on the ground that they are included in the First Schedule of the MCI Act calls for re-examination. Indeed such a practice is not followed in the USA where each state or groups of states conduct their own licensure examination for the university graduates in medicine. Given the practical difficulties in monitoring the performance of medical colleges by the MCI, it may be considered whether the medical colleges and universities should be given full autonomy with the MCI confining itself to the formulation and updating of the core curriculum. There is no reason why continuous internal assessment by the medical college cannot replace the present system of university examinations as envisaged in the 1994 recommendations of the MCI. To claim that university examinations with their insistence on secrecy, external examiners *etc.*, ensure greater objectivity and fairness is to deny the realities of today. If the professional colleges abroad and our IITs can do very well with continuous internal assessment, medical colleges too can be trusted to operate the system well because trust has seldom failed to beget trust. The graduates however, should be required to take a licensure examination conducted by

the State Medical Council for practice within the state and by the MCI in case he or she wishes to move elsewhere in India. If the licensure examination is fair and is mandatory for registration, medical colleges and universities will be obliged to maintain their medical training at a high level. The bifurcation between the educational and licensing functions seems fully warranted in the present circumstances.

9. Burden of Examinations

The spectre of examinations looms large over medical education in India. It is bedevilled by examinations for entrance, professionals for MBBS, postgraduate entrance, postgraduate diplomas and degrees, super speciality entrance and degrees such as DM. The obsession with examinations has distorted the priorities of students and teachers alike and added to the burden on the universities. When a hundred and fifty colleges examine thousands of students throughout the year, it is impossible for the universities, and much less for the MCI, to check the quality or fairness of the examinations.

It is instructive to look at the practice of examinations in UK and US because their experience is richer and longer than ours. The basic principle of student evaluation in those countries is that the examinations at the undergraduate level are conducted by the medical schools and degrees awarded by the medical schools or universities with no paraphernalia such as external examiners. In the UK and US, postgraduate training and examinations in specialities are the responsibility of the Royal Colleges and the Speciality Boards which are highly prestigious professional bodies independent of the universities and the Government. Certification by these bodies is essential for anyone to get a consultant or teaching post in

any speciality. This time, tested policy of bifurcating the undergraduate and postgraduate examinations was not adopted in India for reasons which are not clear. The professional bodies obviously slept while the all-powerful bureaucracy which controls the MCI expanded its jurisdiction to the general detriment of medical education.

To clear the mess, it would be prudent to adopt, with appropriate changes, the pattern which has worked so successfully in the UK and US. This would mean that the training and certification at the postgraduate level will be the function of the National Board of Examinations which should be restructured and made a fully autonomous body with the active participation of learned and professional bodies in medicine. The new NBE will have its own mechanisms for designing and updating training programmes, assessment and accreditation of institutions and conducting Board examinations in all specialities, independently of the MCI, universities and the Government. This will relieve the medical colleges, universities and the MCI of an enormous burden and enfranchise many excellent 'non teaching' hospitals in the training of specialists. Experience in the last several years when the NBE functioned under several handicaps, has shown that its examinations maintain higher standards and a higher degree of fairness and credibility than the postgraduate examinations of the universities. The enhanced role envisaged for the NBE is therefore fully warranted by current experience. The universities may continue with the courses for MD/MS etc., which will however become academic attainments sought after by the gifted and the indefatigable. This prospect is no different from the practice in the UK or US where a postgraduate degree such as MD or PhD counts less for a specialist appointment than the certification by the Royal College

or the Speciality Boards. For the reform to succeed in India it would be necessary for the Government to include the NBE certification in the First Schedule of the MCI Act by an Act of Parliament as has been done for the degrees awarded by the AIMS, PGI and the Chitra Institute.

10. A Place for Ayurveda

If nations grow, like trees, from their roots so do medicine and education which are deeply rooted in the socio-cultural ethos of the people. No wonder Ayurveda and other traditional systems of medicine serve a large percentage-as large as 70% in some estimates-of our population. While China succeeded in integrating the modern system of medicine with the traditional medicine of that country in four decades, we have failed in our efforts to integrate the two systems, colleges of integrated medicine notwithstanding. Rigid mental compartmentalization has, in fact, frustrated administrative efforts at integration. No educational reforms will however truly succeed when they choose to ignore the traditional medical systems which serve the bulk of the population.

A committee chaired by Sir R.N. Chopra made elaborate recommendations in 1948 on the curriculum and training for Ayurveda and how they could be integrated with the academic programme in modern medicine. The Chopra Committee was followed by committees headed by C.G. Pandit, D.T. Dave and K.N. Udupa who modified and expanded the original recommendations. The existing colleges of integrated medicine are the outcome of the official effort to implement the recommendations. One wonders whether Sir Ramnath would have approved of them.

In the existing scheme, the candidates who gain admission to the integrated course are those who do not make it for the

MBBS; the number of students who opt for the integrated system as the first choice is quite small. A reasonable alternative may be to abolish the present scheme of integration altogether and stipulate that MBBS is the basic medical qualification for the purpose of registration. This should coincide with the introduction of a 3 year postgraduate course for MD (Ayurveda) with a large intake for which the Ayurvedic teaching hospitals should be modified and improved as necessary. A shift in policy of this magnitude will mandate changes in the orientation of the present MBBS curriculum to create an awareness among the students of the history, concepts and practice of Ayurveda. Which Indian student would not like to hear about Jivaka, Buddha's doctor, who did a craniotomy or Sushruta who described over 100 surgical instruments and several operative techniques? Similarly the formulation of the MD Course in Ayurveda should be done jointly by senior physicians and educationists of both systems and should do full justice to the study of Ayurveda including the knowledge of functional Sanskrit. The full implementation of such a scheme will probably take 15 years, but a beginning needs to be made without delay. It is a painful fact that the best research in Ayurveda is conducted today in Europe and the US whose interest in Ayurveda has heightened thanks to the growing worries about chemically derived drugs. Rawolfia and Azadiractin are a warning of the melancholy prospect of India being obliged to import Ayurvedic drugs at prohibitive cost from the western countries. The time for preventive action is now.

Since the promotion of Ayurveda is a declared national policy, those opting to take the proposed MD course in Ayurveda should be given special incentives in the form of scholarships. This scheme need

not restrain the practice and training in Shudha Ayurveda in the Gurukula tradition. Gurukula and family traditions of this type are very small in number and deserve full encouragement.

11. Conclusion

Isolated from the mainstream of education, medical education has nevertheless managed to contract many of the ailments which assail the educational system in India. The prescription suggested here amounts to a radical form of treatment which, like all good prescriptions, can bring about recovery but cannot guarantee

success. Whether a radical form of treatment is carried out now or later will depend on the endpoint of academic deterioration when a drastic intervention is regarded as acceptable by our soft society.

REFERENCES

1. Narasimha Rao P. Medical Council of India—An overview. *J Higher Edn.* 1995, 18: 206-215.
2. Antia NH. Science, population, development and health care. *In: Science, Population and Development.* Ed. Gowarikar V. Pune, Unmesh Publications, 1992, pp 33-34.

NOTES AND NEWS

PEDIATRIC CONFERENCE OF NORTH INDIA -1996

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