

MANUAL – 1

The particulars of the organization, its functions & duties.

1. Objective / purpose of the public authority –

To cater to the need of the people staying in the city of Mumbai regarding treatment against the various diseases.

2. Brief history –

The Municipal Corporation was entrusted with the task of providing medical relief in Bombay under the Police Charges Act in 1907. In 1909, an ad hoc committee of the corporation decided that “the time had come for the provision of a fully equipped hospital to meet the growing needs of the North of the Island”. It was thought that this hospital would be a fitting tribute to the memory of the recently deceased King Edward VII and an initial sum of Rs. 5,52,878 was raised from the people of Mumbai. Subsequently, the trustees of the estate of Seth Gordhandas Sunderdas offered Rs.12,00,000 (which was later increased to Rs. 14,50,000) for endowing a medical college named Seth Gordhandas Sunderdas Medical College which was to be associated with the proposed hospital. At the instance of Sir Pherozshah Mehta, the donors also insisted that the professors and teachers to be employed should all be properly qualified independent Indian gentlemen not in government service.

The Seth G.S.Medical College started on first June 1925 with 46 students of whom six were women. It was the twelfth medical college in the country. The formal opening followed the next year and the college was affiliated to the University of Bombay. The hospital, with 125 beds, started admitting patients on 15 January 1926. Both the medical college and the hospital quickly gained a good reputation and patients were attracted in large numbers. A school of nursing, the first school of occupational therapy in India, a school of physiotherapy and an institute of electro-physiology were established subsequently. Today, the hospital has 1800 beds and treats 1.5 million patients every year.

3. Duties, functions and activities –

1) MEDICAL RELIEF AND EDUCATION

The Health Services of Brihanmumbai Mahanagarpalika carries out various prevention and curative measures for the maintenance of sanitation and to protect the health of the citizens from various diseases and ailments which at times assume an epidemic form in a highly congested city.

Virulent and acute types of diseases require medical and surgical care which the poorer citizens cannot afford to pay. Medical relief therefore becomes one of the essential functions of the civic body.

The Mahanagarpalika has taken pioneering steps in starting and maintaining fullfledged hospitals and three medical colleges and a dental college with under-graduate facilities, which perhaps stands out significantly amongst the local bodies in the world.

2) ANATOMY DEPARTMENT

The department of Anatomy has received the prestigious grant from Department of Science & Technology (DST), Govt. of India, New Delhi, under its “ Funds for Infrastructure Development in Science & Technology “ (FIST) programme for upgradation of micro-anatomy laboratory & computerization of three teaching cubicles with LAN connection for computer Assisted Teaching – Learning process.

3) BLOOD BANK – SHANTILAL MATHURDAS

Shantilal Mathurdas Blood Bank (Mumbai Municipal Blood Centre) is the largest blood banks in India & one of the biggest in S.E. Asia with an annual collection of over 36,000 units of which 60% collection is voluntary & 40% through Replacement donors. Tarun Mitra Mandal organized a Blood Donation Camp in 11th January 2004, we collected 2405 bottles in a day. We conduct approx. 150 outdoor Blood Donation Camps per year in Mumbai & out of Mumbai.

4) CARDIOLOGY DEPARTMENT

This department, one of the premier centers for Cardiology in Western India, is involved in non-invasive as well as interventional diagnostic & therapeutic procedures. Non-invasive tests include computerized stress test, Colour Doppler (both pediatric & adult) head-up tilt test and dobutamine stress test. Invasive procedures include diagnostic catheterization in pediatric & adult population and therapeutic procedures like balloon aortic, mitral & pulmonary valvuloplasty for narrowed valves, angioplasty & coronary stent implantation, non surgical transcatheter closure of congenital heart defects like ASD, PDA & VSD, electrophysiology testing & radio frequency ablation of abnormal rhythms in the heart & the implantation of pacemakers/cardioverter defibrillators.

5) CARDIOVASCULAR AND THORACIC SURGERY DEPARTMENT

This department has attended to a large number of old and new patients during the year in their out-patient clinic and also carried out major operations. The department provides postgraduate training to M.Ch. (Nursing S.N.D.T. University) students. Besides it also provides training to occupational and physiotherapy students and Extra-Corporal perfusion technology students. It has actively carried out Research projects in basic sciences in collaboration with other departments and institutes and this work has been published in reputed international journals. The department had record number of operations. Staff members participated in academic activities in the institution as well as outside.

6) CENTRAL CLINICAL BIOCHEMICAL LABORATORIES (CCBL)

The CCBL offers services to the entire hospital. As many as 5,000 biochemical tests per day are carried out.

7) CLINICAL PHARMACOLOGY DEPARTMENT

Estimation of serum levels of carbamazepine and lamotrigine initiated as a part of Therapeutic Drug Monitoring Services and routinely started for patients with epilepsy. Pharmacogenomics laboratory was started from 1st December 2004

A column on awareness about adverse drug reactions started on the intranet and internet of KEM Hospital called "Adverse Event of the Month". This consists of information on unusual, severe or serious adverse events that have occurred in the hospital.

Department provides patient care, teaching and research facilities. TDM and a malana OPD are conducted. Laboratory facilities for drug estimation, Pharmacogenetics are set up. It is ICMR recognised centre of excellence and PCCI WHO centre for Pharmacology Department.

8) CHEST MEDICINE DEPARTMENT

The Department of Chest Medicine offers most advanced tests for diagnosing all type of respiratory disorders at the 'State of the Art' Pulmonary Function Test Laboratory. 32 Channel sleep Laboratory for diagnosis of sleep related disorders fiberoptic bronchoscope services- diagnostic and therapeutic are offered round the clock. The department has facility to treat patients on Indoor and O.P.D. basis. It also has a Respiratory Intensive Care Unit which offers treatment for critically ill patients with respiratory diseases.

The Environmental Pollution Research Center attached to this department carries out research on the health effects due to air pollution in Mumbai city throughout the year.

A study of 1810 subjects from 6 localities in Mumbai has been done. Ongoing work includes study of municipal sewage workers to study respiratory morbidity.

Up gradation of bronchoscope & lung function related services is proposed to achieve early diagnosis.

9) DERMATOLOGY, VENEROLOGY AND LEPROSY DEPARTMENT

In this department patients are treated in out patient as well as inpatient department. It also runs Special Clinic such as Vitiligo Clinic, Psoriasis Clinic, STD Clinic & Dermatosurgery and Acne Clinic. Procedures like Electro Cautery Biopsies, Chemical peels and minor surgical procedures like paring, Corn removal etc. are also carried out. Department has developed specialized surgical techniques for treating vitiligo and acne scars.

New services started are Pediatric Dermatology clinic once a week, PUVA therapy for patients with extensive unresponsive psoriasis and vitiligo and a clinical Research Laboratory.

10) DENTAL DEPARTMENT

Started 60 years ago

The nature of work:

Various minor oral surgical procedures.

Cosmetic procedures.

Restorative work.

School clinic.

Training of the undergraduates and residents is carried out.

11) E.N.T. DEPARTMENT

The E.N.T. Department of this hospital is well known in India & abroad for outstanding work.

The daily activities of two units of department includes OPD, management of emergencies cases, ward work, major and minor surgical work.

Following special clinics like vertigo clinic, ear clinic, head & neck malignancies, Neurotology are also practiced.

Advanced state of art surgeries are performed in ENT OT like head & neck malignancy, Angiofibroma excision, Functional Endoscopic sinus surgeries, skull-base surgery, otoneurosurgery. We get references from all over India to perform advance surgery.

Audiology and speech therapy department is well equipped with Pure tone Audiometer, BERA & ENG. Speech therapy is provided for speech disorders. Department has a CCTV & Camera in the OT for recording of surgeries, for documentation for teaching P.G. students. We have a Temporal Bone Laboratory where Temporal Bone dissections are carried out by the P.G.students and also by senior staff members.

12) ENDOCRINOLOGY DEPARTMENT

The department of endocrinology was started in 1983 and has been recognized for D.M. Endocrinology since 1986. The department conducts 7 outpatient clinics 3 for diabetes, 2 for thyroid disorders and 2 for general endocrinology (including puberty and growth clinic). The laboratory has facilities for all commonly required hormonal and blood sugar assays. The department has now DXA machine on which bone density of patients can be measured. The department is conducting research in area of Diabetes. Neuroendocrinology, metabolic bone disorders and puberty and growth disorders.

13) EMERGENCY MEDICAL SERVICES

State-of-the-art comprehensive Emergency Medical Services for prompt and efficient management of emergency cases round the clock. Clinical services including laboratory and X-Ray, USG and CT scan facilities are available at one place. The workload is rising by approx. 10% each year. Short term training course in Emergency Medicine also offered.

14) FORENSIC MEDICINE

- Maintaining the traditions of providing 24 hrs. postmortem services.
- Immediate handing over the Medico legal reports.
- Visiting & helping crime scene investigation giving expert opinions.
- Medico legal cases admitted in wards.
- Working as advisor to Medical ethical committee & organ transplant committee.
- Perfectly arranged & maintained Medico legal records in the department.
- Immediate attention given to the problems faced by the relatives and the police personnel in regard to medico legal cases.
- Maintaining the standard of undergraduate teaching.

15) GENERAL MEDICINE DEPARTMENT

This department provides daily medical OPD (6 days) and emergency services (365 days).

Additional specialty OPD services conducted include Rheumatology, Hypertension, HIV, Geriatrics, Headache clinic and indoor Medical services, critical care in EMS & MICU. Osteoporosis awareness and prevention programmes in : Rheumatology are conducted. Community Health Services in Geriatrics started with Female Welfare Agency. 5 Mega camps were attended and traffic police Rheumatology, EMS & HIV continued. Yoga relaxation examination and Pranayam services offered by Hypertension clinic along with drug bank for poor patients.

16) GASTROENTEROLOGY DEPARTMENT

This department runs post doctoral programmes toward DM (Gastroenterology) and PHD (Applied Biology). The department is also active in clinical research. All routine patient services are provided. Endoscopic services are provided according to availability of equipment. Specialized facilities like esophageal anorectal manometers and 24 hour PH metry are available. The department runs three outpatient clinics every week.

17) GENERAL SURGERY DEPARTMENT

The department of General Surgery is the very basic department of the KEM Hospital, which was established from the time of the opening of the hospital way back in 1926. Consequently, separate speciality departments were carved out of this department like Cardio-Vascular Surgery, Urology etc. This department has 6 units. Daily about 200-225 patients are seen in the OPD. The department also runs emergency surgical intervention. Monthly about 200-250 major & minor operations are performed. In addition, a separate minor surgery operation theatre is also managed by the department.

The department has acquired ultra-modern equipments required for carrying out surgeries which will improve patient care. Laparoscopic surgeries are also routinely performed. The department recently conducted C.M. E. for resident medical officers which was very much educative and was attended by P.G. student from different parts of state and from outside state also.

Well equipped training center also has been established for betterment of UG/PG teaching.

Recently “Radio-immuno Guided Surgery in Breast Cancer for Centinel Node Detection” was performed for the first time in K.E.M. by Dr.J.V.Hardikar Unit.

18) HAEMATOLOGY DEPARTMENT

First plasma fractionation in India. Workup and management of Haematological cases including Chemotherapy, expert consultation for leukemia, apheresis, procedures like bone marrow aspiration bone marrow biopsy is carried out.

19) MEDICAL EDUCATION TECHNOLOGY CELL

As per requirement of Medical Council of India, the Medical Education Technology Cell, of Seth G.S. Medical College and K.E.M. Hospital was established in January 1993. The ME Unit conducts Certificate Course in Medical Education Technology in the month of March and September every year and train medical teacher of this institute and other institutes. This Unit has been recognized by MUHS to take the lead in Mumbai and Konkan region and train trainers of the colleges affiliated to Maharashtra University of Health Sciences.

20) MICRO BIOLOGY DEPARTMENT

Voluntary and Confidential H.I.V. Counseling and Testing Center at Microbiology Department has been selected for establishment of a Model V.C.C.T.C. for the Western Region of India.

21) NEONATOLOGY DEPARTMENT

Department of neonatology is the referral center for babies from various peripheral hospitals run by the Municipal Corporation of Greater Mumbai and the State Government of Maharashtra and also for Community centers at Prabhadevi, Naigaon and Malvani. Referrals are made from private nursing homes in city and state. Nearby as.

Neonatal intensive care unit renders secondary and tertiary level care to newborns. It is actively involved in various clinical research to improve the neonatal care and bring down the high neonatal and infant mortality. Neonatal intensive Care Unit has latest monitoring and treatment facilities for sickest of the neonates. The unit is actively involved in training Community health workers in Lactation management and Neonatal care. The neonatal department has been awarded a "Centre of Excellence" in Kangaroo Mother Care by Save Newborn Lives and Save the Children "Initiative Bed" by Save Children (US) with support of the Bill Melinda Gates Foundation for low birth weight babies.

22) NURSING DEPARTMENT

Established in 1926 specialty in Neonatology stoma Therapy, Oncology, Burns, OT technology, ICU Nursing. Nursing staff is trained in Yoga., Nurses are actively involved in hospital waste management seminar arranged for all trained nursing staff and student nurses on kangaroo Mother care and in-service education for Sr. In charges on hospital infection control. Ward management and Communication skill. Inter personal relationship.

23) NUCLEAR MEDICINE DEPARTMENT

“Nuclear Medicine Department” works in collaboration with BARC. Radioisotope scans of different organs are carried out, which helps in diagnosis of different diseases.

24) NEUROLOGY DEPARTMENT

Neurology department provides outdoor service to patients of neurology and epilepsy on separate days. We have indoor facilities for both acute and chronic neurological diseases. The department also has an “E-Cell” Epilepsy Information Center, and Surgical treatment for Epilepsy.

We have round the clock Electro-physiology services, clinical research interest and excellent teaching facilities. In last one year we have come up with- Comprehensive epilepsy surgery care with pre-surgical evaluation and Video EEG.

Neuro-Psychology Department- Part time neuro-psychologist available for detail testing in epilepsy and movement disorder.

Movement Disorder Clinic- Detail evaluation with digital video recording and Botox therapy at highly subsidized rate.

25) NEPHROLOGY DEPARTMENT

The department was recognized as an independent postgraduate department for D.M. Course in Nephrology and since then a total of 28 students have completed and 2 students have registered for D.M. Course and 1 student for DNB in Nephrology. The staff members i.e. Dr. Alan F. Almeida, Dr. A.R. Halankar (Hon. Prof.) and Dr. Swapnil Hirematgh (Jan. 04 to May 04) are also actively involved in teaching the MBBS and M.D. students by taking lectures and conducting clinical sessions for them. The training programme for nurses, technicians and students of Nephrology biotechnology from other Institutions are conducted as usual.

26) NEUROSURGERY DEPARTMENT

This department was established in 1957 and is now one of the foremost departments in the country. The main aims of this service have been BEST patient care, medical education and medical research. Various diseases of the Central Nervous System (CNS) are managed. These include infections, trauma, vascular malformation, brain tumors and congenital malformation. Many complex cases of the CNS are referred to this department from various consultants and hospitals in the city, states and nation. Patients are also referred from the adjacent countries such as Bangladesh, Oman and Sri Lanka. From specialized services like stereotactic surgery, functional Neuro Surgery and peripheral nerve Surgery are now a part of the routine programme. The department is supported by various charitable trusts and institutions in its endeavours to treat the poorest and the sick. Many national and international post graduate students and consultants avail of clinical observer post in the department. The Microneurosurgery laboratory provides dissection facilities, mimicking actual operation theatre and permits the students to master complex Neurosurgical techniques.

27) ORTHOPAEDIC DEPARTMENT

In addition to treating orthopedic problems and trauma cases, the department carries out specialized and advanced surgeries such as spine surgeries, primary and revision joint replacement, Pediatric surgeries, arthroscopy, Sports Medicine. The emergency trauma services theatres runs round the clock in addition to daily routine and follow up O.P.D.

28) OPHTHALMOLOGY DEPARTMENT

The department has Out-patient Department and Operations are being performed in operation theatre on all days. It has a special ward for keratoplasty patient. It gives complete eye care in the form of various ophthalmic procedures like, contact lens, intraocular lens implantation, keratoplasty fluorescent angiography and vitreo retinal surgery, diagnostic facilities with ultrasound, slit lamp, perimeter and fund's cameras are available for these specially referred. There is a well established 'Eye Bank' with facilities for enucleations, storage and use of eye balls. This department is a well known center for diseases of the posterior segment of eye. It has facilities for colour and fluorescent fundus photography. Photocoagulation is presently done with the Argon Laser Photocoagulation. Vitreo Retinal surgery is regularly done in the department.

29) OBSTRETICS & GYNECOLOGY DEPARTMENT

National and international exchange:

First Asian Workshop on Gynecological Endoscopic Surgery : gyneacological laparoscopy on cadavers.

Workshop on Ultrasonographic Imaging for Fetal Anomalies (Visiting faculty through British Council).

C.O.E. (Govt. of India) :

- Standards of Male and Female sterilization for the Postgraduates.

NACO, PPTCT Cell: 9 National level "Prevention from Parent to child HIV Transmission" Trainers training (5 members team) from Medical colleges of Mumbai, Maharashtra, Gujrat, Madhya Pradesh, Chandigarh, West-Bengal. City Consultation on HIV/AIDS organized and conducted by UMP/MDACS/MCGM/ AILSG.

Advocacy workshop on PPTCT, for the staff and students of Obstetric and Gynecology, Microbiology, Neonatology of G.S.Medical College.

30) OCCUPATION THERAPY

Occupational Therapy School & Center of Seth G.S.Medical College & K.E.M.Hospital is the first Occupational Therapy School in Asia. The school offers undergraduate and postgraduate course in Occupational therapy.

This center provides treatment and rehabilitation services from routine therapy services, this center has evolved into a pioneer center in rehab services for cardiac, hemophilia, Geri-care, specialized pediatrics services such as treatment of cerebral palsy & autism along with drug de-addiction and community based services. Academic program offered by the school has a top class standard not only in India but at the international level and the research work done at the institute has received international recognition & acceptance.

31) PREVENTIVE SOCIAL MEDICINE DEPARTMENT

- Health check up of Bombay University staff.
- Information scroll board installation for patients in the hospital.
- Reading of research paper in the international conference by staff.
- Malaria eradication programme for institute developed.
- Evaluation of National polio eradication programme.
- Broadcasting of health on All India Radio programme.
- Medical education technique implementation in teaching.

32) PAEDIATRICS DEPARTMENT

The department has 3 units. Emergency Medical Services round the clock. Upgraded Pediatric Critical Care unit, Genetic Clinic and Pediatric Research Laboratory, Chest Clinic, Nephrology and Rheumatology Clinic and Thalassemia Day Care Center.

33) POOR BOX CHARITY FUND

Donations are collected in this department from various donors and from various sources like Prime Minister's National Relief Fund, Chief Minister's Relief Fund, Mayor's Fund, Siddhi Vinayak Trust, Mahalakshmi Trust Saibaba Sansthan Shirdi etc. The money is used for poor and deserving patients.

34) PHARMACOLOGY DEPARTMENT

- Advanced Tissue Culture Lab newly established on 1st April 2003
- 1st Issue of 'Drug Spectrum' included in Intranet on 22nd Jan.2004.
- Guest Lecture arranged on 7th Jan. 2004 on the occasion Dr. A.S.Paranjape Symposium. Lecture delivered by Dr. Honorio J. Silva, Vice President, Medical & Regulatory Affairs, JAALA, Pfizer (Medical Operation, Africa, Middle East and Asia) on the subject 'Drug Development in the Emerging World: A Permanent Challenge, India : Perspective and Benefits of Strategic Alliances.

35) PATHOLOGY DEPARTMENT

Special studies were carried out in neuropathology, cardiac & pulmonary pathology. Pediatrics, renal, gastrointestinal and liver pathology for Breast Carcinoma cases, Special Immunohisto-chemistry staining for Estrogen receptors and progesterone receptors is done.

36) PSYCHIATRY DEPARTMENT

The department runs a daily general psychiatric O.P.D. and offers inpatient services along with specialized services like geriatric, suicide, psychosexual group, child guidance clinic and psycho educational groups for female patients. Consultation liaison services are carried out. Community out reach programmes and service are offered at Malvani, Primary health center. Community awareness programmes on various themes and student welfare programmes are carried out every year. The department also offers post graduate training for D.P.M. and M.D. (Psychological Medicine) and is involved in several research projects for offering better patient services.

Department of Psychiatry is also involved in international research and also received National Awards for best research.

Department of Psychiatry is also involved in HIV AIDS Counselling Programme at National & State level.

37) PAEDIATRIC SURGERY DEPARTMENT

The department offers treatment for all neonatal and paediatric surgical problems from the newborn period till 12 years of age and also offers antenatal counseling services for antenatally diagnosed surgical conditions.

38) PLASTIC SURGERY DEPARTMENT

The department has 40 beds for Plastic Surgery patients and a Burns ward of 12 beds for female patients. 867 patients were admitted for Plastic Surgery and 197 patients were admitted in burns ward. The department provides round the clock emergency services to patients referred from casualty and other departments. A total of 3,258 patients were operated in emergency and routine hours. 9,084 patients were treated in the out-patient department.

39) RADIOLOGY DEPARTMENT

This is one of the largest teaching departments of the country Patient load of over 1,60,000 per year. It has a newly installed MRI. Multi slice Volume Zoom CT scan, Ultrasonography and Doppler studies are carried out. It is the only department in to India house a Biplaner DSA machine for both peripheral & Neuro applications. The department boasts of an excellent department book library and an exhaustive film and electronic teaching media library in India.

40) UROLOGY DEPARTMENT

The department performs many Open surgeries, Endoscope procedures, Kidney transpl-antation, Shock therapy for kidney stone (ESWL) and Cystoscopy-diagnostic procedure. Laparoscopy surgery also has been started in our department. This department is involved in training for undergraduates and paramedical students. Besides teaching and training these students, service and research are other components of departmental activities.

4. Vision statement –LOOKING AHEAD

“We are always going to do better tomorrow, and we would, too, if only we started today.”

From its inception the Institution has served the nation patients and students from all parts of the country.

It is hoped that the Central Government will grant us a National Centre Status and give grant-in-aid for upgradation of existing departments, construction of a new building, a building for students’ hostel, restoration of heritage building and starting of new departments viz. transfusion medicine, genetics, health and hospital administration.

The study and the practice of modern medicine is a continuing journey, aiming to reach a eceding destination called perfection. Set below are the plans and perspectives of the institution in general and of all the departments in particular towards achieving increasing excellence in the field of patient care, students’ education, social services and research.

- Anatomy
 1. Modernization of Dissection hall with installation of air conditioning system
 2. Establishment of Cross-sectional Anatomy – Radiology Imaging Museum
 3. Participation in the proposed Genetics Laboratory
 4. Establishment of Plastination Unit.
- Anaesthesiology
 1. Mandatory Monitors for all theatres
 2. Difficult Airway Clinic
 3. Pain Clinic
- Biochemistry and Clinical Nutrition

Participation in proposed Genetics Laboratory to be funded by DST, Govt. of India.
- Cardiology
 1. Heart failure clinic
 2. Interventional cardiology clinic
 3. Updating arrhythmia clinic
 4. New additional mobile cath lab
- Chest Medicine and Environment Pollution Research Center (EPRC)

Upgradation of Bronchology services with Image Intensifier and Video Bronchoscope.

- Clinical Pharmacology

The department of Clinical Pharmacology was set up as a separate department in June 1995. In the past 10 years, it has focused on tropical diseases, infectitious diseases such as malaria, filarial, kala azar – problems of our and other developing countries. It contributed by providing service, education and research by setting up Malaria OPD, Infectious Diseases – Clinical Pharmacology Ward, Indian Council of Medical Research Centre of Excellence, World Health Organization Special Centre, Department of Biotechnology Liposome Centre etc. A liposomal drug was developed and is now patented, marketed. In the years to come, the department plans to continue its focus on infectious diseases, for appropriate use of existing drugs and development and testing of new drug and delivery system, vaccines development for tuberculosis, HIV-AIDS and other infections. It has already been working on and will now expand its work on drugs for chronic and life-style related diseases like osteoporosis, diseases affecting central nervous system (like epilepsy) and cardiovascular system. It also has started work on and will expand activities on Pharmacogenetics, specially in relation to adverse drug reactions.

Some of the specific ongoing and new projects for next year are:

- Projects to be completed
 1. Menstrual cycle and hormonal changes in epileptic women receiving anti-epileptic therapy.
 2. Assessment of effect of anti-epileptic drugs on Bone Mineral Density (BMD) and biochemical markers in young Indian epileptic patients
 3. Evaluation of effect of anti-epileptic drugs on cognitive functions in epileptic adolescents 88-94

4. Evaluation of activity of TPMT (Thiopurine methyl transferase) in normal, healthy, Indian subjects
5. Efficacy of 75 mg bulaquine as a gametocytocidal agent in *P falciparum*
6. Standardization of PCR genotyping for *Plasmodium vivax*
7. Evaluation of utility of Therapeutic drug Monitoring of CBZ epoxide

- New Projects proposed

1. An open prospective trial of the safety and efficacy of piperine as add on therapy in adult patients of refractory partial and complex partial seizures with or without secondarily generalized seizures. (submitted for DCGI approval)
2. Evaluation of activity of *Sudarshan Ghanvati* against *Plasmodium vivax*
3. Evaluation of anti relapse activity of Azithromycin against *Plasmodium vivax* (submitted for ethics committee and DCGI approval)
4. Study of genetic polymorphism of TPMT in normal subjects and patients with acute, lymphoblastic leukemia (in collaboration with Dr C Adithan, Pondicherry)
5. Genetic polymorphism of enzymes in drug induced hepatotoxicity
- Emergency Medical Services Consolidate the present working, setup standards and conduct training courses.

Endocrinology

1. Levels of 25 Hydroxy Vitamin D in normal healthy adult Indian population and its relationship with Parathyroid hormone.
2. Prevalence of Vitamin D receptor polymorphism in Indian postmenopausal women and its association with low Bone Mineral Density and pharmacogenetics, allele specificity response to drug therapy.
3. Role of midnight cortisol & ACTH in diagnosis of Cushing's syndrome.

- Gastroenterology

Expand infrastructure facilities of endoscopy system, C arm.

- Microbiology

1. Establish diagnostic Centre of excellence for HIV
2. Establish a molecular diagnostic section especially for tuberculosis
3. Establish IgM, IgG – ELISA (Capture ELISA) for diagnosis of Dengue Fever if grants & technical staff is made available.
4. Establish antifungal Susceptibility testing (for MIC) for all clinically important isolates
5. Performing Aspergillus specific IgE testing towards diagnosis of Allergic broncho-pulmonary Aspergillosis (ABPA).
6. To establish a training centre in clinico-mycological skills in Dermatormycology.
7. To develop a certificate course in infection control.

V Establish and develop virology and immunology sections

- Neonatology

Ambulatory Kangaroo Mother Care Services OPD.

Establishment of Human Milk Bank

- Nephrology
 1. Computerisation of Patient Records
 2. Clinical Research in alternative medicine for renal disorders
 3. Patient Education
- 4. Preventive Nephrology
 - Nursing

Approval of proposal for College of Nursing at KEM Hospital.
 - Obstetrics & Gynecology
 1. Recovery Room with monitoring facilities for Obstetrics OT & Gyn OT & Family Planning OT with state of the art Monitoring equipment, resuscitation equipment, and life support equipment:
 2. Extra postnatal ward is planned since the existing postnatal ward has about 175-200% occupancy at all times,
 3. Intensive Labor Care Unit (cont.) with estimated expense: 25.6 lakhs. Is planned
 4. Endoscopic surgery units are being planned to reduce number of laparotomies & in effect,

reduce hospital stay & costs to patients & BMC. Estimated expense: 25 lakhs
 - 5. Centre for assisted Reproduction is planned with estimated cost of Rs.25 lakhs
 - 6. Up gradation of GORC laboratory with is planned with:Automated cell counter, Elisa Reader, Coagulation profile equipment are badly needed to provide essential investigations for obstetric and gynecologic disorders, and support gynecologic endocrinologic work.Estimated expense: 30 lakhs.
 - 7. Miscellaneous:The following services need to be set up:Gynecologic endocrinology OPD, Gynecologic oncology OPD,High risk pregnancy and autoimmune disorders OPD
 - 8. Video library e-library: in process
- Orthopedics
 1. To have two intensive care beds with the facility of ventilator for patients of spinal pathology.
 2. To acquire Somato Sensory evoked potential machine an its set up.
 3. To acquire Thorascope and its set up
 4. To acquire additional space for updating the department office
 5. To acquire Computer Navigation System (Image guided surgery system)
- Pediatric Surgery

Paediatric Laparoscopic Surgery has been started and looking forward to develop the department as a minimal access surgery training centre.
- Pediatric Medicine

PICU

The immediate need is to increase the PICU Bed strength to 15 for optimum use of the available facilities. A patient waiting area for the relatives of the patients is needed.

Following courses to be initiated –

Certificate course for practicing physician, fellowship courses

DM-critical care.

Ambulance services to be available for all times of the day.

To develop a □ retrievals team for patient care.

- Development of library and teaching aids: Up-gradation of library for PICU, improvement in teaching services by multi media LCD projector, Laptop etc.
Upgradation of Pediatric ICU
To start other speciality services like super speciality OPDs.
- PRL & Genetic Clinic:
To develop systems for
 - a. Newborn screening,
 - b. Metabolic workup and
 - c. Cytogenetic Workup,
 - d. Tissue Culture Lab
 Thalassaemia Day Care Center: Chelation therapy for all patients
- **Pharmacology & Therapeutics**
Development of panchakarma unit for Ayurvedic Research Center
- **Physiotherapy School & Center**
As “Equal partners in healthcare”
- **Preventive and Social Medicine**
 1. Establishment of rural health training center affiliated to KEM Hospital.
 2. Establishment of a state of art “Public Health Museum”.
 3. Establishing the department as a premier research and training dept. in community health.
 4. Developing educational and training programmes in collaboration with international universities.
 5. Planning to organize a workshop / seminar on Raj Yoga meditation for faculty and RMOs and U.G. students for prevention of cardio-vascular Heart Diseases and Art of living Healthy life style in collaboration with Bramha kumari organization of spiritualism.
- **Psychiatry**
 1. To provide leadership to general hospital psychiatric departments (GHPU) for the development of Mental Health Services at various levels. (Local, National & International)
 2. To contribute in training (Professionals, Paraprofessionals, Non-Professionals) from awareness to research
 3. To develop National and International collaboration for research group.
 4. To develop Health Education Material in the field of Mental Health.
- **Radiology**
Comforting as it may be to hold an x-ray film in your hand and snap it smartly onto a view box, film technology seems destined to soon fade away.
Films have been the traditional medium used to capture, store, and display imaging studies for many years. The technology has evolved to a high level, and many Imaging modalities are now digital and can be accessed by computers. As more and more Radiology Departments move to systems that are almost entirely digital, it is only a matter of time before film disappears as the viewing medium from the KEM Radiology Department!

The term “Picture Archiving and Communication Systems” (PACS) is used to describe the technologies that are eliminating film. Other terms that may reflect the PACS concept more accurately include “the filmless radiology department” and the “all-digital radiology department.”

- **Skin & V.D**

We are planning to strengthen our services in following areas.

1. Dermatopathology by adding direct immunofluorescence as a diagnostic test
2. Cosmetic Dermatology by adding new procedures like glycolic acid peels
3. Dermatoscopy with photographic attachment as a non invasive diagnostic procedure.

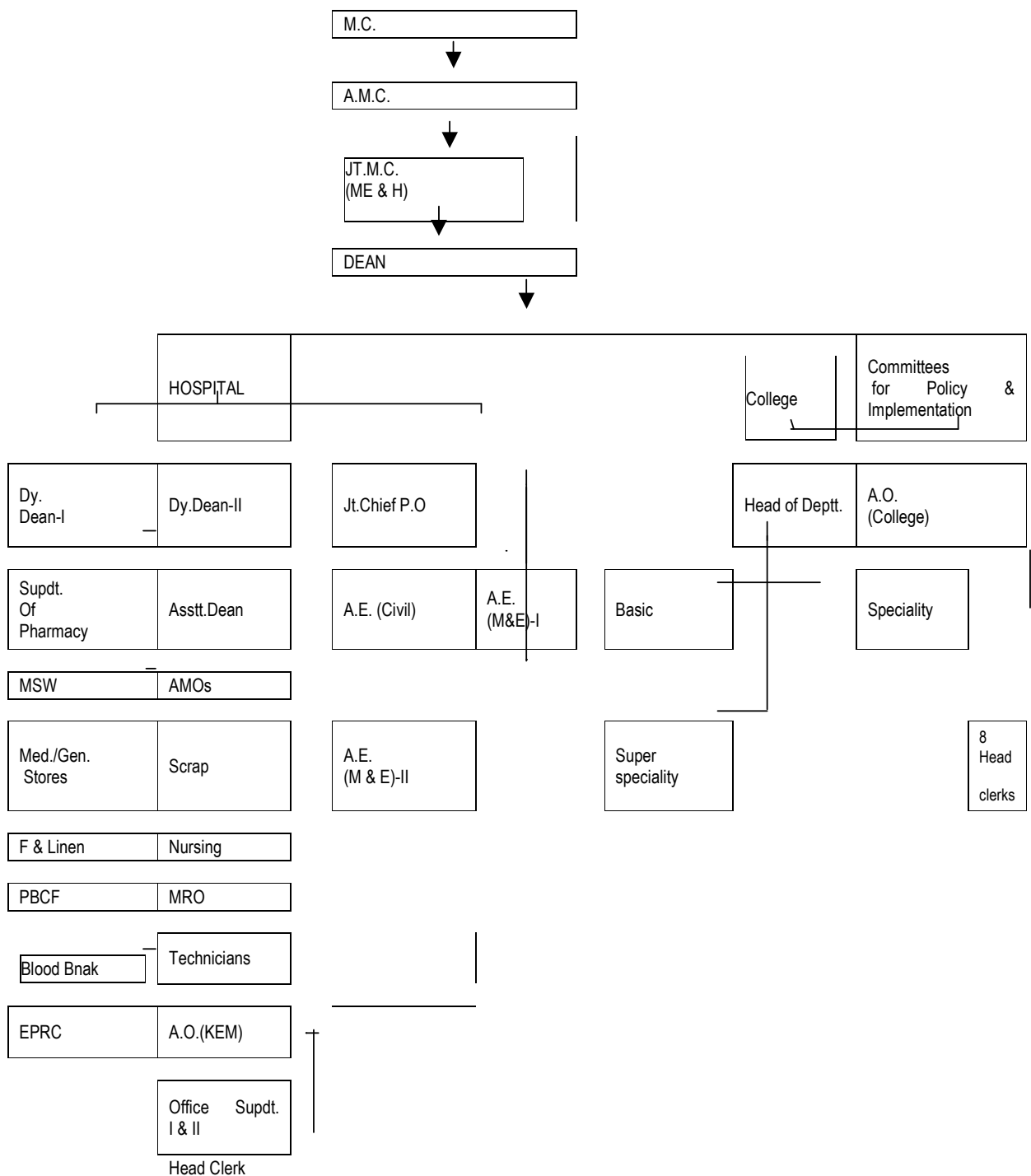
- **Social Service**

We wish to offer more and more services towards patients care, to make it the best in near future.

- **Surgical Gastroenterology**

1. To regularly conduct Basic Surgical skills workshop (Knotting and suturing)
2. To regularly conduct Basic Laparoscopic workshop with Cadaveric dissection programme.
(Fifth and sixth scheduled in January/February 2005.)
3. To start Organ Harvesting Training Programme.
4. To start Liver Transplantation Programme.

5. Organizational structure, diagram –
Organizational structure, diagram enclosed.



6. Statistical Report –

Statistical Report for the year 2002-2003 & 2004 in enclosed.

Annual statistical report for the year 2002- 2003 & 2004.

Sr. No.	Description	2002	2003	2004
1.	Scheduled Beds	1,800	1,800	1,800
2.	Total No. of Admissions	72,841	77,041	78,063
3.	Daily Average of Admission	200	211	214
4.	Total No. of New O.P.D.	4,52,719	4,61,896	4,98,175
5.	Daily Average of New OPD	1,504	1,504	1,661
6.	Total No. of Old O.P.D.	9,95,031	11,35,494	10,15,836
7.	Daily Average of Old OPD	3,305	3,785	3,386
8.	Total No. of attendant (New & Old)	14,47,750	15,97,390	15,14,011
9.	Daily Average of OPD Attendance (New & Old)	4,809	5,325	5,047
10.	Total No. of Operations	52,995	53,124	54,962
	Major	22,860	22,701	22,996
	Minor	30,135	30,423	31,966
	Scopies	2,655	4,359	4,104
11.	Total No. of Deaths	5,174	5,537	5,630
12.	Death Rate	7.17%	7.18%	7.21%
13.	Total attendance in Casualty	1,17,336	1,39,416	1,46,458
14.	Total No. of Medico legal cases	24,018	24,888	27,798
15.	Total No. of In-patients days	5,62,892	5,56,642	5,54,526
16.	Daily Average of Bed Occupancy	1,542 (86%)	1,525 (85%)	1,532 (85%)
17.	Daily Average of In-patient	7.72	7.23	7.10

7. Out Patient Department –

This hospital runs 58 OPDs, the particulars of which are given in the enclosed list.

List of OPDs'

Sr. No.	OPD Name	Tel.	Location	Time	Mon	Tues	Wed	Thurs	Fri	Sat
1	Andrology	2303	New Bldg. 1 Fl.	01.30-01.30 PM	.	.	.	.	SVP	.
2	Anesthesia	2318	New Bldg. 1 Fl.	09.30-12.30 PM	Dept	Dept	Dept	Dept	Dept	Dept
3	Antenatal	2309	Old Bldg1 Fl.127	01.30-03.30 PM	SVP	NMM	MNS	VSS	VSR	ASG
4	Anti-rabies	2302	New Bldg. G. Fl.	01.30-04.30 PM	AMO	AMO	AMO	AMO	AMO	AMO
5	Arthritis	2313	CVTC	08.00-10.30AM	.	.	.	.	.	LSB
6	Arthritis	2524	New Bldg. G. Fl.	01.30-03.30 PM	.	.	.	LSB	.	.
7	Arthrology	2315	OC	01.30-03.30 PM	PBB	.	.	.	.	.
8	Ayurveda	2524	New Bldg. G. Fl.	01.30-03.30 PM	.	.	.	.	BDS	.
9	Cardiology	2313	CVTC	07.30-10.30AM	.	PGK	AVM	PGK	PJN	.
10	Clinical Pharmacology	2524	New Bldg. 1 Fl.	08.30-10.30AM	.	.	.	.	NAK	NAK
11	Congenital heart	2313	CVTC	01.30-03.30 PM	.	.	.	PGK	.	.
12	CVTS	2313	CVTC	01.30-03.30 PM	AMP	JMSK	AMP	.	JMSK	.
13	Deaddiction	2322	OC	07.30-10.30AM	.	SRP	.	SRP	.	SRP
14	Dental	2306	Old Bldg 1Fl. 122	07.30-10.30AM	VRD	VRD	VRD	VRD	VRD	VRD
15	Diabetis	2317	Old Bldg.1Fl.129	07.30-10.30AM	PSM*	PSM	.	PSM*	PSM	.
16	DOTS		Old bldg. G.Floor. Opp. certificate sec.	09.00-12.30	AAU	AAU	AAU	AAU	AAU	AAU
17	ENT	2307	Old Bldg.1Fl. 121	07.30-10.30AM	SBO	MVK	SBO	MVK	SBO	MVK
18	Epilepsy F.U.	2310	Old Bldg.1Fl. 133	08.30-10.30AM	.	.	.	.	SHR	SHR

19	Epilepsy New	2310	Old Bldg. 1 Fl. 133	08.30-10.30AM	.	.	SHR	.	.	.
20	Esophagus	2303	New Bldg. 1 Fl.	08.00-10.30AM	PA	.	.	.	.	.
21	Fire brigade	2047	Dy. Dean's office	09.00-10.30AM	SP	SP	SP	SP	SP	SP
22	Gastroenterology	2303	New Bldg. 1 Fl.	08.30-10.30AM	.	.	PA	.	.	PA
23	General practice	2319	New Bldg. 1 Fl.	08.00-11.30AM	PSM	PSM	PSM	PSM	PSM	PSM
24	Genetic	2014	PRL	09.30-12.30 PM	KRL	KRL	KRL	KRL	KRL	KRL
25	Genetic	2014	PRL	01.30-03.30 PM	KRL	KRL	KRL	KRL	KRL	KRL
26	Geriatric	2304	New Bldg. 1 Fl.	08.30-10.30AM	.	YVM	.	.	.	.
27	Geriatric	2304	New Bldg. 1 Fl.	01.30-03.00 PM	.	YVM	.	.	.	.
28	Geriatric	2304	New Bldg. 1 Fl.	01.30-03.00 PM	.	.	.	.	YVM	.
29	GI surgery	2302	New Bldg. G. Fl.	01.30-03.00 PM 08.30-10.30 AM	ANS	.	.	.	.	ANS
30	Gynecology	2309	Old Bldg. 1 Fl. 127	08.00-10.30AM	SVP	NMM	MNS	VSS	VSR	ASG
31	Hansen's	2312	Old Bldg. 1 Fl. 124	08.00-12.00AM	.	USK	.	.	USK	USK
32	Hematology	2524	New Bldg. G Fl.	08.30-10.30AM	FFJ	.	.	FFJ	.	.
33	HIV	2524	New Bldg. G. Fl.	01.30-03.30 PM	AVP	.	.	.	.	.
34	Hypertension	2524	New Bldg. G Fl.	08.00-10.30AM	.	.	KCP	.	.	.
35	Joint (Total) Replacement	2313	CVTC G. Floor	09.00-11.30AM						MLS
36	Malaria	2715	New Bldg. 1 Fl.	09.30-12.30 PM	.	.	.	.	.	.
37	Medical	2304	New Bldg. 1 Fl.	07.30-10.30AM	ARP	DRK	YVM	LSB	AAC	KCP
38	Neonatology	2524	New Bldg. G Fl.	01.30-02.30 PM	.	.	RHU	.	.	.

39	NephrologyF. U.+New	2524	New Bldg. G Fl.	01.30-03.30 PM	AFA	.		AFA	.	.
40	Nephrology New	2524	New Bldg. G Fl.	08.00- 10.30AM	.	AFA		.		
41	Neurology F.U.	2310	Old Bldg1 Fl.133	08.30- 10.30AM	.	.	.	.	SHR	.
42	Neurology New	2310	Old Bldg.1Fl 133	08.30- 10.30AM	SHR	.	.	.	.	.
43	Neurosurgery	2715	New Bldg. 1 Fl.	07.30- 10.30AM	AHG	AHG	AHG	AHG	AHG	AHG
44	Obstertrics	2309	Old Bldg.1Fl127	01.30-03.30 PM	SVP	NMM	MNS	VSS	VSR	ASG
45	Ophthalmolog y	2320	OldBldg.GFl.113	07.30- 10.30AM	RPJ	YKD	RPJ	YKD	RPJ	YKD
46	Orthopedic New	2315	OC	07.30- 10.30AM	PBB	SVV	MLS	SKS	VJL	MMD
47	Orthopedic Old	2315	OC	01.30-03.30 PM	SKS	VJL	MMJ	PBB	SVV	MLS
48	Pediatric chest	2304	New Bldg. 1 Fl.	01.30-03.30 PM	.	.	.	KRL	.	.
49	Pediatric neph+rheuma t	2304	New Bldg. 1 Fl.	01.30-03.30 PM	.	CTD	.	.	.	.
50	Pediatric surgery	2325	Old Bldg.1 Fl.106	01.30-04.30 PM	.	SSB	.	SSB	.	.
51	Pediatrics	2304	New Bldg. 1 Fl.	01.30-03.30 PM	CTD	KRL	SBB	CTD	KRL	SBB
52	Plastic surgery	2302	New Bldg. G Fl.	01.30-03.30 PM	.	RER	.	RER	.	.
53	Psychiatry	2311	Old Bldg.1 Fl.126	07.30- 10.30AM	.	SRP	.	SRP	.	SRP
54	Puberty & growth	2491	Old Bldg.1 Fl.129	09.00- 11.00AM	.	.	.	.	.	PSM
55	Renal	2524	New Bldg. G. Fl.	02.00-04.00 PM	AFA	AFA	.	AFA	.	.
56	Renal transplant	2534	AKD	09.00- 11.30AM	.	.	.	AFA	.	.
57	Resiratory & TB	2313	CVTC	08.00- 11.00AM	AUA	.	.	AUA	.	.
58	School clinic	2305	Old Bldg.1 Fl.123	02.00-05.00 PM	SBB	KRL	CTD	SBB	KRL	.

59	Sexology	2312	New Bldg. Gr. Fl.	01.30-03.30 PM	.	.	PK	.	.	.
60	Skin	2312	Old Bldg.1 Fl.124	07.30-10.30AM	USK	.	USK	USK	USK	.
61	Spine	2315	OC	01.30-03.30 PM	.	.	.	PBB	.	.
62	STD	2312	Old Bldg.1 Fl.124	07.30-10.30AM	USK	.	USK	USK	USK	.
63	Stone	2303	New Bldg. 1 Fl.	01.30-03.30 PM	.	.	SVP	.	.	.
64	Surgery	2302	New Bldg. G. Fl.	07.30-10.30AM	JVH	JDM	RRS	AND	OSR	VMK
65	Thyroid	2491	Old Bldg. Fl.129	01.00-03.00 PM		PSM	.	.	PSM	.
66	Tumor	2303	New Bldg. 1 Fl.	01.30-03.30 PM	JVH	.	.	.	.	.
67	Urology	2303	New Bldg. 1 Fl.	08.30-10.30AM	.	.	.	.	SVP	.
68	Well baby	2325	Old Bldg.1 Fl.130	01.30-03.30 PM	CTD	.	KRL	.	SBB	.

8. Expectations of the public authority from the public for enhancement, effectiveness & efficiency.

This is being public hospital having largest capacity of 1800 beds, it is expected from the public that they maintain the discipline while visiting hospital for meeting the patients and further maintain cleanliness. It is also expected that during visiting hours people do not come to visit the patients in large groups.

People are also expected to respond in largeness to Blood Donation Campus whenever they are organized inside the hospital campus as well as outside in the city limit.

