Medical Education and Practicing Institutions
MEDICAL EDUCATION AND PRACTISING INSTITUTIONS

The Government had initiated many plans and policies for the promotion of health and its efficient administration. For the social and economic development of India, medical personnel were trained for rendering medical services to the society. A close association among the medical colleges, universities, health authorities was felt for better medical education. In several western countries, the idea of preventive and social medicine had penetrated the whole course of medical education. They paid great deal of attention to health subjects. Progressive countries like England, Australia, America and Russia envisaged new developments on research, preparation and execution of schemes for the improvement of community health.

In Soviet Russia, medical graduates were sent to work in rural districts under an experienced physician to bear an insight to rural health problems. The American Medical practitioners were retrained by refresher course. The British doctors visited continental countries to be stimulated and educated by these refresher courses. The doctors had the opportunity to update all new developments in the field of medicine. The challenge to medical education is how to produce basic physician to be useful in urban and rural sectors.

Since 1928, meager medical care services were given to a vast rural population for anti-epidemic work by opening of dispensaries under District or local boards. Health care delivery in India was the responsibility of hospitals run by the central and state governments, trusts, private sector and private practitioners. Government was responsible in bringing primary health care to semi-urban and rural area in an effective manner through hospitals and dispensaries.
In the past the provision of medical relief had gone in a hazardous way. Large areas in the country are not occupied by medical institutions and qualified practitioners. There was a great need for expansion of hospital facilities and new dispensaries. Government realized the importance of centralizing medical relief and providing highest quality of services in all branches of medicine at district levels. Tiruchirappalli, Kozhikode, Mangalore, Tuticorin had new hospitals at district headquarters. The hospital at Madras was built to develop into a full fledged teaching institution. Government Stanley Hospital was upgraded as an ideal training centre for training nurse pupil for their employment in various institutions during the second five year plan. District headquarters and taluk headquarters hospitals were improved at the cost of 121.81 lakhs and 123.21 lakhs respectively. More than 100 taluk headquarters hospitals were provincialised and 90 rural dispensaries came under the government.

For the expansion of hospital facilities, short term and long term programmes were held. For the benefit those at all district headquarters hospitals, refresher course were started. The health care institutions analysed the family welfare, maternal and child health, integrated child development, immunization, nutritious meal scheme, tuberculosis, leprosy and other control programmes. Different hierarchies of health care institutions, irrespective of hospitals and dispensaries, health centre or clinics existed. They mobilize the skills and efforts of medical personnel to provide a high service to individual patients. The hierarchy of health care centres in the region is in the order of the government headquarters hospital, taluk hospitals, non-taluk hospitals, government dispensaries, ESI dispensaries, municipal dispensaries, primary health centres and maternity centres.

District hospitals and other allied hospitals are the major units of health care delivery system located in urban areas to serve large population. Along with these, the
private hospitals/dispensaries were found in the district headquarters and other urban areas. In the outer urban and suburban zones of towns, people had to travel long distance to gain access to a hospital.

**Health Infrastructure and Performance of Government hospitals**

The infrastructure facilities available in the health care institutions determine the utilization of health care facilities. In the local hospital specialties like medicine, surgery and maternity services were provided, whereas in the district hospitals comprehensive ranges of specialties were given. Further support to this hospital was given by national institutes or Government teaching hospitals catering super specialties and rare form of medical care. Government hospitals had their own building with basic facilities but water supply and drainage facilities were inadequate. The teaching hospitals too have similar problem. As per the Bhore Committee recommendations, a hospital of primary unit should be provided with four beds for a population of 40000 with two doctors, five nurses, four midwives, four trained ayas, two sanitary inspectors, two health assistants and supporting staff. For two primary units, there should be 30 bed- hospitals for 80000 population and 500 beds for five lakh population. District headquarters hospital had many facilities and manned by respective specialists. Postmortem examination was available only at the government hospitals. For the treatment of diseases like tuberculosis and cancer, hospitals were setup at Madras equipped with frigid areas.

Even before the existing hospital facilities were fully utilized, new hospitals were opened to meet the rising demand. Construction work for new hospital at Trichy was in progress in 1948. The Victoria Hospital for Women and Children, Visagapatnam was provincialised. In Chingelput and Tanjore, Mahatma Gandhi Memorial Tuberculosis Sanatorium was opened in 1951. In order to supervise the performance of hospitals, voluntary workers were deputed through CARE. One such was Raja Sir Ramaswamy Mudaliar Lying in Hospital constructed near Stanley Medical College.
In each and every district, the number of medical institutions had increased. For instance by 1951, 1232 medical institution were in existence and in Madurai alone there were 69 medical institutions. From April 1959 the D.G.O course was started in the Kasturba Gandhi hospital for women and children, Madras and a total of 12 candidates were to be admitted and trained each year. The only district headquarters hospital provided with X ray department was the Government Pentland Hospital, Vellore. Surgery of high standard was done in the district headquarters hospitals at Salem, Trichy and Tambaram with the help of anesthetist in the grade of Assistant Surgeon.

Under the improvement of district headquarters hospital scheme by the Second Five Year plan period, all districts except Chingleput and Ramanathapuram had ophthalmic departments. For the above two places eye clinics were sanctioned. There was high incidences and occurrence of blindness in the Madras Presidency which led to the establishment of Madras Eye Infirmary in 1819 later named as Government ophthalmic hospital. As there was tremendous increase in the number of patients to the hospital, outpatient ward was sanctioned. Also the scheme for removal of eyes of destitute sanctioned in 1947 started functioning in the Government Hospital, Madras The Stanley Hospital supplied Eye Bank with cornea from destitute and dying in the hospital. The scheme was extended to Royapettah Hospital also. For availability of ophthalmic services to the rural areas, government sanctioned mobile ophthalmic units in 1961. Under the Second Five Year plan, the School of Optics was attached to the Government Ophthalmic Hospital, Madras. Dental clinics were also proposed to be started in the district headquarter hospitals and during the second five year plan twelve clinics were setup.

District headquarter hospitals were provided with clinical and public health laboratory for bacteriological, serological and clinical materials received from
Medical and Public Health authorities. They were also provided with honorary specialist for ENT, Eye, TB, Paediatrics, Obstetrics and Gynaecology, VD, Skin, Leprosy and Dental work. In 1956-60 six laboratories were started at Vellore, Palayamkottai, Salem, Trichy, Cuddalore and Dindigul. New district headquarters hospitals at Tanjore, Madurai, Dharmapuri and Chingleput district, Nagapattinam, Dindigul, Dharmapuri and Kancheepuram had been expanded to cater to the needs of respective districts. Steam laundries and diet kitchen were established in reputed hospitals. To facilitate early diagnosis and treatment of tuberculosis, three tuberculosis clinics were opened at Tanjore, Coimbatore and Madurai in 1957-58. In the following years, clinics were opened at Salem, Tiruchirappalli, Kancheepuram, Vellore, Ooty and Palayamkottai. The kindness and craft of healing showed by medical and non medical staff added to the popularity of the district headquarters hospitals and enhanced their prestige and reputation.

**Infectious Diseases Hospital**

The Tondiarpet Isolation hospital was created in 1925 due to the need of a hospital for the treatment of smallpox and cholera patients. This hospital came to be known as Infectious Diseases Hospital exclusively for the treatment of epidemic diseases. The students of Madras and Vellore Medical Colleges were trained in diagnosis and treatment of infectious diseases. A new infectious hospital was constructed at Madurai in 1958. Due to the attack of smallpox, 713 patients were admitted in the Madras Infectious disease hospital in 1965. Two to five thousand cases were administered with vaccination. In the taluk and district hospital, bed strength was increased to avoid overcrowding. Medical institution in taluk headquarters were maintained by local bodies. Due to lack of sufficient resources, efficient maintenance was not possible. Hence it was decided to provincialise taluk headquarters hospital and dispensaries. Government took over the 24 local fund institutions during 1956-59.
Table 5.1

Hearing loss among cases examined at the infectious diseases hospital, Madras

<table>
<thead>
<tr>
<th>Disease</th>
<th>Normal</th>
<th>Conducive Loss</th>
<th>Sensory Neural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken pox</td>
<td>218</td>
<td>35</td>
<td>7</td>
</tr>
<tr>
<td>Cholera</td>
<td>79</td>
<td>42</td>
<td>5</td>
</tr>
<tr>
<td>Mumps</td>
<td>57</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Smallpox</td>
<td>61</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Typhoid</td>
<td>90</td>
<td>32</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: The Commonwealth Foundation, Speech and Hearing Problems in South East Asia, Reports on workshops held at Vellore, South India, 1969.

Provincialization of medical officers was done in 1959-60 as people were denied medical facilities due to shortage of medical officers in local fund service. The inherited system of health services had large emphasis on treatment in hospitals and cure of diseases.

Blood Banks

The Blood Transfusion Service was first organized in Madras State during the World War II in the year 1941 for the purpose of building a reserve of blood and plasma for the treatment of emergency causalities. In 1946, the Madras Government reorganized the Blood Transfusion Service. Blood and plasma are useful in many cases of medical emergencies. As a matter of fact, in recent times blood transfusions in maternity hospitals have become a standardized procedure, resulting in the saving of many mothers and thereby their children. Blood banks were established in the government general hospitals and Stanley hospital and in the King George hospital, Visakapattanam. The scheme has been extended to the mofussil hospitals and blood
banks were started in the district head quarters hospitals at Madurai, Tiruchirapalli, Coimbatore, Kozhikode and Kakinada and in the government hospital at Cochin. Blood bank organization took part in various exhibitions in places like Kumbakonam, Salem and Madras to popularize blood donation. Mobile blood banks from Kings Institute, Guindy collected blood from inmates of Central Jail, Cuddalore.15

Medicine has progressed today to such an extent that the Blue Baby danger had been overcome by blood transmission facilities. Blue baby danger resulted in fatalities of child, in which the baby's blood was poisoned and body turned blue with lack of blood. Due to blood banks, such conditions were rectified by infusion of fresh blood and draining out blood stock and thus the baby was saved. In Madras city there were 3 blood banks. The city blood banks stocked and supplied blood not only for use in the government hospitals but to other hospitals, private nursing home, registered medical practitioners and mofussil hospitals. By 1951, there were already 18 blood banks in the state and one was opened in Ooty16. The poor people due to economic necessity were compelled to give their blood for money. The successful working of a blood bank depends upon the regular supply of donations of blood. Pandit Nehru had set an example by offering his blood to a blood bank in Calcutta. For the adequate supply of blood and plasma, purely voluntary donors have donated and saved human lives. Blood transfusion in maternity hospitals had become a standard procedure that resulted in the saving of mothers and children.

In 1953 due to the reorganization of states, blood banks attached to Kozhikode and Fort Cochin was transferred to Kerala and one at Mangalore to the Mysore state.17 The number of blood banks increased every year pertaining to the necessity of patients. Similarly, additional aid like ambulance van to initiate medical services was given to Madurai Erskine hospital. To improve the nutrition condition, diet kitchens were established in hospitals and students of sociology were initiated to supervise
diets in hospital. The State Blood Transfusion Services, Madras made an appeal to save the patients with instances of blood loss from accidents, operation and childbirths and disease like anaemia. The donor had to call at the nearest government hospital Blood bank to offer blood and help to combat disease and death.

For the blood transmissions work in the blood banks, medical officers were trained in blood transfusion services. About two hundred and twelve voluntary donations were made to district head quarters hospitals. Blood banks were used to patients in emergency only during war and peace times. By opening blood bank at Government Headquarters hospital, Chingleput, opening of blood banks in all districts headquarters hospital were completed. Except Chingleput all headquarters hospital were provided with blood transfusion service.

Royapettah Hospital

Under the Surgeon General W.B.Bannerman in 1912, the Royapettah hospital at South Madras was opened as a honorary hospital. Hospitals acted as a spring board to many physicians and surgeons. As a clinical institution for LMP students it later imparted training to GCIM and MBBS students. It had equal facilities like the Government hospital, Madras and Stanley hospital. The causative organism of Kala azar fever was discovered in this institution by Charles Donovan. Another physician Dr. M.L. Kamate with his valuable work on beri beri was a notable figure of this hospital. Family Planning clinics were started in this hospital in 1958 and since 1960 intensive family planning by surgical methods were started.

Mental Health Hospital

Psychotherapy and other forms of treatment to mental patients occurred in non-hospital settings. But seriously ill patients could not be cared outside a hospital or asylum. Even affluent families were less ill-equipped to care for the disabled
members and began to look to the state for assistance. Institutions like mental hospital sheltered the insane and kept them from harming themselves and others by providing help and treatment. The purpose of the admission in the hospital was not to protect patients from the society, but to protect the society from the patients. There was great advance in psychological medicine in the west. In India there was great dearth of doctors trained in psychiatry and of nurses who deal with mentally ill-patients. The upgraded Institute of Mental Health at Bangalore met all these requirements. Mental hospital established at Kilpauk Medical College had both men and women patients. Modern trends in Psychiatry stress more on outpatient treatment and this service was improved there.

Dr. M.V. Govindasamy, Director, All India Institute of Mental Hospital visited the Government Mental Hospital, Madras in 1955. The students of medical colleges in Madras state attended the hospital for their clinical training in Psychiatry. Refresher course in psychiatry for the benefit of medical officers and general practitioners was conducted in this hospital twice a year. Treatment methods included recreation therapy and occupation therapy and psychological methods. Mental hospital was constructed at Madurai and the new infectious hospital at Thoppur was converted into Mental hospital.

Medical Education in India

Indian medical education can be traced from early Vedic period. The pioneers of Indian medicine Susruta, Charaka and Vaghbhatta laid the foundation for medicine, which was an important subject in Taxila, Nalanda and Vallabi universities. Ancient system of medicine in India put high ideals before medical schools. During the medieval period, medicine was one of the special subjects of study offered. The European surgeons and physicians who came by Portuguese ships cured diseases in Mughal and Deccan courts. This furthered the arena of medicine to a very
great extent. The first tangible advance in medical studies was made by Lord William Bentinck. He appointed a Committee to review the whole of medical education on European lines. In 1824, the Sanskrit College was started and it was also the first medical college in India. From 1835 medical schools were opened at Calcutta, Madras, Bombay and Hyderabad which gradually developed into Colleges. Between 1900 and 1920, medical schools were started at Calicut, Vizagapatnam and Tanjore to train men for medical relief works. In 1925 LMS was abolished and new regulations for MBBS Degree came into force in 1928.

During the Second World War period in 1942, vacancies were reserved for war service candidates and first class health officer’s post was to be offered to women medical graduates. The steps taken by the Government to train officers for urgent need of institutions ushered in the need for medical colleges in the South. By the 1946 there were only seventeen medical Colleges with an intake of one thousand four hundred students.

Medical Education since Independence

The Bhore Committee of 1946 was an important milestone in the history of medical education. It recommended for conversion of medical schools into colleges and proposals for new colleges were made by the above committee. But proposal for opening a new college at Rayalaseema was not approved by the Health Minister A. B. Shetty. His suggestions proved that the existing colleges were capable of serving the purpose of the students of Rayalaseema. The blue print of medical education in Independent India was laid and the chair of history of medicine was created. In 1948, the University Education Commission headed by Dr. S. Radhakrishnan urged the need for imparting knowledge about the history of medicine. One of the major changes in medical education included three month training in preventive and social medicine to prevent local people to act as physicians. The Department of
Preventive and social medicine was set up in every medical college. Earlier the field of public health and medical education were treated as two programmes but in 1951 they came under one programme. 

**Medical Education under Plan Period**

Expansion of medical education, research and improvement of colleges were given firm-footing by the five year plans. The first World Conference on medical education sponsored by the World Health Organization was held in London in 1953, and it dealt with different aspects of medical education. Dr. Lakshmanaswamy Mudaliar of Madras was its Vice President and it proved to be a great credit to India. To revitalize medical education standards in India, medical conferences on all India basis were held in 1954 and 1955 sponsored by the Indian Government in collaboration with the Rockfeller Foundation. The above conference was responsible for the formulation of many resolutions. Medical institutions were also updated for undergraduate and post graduate studies.

Many policies and programmes were implemented and out of which health publicity in states was significant. Due to shortage of medical graduates, there was urgent need of opening of more medical colleges. The recommendation for starting of new colleges was made in the All India Association of Physicians held in Madras in 1961. Further development was that in 1966 the Directorate of Medical education was bifurcated from the Directorate of Medical Services. All the advancement made in the expansion of medical education provided adequate medical aid to the people of Tamilnadu.

**Medical Training and Research**

When the Indian Medical Service was started in 1740, physicians and surgeons from Great Britain joined the service. Training of local assistants was entrusted to them with the aim of meeting the health requirements of the East India Company.
officials. These local assistants had no qualification but only training. Hence research and training work on human diseases, their causation, prevention and cure was the need of the hour. Through permanent research institutes, units and field surveys medical research in the country was organized.

The Indian Research Fund Association founded in 1911 in New Delhi now known as the Indian Council of Medical Research had its specific goal of promoting research. The aims of the association were to initiate, aid, develop and coordinate medical aid and scientific research in India and to assist institutions for study of diseases, their prevention, causation and remedy.

An important development in the medical field which took place during the close of the First World War was in 1918 in South India. The Beri Beri Enquiry Committee under Sir Robert Mcarrison blossomed at Coonoor devoting attention to nutrition research. Fatal diseases were traced out in the national laboratory located at Coonoor. Due to the collaboration of The World Health Organization with the Indian Council of Medical Research, public health problems were studied and methods of control were formulated. In order to enrich in medical knowledge, doctors and nurses were provided with overseas training by the international agencies as mentioned in the earlier chapter. Refresher courses for health officers and post graduate education for public health personnel were given by the health organization in India. Training schemes had enabled sufficient person to be trained to man the primary health centers.

For the propagation of health education in India, the Central Health Education Bureau was set up in New Delhi in 1956. It had multifarious functions including training, evaluation and research. Four research and treatment centres for leprosy control were established under the first five year plan. The Central Leprosy Teaching and Research Institute was established at Chingleput, Madras. Research in the
indigenous system of medicine was contemplated. About fifty research beds were provided in the Hospital and College of Integrated Medicine, Madras. It was deemed to be a centre for practical training of GCIM and LIM who became House Surgeons. From 1959 for the treatment of peptic ulcer cases "Khursa Thabasir" a traditional remedy in Unani medicine was tried.

More emphasis was given to the training of pharmacist, nurses, midwives, health officers, dentists and doctors in the five year plans. This overall frame-works were done in all facets of medical education and training to ensure better knowledge about medicine. It has been an outstanding complaint for some decades past that India has not made progress in the field of medical research.

Many of our present day hospitals and laboratories were not properly equipped even for the teaching of students and teaching hospitals do not possess requirements for the treatment of patients. Another drawback in our country had been the lack of sufficient facilities for post graduate training in special subjects. The government of India realized the seriousness of the drawback to the advancement of medical science in this country.

A Committee for the upgrading of training in medical colleges with a view to affording those who are anxious to have a post-graduate course in special subjects was setup. In association with state governments the Indian Government started a programme for improvement of certain departments in selected medical institutions in order to enable them to serve as centers of post graduate medical training.

**Institutes for Training and Research**

Medical and public health research centres disseminated knowledge on public health. The institute of Public Health, Poonamallee which was established as a model rural health centre in 1935, was initially funded by the American Foundation
Rockefeller's in 1935 and Ford's in 1954 and 1956. This institute had three wings like health care, training and research with special emphasis on prevention. The training wing imparts training to various categories of in-service and pre-service personnel like medical officers working in primary health centres, health officers, house surgeons, nurses and other categories like teachers of government and private schools, and medical students. The research wing identified fecal born diseases and introduced low cost flush out toilets which was the orientation in rural health. In 1954 the Oriental Training centre at Poonamallee undertook research work in designing new types of latrines and educated people to use latrines properly. At Madras, Tanjore and Coimbatore trainings were conducted through the above centre.

This institute was taken over by the government in 1961. From then onwards, the objective of the centre was to re-orient doctors and auxiliary personnel in the philosophy of rural health work and to equip them to discharge their duties efficiently in primary health centres. Trainees were deputed from the health centres of different states excluding Kerala. It was realized that the preventive side of medicine and health education could bring about a real change in the working of the primary health centres. Thus this training helped in improving the health services of the rural areas.

**Pasteur Institute**

The Pasteur Institute of Southern India played a important role in medical and health work in India. In1907 it was founded in Coonoor. The unfortunate death of English general due to delay in taking him for treatment to Kasauli, created a necessity for nearer medical facilities. The institute was started with the objective of undertaking research work on rabies and is recognized as the important centre for rabies research in the world. Apart from its own research programme, it is actively co-operating with international organization in several investigations. Sufficient attention has not been paid in our country to the training of personnel required to
carry out the ambitious programmes of research work. After the opening of the Golden Jubilee Block in 1957 by Rajkumari Amir Kaur, Union Health Minister the activities of the institute increased. The institute had close association with the hospitals, civil and military, private practitioners, residential schools and orphanages. Vaccine was supplied to the government as well as the private practitioners. It provides help to state government and local public health authorities by storing and distributing vaccines especially during the epidemics. After the visit of Pandit Jawaharlal Nehru in 1958 the Ministry of Health took over the financial commitment in respect of all research activities of the institute.

Table 5.2

Patients treated in the Pasteur Institute

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Year</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1947</td>
<td>9,122</td>
</tr>
<tr>
<td>2</td>
<td>1952</td>
<td>12,156</td>
</tr>
<tr>
<td>3</td>
<td>1962</td>
<td>12,955</td>
</tr>
<tr>
<td>4</td>
<td>1967</td>
<td>5,347</td>
</tr>
</tbody>
</table>


Due to the services of the institute, the pandemic influenza of 1957, Japanese encephalitis in 1958, polio epidemic in Andhra Pradesh in 1961 and in Palghat and Coimbatore in 1964 were completely wiped away. The international agencies are availing facilities for training foreign workers. These training services could be extended to workers in the country and the institute could serve as a first class post graduate training centre.
Kings Institute, Guindy

The King Institute of Preventive medicine situated at Guindy was opened in 1905 by Lord Ampthill, then Governor of Madras. W.G. King, the Sanitary Commissioner to the Government of Madras was responsible for its inception. It was a central vaccination institute for the Presidency where animal lymph could be cultivated and preserved under conditions which could guarantee high grade of purity. Bacteriological activities were confined to bulk production of sera and vaccines.

This research institute which functioned under the control of the Director of Medical services was one of the pioneer health and medical laboratories in India. The liquid vaccine was manufactured on a very restricted scale and its demand was low. It was supplied to railways, private practitioners and military hospitals of Madras and Bangalore. In 1956 production of vaccine lymph was handicapped due to foot and mouth disease in cow calves used for the purpose. There was a fall in the total number of specimens tested during 1954-55, as the Government and Stanley Hospital specimen were sent to the Venereal Disease Department of Government Hospital, Madras. 40

There was a demand for vaccine lymph and was purchased from the institute of other states. Due to epidemic of smallpox in Madras and Andhra states during 1958, the demand for vaccine lymph was very heavy. The blood bank section at the institute carried on research work processing and supply of plasma and training of medical officers in blood transfusion and resuscitation work. 41 The analysis of samples of drugs drawn under the Drugs Act was carried on in the Kings Institute, Guindy.

Graduates who completed their course of training in the medical colleges had to seek service or set up private practice to make their living. They get isolated from the fountains of knowledge, with little or no facilities to keep themselves abreast of the latest developments in a fast growing and developing medical science.
Surgeons from various institutions were trained in this institute. The University of Madras had arranged refresher courses and it was necessary that every university should arrange for such refresher courses in the interests of the medical practitioners.

**Medical Council of India**

The Government wanted to regulate medical education hence the Medical Council of India was set up in 1933. With the collaboration of post graduate medical education committee, the council maintained the realms of education. Indian Medical Council has laid down arduous norms in response of faculty, hospital beds and equipments. The Director General of the Indian Medical Council was the chief medical officer and administrative head of the Indian Medical Department. After the reorganization of the states in 1956, the names of the medical practitioners belonging to various states were transferred to the respective mother states. An outstanding event in the medical field in 1965 was the appointment of whole time Director of Medical Education to promote Public Health training to MBBS students and control spread of infectious diseases.

**Revival of Indian System of Medicine**

The School of Indian medicine was converted into the College of Indigenous Medicine in 1947, and the Director of Medical Services was the administrative control of the Department of Indian Medicine. Dr. M.R. Gurusamy Mudaliar was the then Director. The college was upgraded in education programmes and the graduates of this college had sound knowledge in both Indian and allopathic medicine. Since 1948 the Government of India was committed to the promotion of indigenous and modern medicine. The Chopra Committee had stressed the beneficial features of Indian system to enrich western medicine following which a research department of Indian Medicine was opened. To finalise the provisions made by the above committee, the Pandit Committee submitted its report in 1951. For the revival
of Indian system the Madras Ayurvedic College was started by Pandit Gopalacharulu. In 1955, the office of Honorary Director of Indian Medicine had been abolished and the administration was placed under the control of Director of Medical Services. The Dave Committee of 1956 commented that no concrete steps were taken to restore these systems of medicine. As a result improvement to the College and hospital of Integrated medicine were given due attention. In the consequent plan period schemes for upgrading research department were started.

Medical Practitioners

In England and America only modern medicine was accepted by the public and practiced by registered medical practitioners. But in India people believed only in ancient or indigenous medicine and the common man did not use modern medicine. There were two classes of medical practitioners of western medicine at the time of Bhore survey. Of the 47,524 registered practitioners nearly two thirds were Licentiates and one-third was graduates. In rural areas, health care was delivered through sub divisional hospitals and dispensaries that were managed mostly by Licentiates. The Central Board of Indian Medicine framed rules for recognition of schools and colleges of Indian Medicine and also registered practitioners. Large number of practitioners was required for rural medical relief. Due to non-availability of practitioners, some of them were sent to rural dispensaries. In Salem district the rural dispensaries of Vengarai and Jedarpalayam were closed due to lack of practitioners. The call for medical men in rural areas led to the increase of subsidized and non-subsidized rural medical practitioners. The rules for registration of practitioners were issued. About eight hundred and thirty candidates were selected for village vaidya training in 1951. The Government could not approve these vaidyas who had no basic qualification and efficiency. Hence, the above scheme was abolished in 1955. It is right to point out at this juncture that medical men with
special training were not available in sufficient numbers in mofussil places. Hence the A and B class practitioners of Indian Medicine who were in-charge of rural dispensary of modern medicine were temporarily converted to take charge of Indian medicine.

**Indian Medicine Courses**

For the promotion of Indian medicine courses like Graduates of College of Indian medicine and Licentiates of Indian Medicine were started. The duration of the GCIM course was reduced from five years to four and a half years with a student strength of fifty. Government appointed a committee to advise them on standard of training afforded to LIM and GCIM course. GCIM’s were eligible for appointment as health officers and both GCIMs and LIMs were selected for House Surgeons training in certain areas.\(^48\) Due to dearth of medical graduates of GCIM doctors appointed as second or third medical officers in ESI medical institutions in the state. The GCIM were replaced by the Graduate of College of Integrated Medicine to indicate that the graduate was trained in both Indian and modern medicine.\(^49\) Admissions to LIM was stopped once for all and syllabus for GCIM were revised. From 1960-61 Government abolished GCIM course also in the College of Indian Medicine and admitted students for MBBS. The pre-professionals of GCIM course were also taken in regular MBBS.\(^50\)

A decision was taken by the Government to recognize homeopathic system of medicine and to open a college and appoint doctors.\(^51\) The Mehta Committee constituted in 1960 recommended the setting up of a college of Indian medicine and award of degree of BIM (Siddha, Ayurveda and Unani) of the University of Madras. In 1964, the Government College of Integrated Medicine was started at Palayamkottai and graduates who passed from the college were trained in medico legal work.\(^52\) They were also eligible for appointment as medical officers in institution of Indian
Medicine after completing BIM Degree. The five years Bachelor of Medicine Degree with one year hospital practice as House Surgeons was recognized by the University of Madras. The students were also eligible for appointment as medical officers in the Institution of Indian Medicine after finishing the BIM Degree.53

Medical Education in Madras Presidency

The history of medical education can be traced as far back as the establishment of the East India Company. Madras was the first province to establish a medical school in 1835 to train medical subordinates for the army. Due to need for greater facilities for medical education in the Presidency, medical schools were established at Tanjore, Vizagapatnam and Calicut. Raja of Panagal appointed Indians in place of Europeans in medical departments. His policy as Health Minister pressed for Indianisation of medical services. The Vizagapatam Medical College and Lady Wellingdon medical school were standing monuments of his achievements.54

Medical colleges and the attached hospitals occupy a pivotal position in the scheme of curative and preventive services. The Andhra Medical College, Visagapatnam organized the Sanitary Inspectors Course for hundred students. The medical and health personnel trained at this institution were able to fill up the vacancy of health workers and prove their efficiency. Most of the medical colleges were planned and started to cater for a specific number of admissions.

Madras Medical College

The well established premier medical institution of the Madras state and one of the earliest institutions to be established in India was perhaps the Madras Medical College. Sir Frederick Adam, the then Governor, established it in 1835 as a school meant for trained subordinates to work in the medical department. The oldest medical college in India was christened as Madras Medical College in 1850 and affiliated to
the University of Madras in 1857. The first doctor of Madras Medical College was Dr. Rangachari whose statue is permanently erected at the entrance of the college. Dr. Lakshmanaswamy Mudaliar was the principal of Madras Medical College. Till 1875 women students were not admitted and Dr. S. Muthulakshmi Reddi had the fame of being the first woman medical graduate of the Madras University. Dame Mary Scharib was the first woman student of the college and Charles Donovan, the discoverer of Kalazar, was one of the professors of the college.

Due to the steady increase in the enrolment of students, hygiene and physiology laboratories were constructed. Changes were made relating to medical degrees. To equip sanitary inspectors with efficiency and to know latest advances in sanitary science, government prescribed short course in Hygiene and minor sanitary engineering at Medical College, Madras. This course became advanced in 1910. Sanitary inspectors were deputed for work in 1912 in the cholera affected areas. The Degree of Licentiate of Sanitary Science was replaced by B. Sc Sanitary Science. First class health officers were prescribed with the above degree and thereby hygiene department became significant. From 1939 to 1940, many departments in the college were centralized. Medical college libraries were reorganized and approved. Under Dr. R.V. Rajam, the first Dean of the college, the venereology and obstetrics department were upgraded to serve as All India training centre from 1950. In the college campus the NCC Medical Company was housed which produced well trained, disciplined doctors for the army and the society. Students were taught how to apply the vast medical knowledge they imbibe in their college.

The medical relief wing of the Madras Medical College was started in 1952 to render free medical service and treatment of surgical ailments to villagers. The WHO team of medical men visited the college in 1953 which gave a great fillip to research and training. From 1957-58 a department of Social and Preventive Medicine was
established to train medical college students of MBBS on preventive side. The post
graduate course of M.S was instituted in Madras Medical College and the Institute of
Obstetrics and Gynecology with effect from 1st July 1959.

In order to ensure public health training to MBBS students and to control the
spread of diseases, the Government sanctioned one epidemiological unit to the
college. The unit consisted of one medical officer, one health inspector and one
Public Health nurse under Dean and Professor of Social and Preventive Medicine. With the expansion of medical education, the college was upgraded into post graduate
medical institute. A post graduate centre was setup at Adayar to manage heavy
overcrowding of outpatient departments and non availability of space in the General
Hospital.

**Stanley Medical College**

The Stanley Medical School was named after its founder Sir George Frederick
Stanley, the Governor of Madras. Lady Willingdon Medical School started
exclusively for women in 1923 and the Stanley Medical School were both abolished
and replaced by the Stanley Medical College. The college was inaugurated by
Dr.T.S.S.Rajan, Minister of Public Health. With the implementation of five year
plans, it became a fullfledged medical college with training facilities for all subjects
in the medical field. Many departments were opened as further development was
recommended by Good Enough and Bhore Committee, for admission of medical
students, and for extension of hospital in the college. Health visitors training class
was transferred from Madras Medical College to this college.

The college students association organized a medical exhibition in 1951 with
great success. From 1953, the student strength of the college was increased from one
hundred to one hundred and ten. The college and hospital campus extends over
27 acres and the hospital strength was nearly one thousand. Every year, the college
admitted one hundred and fifty new students for undergraduate and postgraduate courses. In addition Public Health training was given to MBBS students to control the infectious diseases in the city. The condensed MBBS for medical licentiates run in Stanley College was abolished in 1953. According to university requirement, improvement of the College and hospital to secure necessary standards of medical education was made. In 1956 DGO and MD courses were introduced in this college.

In the hospital attached to the college, provision for better standard of medical relief to general public was given. The cramped out-patient department in the hospital was replaced by new outpatient block at a cost of Rs.12 lakhs. The Silver Jubilee function of the institution was celebrated in March 1964 and three new blocks were opened by the then Chief Minister.

**Madurai Medical College**

Before 1946, there were three medical colleges in the province maintained by the Government: two in Madras and one in Visagapatnam. During 1946 to meet the demand for doctors two more colleges were proposed to be started at Guntur and Madurai. From July 1946 the medical college at Madurai functioned after the sanction of the Government and 50 students were admitted. The first batch of the college started to function at Stanley Medical College, Madras. Under the first five year plan the College building was constructed in 1952-53 and opened in July 1954. In 1956 the number of seats in the college was increased from 65 to 70. Additional departments for infectious diseases and ante natal care were set-up during 1958. The status of strength of college students was 50 during 1954-55 and 382 by 1958-59.

In 1961, the college was recognized by the Medical Council of India with an annual intake capacity of 175 students. The MBBS course was sanctioned by the government from 1960-61.
Diploma in Pharmacy - 150 students

Sanitary Inspectors course - 50 students

Medical students in Madurai Medical College - 672

Medical students in Thanjavur Medical College - 45

The admission and strength of the college students was 200 during 1965 and total student strength was 1583. During 1966, the strength for sanitary inspector’s course was increased from 75 to 100. The research activities in various departments were reported to be satisfactory. Post graduate training was instituted and the college expenditure was 1.7 lakhs in 1966. Among the government medical college in the state, the college showed the higher percentage of passes. The Erskine hospital, Madurai developed as up-to-date teaching hospital for the Madurai Medical College students. Besides, it provided better standard of medical relief to the public.

In order to meet the increasing demand for doctors both in the public and private sector, a proposal to increase the annual intake in the Madurai medical college, from 100 to 125 was under consideration. A scheme for the construction of buildings for the Thanjavur Medical College and the attached teaching hospital at an estimated cost of Rs.133 lakhs has been sanctioned.

**Christian Medical College, Vellore**

Dr. Ida Scudder, in 1918, founded a medical school for women in Vellore with the support of missionary societies in North America, Australia, Denmark and Britain. The school became the Christian Medical College in 1942. It became a co-educational institution with specialized departments in 1947. The college offered post-graduate nurse training, Government Diploma course, MBBS and compounders training course. A unique feature of this college was that students from all over India and abroad were admitted. Seventy five percent of the students were sponsored by Christian churches in India.
During 1947-52, about 55 men and women were admitted for the MBBS course. The first post graduate trainees were admitted in 1950 in the MD General Medicine and in MS General Surgery programme. The PG Nursing training granted by School of Nursing in the college was recognized by the Government. For the progress of medical education, about 16.85 lakhs were allotted in 1956 for the college and its hospital. It is an international residential institution, drawing as members of its staff from all parts of the world. Its expansion and experimentation are in new ways of medical treatment and medical education. Even now the college is considered as the country's best institution in respect of the services rendered.

Other Medical Colleges

Before 1963, there were six medical colleges under the ministry of K.Kamaraj. In order to increase the output of doctors required for the state and the urgent need of medical graduates, the opening of more colleges was felt. In the National Plan, provision was made for expansion of existing medical colleges and attached hospitals. There was a proposal to open about five or six new colleges and create facilities for post graduate training and research. A medical college was sanctioned at Tanjore and about seventy five candidates were admitted from July 1958. Till 1960 the Tanjore College functioned at Madurai and in July 1961 it was shifted to Thanjavur. The student strength in 1961-62 was one hundred and it was raised to one hundred and twenty five in 1963-64 and to 180 in 1967. The Sanitary Inspectors course also started to function.
Table 5.3

Admission to MMC, Madurai and Thanjavur Medical Colleges

<table>
<thead>
<tr>
<th>Year</th>
<th>MMC, Madurai</th>
<th>Thanjavur Medical College</th>
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<tbody>
<tr>
<td>1954-55</td>
<td>50</td>
<td>-</td>
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<tr>
<td>1955-56</td>
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<tr>
<td>1960-61</td>
<td>100</td>
<td>75</td>
</tr>
</tbody>
</table>


Two new medical colleges were proposed to be opened at Chingelput and Tirunelveli. The Chingelput Medical College started in 1965 was under the administrative control of Director of Medical Education. It was declared as a teaching medical institution by the Government of Madras. In the same year, the district headquarters hospital at Tirunelveli was converted as a Medical college hospital affiliated to Madurai Kamaraj University.

The Coimbatore Medical College was started in 1966. The Department of Preventive and Social medicine was set up in medical colleges to adjust the pattern of medical training to present day ideas.

Teaching Hospital

The medical college students were given practical training in the hospitals attached to the institutions. Junior medical officers were trained from 4 to 6 months.
in the Madras Teaching Hospital in surgery, anesthesia, radiology and pathology and posted to district head quarters hospital. Women doctors were trained in obstetrics and gynaecology in Madras and were posted to mofussil hospitals. (See details of the teaching hospitals attached to medical colleges are given in Annexure No. 7).

Apart from the above teaching hospitals, new teaching hospitals were planned to be set up at Tirunelveli and Kodambakkkan Pudur. Consequently the bed strength of the teaching hospitals and city state hospitals were increased.

**Medical Personnel in India**

The state in India in 1947 showed that the ratio of doctor was 1:6300, nurses 1:4300, health visitor 1:4 lakhs, midwives 1:60000, pharmacist 1:40 lakhs and dentist 1:3 lakhs and 20000 to 50000 for one medical institution. Auxiliary personnel like nurses, midwives, and dais and health visitors were given training in respective fields. Being the cog in the wheel of any country health care sector, nursing was one of the most time honoured careers. Countries like United States of America, United Kingdom, Canada, Australia, United Arab Emirates and others have huge demand for nurses.

**Nursing**

Nursing education was set to change far better to inculcate varied syllabus for training. India had about seven thousand nurses in service by 1946. The Lady Hope School of Nursing was opened as a preliminary training school in 1947. To recognize the importance of nursing profession, government raised the post of matrons and sister tutors to gazette rank in Madras State Nursing Service. As the shortage of personnel in nursing and auxiliary services was traced in 1950, auxiliary midwives course for two years was started. The state government also approved proposal that training methods of Family Planning to be included in the curriculum for nurses and midwifery pupils.
In Madras the School of Nursing was attached to the Government General Hospital where nursing tutor’s course and hospital administration course were conducted. The B Sc Degree course in Nursing has been started in the Christian College for Women at Vellore. Candidates were trained in United Kingdom to acquire first hand knowledge about nursing. Thus capable nurses were produced. In 1953, there took place a bubonic plague at Bellary and as a nurse Kumari Grace Amelia Isaac rendered her service to the affected for which she was awarded the Nalwa Medal. To encourage the auxiliary personnel the government gave grants to training schools for health visitors, midwives and auxiliary nurses. The nurses and midwives course was implemented in 1956 in the general hospital and in Kasturba Gandhi Hospital, Madras from 1957.

Midwifery training continued to play a large part in the World Health Organisation assisted programmes. Nursing tutors were permitted to attend the Regional Nursing Seminar at New Delhi conducted by WHO. Women candidates admitted in medical colleges were on the increase and more facilities were available in the hospitals for training of auxiliary personnel. Though it was felt that women could manage better than men, male nursing was tried in Madras. Male nurses were also appointed. Nurses were deputed to undergo training courses sponsored by World Health Organization and UNICEF with the assistance of the Central Government.

Substantial progress was made in the development of medical and public health facilities in Madras state. In 1963, the number of doctors was found to be 1874 when compared to 1073 in 1957. Similarly, there was an increase in the number of nurses from 1306 in 1957 to 2073 in 1963. In 1957 there were three government medical colleges admitting 315 students every year and in 1963 there were five such colleges admitting 700 students every year. The demand for more number of nurses was felt in 1966 and with the support of WHO steps has been taken to conduct short term courses.
**Dental Education**

Dental education was in a neglected state and government recognized dental care of the population besides provision for its service. In India, Siddha and Ayurveda had details about teeth problems and the ancient people were interested in dental studies. The Madras Public Health Department decided to start separate dentology section in 1883 and dentist from England gave treatment. Followed by Dental College at Calcutta, the Madras Dental College and Hospital and American Dental College were opened in Madras. Sir Joseph Parey Committee of 1943 recommended opening of dental colleges for dentist education. Thereby, the Dental Council was set up in 1951 which made provision for BDS course. Dr. B.L. Rao was elected as a member of the Council. Since 1957, one hundred and twenty five candidates passed from the Madras Dental College. From 1965 with the assistance of Health Ministry, Government of India, Madras Medical College imparted Dental education.

**Pharmacy Course**

The pharmacists were responsible for proper dispensing of doctors prescription. For their best performance, the Bachelor of Pharmacy Course was instituted in 1949 and came into effect from 1950. The new diploma in Pharmacy was started in 1955 in Madras Medical College. The Compounder course was discontinued and compounders were designated as pharmacists from October 1956. About one hundred and fifty students were admitted for the Diploma in Pharmacy.

The Role of pharmacist in the maintenance of nations health was remarkable. On the 24th November 1964, the National Pharmacist week was observed and the pharmacist were given the slogan “Pure drugs and silent service to suffering humanity”. The registration of pharmacist was on the increase from then.
College, Madurai about two hundred students and in Medical college, Madras about one hundred and fifty students were admitted for the Diploma course in Pharmacy. During the fourth five year plan, 316 pharmacists were required.

**Five Year Plans and Medical Education**

Many achievements were made during the five year plans which brought many changes in the medical education. In the course of the First Five Year Plan, research institute at Chingleput, Madras was established. Training centres for leprosy control units in the state were initiated during the second plan. By the Third Plan admissions in the state medical colleges were increased to 936. With the basic course of nursing public health was integrated. Under the Fourth Plan, proposal to start three new medical colleges with admission of 100 was made to increase doctor population ratio. There was requirement of 3000 nurses and training of 1000 nurses was proposed. As the number of admission of students was on increase, teaching hospitals with increased bed strength were attached to teaching institution.

The maintenance of health of the community and the provision of adequate facilities for medical treatment should be a matter of vital concern to any government. The development programme formulated by the government for raising the socio economic conditions of the people provided for the expansion of health services. The government has been implementing scheme after scheme for the extension of the benefit of medical relief to new areas, for the provision of the improved facilities and treatment in hospitals, for the development of technical man power through appropriate training programmes, for the popularization of family planning and for bringing about progressive improvement in the health of the community.

The four government medical colleges in the state including the new Thanjavur medical college provided for total annual intake of 420 students. Facilities already existed in medical colleges and attached teaching hospitals for post
graduate education in general medicine, general surgery, midwifery and the various specialist branches of medicine and surgery. These facilities were being expanded to meet the growing demands.

Teaching and research institutions have to come to their cloisters, not only to train health professionals but also research upon best models of health care delivery system. Medical and auxiliary education must fulfill national tasks and train public health practitioners well versed in vocational skills, and deliver health services at doorsteps of the needy. It must provide the personnel willing and able to function effectively in primary health centres. There is over production of medical graduates. Post graduate education in public health was neglected and inadequate. Despite establishing department of preventive and social medicine in every medical college, prevention has not become as an integral part of clinical practice. Lack of career opportunities to public health service deterred meritorious service to opt for public health especially in general and epidemiology in particular. The chief bottlenecks in attracting medical officers for service in rural areas was lack of suitable houses for health visitors, inspectors, maternal assistants and pharmacists.

The prerequisite for the health of the community can be maintained by establishing central hospital at each district headquarters, medical colleges for training, and research institute for post graduate training. Sufficiency of medical staff, nurses, pharmacist, dispensaries and midwives could solve medical problems. After the development of medical services only the death toll due to epidemics was reduced. The quality of medical education imparted in the state was the best in India and Madras doctors had wide reputation for their skill and knowledge. There were seven government medical colleges, and one private medical college. There were 247 Government hospitals, 54 privately managed hospitals and nursing homes and 27 hospitals run by local bodies. The bed strength in government hospitals
was 19,578 and in non-government hospitals was 6,902. The number of doctors and nurses including Maternity assistants in hospitals was 2,092 and 4,087 respectively. There were 353 government, 275 local bodies and 44 private dispensaries in the state. The registered medical practitioners in the state were 13,557.

Thus the government of Madras gave special emphasis for the development of Public Health by opening new medical colleges and medical institutions since independence. By 1967 there were sufficient numbers of medical colleges, practitioners, government and private hospitals in the state.
Reference

2. Roy B.C., Priority Based and Problem Oriented Education. New Delhi, July 1974, p-2.
12. Ibid.
25. Goyal M.R. & Gupta M.C., Anatomy of Medical Education, New Delhi, 1986, p-
GO (MS) No.4204, Public Health. 28-11-1949.

GO (MS) No.2964, Public Health 23-08-1949.


Borkar G., op.cit., p-269.


Diamond Jubilee Souvenir, Pasteur Institute, Coonoor, 1967.


GO (MS) No.402, Health, 08-02-1960.

GO (MS) No.762, Public Health, 10 March 1947.

GO (MS) No.2852, Public Health, 13-08-1949.


GO (MS) No.2498, Public Health, 02-07-1953.

GO (MS) No.3579 Health, No.07-12-1957.


Madras Legislative Debates, Volume XXXVII, No.1-5, August 1960, p-208.

GO (MS) No.959 Health, 15-03-1950.


GO (MS) No.1659 Health & Family Planning 23-11-68

Rajaruman P., op.cit., p-258.
GO (MS) No.1110, Health, 26-03-1953.


GO (MS) No.1977 Local dated 9-09-1907.

GO (MS) No.150, Municipal, 22-01-1916.


GO (MS) No.947, Health, 17-03-1953.

GO (MS) No.1790, Health, 05-10-1966.


GO (MS) No.1790, Health, 05-10-1966.

GO (MS) No.2123, Public Health, 16-07-1946.


GO (MS) No.1664, Health, 21-10-1967.


The Hindu, August 18 2008, p-3.


GO (MS) No.2073, Health, 12-08-1960.
83 GO (MS) No.1561 Health, April 24 1953.