What ails medical education in India: Problems and solutions
(St. John’s Medical college, Bangalore)

Dr. C M Francis

Under the existing conditions of affiliated colleges in India, innovative changes of the required nature are not easy because of various constraints. These constraints are often stifling and frustrating among these are:

1. Constraints placed by the university, especially when there are more than one medical colleges affiliated to it and the institutions are under different managements.
2. The medical Council of India, which lays down detailed regulations in the name of standards and does not permit large scale innovations.
3. The teachers who rely on their past educational experiences, however irrelevant they were then and are more so now.
4. The students who resist change because of the fear that the newer things may be more difficult and demanding of their time.
5. The use of textbooks produced in other countries to serve different purposes.

Within the existing constraints, St. John’s Medical College has been trying to see that the training becomes more relevant. While the objectives and course contents have been largely laid down by the medical council, St. John’s Medical College has spelt out its own broad institutional objectives, which are complementary to the aims and goals set out in the national plans. These broad objectives are:

1. Personal and intellectual integrity and application of ethical and humanitarian values;
2. Compassion and understanding for the patients and their families;
3. Dedication in the service of the country and especially the disadvantaged and the poor;
4. Awareness and understanding of the medico-social problems, especially in the rural areas;
5. Rapport with colleagues and other members of the health team;
6. Attitudes, skills and knowledge to participate effectively in the health care system of the country;
7. Skills in the diagnosis and management of common diseases and their prevention, using the available resources, and in the diagnosis and treatment in emergency situations;
8. Ability to judge one’s own professional capabilities and limitations and knowledge as to when and where to seek further help; and
9. Appreciation of the scientific approach to medicine and the ability to seek, extend and apply knowledge, as it becomes available.

These objectives are aimed at personal growth, professional development and social concern, with equal emphasis for all three groups.

Arising out of the general institutional objectives, each department is expected to work out the specific objectives of the courses offered by it. Some departments like Community Medicine have done it; others are in various stages of development of the specific departmental objectives.
Many changes have been attempted:

1. Selection process

   The selection to St. John’s Medical College is based on:

   a) Marks at the competitive written entrance test, conducted in 17 centres in India, by the institution. This consists of 3 (multiple choice and short answer) question papers in physics, chemistry and biology and one paper on values. Since the ability to obtain high marks in written test depends to some extent on the verbal facility, the questions are framed in very simple English.

   b) Interview: on the basis of the performance in the entrance test, approximately 120 candidates (double the number to be finally selected) are called for interview and aptitude test. The preliminary screening by the written test, reduces to manageable size, the number of persons to be interviewed. There are two sets of interviews; one in which 10 students spend two days with two observers (group interview) and another one of the conventional type, by a board which includes representatives of Central and State Governments, teachers and management.

   The interview process has been modified to bring out such qualities as concern for social justice, motivation, etc., with the help of the Indian Institute of Management, Bangalore.

   Because of various circumstances, candidates of scheduled caste/tribe origin are not able to get admission to the medical colleges. Hence 18% of the seats are reserved for them and they qualify otherwise.

   Weightage is given to religious sisters, who are dedicated and motivated to serve the needy and poor, especially in the rural areas. One of the greatest achievements of the institution has been the selfless service rendered by these sisters in providing primary health care even in remote areas.

2. A shift to the study of social and behavioural sciences as a foundation to health care. We would like our students to become aware of the social and community aspects of medicine and health. A course of sessions of two hours each is given during the first year of the course.

3. Integration and Sequencing:

   Integration curriculum attempts to fuse independent disciplines into a unified whole. This was attempted on a large scale first by case western reserve university’s school of medicine at Cleveland, U.S.A. It was hailed as a great step forward and has been adopted partially in many medical schools. At St. John’s medical College, such integration has been only minimal:

   a) Preclinical students are taken to the hospital and patients are demonstrated by the clinicians, showing the relevance and application of the preclinical studies;

   b) In the clinical years, there are integrated courses given as lectures.
c) Symposia and seminars are arranged on specific topics.

It is planned to have a more integrated approach as it has many advantages over the subject-centred instruction, making learning more meaningful and eliminating areas of redundancy.

4. **Rural orientation:**
As part of our intensive rural orientation programme, first year students live in the village with faculty members of the department of community medicine, for a period of 15 days (30 students in each batch). This period is utilized to understand the various aspects of life in the villages including social customs, economic and cultural backgrounds, agricultural activities, education, technology and others. The students also find out the real needs of the people and learn to communicate with them.

5. **Medical ethics:**
There are two courses in medical ethics, one in the first M.B.B.S and the other in second M.B.B.S. (apart from ethical considerations which form part of the study of such subjects as forensic medicine). This is an area which is extremely important in the formation of the doctor and must permeate all instructional programmes as the doctor should be able to deal with the moral as well as the intellectual challenges of tomorrow’s medical practice, especially as medicine enters more and more controversial fields of organ transplants, psychosurgery etc.

6. **First Aid and Nursing Procedures:**
All first MBBS students are expected to take and successfully complete the first aid course leading to the certificate of St. John’s Ambulance Brigade. Such a training would be useful immediately in the event of some disaster and also for training others in the area where the doctors settle down at a future date.

Clinical first year students are given some training in nursing procedures. These lecture-demonstrations are given by senior nursing staff in a practical manner. This training programme is well accepted and should be extremely useful, should the medical graduate find himself in situations where other help is not available and he has to give practical instruction in home nursing.

7. **Biostatistics**
Teaching of biostatistics is done in two phases, preclinical and clinical. Data which are collected from the laboratory, hospital and field practice are used. Formerly, the teachers were taken from the Indian Statistical Institute; now a member of the staff of the department of community medicine, interested and trained in the subject handles this subject.

8. **The Internship Programme**
The Internship Programme has been re-organised, with six months of community medicine. The interns stay in the villages for three months. A number of villages have been selected and each rural health centre is different conceptually from the other:
a) Mallur, with a health co-operative, attached to a larger milk co-operative with finances being provided by the milk co-operative. The local leadership and lines of communication are already available because of the cooperative.

b) Siluvepura, with a number of voluntary agencies participating to provide health care as part of the development programme.

c) Uttarahally, an extension project of St. Martha’s hospital, where the student nurses have their field public health training, and

d) Dommasandra, a government primary health centre, which has been handed over to St. John’s Medical College for service and training.

The interns learn by doing and being with the people, participating in all their activities. Their work is supervised by the medical officer of the health unit and by the department of community medicine. Occasional health camps are conducted in these areas; the staff of the clinical departments participate in these camps. Our aim is to have the teaching staff resident at the rural health unit and train the internees. The interns participate in health education programmes and also get involved in all the developmental activities.

One of the responsibilities assigned to every intern is to conduct a survey on a problem selected by the intern with the guidance of the staff. This is not very popular, especially as the basic questions being asked are the same and families resent being asked the same questions repeatedly. Probably this can be eliminated and basic data available could be supplied to the student, who can carry on from there. The choice of the problem is important as this can influence the thinking of the interns: problems chosen have been largely those involving multidisciplinary approaches such as medico-social survey of drinking habits, nutritional survey of families, pisciculture and rural health, and similar ones.

A few interns may get other additional experiences, such as working with tea plantation labour. One month of the course in community medicine is spent in paediatrics. The rest of the internship period of six months is spent in rotation in medicine, surgery and obstetrics and gynaecology to gain clinical competence.

9. Tutorial system
Five to six students are attached to one senior member of the teaching staff, who will be their guide in all matters – academic and other. This has met with limited success. But the problem is, those who need guidance most do not get it, because they do not meet the ‘tutor’. The teachers are not experienced in handling the various problems of the students; some special training seems to be necessary to equip the teachers to be of help to the students. Further, if this tutorial system is to be useful in motivating the students to become “good” doctors who will serve the people according to their needs, then the ‘tutor’ themselves should be motivated.

10. Electives and research
Quite good a portion of the available time is given to electives. The purpose of these electives has been to enable students to go deeper into any particular discipline of their choice. But very often, students continue to work as for the regular postings. There is a
prize for the best research work done by the students. This is expected to be carried out at
the time of electives and additional time found outside regular hours. A few students have
done research work, which is of a fair standard. This has to develop further by students
taking greater interest and also the staff guiding these students. Advantage has been taken
of the schemes of the Indian Council of Medical Research for promoting research by the
students.

11. Curriculum Planning Committees
These committees have been constituted, one each for preclinical and clinical. These have
the professors of the various disciplines and the student representatives as members. The
success of these committees in bringing about improvements depends on the interest
taken by them and the acceptance that improvements can be made in spite of limitations.

12. Full-time Faculty
The management of the college has taken a policy decision to have only Full-time, non-
practising faculty members. This is necessary if all the tasks and objectives are to be
achieved and is in line with the tendency all over the world and particularly so in the
developing countries. In the new medical school in Brazilia, 87.5% are Full time; a
distinguishing feature of this institution is its effort to recruit staff committed to teaching
and willing to work Full-time. All new recruitments to St. John’s Medical College have
been on Full-time, non-practising basis and over 90%
% of the staff are now Full-time, without private practice.

Continuing support
The institution is now engaged in working out details of the placement of the young graduates.
This has become possible and necessary because of an agreement executed by the students at the
time of entry into the college, to serve in a place designated by the college. Areas and institutions
are being selected so that placements can be made in such a way that the graduates and the
institutions will derive the maximum benefits and the country will be served where the need is
most urgent.

Autonomous colleges
If improvement is to come about in medical education, it is necessary to have medical colleges
try innovative programmes. Certain selected colleges in the country should be given the freedom
to try new experiments, unhampered by petty regulations. If selection of the colleges is made
properly, there need be no fear of falling standards; it is inconceivable that we cannot identify
10-12 good institutions in the country who can be given freedom to try new methods of
selection, innovative curricula and teaching methodology and assessment. These institutions
should be helped to try the new approaches. Some experiments are bound to fail but the feedback
obtained from the trials conducted will help in improving medical education so as to meet the
needs of the country.

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