



MALABAR CANCER CENTRE
THALASSERY

ANNUAL REPORT
2013-2014

FROM DIRECTOR'S DESK

Malabar Cancer Centre, an autonomous institution under Health and Family Welfare Department, Government of Kerala, thrives for excellence in the field of early detection, diagnosis and treatment of cancer. The institution is being developed as a state of art cancer centre with equal thrust on clinical care, education and research.

In 2013, we could edge towards our objectives of growth in several areas such as surgery, radiation therapy, outpatient services, and clinical lab services. There was 21% increase in new cancer cases, 38% increase in major surgeries and 10% increase in clinical lab services. To provide a multi-disciplinary forum for the analysis and discussion of ethical standards effecting patient care, professional education and community interests, MCC constituted Institutional Ethics Committee (IEC) as per ICMR Guidelines. For periodically reviewing the training, services and research activities and make recommendations to the Executive Committee and Governing Body, MCC constituted a Scientific Advisory Committee. An online Palliative Care and Support Network system was developed in research collaboration with C-DIT. The trial running is going on successfully with the help of Palliative Groups in Kannur Districts. MCC also started the implementation of e-Hospital Software of National Informatics Centre with the main objectives to provide a mechanism to access the patient records and to have an efficient system to manage the patient information.

To prepare an accurate incidence and mortality data- base of cancer cases in three districts Kannur, Kasaragod and Mahe the MCC launched Malabar Population Based Cancer Registry (MPB-CR) on 1st January 2014 in the districts of Kannur, Kasaragod & Mahe (Two States- Kerala & Pondicherry) partially supported by National Cancer Registry Programme (ICMR) .



The financial performance of MCC for the year 2013-2014 was found to be satisfactory. Each year, MCC adopts budget estimate to serve the road map for development of the institution to achieve the goals set forth in our multi-year plan that reflects the health care needs of our community.

It is with immense pleasure to disclose the research association MCC has with School of Health Sciences, Kannur University, Centre for Electronic Materials Technology, Thrissur and P.S.Vaidhyarathnam Ayurveda College, Kottakkal and HTIC-Chennai. Sahlgreska Cancer Centre, University of Gothenburg, Sweden has come forward to be collaboarte in regions of student-faculty exchange program and research. The same is under the consideration of the Government.MCC has become an member of National Cancer Grid which is expected to bring in revolutionary changes in the management of cancer and in the growth of the institution. Malabar Cancer Centre also had collaboration with Institute of Palliative Medicine, Kozhikode and Department of Physics, Calicut University for academic and research purpose.

Two smart class rooms were established during this period for BSc Medical Radiological Technology course and for various in house and external training program conducted regularly. 1.5 Tesla MRI was installed and commission during this period and its clinical use is started. Commissioning and clinical use of Digital mammography machine of latest technology with tomosynthesis and stereotactic biopsy system has enabled the imageology department to surge ahead of other institutions in breast imaging. Breast interventions include stereotactic biopsy, wire localization and vacuum assisted biopsy could be performed regularly. Intervention radiology has become a reality in MCC with the acquisition of Starbust radiofrequency ablation system (RFA), Zeilm C arm system and Maxio Interventional Radiology Assistance platform from Perfinct Healthcare Ltd. The Robot assisted intervention or treatment system was first introduced in Kerala in MCC.

The major achievement of MCC in this period was commencement of Bone marrow transplantation programme. Under the leadership of Dr.Chandran.K.Nair, the team of doctors and nursing staff in the department of Clinical Hematology and Medical Oncology performed its first autologous Bone marrow transplantation in public sector in Northern Kerala. This was further followed by another three bone marrow transplantations including two allogeneous transplantations. The complete success rate of all these procedure provide immense thrust to the growth of the institution and the hope and relief for the patients of the region.

Apart from many academic awards for residents and faculty in conferences, MCC won first

place in Kerala State Pollution Control Board award for the year 2014-14 in the Government Medical college category and first place in the district for institutional cultivation program of Department of Agriculture. The importance of team work in these achievements need not be overstressed.

The community outreach activities of MCC, through its community oncology department, has reached Attappady-a tribal hub. One volunteer training program, three tobacco awareness program and screening camps in tribal camps and eight oral cancer screening camps were conducted in Attappady .During this period, 89 cancer awareness classes,131 Early cancer detection camps, 6 volunteer training program,28 cancer awareness exhibitions and 2 seminars were conducted. The camps were conducted in Kannur(68), Kasargode(18),Kozhikode(13), Wyanad(18), Palakkad (3) and Mahe(2).21546 persons were screened in these camps and over 5500 pap smears were reported.

During 2013-14, various financial assistance schemes of Government were implemented in MCC.A helpdesk, in this regard, was set up to help all patients. MCC took a policy that its the responsibility of the institution to help patients getting eligible financial assistance schemes even if they fail to request for. The treating doctors and nurses and paramedical staff take laudable care in getting this objective reached.

Hence with immense pleasure and pride I herewith present the annual report for the financial year 2013-14.

SATHEESAN.B
DIRECTOR

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About MCC

Malabar Cancer Centre, Thalassery (MCC) is an autonomous institution under Health and Family Welfare Department, Government of Kerala, started with an aim to establish a comprehensive cancer centre, providing the much-required oncology care to the population of Northern region of Kerala and neighboring parts of Karnataka and Tamilnadu states. The main objective of the centre is not only to provide comprehensive cancer care but also to develop as a Research and Training Centre of international standards. A society named Malabar Cancer Centre Society was registered under Societies Registration Act XXI of 1860 with the above aims and clinical work in MCC started from March 2001 onwards. At present MCC has around 110 in-patient bed strength which is expected to be increased to 220 in near future.

MCC is providing a full spectrum of oncological care as an autonomous not-for-profit insti-

tution funded by the State Government and other sources. Patients are categorized according to their economic status, and accordingly it is expected that 20% of patients will be provided free services and about 60% on concessional rates. It has been undertaken that no patients will be denied treatment for financial reasons. During the last twelve years period, a total of more than 20,000 new cancer patients had registered for various modalities of cancer treatment and about 3,00,000 patient visits made during this period. The main modalities of treatment offered by MCC to patients, presently, include radiotherapy, chemotherapy, onco-surgery and palliative care. The Centre also carries out Community Oncology activities including cancer awareness and early detection programmes. With affiliation to Kannur University MCC has started BSc. (MRT) course from 2011 – 2012 onwards.

MISSION & VISSION

Mission

Non-compromising Professionalism in Quality of Treatment, Research and Education.

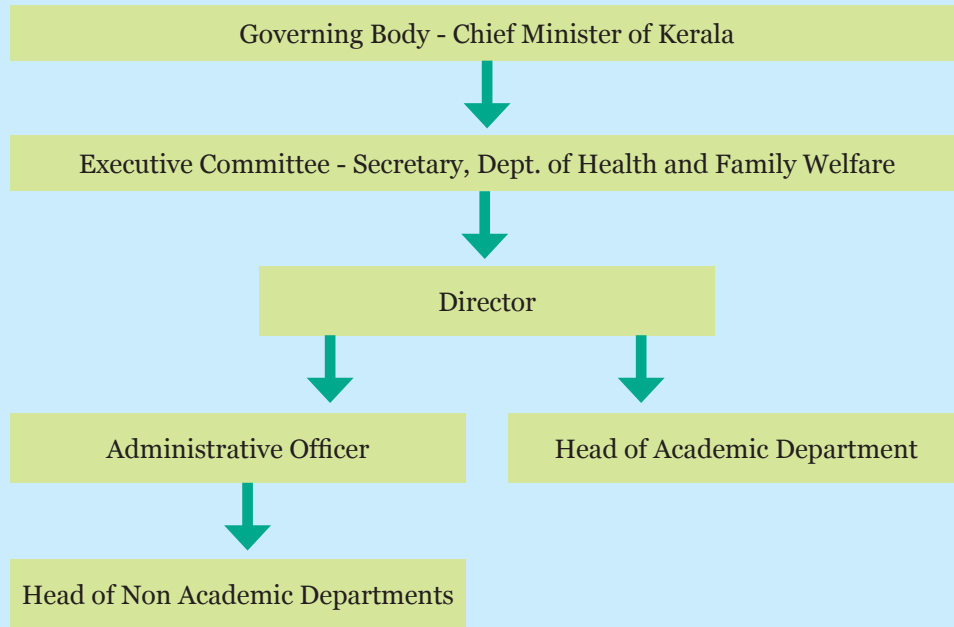
Vision

The development of an exponentially progressing high quality institution with equal trust on clinical care, oncology related education and multifaceted research.

Emblem



Organization Structure



Governing Body, Executive Committee and other Committees

The control and management of the Society are vested in the Governing Body consisting of 23 members with the Hon'ble Chief Minister of Kerala as the Chairman. The routine activities and functions of the Centre are supervised by the Executive Commit-

tee, with the Secretary, Department of Health and Family Welfare, Government of Kerala being the Chairman of the Committee. The members in the Governing Body and Executive Committee are functioning by virtue of their official positions.

Governing Body (GB): The Governing Body of the Society consists of 23 members.

1	Chairman	Chief Minister of Kerala
2	Vice-Chairman	Minister for Health & FW, Kerala
3	Alternate Vice-Chairman	Minister for Electricity, Kerala
4	Member	Secretary, Department of Finance, Kerala
5	Member	Secretary, Department of Power, Kerala
6	Member	District Medical Officer, Kannur
7	Member	Secretary, Department of Health & FW, Kerala
8	Member	An eminent Medical Scientist
9	Member	Secretary, Department of Science, Technology & Environment

10	Member	One nominee of the Ministry of Health, Government of India
11	Member	Principal, Medical College, Kozhikode
12	Member	Secretary- Planning & Economic Affairs Department, Kerala
13	Member	Director- Rajiv Gandhi Centre for Bio technology, Trivandrum
14	Member	Director of Medical Education, Directorate of Medical Education, Trivandrum
15	Member & Secretary to GB	Director, Malabar Cancer Centre, Thalassery
16	Member	M.L.A. of the Thalassery constituency
17	Member	President, District Panchayat, Kannur District
18	Member	Chairman, Thalassery Municipality, Thalassery
19	Member	A public man from North Malabar region (to be nominated by Government of Kerala)
20	Member	One Head of the department nominated from Malabar Cancer centre, Thalassery by the Government.
21	Member	One nominee of the Charitable Society established for rehabilitation and financial assistance for poor cancer patients
22	Member	Principal/Chief Executive Officer of Medical College, Pariyaram
23	Member	Director, Regional Cancer Centre, Trivandrum

Executive Committee (EC): The Executive Committee shall be composed of;

1	Secretary, Department of Health & Family Welfare, Government of Kerala	Chairman
2	Secretary, Department of Power, Government of Kerala	Member
3	Secretary, Department of Finance, Government of Kerala	Member
4	Chairman, Thalassery Municipality	Member
5	A public man from North Malabar to be nominated by Government of Kerala	Member
6	Secretary, Department of Planning, Government of Kerala	Member
7	Director, Regional Cancer Centre, Trivandrum	Member
8	The Director, Malabar Cancer Centre, Thalassery	Member/Convener

Other Committees:

1	Administrative Council
2	Academic Council
3	Scientific Advisory Committee
4	Library Committee
5	Purchase Committee
6	HOD Committee
7	Canteen Committee

8	Waste Management Committee
9	Institutional Review Board
	i) Scientific Review Committee
	ii) Institutional Ethics Committee
10	Data Monitoring and Safety Committee
11	Building Committee

Highlights from the year 2013-14

- ▶ Institutional Ethics Committee (IEC) (Constituted as per ICMR Guidelines in August 2013)
- ▶ Launched Malabar Population Based Cancer Registry (MPBCR) in 2 states (Kerala & Pondicherry) with 3 Districts – Kannur, Kasargod & Mahe.
- ▶ Formed Scientific Advisory Committee - periodically review the training, services and research activities and evaluate and make recommendations to the Executive Committee (EC) and Governing Body of the Malabar Cancer Centre.
- ▶ National Knowledge Connectivity (NKN).
- ▶ Started implementation of e-Hospital Software of National Informatics Centre.
- ▶ e – Palliative : An online Palliative Care and Support Network system developed in association with C-DIT.
- ▶ Established two smart class room.
- ▶ MRI Installation Completed

Academic and Research Collaborations

- ▶ Centre for Materials for Electronics Technology (C-MET) Thrissur. (Research Collaboration)
- ▶ P.S Vaidhyaratam Ayurveda College, Kottakalottakkal. (Research Collaboration)
- ▶ School of Health Sciences, Kannur university. (Research and Academic Collaboration)
- ▶ Institute of Palliative Medicine, Kozhikode. (Academic and Training Collaboration)
- ▶ Centre for Development of Imaging Technology (C-DIT), Thiruvananthapuram (Research & Academic Collaboration)
- ▶ Health Technology Innovation Centre (HTIC), IIT-Madras, Chennai (Research Collaboration)
- ▶ Department of Physics, Calicut University (Research & Academic)
- ▶ Sahlgreska Cancer Centre, University of Gothenburg, Sweden (In Process)

MCC Profile at a Glance

SL.NO	DESCRIPTIONS	2013
1	New Cases	3867
2	Non Cancerous Cases	2086
3	Follow up cases	57758
4	Non Cancerous cases(follow up cases)	3075
5	Total Patients	66786
6	In patients	3524
7	Day CT Injections	9009
8	IP CT Injections	1966
9	Total CT Injections	10975
10	Major Surgeries	1010
11	Minor Surgeries	430
12	Total surgeries	1440
13	Scopies	869
14	X-ray	4262
15	U S G	944
16	Mammogram	1123
17	CT Scan	2908
18	Esophageal stenting	6
19	Biopsy	2289
20	FNAC	1010
21	Cytology	5972
22	Histopathology	5928
23	Haematology	37671
24	Biochemistry	37705
25	Urine analysis	1212
26	BMA	278
27	Peripheral smear	568
28	ECG	715
29	Bronchoscopy	970
30	RT Patients(in fractions)	25395
31	Number of Patients RT	1122
32	Brachytherapy	256
33	Brachytherapy (pt. bases)	90
34	RT Simulator	1122

35	Volunteer Training programme (ECDC)	12
36	Cancer Awareness Classes	92
37	Early Cancer Detection Camp	127
38	Exhibition	12
39	CME	8
40	Blood Donation	4112
41	Component Preparation	9574
42	Screening Test	4112
43	Blood Donation Camp	22
44	ABG	152
45	No.of FLUID	246
46	CNE	2
47	Linac(No.of patient RT)	472
48	Linac(RT patient in fractions)	30447
49	Tumour assay	3214
50	Second Opinion	1582

Facilities Available

Treatment Facilities

- Two major operation theatres
- Minor theatre
- Endoscopy unit
- Laser surgery unit, CUSA, Waterjet dissector, Harmonic scalpel
- HD Laparoscopy unit
- Videocolposcope
- High End Dual energy Linear Accelerator with Rapid arc (Varian)
- Elite-80 Teletherapy machine
- CMS XiO Treatment planning system
- HDR Brachytherapy & planning system
- CT Simulator
- Conventional Simulator and Ultra Simulator
- Mould room facilities for patient immobilization
- Well equipped Operation Theatre to perform all major oncological surgical procedures
- Bone marrow transplant unit
- IP & Day care chemotherapy facilities
- Physio Therapy Department
- Speech and Swallowing Therapy
- Clinical Dietetics and Nutritional Therapy

- Started Bone marrow transplantation
- First allo-transplantation for aplastic anaemia in Northern Kerala
- Did first totally free bone marrow transplantation for a multiple myeloma patient in northern Malabar
- Blood irradiator will be installed soon

Three radiotherapy machines

- Telecobalt
- High end Dual energy Linear accelerator
- HDR Microselectron brachytherapy
- Treats 80-95 patients per day
- High precision radiotherapy- IMRT, IGRT, SBRT

24 Hours Clinical Laboratory Facilities

- Haematological investigations
- Biochemical investigations
- Cytological Examinations
- Immunological investigations
- Histopathological Examinations
- Immuno Assay-Tumor marker, Hormone detection, Viral diagnosis

Radiological investigations

- MRI Scan
- 4D CT
- Multi Slice Spiral CT Scan
- Ultra Sound Scan
- Digital Mammography machine with stereotactic biopsy facility
- Digital X-ray
- Portable X-ray machine with 60MA
- Endoscopic services with Oesophagogastric, Colonoscopic and Bronchoscopic examinations

Diagnostic facilities

1. **X-ray:** GE DX 525 X-Ray Unit was commissioned in 2005 along with Automatic Film Processing Unit. A GE Genius Portable X-Ray machine is also available in the Department.
2. **Mammography:** Has one of the best mammography machine- Hologic Selenia Dimen-

sion with 3D mammography, stereotactic and mamotome biopsy facility. Unit also has CAD facility.

3. **Ultrasound Scan:** Three Ultrasound Scanners available - GE LOGIQ 200 Ultrasound Machine, Portable Ultrasound Scanner MUS 602, Color Doppler Ultrasound Scanner (Hitachi EUB).
4. **Major services** includes routine abdominal scans, doppler, USG guided biopsies, drainage, pigtail insertion and brachytherapy planning.
5. **CT Scanner:** The GE Lightspeed Multi slice CT scanner with GE Advantage Sim Virtual simulation workstations was commissioned in 2007. The major activity includes routine spiral CT scan, CT Angiography, Multi phase studies, guided biopsies, drainage procedures, pigtail insertion and treatment planning.
6. **MRI Scanner:** HDxT 1.5T Signa 16 Channel GE MRI scan was commissioned in January 2013. The machine has capability for routine imaging, whole body imaging, whole body DWI, endorectal coils for prostate, rectal and cervix imaging with prostate spectroscopy, dedicated breast coils and non contrast whole body angiography.
7. **PACS:** Has GE Centricity PACS.
8. State of art Clinical Laboratory for all usual tests.
9. Histo-Pathology Department for Cytological and Histo-pathological examinations.
10. Rooms for General examinations, Gynec examinations, Dental examinations etc., with an attached area for minor procedures.
11. Cancer awareness classes and early detection campus for the community.
12. Robot arm assisted RFA
13. 4D CT Scan
14. Full-fledged Microbiology Laboratory

Clinical facilities

1. **Linear Accelerator (Varian Clinac iX):** This dual energy high end Linear Accelerator is a complete and integrated platform for delivering state of the art Radiation Therapy treatments e.g. 3DCRT/IMRT/RapidArc/IGRT/SBRT/SRS. The system is capable of

treatment with 2 Photon Beam Energies and 6 Electron Energies. It is equipped with On Board Imaging System capable of KV Xrays, Online Fluoroscopy and Cone Beam CT images for online treatment verification and adaptive radiotherapy. The machine treats about 65 - 70 patients daily with 65 - 70% being treated with RapidArc IMRT. This machine has successfully treated over 700 patients since its commissioning in November 2011.

2. **Nucletron 16 Channel HDR Brachytherapy:** The system is capable of delivering brachytherapy treatment to various sites. The Centre practices Intracavitary, Interstitial, Intraluminal and Surface Mould Brachytherapy. The centre is in the process of acquiring a MUPIT applicator for interstitial brachytherapy in pelvic malignancies as well as Fletcher Suite CT/MRI compatible applicator. In addition the treatment planning system is being upgraded to the latest ONCENTRA brachytherapy treatment planning. A dedicated Brachytherapy OT is situated beside the brachytherapy vault.
3. **Tele Cobalt 60:** The workhorse of the treatment machine treats about 40 - 50 patients per day. The machine is intergrated with the CMS XiO treatment planning system. Compensator based treatment is offered for all radically treated head and neck cancer patients.
4. **Treatment Planning System:** The department has the latest ARIA Oncology Information System along with the ECLIPSE treatment planning system. In addition it has the ADVANTAGE Sim, PLATO and CMS XiO treatment planning systems. The PLATO treatment planning system is being upgraded to the latest ONCENTRA BRACHY treatment planning system.
5. **CT Simulator:** The department is in the process of acquiring the latest 16 slice CT Simulator capable of 4D image acquisition. The CT simulator will be exclusively available for the department of radiation oncology and will reduce the waiting list for the advanced treatment substantially. The present CT simulation is being performed on the 4 slice GE CT machine.
6. **Conventional Simulator:** The department has Conventional Simulix Simulator in which all patients are simulated. The images can be fluoroscopically transferred to the treatment

planning systems.

7. **Mould Room:** The department has a well equipped mould room with facility to make custom thermoplastic immobilization masks, vaccum cushions, compensators, Electron cut-outs etc.
8. Outpatient service is being conducted 6 days a week.
9. Average 1200 outpatient visits a week.
10. Cancer Palliative Medicine Clinic.
11. Recognized institution for possession and supply of Oral Morphine.
12. Operation theater well equipped to perform all major surgical procedures
13. Endoscopy services with Oesophagogasitric, Colonoscopic and Bronchoscopic examinations.
14. Full-fledged Blood Bank with all modern accessories and facilities for component separation.
15. Day care chemotherapy ward, Separate general wards for male and female in-patients.
16. Semi payments pay wards and single accommodation paywards
17. Post operative and pre-operative wards are also attached with this.
18. 24 hours Pharmacy dispensing all the medicines for cancer patients.
19. Tobacco Cessation Clinic
20. Stoma Clinic

Supportive Facilities

1. **Drug Bank:** Drug Bank is formulated for collection of drugs from Doctors in and around Thalassery and also sample medicines issued from various pharmaceutical companies. Such medicines are issued free of cost to the needy poor patients, who are undergoing treatment from this Centre.
2. **Home care services:** Home care services provided to patients staying nearby and who are unable to travel to MCC for availing treatment.
3. **Hospital Library for patients and relatives:** A unique Hospital library for patients, their relatives and staff is functioning in the centre since 2005. The Library is funded by

Kerala State Library Council.

4. **Tele Medicine Unit:** Telemedicine facility has been started in MCC with financial assistance from NRHM and technical assistance from C-DAC and Kerala State IT mission.
5. National Knowledge Network connectivity
6. Dynamic website www.mcc.kerala.gov.in in English and Malayalam Languages
7. Implemented eProcurement System of Govt. of Kerala.
8. Two Smart Class Rooms
9. 26 acres of elevated greenery land
10. 11KV dedicated line, which can drop power up to 2.5MW
11. Transformer capacity of 1600KVA
12. DG of 250 KVA and 500KVA
13. Effluent Treatment Plant with 110 KLD
14. Incinerator with capacity of 25KG/hr
15. Open well to cater all needs of the Hospital
16. Incinerator with capacity of 15kg/hr
17. Canteen for Patients and staff
18. Dormitory for bystanders
19. Preventive Oncology Facilities
20. Cancer awareness classes and early cancer detection camp
21. Screening tests like Mammogram & Pap smear.

Patient Welfare Activities

The Patient Welfare Committee was constituted for the smooth functioning of our Patient Welfare Activities has attributed a boost to our patient services and management. The Committee consists of Doctors of different specialties, representatives from Administrative section, Social Scientist and Nursing personnel. The Committee co-ordinates all the welfare activities of the patients who are undergoing treatment at this Centre. It promotes to raise the money for the patient welfare fund from the general public as well as staff members of Malabar Cancer Centre. Majority of the staff members generously donate to this fund. This fund is utilized for the treatment/investigations for the needy patients after proper assessment.

Patient Welfare Schemes

- Comprehensive Health Care Project for Scheduled Tribe patients.
- Prime Minister's National Relief Fund
- Chief Ministers Relief Fund
- Cancer Suraksha Scheme
- Thalolam
- Sneha Santhwanam
- CHIS PLUS
- PMRS (Pondicherry Medical Relief Society)
- Employees State Insurance Credit facility
- Karunya Benovelent fund

Patient Free Food Scheme:

As most of our patients belong to lower socio-economic strata struggling to earn for their meal, with the financial assistance from philanthropists and like-minded organizations, all in-patients are given food (three times a day) at free of cost.

Patient Welfare Fund:

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Drug Bank:

Apart from the above a Drug Bank is also formulated for collection of drugs from Doctors in and around Thalassery and also sample medicines issued from various pharmaceutical

companies. Such medicines are issued free of cost to the needy poor patients, who are undergoing treatment from this Centre.

Support Groups:

MCC initiates the formation of two support groups for the welfare and rehabilitation of Breast and Colostomy cancer patients;

- 1) **Thejas:** Thejas (Breast Support group) is started on 30-09-2009
President: Smt. Pushpa Antony
Secretary: Sr. Dissy mol
Convener: Dr. Saina Sunil Kumar, Dept. of Cancer Registry and Epidemiology
- 2) **Spandhanam:** Ostomy Association started on 21-11-2011
- 3) **Abhayam:**

Educational Programmes and activities

With the increased incidence of cancer, more

institutions are getting equipped for treatment of cancer. We realize the need for focused training in oncology, especially for medical and paramedical courses. This is a step towards better care for patients in the present milieu. It is already proposed to develop MCC as a Post-Graduate Institute of Oncology.

Regular Academic Programs:

All new cases are presented in the Daily Multi Specialty Board which are reviewed and decisions on treatment taken accordingly. Interactive discussions on a specific topic are carried out on all Wednesdays afternoon in the Radiation Oncology Cub. All Thursday morning, lectures on the recent trends in oncological care by one faculty are carried out in the Centre. On Saturdays morning, Journal club/ lecture/ morbidity meet are carried out in the centre. Apart from the regular academic programs, Continuing Medical Education Program for Doctors and Post-Graduate Students of nearby Medical Colleges are organized by MCC.

Teaching Courses at MCC

Sl No	Course	Duration	University/ Board
1	B. Sc MRT, (Medical Radiology Technology)	4 Years	Kerala University of Health Sciences
2	Basic Certificate Course in Community Palliative Nursing(BCCCPN)	6 weeks	Institute of Palliative Medicine, Kozhikkode
3	Certificate Course in Community Palliative in Auxiliary Nursing Course(CCPAN)	3 Months	Institute of Palliative Medicine, Kozhikkode
4	Fellowship in Head and neck oncology	1 Year	Institutional fellowship
5	Fellowship Programme in High Precision Radiotherapy	1 Year	Institutional fellowship
6	Fellowship in Surgical Oncology	2 Years	Institutional fellowship
7	Indian Association of Palliative Care Courses		
8	Distance education course in Cancer Pain and Palliative Medicine		

Departments and Divisions

Sl no	Name of the Department	✓ Divisions under the Department
1.	Department of Radiation Oncology	<ul style="list-style-type: none"> ✓ Radiation Oncology Division ✓ Radiation Physics Division
2.	Department of Imageology	<ul style="list-style-type: none"> ✓ For administrative purpose, this Department presently will be under Department of Radiation Oncology
3.	Department of Clinical Hematology and Medical Oncology	<ul style="list-style-type: none"> ✓ Clinical Hematology Division ✓ Medical Oncology Division ✓ Division of Medicine ✓ Division of Pediatrics/Pediatric Oncology
4.	Department of Respiratory Medicine and Critical Care	<ul style="list-style-type: none"> ✓ For administrative purpose, this Department presently will be under Department of Clinical Hematology and Medical Oncology
5.	Department of Surgical Oncology	<ul style="list-style-type: none"> ✓ Surgical Oncology Division ✓ Division of Rehabilitation Physiotherapy, Speech and Swallowing therapy ✓ Division of Gyenaecology/Gynaecologic Oncology ✓ Clinical Nutrition and Dietetics
6.	Department of Clinical Laboratory Services and Translational Research	<ul style="list-style-type: none"> ✓ Oncopathology Division ✓ Molecular Oncology Division ✓ Biochemistry Division ✓ Microbiology Division ✓ Blood Bank and Transfusion Medicine Division ✓ Genetics Division(including Cytogenetics)
7.	Department of Cancer Registry and Epidemiology	<ul style="list-style-type: none"> ✓ Cancer Registry and Epidemiology Division ✓ Medical Records Division ✓ Health Information Technology Division(Presently under Director) ✓ Clinical Research and Biostatistics Division (Presently under Director)
8.	Department of Community Oncology	<ul style="list-style-type: none"> ✓ Community Oncology Division ✓ Tobacco Cessation Division
9.	Department of Onco Anesthesiology	<ul style="list-style-type: none"> ✓ Onco Anesthesiology Division
10.	Department of Cancer Palliative Medicine	<ul style="list-style-type: none"> ✓ Psycho-Oncology and Clinical Psychology Division ✓ Home Care Services Division.

11.	Department of Dentistry and Rehabilitation	✓ Dentistry and Rehabilitation
12.	Department of Engineering and Maintenance	✓ Engineering & Maintenance
13.	Department of General Administration	<ul style="list-style-type: none"> ✓ General Administration Division ✓ Hospital Administration ✓ Academic Division & Library and Information Science ✓ Public Relations and Clinical Services Division ✓ Accounts Division ✓ Purchase/Store Division & Pharmacy ✓ Human Resources and Establishment Division ✓ Security Division
14.	Department of Oncology Nursing	✓ Nursing Services Division

DEPARTMENT OF RADIATION ONCOLOGY & DIAGNOSTIC RADIOLOGY



Dr. Santam Chakraborty
Associate Professor & HOD

INTRODUCTION

As the premier cancer centre in the country, Department of Radiation Oncology and Diagnostic Radiology are committed to provide excellence in the treatment and diagnosis of cancer. Commissioned 4DCT Simulator and the first patient were taken on 5th April. This has reduced the burden on the Diagnosis Department as the planning CT was being done at 4DCT simulator. Purchased MR Compatible Image guided Brachytherapy system and commissioned for treatment in June 2013. Upgraded the Plato Sunrise Brachytherapy system to Oncentra and the training for the new system conducted both at Nucletron Elekta Brachytherapy Academy, Chennai and at MCC also. The focus of the departments will be for well utilize the facilities available and evolve the process necessary to run for the quest of cancer. The quest for cancer will have implications on affordability, innovation on one hand and delivery/dissemination of standard of care, development of infrastructure and human resource on the other.

ACTIVITIES & ACHIEVEMENTS 2013 -2014

1. The first Rapid arc was started in March 2012. During the year 2013-2014 Rapid arc became the most preferred method of delivering intensity modulated radiotherapy in the department. Compared to the previous year, Rapid arc treatment was fine tuned for almost all sites.
2. Simultaneous integrated boost Rapid arc is the method of treatment of for all head and neck cases. For cervix and rectum also SIB started.
3. Matlab software was installed at the department for research purposes.
4. AERB has approved our centre as a research centre to accommodate for Physics interns. Next year onwards we will be having 4 interns in Physics.
5. Three students each from Madapally college, Vadagara and Sree narayana College, Vadagara had applied to do their project work in Department of Radiation Oncology.

STATISTICS

The following are the statistics for the Department in the year 2013-2014

Sl. No	Site	Number	II	Treatment on Linear Accelerator	422
I	Patients treated with Radio-therapy	1500	1	Number of fields treated	1079
1	Treatment on Cobalt	1078	2	Number of Rapid Arc	305
2	Number of Fields Treated	25967	3	Number of IMRT	2
3	Palliative Treatments	887	4	Number of 3DCRT	119
4	Radical Treatment	191	5	Number of Electrons	68
			6	Number of SBRT	1
			III	Treatment with HDR Brachy-therapy	75
				Total Sessions Treated	215

STAFF

Sl. No	Name	Designation
1.	Dr.Santam Chakraborty	Associate Professor
2.	Dr.Geetha.M	Assistant Professor
3.	Dr.Sameer.E.P	Lecturer
4.	Dr.Greeshma.K.E	Lecturer
5.	Dr.Vinin.N.V	Assistant Professor
6.	Dr.Joneetha Jones	Assistant Professor
7.	Dr.Syamkuamr.S.A	Lecturer, Radiation Physics
8.	Ms. Suja.C.A	Lecturer, Radiation Physics
9.	Mrs.Silpa Ajaykumar	Lecturer, Radiation Physics
10	Mrs.Resmi.K.Bharathan	Lecturer, Radiation Physics
11	Mrs.Sriji Soman	Technologist
12	Mr.Renjith.M	Technologist
13	Mr.Najeed.K.A	Technologist
14	Mrs.Rijisha	Technologist
15	Mr.Nijeesh.P.T	Technologist
16	Mr.Rejinish Kumar.O.A	Technologist
17	Mr.Gibesh.K.P	Technologist
18	Mrs. Dhayna.V	Technologist
19	Mrs.Beena.P.K	Technologist
20	Mrs.Chippy Mohan	Technologist
21	Ms.Anithakumari	Technologist
22	Mr.Sandeep	Mould Room Assistant
23	Mr.Sujith	Mould Room Assistant

DEPARTMENT OF IMAGEOLOGY



Dr. Satheesh Babu
Assistant Professor

INTRODUCTION

Imageology is one of the fastest developing speciality of medicine. It has greatly influenced development of other speciality and is still doing so. It has become an important pillar in the diagnosis and management of cancer. Accurate and early diagnosis is the only way at present to cure cancer and good clinico-radiological skill plays an important role in this. This speciality has slowly started diversifying in to many sub specialities and one of the important subspeciality which has influenced oncology is interventional radiology. It is not only important in the therapeutic aspect but also in palliation. New imageology block was inaugurated in 2008. In the initial phase , department acquired 4 slice CT scan and a Doppler machine. Later , the department acquired state of the art machines and is steadily thriving to become one of the best radiology department in this part of Kerala. The Department of Imageology has seen a tremendous increase in the number of diagnostic imaging and interventions performed.

ACTIVITIES & ACHIEVEMENTS 2013 -2014

1. Developed protocols for CT examination of different organ cancers. This has increased the throughput with very minimal technical and manual error. More and more CT guided procedures like FNACs, biopsies, aspiration, pigtail insertion and RFA was started. Angiograms and multi phase studies were started adding to better quality diagnostic services to the clinicians. Statistics are given below.
2. MRI which completed its installation in Jan 2013 , saw a steady increase in the number of cases and its statistics is given below. Implemented standard protocols for Ca tongue, Ca rectum, MR mammogram, MR angiogram and whole body imaging. Whole body diffusion weighted imaging helps in the metastatic workup of cancer patients without exposing them to radiation and intravenous contrast. More than 300 cases were done and data was presented in Indian Cancer Congress held in New Delhi. MR guided RT planning protocols were developed with the help of department of Radiation Oncology.

3. Installed Kerala's first Breast tomosynthesis machine . Doctors and female technicians in the department were trained by Hologic engineers from Belgium on image acquisition and breast interventions. Breast interventions include stereotactic biopsy, wire localization and vacuum assisted biopsy. Following installation , more than 1000 3D mammogram, 4 vacuum assisted biopsy , 2 stereotactic wire localization and 13 USG guided wire localization has been done. Images are of excellent quality helping us in detecting lesion in very early stage. Difficult cases were complimented by MR mammogram done using 16 channel HDxT 1.5 T MRI machine.
4. Towards the end of August , we acquired Starbust radiofrequency ablation system. RFA is a minimally invasive procedure in which a thin needle electrode is inserted into an unresectable liver lesion under ultrasound or CT guidance. Electrical energy is delivered through the electrode to the lesion which produces heat within the cells surrounding the electrodes, killing the cells when lethal temperature is reached. Two patients underwent ablation therapy , one for metastatic colorectal cancer and other for HCC in segment 8 of liver.
5. In December 2013, we acquired Maxio Interventional Radiology Assistance platform from Perfint Healthcare Ltd. It helps to place biopsy or RFA needle in difficult to assess areas with less effort. With one planning CT , it is possible to target a lesion in anatomically inaccessible area with less radiation , less trauma due to repeated needle placement and greater accuracy . Soon after its installation we have done one RFA and few biopsies.
6. Department faculty is also involved in conducting classes and internal assessment of 1st , 2nd and 3rd year BScMRT students. Nearly 300 hours are dedicated for classes. Regular teaching session is also conducted for head and neck fellows.
7. Acquired Zeilm C arm system , which is at present used for swallow studies and urological and orthopaedic oncological surgeries. Video fluoroscopic swallow study data was presented in ISRT national conference by our technologist.

STATISTICS

The following are the statistics for the Department in the year 2013-2014

Sl. No	Site	Number
1	X Rays	4839
2	USG	630
3	Mammogram	1200
4	CT	3110
5	MRI	1105
6	USG guided Procedure	98
7	CT Guided FNAC/Biopsies	150
8	RFA	2
9	Robot guided RFA	1
10	Robot guided FNAC/Biopsy	8

STAFF

Sl. No	Name	Designation
1.	Dr. Satheesh Babu	Assistant Professor
2.	Dr. Sarath KE	Lecturer
3.	Sherin Paul	Technician
4.	Seena Pratap	Technician
5.	Sindhu	Technician
6.	Adarsh	Technician
7.	Shijith	Technician
8.	Deepu	Technician
9.	Jayakumar	Technician
10	Greeshma	Technician

PUBLICATIONS

1. Use of SSFP sequence in treatment planning of base of skull malignancies- Abstract in Indian Journal of Cancer(Vol 50,Nov 2013)
2. MR whole body diffusion weighted imaging in staging and assessment of tumour burden in patients with malignancies: Initial experience (Vol 50 , Nov 2013)

CONFERENCES , SEMINARS, WORKSHOP AND PRESENTATIONS

1. Has participated in two panel discussion in Peripheral Meet of FHNO “MARCH 2013”, organized by Malabar Cancer Center, Thalassery, Kerala on 1st and 2nd June 2013, at Kannur. First was on oral cancers and second on paranasal tumours. Presented a poster on “MRI in the differential diagnosis of uncommon neck swelling- A case study”.
2. Was a guest speaker in Continuing Nursing Education conducted on 3rd August 2013, at College of Nursing ,Thalassery. CNE was on bone malignancy and the talk was on “Radiology of Bone tumours”.
3. Attended as delegate in 32nd Annual Conference of IRIA, held in Trivandrum, Kerala on 22nd ,23rd and 24th of March,2013
4. Training – Attended 12th annual meeting on evidence based management of cancers in India with emphasis on oncologic imaging at Tata Memorial Center, Mumbai from 27th February to March 2nd, 2014

RESEARCH PROGRAMMES

Ongoing projects in MCC

1. Retrospective audit of 3D mammogram detected clinically non palpable BIRADS 3,4 and 5 breast lesions
2. CT guided lung biopsy – diagnostic accuracy and complication rate
3. Developing a tool which can be used by any non medical person to detect deep vein thrombosis in community settings and ICU by collaborating with HTIC, IIT ,Madras

Completed projects in MCC

1. To predict the parameters affecting the accuracy of CT compatible robotic system
2. Baseline ADC value in patients with oral cancers undergoing pretreatment MRI evaluation – Data from a tertiary Cancer Center
3. Assessment of aspiration in head and neck cancer patients using video fluoroscopy.

DEPARTMENT OF CLINICAL HAEMATOLOGY AND MEDICAL ONCOLOGY



Dr Chandran K Nair
Associate Professor & HOD

INTRODUCTION

The Department aims to offer a comprehensive and state of the art treatment to patients with all types of hematologic disorders. This includes addressing patients with various non malignant hematologic disorders like anemia, thrombocytopenias, and homeostatic disorders .

Our major chunk of patients are with hematologic malignancies

1. Acute myeloid leukemia: treatment of myeloid leukemia is based on risk stratification based on cytogenetics and molecular markers. Any patient with high risk AML is offered allogeneic stem cell transplant. Good risk patients are offered consolidation chemotherapy.
2. Acute lymphoblastic leukemia: Both pediatric and adult ALLs are treated here. For pediatric patients (<18 years of age), the government of Kerala offers help in the form of CANCER SURAKSHA SCHEME, so that majority gets treated free of cost. We follow BFM protocol for pediatric and adolescent ALL and GMALL/HyperCVAD protocol for adult ALL. All patients are risk stratified at diagnosis with conventional karyotyping and molecular tests. High risk patients are offered allogeneic stem cell transplant.
3. Chronic myeloid leukemia: We have access to the GIPAP program by which patients can get Imatinib free of cost. For imatinib failure /intolerant patients, second generation TKIS are offered.
4. Hodgkins and Non Hodgkin's lymphoma: Protocol wise treatment is offered for this group of patients. We follow NCCN guidelines here. Autologous transplant is offered for relapsed/refractory lymphomas.
5. Multiple myelomas: On an average we see 50-75 new myeloma cases per year. Treatment is decided as per patient's age, comorbidity and performance status . For patients below the age of 65 years and with good PS, autologous BMT is offered (High dose melphalan)

Hemato-oncology OP clinic is conducted on all week days. Beginning hematological disorders are also treated at MCC. Chemotherapy of all solid tumors is administered in this Department. The Department has the following divisions;

1. Clinical Hematology Division
2. Medical Oncology Division
3. Pediatric Oncology Division

MAJOR ACHIEVEMENTS

- Development of chemotherapy expectation proforma, Malayalam translation and its validation done
- Audit of NCCN distress thermometer
- Development and testing of triple drug metronomic in Head and neck cancer
- Studying the feasibility of weekly paclitaxel and carboplatin in ovarian cancer
- Studying the feasibility of 3 drug NACT in head and neck cancer
- All India survey of chemotherapy safety practices
- Analysis and formulation of FN guidelines for MCC
- Audit of geriatric patients of MCC
- Drafting of national guidelines for meta-static head and neck cancers.
- Letter of critical review of DeCIDE study.

ACADEMIC ACTIVITIES

- ITP in children- Dr Chandran K Nair (topic presented at CME organized by IAP,Thalassery)
- Organized 3rd CME in Clinical and Laboratory Hematology and National Hematology Quiz (State round) on 22nd and 23rd June 2013 at Hotel Hyson Heritage,Calicut
- Interpretation of CBC-Dr Chandran K Nair (presented at state level CME of IAP Pediatric Hematology chapter organized by IAP,Kannur)
- Panel discussion on Treatment of AML in elderly (at Bangalore) participated by Dr Chandran K Nair
- 15 days observership done by Dr Aboobacker Mohamed Rafi (Post Graduate student in Transfusion Medicine, Jubilee Mission

Medical College,Thrissur)

- Class for MSc Oncology Nursing students on the topic “ Overview of Pediatric malignancies”- Dr Vineetha
- Continuing Nursing Education programme on Hematopoetic Stem Cell Transplantation at MCC,Thalassery .The following topics were presented.
- Autologous Blood transfusion –talk by Dr Chandran K Nair at IMA,Kanhangad
- Approach to Lymph Node Enlargement- Dr Chandran K Nair (Presented at Physicians club,Thalassery)
- Approach to thrombocytopenia- Dr CKN , presented at IMA State Conference, Thalassery
- Bone Marrow Transplantation in Thalassemia-Dr CKN, presented at meeting of Thalassemia society, Calicut
- Awareness programme about BMT in Thalassemia patients- By Dr Chandran K Nair at Calicut
- Video demonstration of care of central line to nursing staff at MCC,Thalassery
- Preparation of Training Module for doctors from Kerala Government Health Service in Care of Cancer patients
- Awareness programme for Sickle cell anemia patients and parents at Meenangadi , Wayanad- Talk given by Dr Chandran K Nair
- Lifestyle diseases overview(health education for public)- Dr Manu Prasad
- Topic presentations in the unit:
- Classes for Doctors from Kerala Govt Health Services who are undergoing training at MCC, Tly:
- Class for BSc MRT students:

STATISTICS

The following are the statistics for the Department in the year 2013-2014

OPD	Number of Patients
Hematology OPD	6271
New Cases in Hematology OPD	447
Hemato Oncology	285
Benign Hematology	162
BMT Unit Statistics	
Allogenic HSCT	2
Autologous HSCT	2

STAFF

Sl. No	Name	Designation
1.	Dr. Chandran K. Nair	Associate Professor and HOD
2.	Dr. Vijay Patil	Assistant Professor, Medical Oncology
3.	Dr. Praveen Kumar Shenoy	Senior Lecturer, Medical Oncology
4.	Dr. Manu Prasad	Senior Lecturer, Medical Oncology
5.	Dr. Vineetha	Assistant Professor, Pediatrics
6.	Dr. Jithin T.K.	Assistant Professor, Pediatrics
7.	Dr. Amith Sreedharan	Assistant Professor, Pulmonology

INNOVATIONS:

- First Autologous HSCT in a 43 year old female- a case of Multiple Myeloma
- Flowcytometry in peripheral blood and Bone Marrow aspirate samples for diagnosis and typing of Hematological malignancies
- Grand rounds introduced on all Saturdays where each I.P case is discussed in detail.
- First Allogeneic HSCT at MCC, Thalassery for a 26 year old male with severe aplastic anemia

PUBLICATIONS:

- Pleural effusion during acute myeloid leukemia induction chemotherapy: A perplexing case. Nair CK, Kumar M, Odayoth SM. J Cancer Res Ther. 2013 Apr-Jun;9(2):290-1
- Recent Trends in Stem Cell Research on Cancer Therapeutics, Shanju S, Sangeetha K, Chandran K. Nair, Satheesan B, Research Journal of Biotechnology, Vol. 8 (4) April (2013)
- Bleomycin lung toxicity in Hodgkins Lymphoma patients – A Retrospective Study at a tertiary cancer centre in North Kerala: Chandran K Nair, Vineetha Raghavan, Subhradev Sen, Satheesan Balasubramanian. IJC accepted
- An audit of febrile neutropenia cases from a rural cancer center in India. IJC accepted
- Patterns of care in Geriatric Cancer Patients - An audit from a rural hospital based cancer registry in Kerala. IJC accepted
- Audit of pediatric oncology practice at a rural government tertiary cancer centre in South India. IJC accepted

CONFERENCES ATTENDED:

- 3rd CME in Clinical and Laboratory Hematology and National Hematology Quiz (State round) at Calicut organized by MCC

- Pediatric Hematology CME of IAP Pediatric Hematology chapter organized by IAP, Kannur (Attended by Dr CKN and Dr Vineetha)
- Maintenance therapy is it the standard of care? Debate–Dr Vijay Patil participated in the debate at International Conference, UAE, Dubai
- Hematocon 2013 (Mumbai) attended by Dr Chandran K Nair as faculty and spoke on renal dysfunction in Myeloma.
- Bleomycin lung toxicity in Hodgkins Lymphoma patients – A Retrospective Study at a tertiary cancer centre in North Kerala: poster presentation at ICC 2013
- Indian Cancer Congress: Attended by Dr Vijay Patil and Dr Sujith
- Hematology conference at AIMS, Kochi- attended by Dr CKN as faculty
- Dr CKN attended Winter symposium at CMC, Vellore on 10th, 11th, 12th Feb 2014
- Dr CKN attended workshop in Hematopoietic Stem Cell Transplant at Apollo hospital, New Delhi on 19th Feb 2014.
- Dr Vineetha attended Kerala Neocon at Perinthalmanna on 22nd and 23rd Feb 2014 as delegate.

AWARDS

- National
 - ISO (ICC Nov 2013) : First prize for oral presentation
 - ICON March 2014 : First prize for case presentation
- International
 - ASCO/IDEA award for 2014
 - ASCO/ International trial workshop fellowship 2014

DEPARTMENT OF SURGICAL ONCOLOGY



Dr. Syam Vikram
Associate Professor & HOD

INTRODUCTION

The department of Surgical Oncology had been more active during the year 2013-14. There was increase in the number of patients treated by surgery. The staffs and residents participated in various conferences and won awards in presentations. The department was headed by Dr Syam Vikram during this period.

ACADEMIC ACTIVITIES

Training to students:

- **Fellowship in Head and Neck Oncology:** Second batch completed course in Aug 2013- Two trainees. Third Batch started course in Aug 2013 – Two trainees, continuing
- **Training for MS students:** Trained five MS (General Surgery) students from various Medical Colleges in Kerala.
- **Training for BASLP students:** Trained 20 students for one month each, in speech & swallowing therapy.



STATISTICS

Total Number of Surgeries performed: 1133

Sl. No	Site	Number
1	Head and Neck	301
2	Breast	370
3	GIT	160
4	Gynaecology	125
5	Urology	49
6	Bone & Soft tissue	101
7	Others	27
	Total	1133

PUBLICATIONS

- Quality of life assessment after neck dissection in head and neck cancer patients: impact of selective neck dissection and radiotherapy. Sajith Babu, Anju EM, Suriy Salih, Geetha M, Sameer EP, Greeshma KE, Santham C, Syam Vikram, Satheesan B; Indian Journal of Cancer : Suppl; Nov 2013.
- Noncompartmental excision of tongue cancer- is the outcome same? Sajith Babu, Dinesh Kumar, Suriy Salih, Geetha M, Sameer EP, Greeshma KE, Santham C, Syam Vikram, Satheesan B; Indian Journal of Cancer : Suppl; Nov 2013
- Prognostic implication of tumour thickness in oral carcinoma: A retrospective

STAFF

Sl. No	Name	Designation
1.	Dr. Satheesan B.	Professor & Director
2.	Dr. Syam Vikram	Associate Professor
3.	Dr. Sajith Babu TP	Associate Professor
4	Dr. Surji Salih	Associate Professor
5	Dr. Sampada Desai	Assistant Professor
6.	Dr. Shiva Kumar	Assistant Professor
7.	Dr. Nizamudheen	Assistant Professor
8	Smt. Reena	Dietician
9	Smt. Roopa	Physiotherapist
10	Sri. Aneeth	Speech & Swallowing Therapy

Non Academic Staffs

Sl. No	Name	Designation
1.	Sri. Krishnakumar	Chief OT Technician
2.	Sri. Bipin	OT Technician
3.	Sri. Mayan	Dialysis Technician
4	Sreelatha	Staff Nurse
5	Shyja	Staff Nurse
6.	Jisha K.	Staff Nurse
7.	Sajina	Staff Nurse
8	Smitha	Staff Nurse
9	Sreejith	Nursing Assistant



analysis. Atul Singh, Sajith Babu; Indian Journal of Cancer : Suppl; Nov 2013

- Impact of adverse histologic factors in oral cancers- Audit of prospective data base. Shubrah Chauhan, Sajith Babu; Indian Journal of Cancer : Suppl; Nov 2013
- Radiation induced Extra-osseous Osteoblastoma – A Case Report and Review of Literature. Syam Vikram, Suriy Salih, Aswathy Krishnan, MP Nizamudheen, Sajith Babu, Sithara A, N Sangeetha, B Satheesan; Indian Journal of Surgical Oncology :Dec 2013, Vol 4(4) p374-377.
- Unique surgical issues in the management of a giant retroperitoneal schwannoma and brief review of literature. Kuriakose S, Vikram S, Salih S, Balasubramanian S, Mangalaseri Pareekutty N, Nayanar S. Case Rep Med. 2014;2014:781347. doi: 10.1155/2014/781347. Epub 2014 Mar 6.

CONFERENCES CONDUCTED

- Peripheral meet of Federation for Head and Neck Oncologists (FHNO), MARCH – Malabar Cancer Centre Conference on Head and neck cancers held at Kairali heritage, Kannur on 1st and 2nd June 2013.
- Academic Partner in conference, FREEDOM, organized by Mahe Institute of Dental Sciences.

TRAINING:

- Dr Syam Vikram did one month training in the department of Hepatobiliary surgery at AIMS, Kochi
- Dr Sajith Babu did one week hands on training programme in micro vascular surgery and skull base surgery at AIMS, Kochi

AWARDS

- Dr. Suriy Salih got best poster award at ASI peripheral meet
- Dr Sudheesh.M got best paper presentation award at Conference held at Thrissur
- Dr. Nizamudheen got selected for MCh in Surgical Oncology at Tata Memorial Hospital.

RESEARCH PROGRAMMES

The following research was completed during the year 2013-14.

- Study to assess the incidence of Phrenic nerve injury following neck dissection – Dr. Sajith Babu, Dr. Shubrah Chauhan.
- Incidence of level-IIB lymphnode metasis in oral cavity carcinoma -prospective study- Dr. Sajith Babu, Dr. Atul Singh.
- Comparative study of serum IgA level in pre & post treated oral cancer patients- Dr. Suriy Salih, Dr. Vini J Kanchan.
- Breast conservation surgery with oncoplastic reconstruction in a tertiary cancer centre an early evaluation- Dr. Nizamudheen.
- Surgical morbidity prediction in older cancer patients-Dr. Syam Vikram.
- A retrospective analysis of maxillectomy defects, reconstruction and outcome - Dr. Sajith Babu, Dr.Sudheesh M.
- Lymph node mapping and lymph node ration for oral cancer and its implications- Dr. Sajith Babu, Dr. Kulkarni Prashant.
- Investigation in cervical nodes with metastasis of unknown origin- Dr. Sajith Babu, Dr. Kulkarni Prashant.
- Retrospective analysis of mandibular invasion in oral squamous cell carcinoma: clinico pathologic correlation- Dr. Sajith Babu
- Quality of life assessment of patients with head and neck cancer after mandibulectomy- Dr. Sajith Babu

The following research projects are ongoing in the department of Surgical Oncology.

- Effect of radio therapy on hearing in head & neck cancer patients-a pre & post comparative study- Mr. Aneeth M.
- Assessment of the morphology of the tumor front in tongue cancer using mri and its surgical implications; a prospective study – Dr. Sajith Babu, Dr. Sudheesh M, Dr. Hamsanandini.

Division of Clinical Nutrition & Di- etetics

Conferences & Programmes attended

- Participated as a resource person in different Education programme conducted for Doctors, nurses, health inspectors, ICDS Supervisors, Anganwadi workers throughout district, organized by District Medical Office, State Nutrition Board, Kerala etc during the year 2013. (in different topic diet in Iodine deficiency disorder, nutrition for pregnant & lactating mother, Balanced diet, Diet in Non communicable disease etc.).
- Attended different Examination valuation camps of BSc & Post Basic BSc Nursing in Kerala University of Health Science, Thrissure during the year 2013.
- Taken duty as practical examiner for the conduct of practical examination Project Viva voce of BSc Home Science Students during the year 2013, kannur University.
- Training given to staff of Abhaya foundation, kodeyeri to start new Enteral feed unit for Oncology patients, who are undergoing treatment at Malabar Cancer Centre on 25/6/2014.
- Given education class in “Spanthanam” in the Topic Diet in Colostomy on 12/10/2013.
- Training given to canteen staff for preparing enteral feeds & food for Bone marrow transplant patients.
- Feed room started at Malabar cancer Centre for feeding patients with special needs- such as enteral feeding, liquid diet, blenderized feeds.
- Separate food preparation Unit for Bone marrow transplant patient was started on 15/07/2013.
- Actively organized & participated in Canteen Day celebration conducted at MCC canteen on Dec 25th 2013.
- Done visit to various institutions, such as Pariyaram Medical College, pariyaram, Kannur (7/05/2013), Yenappoya Medical College, Mangalore, Sree Krishna Resturent, Vadakara (8/10/2013), Beach restaurant, Calicut, Zain resturent, Calicut etc to identify the present infrastructure & modern facilities available, there to take care of patients, with the aim to improve the status of our canteen.
- Developed a high calorie/ protein rich mix & it is giving to our enteral feeding patients.
- Participated as a faculty in Continuous Nursing Education on Stem Cell Transplantation AGAMA- 2013 in the topic Diet in Bone Marrow Transplantation on 20/10/2013.
- Resource person at “Scientila” Education Programme in Head & Neck Cancer in the topic “Nutritional Support of Head & Neck Cancer Patients”.
- Attended State level Education Programme/ conference of Indian Dietetic Association, Kerala Chapter during March 2013.
- Participated in Hospital Nutrition Expert Group meeting on 24 th August 2014, Bangalore organized by Abbot Nutrition Health Institute.
- Participated in UGC sponsored National Seminar “Diet in Life Style Disease” conducted by Nirmalagiri College, Kuthuparamba on 30/10/2013.
- Participated as a delegates in Head & Neck Conference MARCH organized by Malabar Cancer Centre on 2 and 3 June 2013.
- Participated in workshop cum education programme on Ketogenic Diet by British Biological at Calicut in 2013.
- Taken education class on 25/02/2014 in the topic Diet & Life Style Disease at Malabar Cancer Centre organized in connection with Healthy Life Style Month.
- Taken class in the topic Sreethikalum Arogyavum for Mahila Samajam at Irinhal peedikka on 26/06/2013.
- Arogya Jeevitham- Bhakshanathiloode – education classes for vanitha vedhi kodeyeri unit at PHC kodeyeri.
- Conducted class in Diet in Cancer & Palliative Care for Palliative students in Malabar Cancer Centre.
- Conducted a radio talk at Akashavani real FM in the topic “Role of Diet in prevention & management of Breast cancer” on world breast cancer awareness day 2013.
- Participated as a member of Panel discussion in Pink ribbon Day celebration conducted at Malabar cancer centre during at 27 oct 2014.
- Participated as a faculty by taking classes on the topic “Overview of Nutritional Support in Cancer Patients” in NUTRIPEN 2014 educa-



tion programme in Nutrition on 15 th November 2014 at Malabar cancer centre.

CONFERENCE ORGANIZED

- Organized & conducted an education programme in Nutrition, NUTRIPEN 2014-“Enteral & Parenteral Nutrition Support” on 15 th November 2014 at Malabar Cancer Centre.

ARTICLE PUBLISHED

- The book released in Malabar Cancer centre Spandhanam oru ithal koodi on world Palliative Care day, Arbhudavum Sandwana Chikilsayum- Paricharana Pathayil nammal Ariyendath.....”diet in Palliative Care”
- Book released by kerala Bhaska institute on pink ribbon day 2014 “Sthanaarbhadham” – Diet in the prevention & management of Breast Cancer”
- Informative Brochure released on world life style month- Prevention of life style disease
- Article in Mathrubhumi Arogya Masika june 2013 in the topic “ Yellurappakkan Calcium”
- Article in Mathrubhumi Arogya masika July 2013 “Ruchikaram Poshaka Samrutham Noodles”
- Article in Mathrubhumi Arogya masika “Cancer Thadayan Bhakshanakramam’ December 2013
- Article in Mathrubhumi Arogya masika “Cancerine cherukkunna 20 ilakkarikal” December 2013.
- Article in Mathrubhumi Arogya masika ”Cancer Roghikalude Bhakshnakramam”- may



2014.

- Written article in IMA magazine of Malabar Cancer centre – Lokathe aaru theetti pottum.

DIVISION OF PHYSIOTHERAPY

Academic Programmes Conducted/Attended

- Faculty in Education programme for limb salvage surgery patients and family members conducted by Sanjeevini, MCC on September 13-2013
- Faculty in Nursing conference “vancos Os” – Bone Tumor in depth conducted by Msc Nursing Students at College of Nursing ,Nettur. Thalassery on March 9 -2013
- Education programme for BCCPN Students 2012 onwards (all Batches), BCCPAN Students 2010 onwards (all Batches) in MCC
- Education Programme for District Hospital Nurses-Role of Physiotherapy In Oncology at MCC on January 2013
- Talk in Kannur FM radio station –Breast Cancer Awareness Programme,on 28 October-2013
- Faculty in CNE “SYOPA”-Nature of Rehabilitation In Bone &Soft tissue Sarcoma on October 19,2014.
- Participated in Panal Discussion Pink Ribbon Day Programme at MCC on October 27-2014
- Participated in Nutritional Education Programme-“NUTRIPEN ”ON November 15 ,2014-at MCC

ARTICLE

“STHANARBUTHAM”-Published by Kerala Basha Institute-2014.

DEPARTMENT OF CLINICAL LABORATORY SERVICES AND TRANSLATIONAL RESEARCH



Dr.Sangeetha K. Nayanar
Professor & HOD

INTRODUCTION

The Department of Oncopathology provides all diagnostic services including Surgical Pathology reporting, Cytopathology work like FNAC & Aspiration cytology and Haematology services like Automated Blood cell counts, Peripheral smear & Bone marrow studies. Special studies like Frozen sections using Cryostat for intra-operative diagnosis, Immunohistochemistry for diagnosis of difficult or rare tumours are also performed. The service laboratory is on its way to acquire state-of-art new machines & instruments, thus ushering in latest technological advances in disease diagnosis.

Transfusion Medicine Division

A full-fledged Blood Bank is functioning in this Centre with facilities for providing whole blood as well as components like packed RBCs, platelet rich plasma, platelet concentrate, single donor plasma, cryoprecipitate and fresh frozen plasma.

This is one of the most well equipped blood bank in the North Malabar region and caters to lot of hospitals in and around Thalassery & Kannur. Blood grouping & donation camps and awareness classes are conducted routinely, thereby generating greater public interest in blood donation and transfusion related diseases. The Blood Bank at MCC is now starting Apheresis services as well.

The Blood Bank is well-staffed with qualified technicians, is well-equipped, well-ventilated & located at an easily accessible point in the hospital.

Molecular Oncology Division

A Research oriented well equipped molecular oncology laboratory will be functioning very soon.

Microbiology Division

A well equipped microbiology laboratory will be opening shortly. This will be functioning with experienced and talented microbiologists and technicians. Apart from all the conventional microbial cultures, microscopic procedures and serological methods we have fully automated machines which will help us to fine tune our services. The BACTEC 9050, automated blood culture system will enable us the rapid detection of blood pathogens. Replacing the cumbersome conventional methods, the automated identification and

sensitivity system-BD Phoenix 100 identifies and furnishes susceptibility test results accurately & in quick time. With all these equipments and expertise, the microbiology lab will provide state of the art facilities in empowering clinical decisions.

Biochemistry Division

The Clinical Biochemistry laboratory provides the best support in diagnosis and management of cancer patients using tests and procedures that meet the international standards of quality assurance. The quality of the test results were assessed by both internal and external quality assurance programmes. The policy of the lab is to provide reliable and dependable results with accuracy and precision. The department is equipped with fully automated analysers for the analysis of complete biochemistry parameters, Immuno-assay system for the analysis of different types of tumour markers. Automated Electrophoresis apparatus and Coagulometer are new additions to the armamentarium, Arterial Blood Gas (ABG) analyser caters to effective monitoring of critical care patients on therapy and also the preoperative and postoperative evaluation in surgical patients. Trained technicians under able faculties execute the daily outpatient and inpatient sample load. The laboratory provides an advanced training as observers for B.Sc. and M.Sc. students in Medical Biochemistry, Biochemistry, MLT and Biotechnology.

STATISTICS

Clinical reports of Histology, Cytology and Community oncology

Sl. No	Description	Number
1	Biopsy	2416
2	FNAC	948
3	Fluid Cytology	276
4	Cervical Cytology	397
5	PAP/CAMP	3960
6	SOB	1242
7	SOC	367
8	IHC	902
9	Frozen	183

Clinical reports of Hematology and Biochemistry

Sl. No	Description	Number
1	Hematology	33714
2	Biochemistry	36974
3	Urine Analysis	1414
4	BMA	318
5	Peripheral Smear	651
6	ABG	288
7	Hormone Tests	2929
8	Blood Group	2444
9	Tumour Assay	824

Clinical reports of Microbiology

Sl. No	Description	Number
1	Blood & CS	767
2	Urine & CS	974
3	Exudates & CS	964
4	Environmental	487
5	Sputum AFB	195
6	Gram Stain	441
7	Fungal Culture	34
8	Wet mount	27
9	CRP & Mantoux	2
10	CRP, Widal & Mantoux	229
11	CRP	132
12	Mantoux	8
13	Stool	5
14	KOH	1
15	RA Factor	2
16	VDRL	2
17	BOT	18
18	Widal	2
19	Free	14

Clinical reports of Hematology and Biochemistry

Sl. No	Description	Number
1	Blood Donation	4355
2	Component Preparation	10383
3	Screening Test	4405
4	Blood Donation Camp	21

PUBLICATIONS

- Unique surgical issues in the management of a giant retroperitoneal shwannoma- Dr. Santhosh Kuriakose, Dr.Syam Vikram, Dr.Surij Salih,Dr.Nizamudeen M.P, Dr.Sangeetha Nayanar, Dr.Satheesan B –IJCO 2013
- Clinicopathological profile of salivary gland tumours- Dr.Sithara A, Dr.Sangeetha Nayanar, Dr Bithun Balan K, Dr Sujith Kumar M, Mr Subhradev Sen,Dr Surij Salih, Dr Satheesan Balasubramanian- Indian Journal of Cancer-2013
- Recent trends in Stem cell research in Cancer therapeutics-Dr.Shanju, Dr.Sangeetha K, Dr.Satheesan B -Research Journal Biotechnology- 2013
- Current trends in Cancer vaccines in a bioinformatics perspectives-Dr.Shanju Dr.Sangeetha K,Dr.Satheesan B -Asian Pacific Journal of Cancer Prevention-2013
- Utility of squash smear cytology in Fibre-optic biopsies- Dr.Sangeetha K,Dr.Aravindan K P, Dr.Kumari Chandrika B- Journal of Cytology-Jan –March 2014
- A primer on next –Generation Sequencing: Application in Cancer Research-Health science Journal- Dr.Geo Francis, Dr.Sangeetha K Nayanar,Dr.Satheesan Balasubramanian
- Metastatic carcinoid in mesenteric lymph nodes from occult primary in the midgut:A report of two cases-Dr.Divya KP ,Dr.Sangeetha

K, Dr.Syam V, Dr.Surij S, Dr. Satheesan Balasubramaniam.— Indian journal of Pathology-Research & Practise.

CONFERENCES

- 1) Clinicopathological discussion on tumours of Nasopharynx—CME on Head & Neck Oncology,June 2013-Dr.Sithara A
- 2) Stem cell preparation Continuing Nursing Education- 2013- Dr. Aswathy M K
- 3) Clinicopathological profile of salivary gland tumours-ICC 2013,New Delhi—Dr.Sithara, Dr. Divya KP & Dr. Kavitha KP attended international CME on Feb 27th 28th &March 1st and presented academic papers.
- 4) Dr. Divya KP won second prize for the paper-Evaluation of chemotherapeutic response and role of limb salvage surgery in malignant tumors of long bones- a two year study
- 5) Dr.Kavitha KP presented paper on-an analysis of pathological profile and response after neo-adjuvant chemotherapy/chemoradiation in breast cancer
- 6) Ms.Sabna Dev & Mr. Shefeeque Ibrahim attended a workshop on “Liquid Based Cytology” at Tata Memorial Hospital,Mumbai.
- 7) Dr. Sithara Aravind attended a training programme on “Liquid Based Cytology” at PGI, Chandigarh.



RESEARCH PROGRAMMES

- Molecular characterisation of NCOA3/SRC3/AIB1 status in the intrinsic subtypes of breast carcinoma-Dr.Geo Francis
- Identification of serum biomarkers in Lung cancer patients-Dr.Shanju S
- Bilateral breast carcinoma- a population based study of incidence,risk factors,tumour characteristics and survival-Dr.Sithara Aravind.
- Comparison of conventional & Liquid based cytology in Cervical smears-a multicentric trial- PGI,Chaadigarh & MCC,Thalassery
- Role of sentinel lymph node biopsy in Carcinoma breast- a study using frozen sections- Dr.Syam Vikram,Dr.Sangeetha K ,Dr.Satheesan B(to commence)
- Incidence of HPV in oral cancers- a study using immunohistochemical methods-Dr.Shiva Kumar,Dr.Sajith Babu,Dr.Sangeetha K(to commence)
- A study on Acinetobacter infection in cancer patients of MCC- Dr.Gufran,Dr.Sajini,Mrs. Savitha
- Assessment of risk & prognosis of thrombotic complications in cancer patients-Dr. Aswathi(to be presented in IRB)
- A correlation between MRI imaging & histopathology of T3 colorectal cancers-Dr.Satheesh Babu,Dr.Aswathy K M,Dr.Santham.C.

Department of Clinical Laboratory Services and Translational Research		
Oncopathology Division		
1	Dr.Sangeetha.k.Nayanar	Professor & HOD
2	Dr.Kavitha.k.p	Associate Professor
3	Dr.Sithara Aravind	Assistant Professor
4	Dr.Aswathi.k	Assistant Professor
6	Sabna Dev. S.K	Cytotechnologist
7	Nimi. G.K	Cytotechnologist
8	Padmanabhan. M.V	Trainer in Histopathology Techniques
9	Shefeeque. I	Cyto Technician
10	Soumya. V.K	Lab.Technician
11	Pravisha.T	Data entry operator
Microbiology Division		
1	Dr.Gufran Ahmmed Bijapur	Consultant Microbiologist
2	Dr.Sajini Samuel	Assistant Professor
3	Mrs.Sindhu	Lab Technician
Biochemistry Division		
1	Dr. S. Shanju	Assistant Professor
2	Dr.Binu. KA	Lecturer in Biochemistry
3	Mini. K.A	Lab. Technician

4	Rohini.G.S	Lab. Technician
5	Anisha Bhaskaran	Lab. Technician
6	Seena Sukumaran	Lab. Technician
7	Anish	Lab. Technician
8	Reena.K.C	Lab. Assistant
Blood Bank and Transfusion Medicine Division		
1	Sabeesh.p	Blood Bank Technician
2	Soumya.c	Blood Bank Technician
3	Sajeesh.V.M	BloodBankTechnician
4	Shibin.c.v	Blood Bank Technician
5	Anoop Joy	Blood Bank Technician
6	Arun	Attender
Genetics Division (including Cytogenetics)		
1	Dr.Geo Francis	Lecturer
2.	Dr.Naseer	Senior Resident
3	Dr.Deepak	Lecturer

DEPARTMENT OF CANCER REGISTRY AND EPIDEMIOLOGY



Dr. Saina Sunilkumar
Lecturer & HOD

INTRODUCTION

Department of Cancer Registry and Epidemiology was established in the year 2010 and started Hospital Based Cancer Registry partially supported by National Cancer Registry Programme (ICMR), Bangalore and published the second Hospital Based cancer registry report 2011 in February 2013.

To assess the epidemiological evidence on diet and cancer and to make public health recommendations, the department started new project titled “Lifestyle & Cancer” and for that the department commenced new lifestyle registration and started to enter the data into the new software.

The Department also observed the world Breast Cancer Awareness day on October 2013 and several awareness programs and exhibitions were conducted for the public. Around 53 were attended and in afternoon classes were also conducted in Lion’s Hall, Thalassery.

To prepare an accurate incidence and mor-

tality data- base of cancer cases in three districts Kannur, Kasaragod and Mahe the department launched Malabar Population Based Cancer Registry (MPBCR) on 1st January 2014 in the districts of Kannur, Kasaragod & Mahe (Two States- Kerala & Pondicherry) with the help of 8 field staffs – 4 social Investigators and 4 Data Collectors. Malabar Population cancer registry (MPBCR) collect information of all new cancer cases reported from the population residing in Kannur, Kasaragod and Mahe. For MPBCR, the department also formed advisory committee board for Kannur, Kasaragod and Mahe as the District Collector and Regional Administrators as the Chairman and the first advisory committee meeting was conducted on December 2013 and started the MPBCR on January 2014.

To obtain the clinical stage and treatment based survival in all registered and treated patient- the Department started a funded project of NCRP/ICMR, Patterns of Care & Survival Studies in Breast, Cervix & Head & Neck cancers started in 2014.

ACADEMIC ACTIVITIES

- 1) Dr. Saina Sunil Kumar and Mrs. Shamna attended two day workshop on HBCR – DM soft ware and patterns of patients care on 19/03/2013 & 20/03/2013 held at Na-
- 2) Attended the India Cancer Congress 2013 at Delhi. Exhibited two posters, on 21/11/2013 at Kempinski Hotel.

- 3) Mrs. Bindu and Mr. Ratheesan K attended 6 day training programme at Cancer Institute, Adayar.
- 4) Two Posters were presented in India Cancer Congress 2013 at Delhi.
- 5) Consolidated Report of HBCR 2010 & 2011 was presented on 19/03/2013 at a two day National Level workshop on HBCR –DM soft ware and patterns of patients care on & held by National cancer for disease informatics & research NCRP/ICMR at Bangalore
- 6) Invited Faculty in Workshop on Research Methodology and Biostatistics, Kannur Medical College.
- 7) Invited Faculty in Biomatrix 13 ,Malabar Cancer Centre
- 8) Invited Faculty in a Seminar on ‘Statistical Data analysis, Sir Syed College, Taliparamba.

STATISTICS

Report of Hospital Based Cancer Registry 2012:

According to cancer registration in the Hospital Based Cancer Registry of MCC, Thalassery, Kannur during the year 2012, the number of cancer patients and their relative proportion according to sex and sex ratio percentage have been represented in Table 1. The number of cancer patients recorded in the HBCR was 3143 [males 1685 (53.6 %) and females 1458(46.4%)].

Number (#) and Proportion (%) according to Sex

Males		Females		Sex Ratio	Total Cases
#	%	#	%		
1685	53.6	1458	46.4	116	3143

LEADING SITES OF CANCER AND MAGNITUDE 2012

MEN			
Rank	Sites (ICD-10)	#	%
1	Lung etc. (C33-C34)	372	22.1
2	Mouth (C03-06)	121	7.2
3	Stomach (C16)	121	7.2
4	Tongue (C01-C02)	91	5.4
5	Oesophagus(C15)	86	5.1
6	Prostate(C61)	85	5.0
7	Larynx(C32)	66	3.9
8	Rectum(C19-C20)	64	3.8
9	Hypopharynx(C12-C13)	58	3.4
10	NHL (C82-C85,C96)	57	3.4
	All Sites	1685	100.0

WOMEN			
Rank	Sites (ICD-10)	#	%
1	Breast (C50)	442	30.3
2	Cervix Uteri(C53)	113	7.8
3	Ovary etc.(C56)	109	7.5
4	Mouth (C03-C06)	92	6.3
5	Stomach (C16)	57	3.9
6	Tongue (C01-02)	49	3.4
7	Lung etc.(C33-C34)	49	3.4
8	Corpus Uteri(C54)	46	3.2
9	NHL(C82-85,C96)	43	2.9
10	Rectum (C19-20) 40	40	2.7
	All Sites	1458	100.0



PUBLICATIONS

- Multiple Cancer : A descriptive study of 101 cases from a tertiary Cancer Centre in South India Sunil Kumar S, Bindu.T, Sen S, Sujith Kumar Satheesan .B. Indian Journal of Cancer Volume50/Supplement 1. Page NO.S303
- Analysis of site, histology& Prior RT of Primary Cancer in metachronous multiple cancers-Do they matter? Sunil Kumar S, Sujith Kumar, Bindhu.T, Sen S, Satheesan .B. Indian Journal of Cancer Volume50/Supplement 1. . Page NO.S296
- Addiction patterns in common cancers at a rural tertiary cancer centre in South India –need for Awareness SujithKumar.M, Sunil Kumar S, Bindu.T.Philip, Neethu .A.P, Satheesan B Indian Journal of Cancer Volume50/Supplement 1. Page NO.S303
- Elderly Patients with cancer Kerala showing the way Patil V.M, Chakraborty.S, Sunil Kumar S, Desai.S, Geetha.M, Sujith.M, BaluS, Vikram, Biji.M.S, Vineetha.R, Satheesan.B, Indian Journal of Cancer, Volume50/Supplement 1. Page NO.S287

BOOKS & NEWSLETTERS/MAGAZINES

- ABHAYAM- News Letter.
- BREAST CANCER BOOK IN MALAYALAM-Sthanarbhudam, Director, Doctors from various Dept. Physiotherapist, Dietician of MCC Kerala BashaInstitute Published.
- Hospital Based Cancer Registry –Annual Report for the Year 2011.

- Hospital Annual Report-2011-12.
- Hospital Annual Report-2012-13.

CONFERENCES

- BIOMATRIX'13 Basics of biostatistics and clinical research methodology - A Voyage Begins
- ONCO-BURDEN'13

RESEARCH PROGRAMMES:

- Hospital Based Cancer Registry(HBCR)
- Patterns of care and Survival Studies (POCSS)[Funded Project]
- Life Style & Cancer
- Malabar Population Based Cancer Registry (MPBCR)

AWARDS:

- Dr.SainaSunilkumar got first prize in poster presentation under General Medical OncologyCategory at ICC 2013, Delhi .

GRANTS AND SCHEMES:

Funded Project of NCRP, ICMR-Patterns of Care and Survival Studies (POCSS)

Sl.No.	Letter No. and Date	Amount
1	NCDIR/NCRP/COU/HB-CCR/778/2012/2069 dated 28.02.2014	1,10,000.00
	Total	1,10,000.00

MEDICAL RECORDS DIVISION



Sri. Jayadev G
Medical Records Officer

INTRODUCTION

Medical records department is situated in ground floor adjacent to outpatient departments and reception. It is one of the busiest departments in Malabar cancer centre, on an average 300 files are retrieved and sent to different outpatient departments. All the patient files are kept in movable racks according to the hospital number and the death files are kept separately. Inpatient and outpatient files kept in single folder and are arranged in chronological order. We have two types of registration, malignant and non malignant cases. Malignant and Non malignant cases are kept separately according to the hospital number. Malignant case folders are colour coded according to the site of cancer for easy identification.

STATISTICS

Total no. of outgoing files	61323
Total no. of returned files	59829
Total no. of death informed	163
No. of paid copies taken	55546
No. of free copies taken	581

DEP. WISE CHART OUT DETAIL

Surgical Oncology	18378	TPS	128
Radiation Oncology	14951	Brachy OT	79
Reception	9562	Medical Records	77
OP	5357	CT Scan	63
Simulator	5023	Nursing	44
Cancer Registry	2255	Speech Therapy	41
RT OP	1044	Pre Anesthetic Check	41
Hemato Oncology	907	Dental	22
Palliative	795	Community Oncology	22
Director	749	Day Chemo	14
Medical Oncology	592	Pulmonology	11
Pathology	548	Day Care	9
Endoscopy	449	Physiotherapy	4
Multi speciality Board	158		

CHART IN CHART OUT DETAILS

Chart IN	59829	Chart OUT	61323
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PHOTOCOPY SERVICE

Paid	55546	Unpaid	581
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ACTIVITIES

- Preparation of New files and folders
- Intimation of Death to the Municipality through hospital KIOSK
- Maintenance of death register
- Dispatching file upon reporting of patient in registration
- Re Filing of records
- Dispatching file on request from different departments for study purpose
- Providing copies of investigation report on request from patient
- Attaching chemo charts in patients files
- Provides photo copy service to patients and hospital purpose
- Safe keeping of expired file according to hospital number
- Keeping NMC file in separate folder

HEALTH INFORMATION TECHNOLOGY DIVISION



Sri. Ranjith M K
System Manager

INTRODUCTION

Health Information Technology Division under Department of Cancer Registry and Epidemiology was commenced in the year 2012. In a short working span, the division started the development of health-care related software's and has extended support to Malabar Cancer Centre for its developments in the new era of Health Information Technology. Also the division is looking forward in research projects, in applications of Health Information Technology for cancer awareness, diagnosis, detection and prevention. This is just the beginning of a new era, wherein the world of information technology is going to initiate health information technology.

Health information technology and exchange provides the umbrella frame work to describe

the comprehensive management of health information and its secure exchange between consumers, providers, government, quality entities, and insurers. Health information technology (HIT) in general is increasingly viewed as the most promising tool for improving the overall quality, safety and efficiency of the health delivery system. Broad and consistent utilization of HIT will: Improve health care quality; Prevent medical errors; Reduce health care costs; Increase administrative efficiencies; Decrease paperwork; and Expand access to affordable care. In line with recent advances in Information Technology, the Health Information Technology Division as the heartbeat of a Digital MCC, provides, operates and maintains effective, dynamic user friendly data systems that will enable the Malabar Cancer Centre to achieve its vision of a centre of excellence.

STATISTICS

1	Server Computer	09
2	Workstations	31
3	Desktop Computers	120
4	Laptop	09
5	Network Printer	08
6	Ink jet Printer	08
7	Dot-matrix Printer	11
8	Laser Printer	29

9	Scanner	08
10	UTMfirewall	01
11	Switch (10/100/100)	23
12	Modems	03
13	LCD Projector	08
14	High Resolution Digital Visualiser	02
15	Over Head Projector	01
16	Wireless Interactive White Board	02



II. Network Infrastructure:

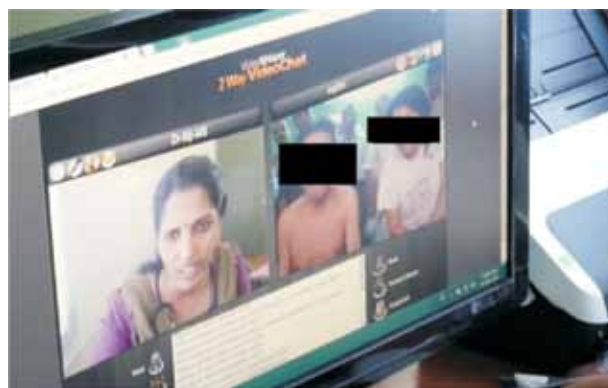
- National Knowledge Network(NKN)Dedicated internet connection
- 2 BSNL Broad band Connection with static IP
- IBSNL Internet connection (NMECT)
- Kerala State wide Area Network connection (KSWAN)
- Structured Cat6 cabling (LAN)

ACTIVITIES

The main responsibilities of the Division are to provide technology vision and leadership in the development and implementation of the organization-wide information technology (IT) program and the planning and implementing of information systems to support both clinical and business operations and achieve more effective and cost beneficial IT operation. The division led to implement the hospital policy for information and associated computer technology. It undertakes broad system development and research and has responsibilities for organizational change to support new system.

The major responsibilities of the Division are as follows;

- a) Plan for the Information Technology needs of the organization including electronic health records, voice, data, imaging, telecommunication, office automation.
- b) Plans and manages the implementation of new information systems and software acquisitions.
- c) Manages system administration including local area networks
- d) Researching and installing new systems.
- e) Managing and Administering the official website of the organization
- f) Develop and implement policies and procedures for computer systems and operation and main-



tains the privacy and security of all IT information.

- g) Ensures the cost-effective expenditure of resources

The major activities of the division are as follows;

- **Research Tie-up with C-DIT:** MoU Signed for research Tie-up with C-DIT in the area of Health Information Technology. Initial research projects are under implementation.
- **National Knowledge Network:** Implemented National Knowledge Network (NKN) connectivity at MCC.
- **Initiate and speedup the HIS software Implementation activities.** The National Informatics Centre (NIC) started E- Hospital Software Implementation at MCC.
- **Updating and maintaining a dynamic website for MCC** in English and Malayalam Languages with the domain www.mcc.kerala.gov.in
- **Implemented E-Procurement Mission Mode Project** of Govt. of Kerala at MCC
- **E-Palliative:** An online Palliative Care and Support Network system developed in research collaboration with C-DIT. The trail running is going on successfully with the help of Palliative Groups in Kannur Districts.
- **Implemented Malayalam Computing** at MCC in association with Akshaya Project office, Kannur
- **Computer Hardware Maintenance:** Providing Computer Hardware, Network and Software Maintenance and support to all the departments at MCC
- **Handling Computer Science classes** for B.Sc. (MRT) students.
- **Edu@Expert:** Delivering series of lectures using T elemicine facilities about cancer awareness to Nursing Students and Staff at various institutions.

- **Developed and updated Canteen Billing and Management Software** for MCC Canteen. Also developed and implemented Payroll/ Salary Software for MCC.
- **Providing Telemedicine support for Diagnosis.**
- **Online Career Application:** Online application software implemented and maintained for inviting application for the posts on contract and project basis.
- **Online Examination:** Implemented online examination facilities to recruitments on contract and project basis.
- **Developed and implemented new software for PBCR**
- **Academic Project support:** Providing Project support for MCA, B.Tech, M.Sc. IT, M.Sc. Computer Science, BCA, B.Sc. Computer Science, B.Sc. IT Students.
- **Institutional E-mail ID to all staff:** Providing Institutional Mail ID to all staff is progressing
- **Smart Class Room:** Implemented two Smart Classrooms at MCC for classes, seminars and conferences.
- **Networking new IP Block:** New structured network was implemented at MCC with Cat-6cabling, 10/100/1000 switch and fiber backbone.
- **Online Birth & Death Registration:** Co-ordinate with Information Kerala Mission, online Death and Birth Registration Implemented at MRD.
- **Support given for publishing Breast Cancer –Malayalam Book** through Kerala Bhasha Institute.
- **Support given for publishing Abhayam News letter of MCC.**
- **Started Fundamental Computer Training to all staff as part of Modernization.**
- **Started development and implementation of several healths IT applications** like Diet Management Software, Clinical Calculator, Medical Records Digitization and Archiving System, Cancer Mapping Software, Online Examination Software, etc.
- **Aadhar Enrollment camp** was conducted in association with Akshaya Project office, Kannur on 17-01-2014 at MCC.
- **New server room was implemented** at new IP Block and purchased IBM server for e Hospital Implementation.
- **Support given for preparing Brochures, banners and website** for various seminars and workshops organized by MCC.

PUBLICATIONS

- “Sthanarbudham”, State Institute of Languages, Kerala, June 2014, ISBN 978-81-7638-707-1.
- “ArogyaParipalanathinu Vivara Sankethika Vidhya” (Malayalam), Ranjith MK, Janapadham Vol.3 Sl.1, March 2014.

CONFERENCES, SEMINAR, WORKSHOPS AND PRESENTATIONS

1. **“Health Information Technology (HIT):** The heart beat of a digital Hospital-Advantages and Challenges” presented by Ranjith MK at RENDEZVOUS-2013: Indian Medical Association Kerala State Conference held on 08-11-2014 at Mahe.
2. Participated **WEB APPLICATION SECURITY** training conducted by CERT-K in coordination with IIITMK at Techno Park, Trivandrum on April 10th to 12th 2013.

RESEARCH PROGRAMMES

1. A Cross sectional study to evaluate the Computer Literacy among the Medical Staff at Malabar Cancer Centre, Thalassery -Ranjith MK, Ratheesan K, Dr. Saina Sunilkumar.
2. To assess the Level and Extent of Usage of Health Information Technology in various Hospitals in the Malabar Region of Kerala State and to identify the challenges faced during the implementation -Ranjith MK, Dr. Saina Sunilkumar, Bindu T, Ratheesan K.

Research Collaborations and Projects Supported:

1. **e-Palliative:** An online Palliative Care and Support Network system developed in research collaboration with C-DIT. The trial running is going on successfully with the help of Palliative Groups in Kannur Districts.
2. **eDietician** - An open source web based Nutrition and Diet Management Software: The design and development work is going on in research collaboration with C-DIT.

CLINICAL RESEARCH & BIOSTATISTICS DIVISION

INTRODUCTION

The Division of Clinical Research & Biostatistics came into acting position from April-2013 under the Headship of Dr. Saina Sunil Kumar of the Department of Cancer Registry & Epidemiology. The Division was started with an aim of conducting Clinical research and advanced level Statistical work to improve the quality of Scientific research in the Centre. The Division was also aimed at starting academic activities in the centre.

ACTIVITIES AND ACHIEVEMENTS

1. Achieved Official affiliation as a Research Institute from Kerala University of Health Sciences, Trissur.
2. Established Institutional Review Board with delegate sub-committees and SOPs for conducting systematic research activities in the centre.
3. Conducted two National Level Workshops on modern issues and Biostatistics.
4. Regular Classes in Biostatistics started for Faculty members/Researchers/Fellows of the centre.
5. Initiated Scientific Advisory Committee for developing Research & Academics in the Centre.

PUBLICATIONS

10 Research Articles published in peer reviewed Journals

Developed 15 IRB SOPs

CONFERENCES

1. Conducted National Workshop on “Burden of Disease”(ONCO-BURDEN-13), Nov16-17-2013.
2. Conducted National Workshop on “Clinical Trials & Meta Analysis, April 4-5, 2014.
3. Attended and presented Research paper in National Conference in Kottayam, Kerala (Dec-2013).

RESEARCH PROGRAMMES

6 IRB Approved Studies

4 Ongoing

GRANTS AND SCHEMES

ICMR Financial Support for ONCO-BURDEN-13.(Nov16-17-2013)

FACILITIES AVAILABLE

Statistical Software SPSS 20.0, Advanced training in R, Biostatistics, Statistical Quality Control, Win-Bugs.



STAFF

Sl.No	Name	Designation
Cancer Registry & Epidemiology Division		
1.	Dr. Saina Sunilkumar	Lecturer, HOD in charge
2.	Smt. Bindu T	Lecturer in Biostatistics
3.	Sri. Ratheesan K	Lecturer in Biostatistics
Health Information Technology Division		
1.	Sri. Ranjith M K	System Manager
2.	Smt. Bavina. C	Junior System Analyst
Medical Records Division		
1.	Sri. Jayadev G	Medical Records Officer
2.	Surajkumar Chandran	Medical Records Assistant
3.	Suha P	Medical Records Attender
Clinical Research and Biostatistics Division		
1.	Sri. Subhradev Sen	Lecturer in Biostatistics
2.	Dr. Atanu Bhattacharjee	Lecturer in Biostatistics

DEPARTMENT OF COMMUNITY ONCOLOGY



Dr. Neetu A.P.
Lecturer & HOD

INTRODUCTION

Activities for improving public health by creating awareness on cancer have always been the priority of Community Oncology Department. This year focus is on school tobacco programmes and ASWAS. National cancer awareness day, World cancer day and No tobacco day were observed by hosting public programmes. Activities of the department are spread in 5 districts Kannur, Kasargode, Wynad, Kozhikode, Palghat and UT of puducherry.

Anti Tobacco Cell- Malabar Cancer Centre

Anti tobacco cell was formed on 31-10-11 under Community Oncology Department of Malabar Cancer Centre. The cell consist of eminent personalities from different walks of life like teachers, Journalists, Social activists, writers, janamythri police etc. The main aim of cell is to educate the student community on the menace posed by the tobacco use. The Executive Committee of the cell comprises the following members - Dr. Satheeshan Balasubramanian (Chairman), Dr. Ramachandran V (Joint Convener), Dr. Neethu A.P, Dr. Phinse .M. Philip (Member conveners) and Major P Govindan, Dayanandan Master, Chalakkara Purushu, Pradeep Master (Executive members). The cell is involved in all our anti tobacco campaigns.

STATISTICS

Tribal activities at Attappady:-

Volunteer training programme	Tobacco awareness class and screening in tribal hostel	Oral screening camp in hamlets
1	3	8

Oral screening camps were held at 8 hamlets of Agali namely Palooru, Kolappady hamlet, Kadambara hamlet, Agali Meleooru, Kavundikal hamlet, Othukkuzhi hamlet, Chemmannur hamlet and Sholayur hamlet.

Details of camp

Total screened	leukoplakia	OSMF	Erythroplakia	erythroleukoplakia
273	26	5	5	4

Statistics of routine activities

Cancer awareness classes	School tobacco classes	Early cancer detection camps	Oral screening camps	Volunteers training programme	Health exhibitions	Seminars
89	12	122	9	6	28	2

District wise distribution of camps 2013-2014

Kannur	kozhikode	kasargode	Wynad	Palakkad	Mahe
68	13	18	18	3	2

Total screened during the period-21546

- Leukoplakia-147
- Oral submucous fibrosis-61
- Lichen Planus-85
- Benign breast disease-171

Details of Pap smears and FNAC done at camp

Total Pap Smear- 5318

ASCUS-40 ,ASC-H -2 ,LSIL-11 ,HSIL -6 ,Squamous cell ca -1

Total FNAC taken -586

ASWAS statistics:

Total no. of camps conducted -48(from 3/10/13 to 11/3/14)

Total persons screened in ASWAS project -7721

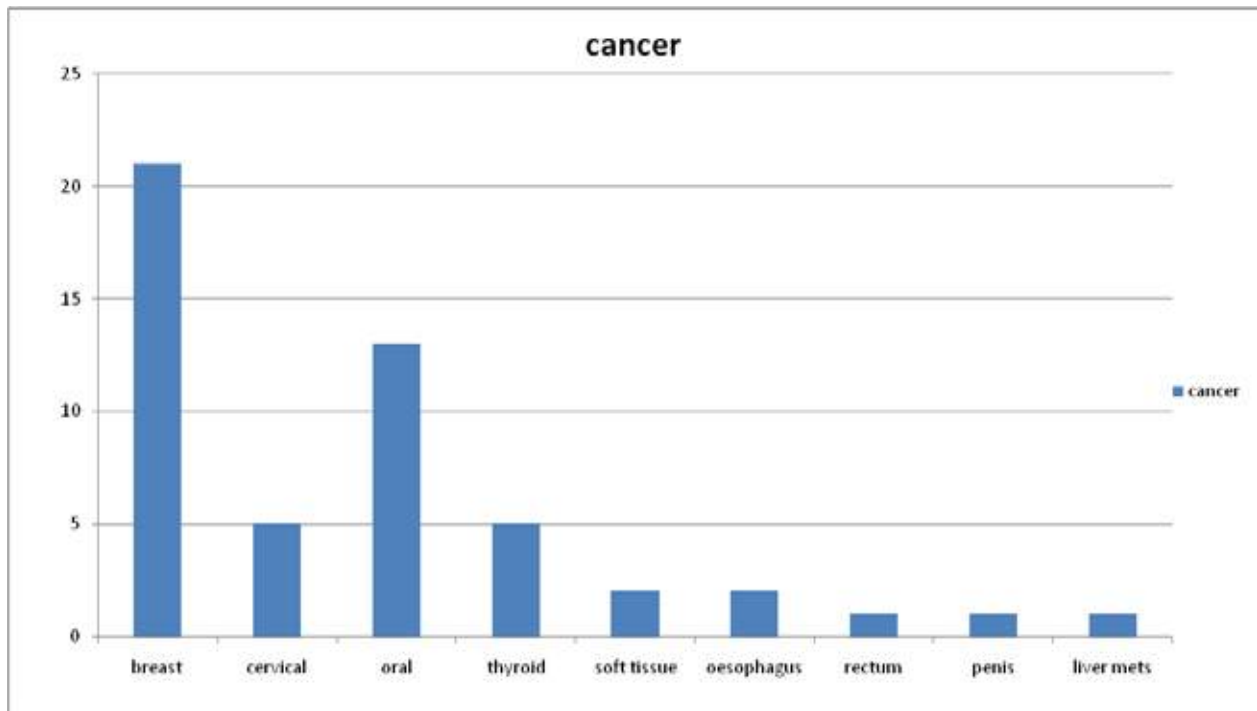
Tests conducted:

Cervical pap smears	-	2619
FNAC	-	512
Total referred to MCC for tests and further evaluation	-	453
Referred patients who reported at MCC and underwent various tests	-	433

Total precancerous oral cases detected - 174

leukoplakia	OSMF	Lichen planus	Head &neck ca	Tobacco cessation
89	31	54	13	21

Total cancer patients detected -51



ACTIVITIES AND ACHIEVEMENTS 2013-2014:

In addition to routine activities like cancer awareness classes, antitobacco campaign and early cancer detection camps, the department also organized the following activities-

1) World No tobacco day on May 31st

- Conducted health exhibition and seminar on hazards of tobacco for nursing students and public at Chamber of Commerce, Kannur as part of the District level programme organised by Dept of Health on the day.
- Conducted tobacco awareness exhibition in 7 schools of Thalassery and Mahe -NTTF, Thalassery, Thiruvangad school, Thalassery, Sreenarayana Teachers training college, Mahe, Palayad higher sec school, Mubarak Higher sec school, Oniyan High school, Kodyeri, Vadakkumbad Higher sec school, Thalassery from 30/5/13 to 26/6/13
- Conducted painting competition for high school and college students on theme of tobacco at Malayala Kalagramam, Mahe on 16/6/13.

2. Observation of loka lahari virudha dinam 26/6/13

Health exhibition and seminar on tobacco hazards by Dr. Neetu in a programme for making schools of Thalassery tobacco free by Oct 2nd

2013 organized by District Educational Dept, inaugurated on lahari virudha dinam by DPI at Mubarak Higher Sec School in the presence of District sub Collector, ASI and DEO.

3. National cancer awareness day(7/11/13):-

Observed by conducting cancer awareness class and an early cancer detection camp at Madai on November 7 2013, health exhibition at Thrikarippur from 7/11/13 to 10/11/13 and a radio programme in akashavani on cancer awareness.

4. World Cancer Day- Feb 4: -

- Seminars on cancer awareness and an early cancer detection camp at Kanichar Primary Health centre on 4-2-14.
 - Release of News letter "NETHI" (4rd volume) by Jilla panchayath President, Wynad district
- Tribal community programme at Attappady from 30/4/13-1/5/13 and 9/7/13 to 11/7/2013 -training programmes, awareness classes and oral screening in tribal hostels and hamlets.
 - Training programmes for Health inspectors on tobacco, training of trainers for survey as part of ASWAS

PROJECTS

- ASWAS 2013-2014:- A comprehensive project for control of cancer jointly organized



by MCC, Dept of Health and Jilla Panchayath in 48 Panchayaths of Kannur District from October 2013 to March 2014. The programme was inaugurated by Prof K.A Sara-la, jilla Panchayath President on 18/6/2014

- Arogya raksha project (2013-2016)
- The project was designed to assess the impact of awareness on the general improvement of health status of the people. Two residence associations in Thalassery municipality were selected for the implementation of the project. Sri Kodyeri Balakrishnan MLA inaugurated the project.
- Involved in project for cancer control in various panchayaths.
- Project on cervical cancer screening in collaboration with HTIC, IIT Madras is under planning

PUBLICATIONS :

- 1) News Letter ' NETHI ' by anti tobacco cell of MCC (3 volume/year). 5000 copies of each volume are circulated among students & public.
- 2) Hand book on tobacco for school students and public.

CONFERENCES, SEMINARS & WORKSHOP

- 1) Seminars on tobacco awareness in Capacity building Workshop for health Inspectors in Kannur organized by KVHS on 30/10/13.
- 2) Seminars on tobacco control for Nursing students and public at Science park in connection with world no tobacco day .

RESEARCH PROGRAMS:-

Project on cervical cancer screening in collaboration with HTIC, Madras is proposed to start in May 2014 and is under planning

STAFF

Sl No.	Name	Designation
1.	Dr. Neethu A.P	Lecturer & HOD in charge
2.	Dr. Phinse .M. Philip	Lecturer
3.	Sri. Santhosh Kumar. K	Lab Assistant
4.	Smt. Nisha	Nursing Assistant
5.	Smt. Sheeba .M.T	Nursing Assistant

DEPARTMENT OF ONCO ANESTHESIOLOGY

INTRODUCTION

Department of Onco Anesthesiology is committed to taking care of cancer patients undergoing surgery in Malabar Cancer Centre. We have state of the art work stations and ventilators. All types of anesthesia are given here meticulously and we strive towards giving better care and reducing complications. Post-operative intensive care unit is equipped with all necessary instruments and we have well trained staffs. We conduct regular training programs for all staffs in advanced life support techniques usage of life saving instruments.

STATISTICS

Tribal activities at Attappady:-

Description	Number
Total number of major cases	1059
General anaesthesia alone	736
General anaesthesia + Epidural anaesthesia	226
Spinal anaesthesia alone	81
Epidural anaesthesia+ spinal anaesthesia	16

STAFF

Sl No.	Name	Designation
1.	Dr Krishna Das	Visiting consultant, Anesthesiologist
2.	Dr Krishna Warriar	Visiting consultant, Anesthesiologist
3.	Dr Prajeesh Nambiar	Visiting consultant, Anesthesiologist
4.	Dr Limesh	Visiting consultant, Anesthesiologist
5.	Dr Anil	Visiting consultant, Anesthesiologist
6.	Dr Sarath K	Visiting consultant, Anesthesiologist
7.	Dr Smera	Visiting consultant Anesthesiologist
8.	Dr Pradeep	Visiting consultant, Anesthesiologist
9.	Dr Nikhil Mohan	Lecturer

DEPARTMENT OF CANCER PALLIATIVE MEDICINE



Dr. Biji M S
Assistant Professor & HOD

INTRODUCTION

Cancer Palliative Medicine has been functioning in this Centre, since November 2002. The Centre is a recognized medical institution for possession and supply of Oral Morphine. The Palliative Care Services also provide counseling to patients and their family members. Cancer palliative medicine aims at improving the quality of life of cancer patients especially those for whom curative options have been exhausted. Cancer Palliative Medicine Division has an inpatient, outpatient and home care facility.

Homecare facility for the needy patients was started on June 20, 2009. Home care is done thrice in a week catering to the need of patients staying within 35 kms from MCC. There are so far patients registered in homecare facility. Patients are given medication free of cost. Procedures like ascitic tapping, wound dressing, catheterization, ryles tube introduction are done. Apart from this psychological support to the patient and their families are also given.

e-palliative medicine :

The homecare service from MCC is Nurse-lead and doctor assisted. In order to make the service more effective consultation of the patient is done through e-palliative medicine wherein the patient and relatives can see and consult the doctor

directly making the homecare visit more satisfying to them.

ACADEMIC ACTIVITIES

- 15.1.2013-Sargalayathilekkoru santhwana padham - Patients and their relatives were taken for a one day trip to Sargalaya Arts and crafts village, Iringal in connection with palliative care day. Later they also visited Turtle conservation Center, Iringal. Around 60 members participated in the program. Patients and their relatives enjoyed the trip and appreciated the program very much.
- 5.2.2013-Awareness class was given to volunteers conducted by Janamythri police at KAP camp, Darmasala, Kannur. About 86 volunteers (including BAMS and nursing students) participated in the programme.
- 8th, 9th, 10th Feb 2013-Attended the 20th international conference of IAPC hosted by Kidwai Memorial Institute of Oncology held at Nimhans Convention Centre, Bengaluru. Two posters were presented at the conference :
 - a) Fatigue and its impact on quality of life: A cross sectional survey in patients undergoing palliative chemotherapy in Malabar cancer centre.
 - b) Palliative chemotherapy with fortnightly meth-



otrexate in oral cancers: Experience at a tertiary care centre.

- 1st,2nd,and 5th June 2013 -3rd batch of IAPC course started .Training given for 11 candidates.
- 22.7.13-7th batch BCCPAN started with 6 students.
- 12.10.13 - World Palliative care day was observed on 12th October 2013.The program was ‘SPAN-DANAM –ORU ITHAL KOODI’(Getogether of ostomates).The program was attended by 34 stoma patients along with one or two relatives.A total of 80 members participated in the program.
- The program was inaugurated by our Director Dr.Satheesan Balasubramanian .The highlight of the program was the release of a hand book for patients-‘ARBHUDAVUM SANDWANA CHIKILSAYUM’-paricharanapadhayil nam-mal ariyendathu prepared by the Department of Palliative Medicine,MCC.The first copy was received by Mr.Abdul Azeez secretary of SPAN-DANAM.This was followed by a very interesting and interactive session on stoma care by a Dr.Surij Salih and Dr.Syam Vikram, surgical oncologists and Mrs.Reena -Dietician.A stall exhibiting various stoma bags was also organized by representatives of coloplast company. Patients found it very useful. Patients could clarify many of their doubts regarding different kind of available stoma bags. Ostamates exchanged their problems and solutions and got the feel of being in a family with lot of support around them from doctors, stoma nurse other ostamates and their own family members.

- 15.1.14-Palliative care Day,Kerala chapter was observed .As part of psychological support given to our patients a trip to Vismaya Water Theme park “Vismaya lokathile Vismaya Kazhchagal” was organized.60 people attended including spouses and children of our patients.
- Apart from this regular training of doctors and nurses are conducted as part of Pain Free Hospital Initiative.
- 14th,15th,and 16th Feb 2014 :Attended the 21st International Conference of Indian Association of Palliative care at KIIMS University, Bhubneshwar. Two oral presentation were done :
- Dr.M.S. Biji presented “Oral Morphine Utilization During Adjuvant Rapidarc imrt in Oral cancers : Need For Routine Palliative Care Integration”
- Sindhu ,N.R presented “BURDEN OF DECUBITUS ULCER IN HOME CARE PATIENTS : AN AUDIT FROM A RURAL TERTIARY CARE CENTER”.
- 19.3.2014: 8th batch BCCPAN course started with 3 candidates.

PUBLICATIONS:

- Article: Palliative low dose fortnightly methotrexate in oral cancers: Experience at a rural cancer centre from India.Santam Chakraborty, M Geetha, K M Sujith, M S Biji, B Sateeshan, South Asian journal of cancer. 07/2014; 3(3):166-70.
- Article: Effectiveness of nurse-led and physi-

cian-assisted homecare provided from a rural cancer center in India evaluated using the palliative care outcome scale.

MS Biji, Santam Chakraborty, NR Sindhu, Shibilmol Thomas, Subhradev Sen, Milind Kumar, Satheesan Balasubramaniam Journal of Clinical Oncology 01/2014; 32(15_suppl):e20544. • 18.04 Impact Factor

- Conference Paper: Oral Morphine Utilization During Adjuvant Rapidarc IMRT in Oral Cancers: Need for Routine Palliative Care Integration M. S. Biji, N. R. Sindhu, Santam Chakraborty, M. Geetha, C. A. Suja, Liji Bineesh Indian Journal of Palliative Care, Bhubaneshwar; 01/2014.

RESEARCH PROGRAM:

- 11.9.14-24.9.14: Mrs. Megha Agarwal, 4th Semester student in MBA of Sikkim Manipal University Distance Education did her project "Evaluation of Job strain among healthcare workers working at a tertiary cancer center in India" under the supervision and guidance of Dr. M.S. Biji, Assistant Professor, Cancer Palliative Medicine.

ing at a tertiary cancer center in India" under the supervision and guidance of Dr. M.S. Biji, Assistant Professor, Cancer Palliative Medicine.

Courses Conducted:

1. IAPC course in "Essentials of Palliative care" for doctors and nurses-4 batches completed.
2. BCCPAN (Basic Certificate Course in Palliative Auxillary Nursing) for auxillary Nurses-9 batches completed
3. BCCPN (Basic Certificate Course in Palliative Nursing) for Nurses-3 batches completed.

STAFF

Sl No.	Name	Designation
1.	Dr. Biji M.S	Assistant Professor & Head
2.	Sindhu N R	Staff Nurse

DEPARTMENT OF DENTISTRY AND REHABILITATION



Dr Phinse M Philip
Lecturer

INTRODUCTION

This Division provides treatment modalities for the oral health and radiation protection of teeth of cancer patients. These included procedures like oral prophylaxis, conservative therapy, dental extractions, occlusal adjustments, therapeutic management of pre-cancerous oral lesions, management of osteoradionecrosis and bis-phosphonates induced osteonecrosis of jaw, pre and post-radiation oral care, pre and post surgical oral care, pre and post chemotherapy oral care, oral biopsies, management of ulcers, bleeding gums, toothache etc.

Apart from these activities, the dental division in association with the community oncology department is actively participating in the early cancer screening camps, school tobacco awareness classes, cancer awareness classes and cancer volunteer trainings. Tobacco cessation facilities are also provided.

ACTIVITIES

Pre & post radiation care of teeth

Procedures like oral prophylaxis, conservative therapy and extractions were used for pre-radiation care, where as fluoride therapy was resorted for post-radiation care. Oral hygiene instructions for better maintenance during treatment were also provided. Post radiation mucositis are managed symptomatically and its severity is reduced through proper oral hygiene measures.

Pre & post surgical oral care

Removal of teeth with very poor prognosis like caries exposed teeth, grade 2 and 3 mobile teeth, tooth with very poor periodontal status are carried out in the pre and post oral care period.

Post chemotherapy oral care

This facility is provided by the use of smoothing, protecting and antimicrobial oral rinses and ointments. Chemotherapy induced mucositis management is done.

Tobacco cessation treatment

Tobacco cessation treatment is provided to those chronic smokers and pan chewers they wish to quit the habit but unable to quit it by themselves. Nicotine replacement therapy and counselling are given.

Management of oral precancerous lesions

Management of oral precancerous lesions like leukoplakia, lichen planus etc are done in the department.

STATISTICS

Description	Number
Consultations	797
Scaling	143
Extractions	503
Tobacco cessation	60
Cusp smoothing	30
biopsy	6

DEPARTMENT OF ONCOLOGY NURSING



Smt. Annet Fernandez
Nursing Superintendent

INTRODUCTION

Nursing Department was established in 2001 with the aim to provide comprehensive cancer treatment to all patients coming to MCC. At that time Nursing department was started with 14 nursing staffs and 12 nursing assistants. At present there are 86 nursing staffs (out of that 53 permanent staffs and 23 contract staffs). There are 36 nursing assistants (29 permanent staffs and 7 contract staffs) and 20 ward assistants. In out patients departments as well as IP patients.

ACTIVITIES

- Training programme for nurses on chemotherapy was conducted by MCC from 14.1.2013-28.1.13. Nurses from all Govt. Hospital were attended.
- Oncology nursing department conducted a CNE on breast PARATUS – 13 pm 3rd March 2013
- Nurses day was celebrated on 12th May, 2013, programme was inaugurated by Dr. Chandran K Nair, HOD, Department of Clinical Hematology and Medical Oncology. A sum of Rs. 35, 100 was donated to Patient Welfare fund of MCC. Pledge regarding organ Donation was also taken.
- Infection control committee was formed in MC

on July 2013. Meeting were held regularly under the supervision of NS & Microbiology Division

- More nurses have been posted in Radiation Department (Brachy OT, 4DCT, LINAC, CT & MRI)
- Given Radiation safety badges. Periodical radiation safety class were taken by Dr. Syam Kumar S.A.
- Stem cell transplantation unit was started on 15-7-2013
- Two nursing staff from stem cell unit sent to Cancer Institute Adayar, Chennai for two weeks programme on 16/7/2013 to 20/7/2013
- CNE on stem cell transplantation AGAMA -13 was conducted on 20th October, 2013
- Get together programme for Limb salvage surgery patients “Sanjeevani” conducted on 31-08-2013
- Get together programme for colostomy patients held on 12-10-2013
- Dialysis Unit started
- Drugs Bank was functioning well and drugs were given to poor patients
- Temporary CSSD unit was started. Two nursing assistants were sent to Pariyaram Medical College for training on 3-12-13 to 16-12-13



- New I P Block was started functioning on May 2013 with Female Ward, Male Ward, Private room, BMT room etc.
- Regular classes were taken on the following:
 - o Biomedical waste management
 - o Demonstration class whenever new equipments were received in MCC (Clarity monitor, ventilator Infusion Pump etc.)
 - o Pain management classes were taken by Dr. Biji
 - o Home care service are conducted in twice in a week
- Nurses day was celebrated on May 12th in the year 2014.the nightingale pledge was spelled out by Senior nurse .All nurses with the candle light in their hands repeated the pledge.
- Best ward was selected and male ward was given a rolling trophy followed by this eve.
- Two Nurses (Sindhu.s and Smitha Grace)were send to Tata memorial hospital for 3 months training program on bone marrow transplantation from may 2014 to august 2014.
- One Nursing staff (Sindhu.N.R) presented (paper presentation) a study on “Burden of decubitus ulcer in home care patients” in an international conference held at Orissa in the month of February 2014.
- work shop on “communication skills” was conducted on world palliative care day in MCC.
- oncology nursing department in MCCwas conducted 9th CNE ”SYOPA 2014” on bone and soft tissue malignancies on 19th October 2014 .
- breast cancer day was celebrated as pink ribbon day on 27th October 2014 and all available nursing staffs were attended.
- Basic life support classes are being conducted every week by Dr.Amith ,pulmonologist.10 to 15 nursing staffs were attended at a time.
- classes of advanced chemotherapy medicines are being conducted by Dr.vijay ,medical oncologist on every Monday.

STAFF

Sl No.	Name	Designation
1	Annet Fernandez	Nursing Superintendent
2	M V Subadra	Senior Nurse
3	Shyni A F	Head Nurse
4	Liby George	Head Nurse
5	Sreelatha N	Junior Nurse
6	Sabitha	Junior Nurse
7	Sindhu N R	Junior Nurse
8	Resmi K R	Junior Nurse

9	Maya PK	Junior Nurse
10	Sheeja N	Junior Nurse
11	Bijitha P	Junior Nurse
12	Smitha Grace	Junior Nurse
13	Sindhu S	Junior Nurse
14	Shaia E	Junior Nurse
15	Navamy T C	Junior Nurse
16	Seena E	Junior Nurse
17	Jisha k	Junior Nurse

18	Kavitha C N	Junior Nurse
19	Saritha N	Junior Nurse
20	Ligy Jose	Junior Nurse
21	Sindhya Rani	Junior Nurse
22	Linesh N	Junior Nurse
23	Sajina N	Junior Nurse
24	Smithamol D	Junior Nurse
25	Sujatha K	Junior Nurse
26	Jisna MK	Junior Nurse
27	Sheena C	Junior Nurse
28	Prajina E	Junior Nurse
29	Sreeja Kumari	Junior Nurse
30	Saritha K R	Junior Nurse
31	Remya M	Junior Nurse
32	Sunitha Kumari	Junior Nurse
33	Asha mol M A	Junior Nurse
34	Anuthara R	Junior Nurse
35	Jemy Mathew	Junior Nurse
36	Shiji Paulose	Junior Nurse
37	Sumi P R	Junior Nurse
38	Bindu Raman	Junior Nurse
39	Shibi Mol	Junior Nurse
40	Shabina P	Junior Nurse
41	Blassy P	Junior Nurse
42	Athira K	Junior Nurse
43	Sherjin	Junior Nurse
44	Jaleema M L	Junior Nurse
45	Shijila V	Junior Nurse
46	Sajitha P	Junior Nurse
47	Sibi K Daniel	Junior Nurse
48	Jisha P	Junior Nurse
49	Asha John	Junior Nurse
50	Sreejisha P	Junior Nurse
51	Nirmala N	Junior Nurse
52	Shiji P	Junior Nurse
53	Suma Devi	Junior Nurse

54	Shimna S	Junior Nurse
55	Silja Kurian	Junior Nurse
56	Savitha M	Junior Nurse
57	Subina	Junior Nurse
58	Sachithra	Junior Nurse
59	Abhina	Junior Nurse
60	Lethiamma P R	Nursing Assistant
61	Jerry A	Nursing Assistant
62	Kalamol G	Nursing Assistant
63	Deepa Prabha	Nursing Assistant
64	Baiju B	Nursing Assistant
65	Shobidha L	Nursing Assistant
66	Biju Prasad	Nursing Assistant
67	Shibu S	Nursing Assistant
68	Mary I C	Nursing Assistant
69	Mercy John	Nursing Assistant
70	Ajimol Dominic	Nursing Assistant
71	Sreejith S	Nursing Assistant
72	Dhanya P M	Nursing Assistant
73	Sajitha Kumari	Nursing Assistant
74	Dhaya E	Nursing Assistant
75	Shibila K	Nursing Assistant
76	Rekha M	Nursing Assistant
77	Midhun G	Nursing Assistant
78	Neethu BS	Nursing Assistant
79	Shamla N	Nursing Assistant
80	Bindu KM	Nursing Assistant
81	Nisha T	Nursing Assistant
82	Ragi Sindhya	Nursing Assistant
83	Rehana T	Nursing Assistant
84	Zeenath	Nursing Assistant
85	Shanthini	Nursing Assistant
86	Prajina E K	Nursing Assistant
87	Jinshi RS	Nursing Assistant
88	Rejitha L R	Nursing Assistant
89	Shrya C	Nursing Assistant

DEPARTMENT OF ENGINEERING AND MAINTENANCE



Sri.K.T Sudeep
Engineer

INTRODUCTION

MCC is having a well-functioning Engineering section. The Engineering Dept undertakes all the Electrical maintenance works of the hospital such as daily inspection and monitoring of HT Yard major Electrical equipments such as transformer VCB, Generators etc, maintenance of whole Electrical installations, Panel boards, Streetlights This Dept also maintains the whole medical, clinical and radiation equipments and attends complaints from all sections The water supply system of the Hospital is well managed with number of filtered drinking water outlets and well planned sanitary lines with sewage treatment plant .

Engineering wing prepares the estimates and drawings of MCC of various projects and submits before Director, HoD Meeting, Building committee and Executive committee of MCC After getting approval from all the above higher authorities the estimate is send to Engineering College Kannur for verification Tendered works and awarded the work to lowest tenderer after negotiation and observing all Government tender procedures We also supervise the constructions and settle the bills .

ACTIVITIES AND ACHIEVEMENTS 2013-2014

In addition to the routine maintenance works, necessary steps were taken to execute the following works:

- Internal road works in the hospital campus completed by constructing new roads beside of IP Block, dividers, culverts patch works of existing roads and thereby enabling smooth travelling and transporting inside the campus
- Constructed an ATM Centre in front of the hospital for patients and staff
- Modification works of surgery wards.
- Setting of a vehicle parking area
- Constructing compound wall and leveled/filled with earth, besides the main road to prevent encroachment of MCC's land.
- Renovated the damaged/leaky toilets as per complaint from patients and public
- Setting of a 20m³ Bio gas plant near Canteen ,from which 8-12 hour gas are produced which is used for canteen cooking needs
- Installation of solar power plants and solar water heaters.
- Modification of cytogenic lab and central lab.
- In order to improve the security system in the hospital, an additional security check post was constructed at the northern end of hospital campus and provided cameras in the main gate.
- Setting of waiting area for bystanders of surgery patients near OT, Lab result waiting patients



and new case patients by providing roofing and other facilities and controlled rain water entering

- Setting of BMT Rooms in IP block
- Started power laundry
- Stared the work of centralized oxygen and suction plant and providing outlets in all wards
- Supervision of Pediatric Oncology block.
- Agriculture Department, Govt. of Kerala has provided a financial assistance of ` 90,000/- to MCC under the scheme for vegetable development programme 2013-14 project based Institutional cultivation to increase the production of vegetables,. The project intends to engage patients in agricultural activities and thereby helping them to relieve the mental stress and agony. The project was a grant success and MCC had cultivated 1 acre vegetables in MCC compound with treated STP water and bio fertilizer, from which MCC bagged district wise 1st prize best agricultural award and a prize money of Rs 10000/, under institutional cultivation project of Kerala Agriculture Dept. The award was received from Hon'ble Minister of Agriculture Shri K.P.Mohanana .

CONFERENCES, SEMINAR, WORKSHOPS AND PRESENTATIONS

MCC has send two engineering staff to attend the best practices in energy conservation class conducted by EMC at cochin and the classes was very motivate for the energy conservation activities of hospital. MCC has Conducted an energy conservation awareness class on 18/6/13 by EMC Engineers for staff and bystanders of MCC and was very fruitful One Engineering staff has attended a workshop conducted by Pollution Control board .

Engineering section has conducted a function at our conference hall to appreciate the staffs and our well wishers who helped MCC to get such a prestigious award and we gave a gift to all our cleaning and laundry staff in connection with this award

AWARDS

- We have received state pollution control award for the year 2013-2014,(First among the Govt. Medical College category) Prize money Rs 1 lakh and the certificate of appreciation was received from the Honorable Minister for Electricity Shri Ariyadan Mohammad, in a prestigious ceremony held at Kochi
- Received District wise 1st prize among public Institutions and a prize money of Rs 10000/- under institutional cultivation program of Govt



of Kerala from Honorable Minister for Agriculture Shri K.P.Mohanana.

GRANTS AND SCHEMES

Agriculture department, Govt. of Kerala has given a financial assistance of ` 90,000/- to MCC under the scheme for vegetable development programme 2013-14 project based Institutional cultivation to increase the production of vegetables We have got district wise 1st prize among public Institutions and a prize money of Rs 10000/-

STAFF

Sl No.	Name	Designation
1.	Sri. Sudeep K T	Engineer
2.	Smt. Reena P C	Supervisor, Electrical
3.	Sri. K. Chandran	Supervisor, Plumbing
4.	Sri. T V Satheesh	Supervisor, Electrical
5.	Sri.K. N. Sharath Kumar	Supervisor Civil
6.	Smt. Lijikrishnan	Biomedical Technician
7.	Sri. Sushanth	Electrician
8.	Sri. Nyju	Electrician
9.	Sri. Rajesh	Electrician
10.	Sri. Sunilkumar	Electrician cum plumber
11.	Sri. Rasheed	Plumber
12.	Sri. Jinsithlal	Plumber

DEPARTMENT OF GENERAL ADMINISTRATION



Sri. Rajesh A K
Administrative Officer

INTRODUCTION

This Department handles the overall administrative activities related to the Hospital and liaison work with Government and other Departments. The Department consists of ministerial staff looking after the day-to-day affairs of the Centre in accordance with the existing rules and regulations of the Centre and in accordance with Government orders/instructions, issued from time to time. The Department controls the overall activities of the Centre and consists of the following major Divisions:

1. Security
2. Establishment
3. Purchase
4. Accounts
5. Store

SECURITY DIVISION

The security wing of MCC plays a pivotal role in maintaining the overall security of MCC and is headed by Security Officer. Security guards are Ex-servicemen and are outsourced through KEXCON (Kerala State Ex-Servicemen Development and Rehabilitation Corporation). They guard the Centre 24x7 and are posted in various areas of this Centre, for the smooth functioning.

ESTABLISHMENT

The establishment works of this Centre are handled under this Division. All recruitment procedures for academic staff as well as non-academic staff are performed by this Division. Leave matters of staff, service matters, maintenance of service book, dealing with Government related communications, etc. During the period 43 employees have newly joined this Institution and 14 numbers of staff were relieved from the Institution, as detailed below.

Staff who had joined the Institution during the period

Sl No.	Name	Designation	Joining Date
1	Harshal C.H.	X ray Technician	02-05-2013
2	Blassy P.	Junior Nurse	29-05-2013

3	Sreejith P.K.	Clerk/Cashier/Typist	05-06-2013
4	Ganesh V.	Clerk/Cashier/Typist	24-07-2013
5	Sheena T.P.	Radiographer	19-08-2013
6	Bindhu T.N.	Hospital Assistant	02-09-2013
7	Honey Mol R	Hospital Assistant	03-09-2013
8	Athira K. Chandran	Junior Nurse	20-09-2013
9	Nisha Gangan T.V.	Assistant Pharmacist	10-10-2013
10	Jeleema M. Lawrence	Junior Nurse	12-11-2013
11	Sherjin AJ	Junior Nurse	15-11-2013
12	Zeenath Battantavita	Nursing Assistant	09-12-2013
13	Santhini Chandran	Nursing Assistant	11-12-2013
14	Anil Kumar S.	Electrician/Plumber	01-01-2014
15	Sindhu K.U.	Radiographer/ Technician	03-01-2014
16	Suha P.	Attender	26-02-2014
17	Shijila V.	Junior Nurse	05-03-2014
18	Sajitha P	Junior Nurse	06-03-2014
19	Prajina E.K.	Nursing Assistant	07-03-2014
20	Jinshi R.S.	Nursing Assistant	07-03-2014
21	Siby K. Daniel	Junior Nurse	10-03-2014
22	Jisha P.	Junior Nurse	10-03-2014
23	Asha John V.	Junior Nurse	10-03-2014
24	Sreejisha P.	Junior Nurse	10-03-2014
25	Nirmala Nallachery	Junior Nurse	11-03-2014
26	Surya C.	Nursing Assistant	12-03-2014
27	Shiji P.	Junior Nurse	12-03-2014
28	Savitha M.	Junior Nurse	12-03-2014
29	Sumadevi S.	Junior Nurse	13-03-2014
30	Shimna Sebastian	Junior Nurse	13-03-2014
31	Silja Kurian	Junior Nurse	14-03-2014
32	Dr. Sarath K.E.	Lecturer	18-05-2013
33	Dr. Sajini Samual	Assistant Professor	29-07-2013
34	Dr. Nikhil Mohan	Lecturer - Medical Officer	05-08-2013
35	Dr. Vinin N.V.	Assistant Professor	12-08-2013
36	Dr. Dessai Sampada Bablo	Assistant Professor	13-08-2013
37	Dr. Amith Sreedharan	Assistant Professor	26-09-2013
38	Dr. Atanu Bhattachargee	Lecturer	26-09-2013
39	Dr. Manu Prasad A	Senior Lecturer	17-01-2014
40	Dr. Joneetha Jones	Assistant Professor	20-01-2014
41	Dr. V.P. Praveen Kumar Shenoy	Senior Lecturer	20-01-2014
42	Dr. Jithin T.K.	Assistant Professor	29-01-2014
43	Dr.Shivakumar Thiagarajan	Assistant Professor	03-02-2014

Staff who had left the Institution during the period

Sl No.	Name	Designation	Joining Date	Relieved Date
1	Jibeesh V Alex	Assistant Pharmacist	25-07-11	26-03-13
2	Dr. Milind Kumar	Associate Professor	21-10-10	01-04-13
3	Neethu.S.Nair	X ray Technician	15-10-12	02-04-13
4	Dr. Roshan Joseph	Lecturer	05-02-11	11-04-13
5	Suresh.M	Clerk/Cashier/Typist	19-07-11	25-05-13
6	Alsa Paul Ukken	Radiographer	29-01-08	01-07-13
7	Preetha.M.S	Junior Nurse	17-05-07	05-08-13
8	Saneesh Krishnan	Radiographer	31-07-13	10-10-13
9	Dr. Sujith Kumar	Assistant Professor	16-12-12	30-11-13
10	Suni S.	Assistant Pharmacist	15-04-13	12-12-13
11	Ajesh.C.S	Medical Records Attender	25-09-12	01-01-14
12	Remla.P.T	Radiographer	12-10-12	17-01-14
13	Elizabeth Sebastian	Junior Nurse	30-12-10	01-02-14
14	Rejitha L.R.	Nursing Assistant	10-03-14	28-03-14

PURCHASE STORE DIVISION & PHARMACY

PURCHASE

All purchase matters including medicine purchase are handled by this Division. All purchases are done following Store Purchase Manual. Major equipments purchased during the period are as follows:

Sl No.	Name	Designation	Joining Date
1	High Speed Refrigerator Centrifuge	₹13,50,000.00	M/s. Universal Agencies, Trichur
2	ICU COT (Model: AMB:-1: ICU bed – Five Function, Make: Accura)	₹3,20,000.00	M/s. Trend Surgicals Pvt. Ltd, Kannur
3	Cytogenetic & Fish (Fluorescence in situ Hybridization)	€ 39,350.00	M/s. Carl Zeiss India (Bangalore) Pvt. Ltd, Bangalore
4	Liquid Nitrogen Container	₹10,25,000.00	M/s. Haemolab Equipments, Cochin
5	Automatic Tissue Processor	₹87,00,000.00	M/s. DHR Holding India Pvt. Ltd, Chennai
6	Tissue Embedder		
7	Autostainer Work Station		
8	Electrophoresis & Blotting	₹7,15,000.00	M/s. Bio-Rad Laboratories (India) Pvt. Ltd, Bangalore
9	-200C Low Temperature Freezer (Sample Collection & Storage –MO)	₹3,97,382.00	M/s. Haemolab Equipments, Cochin
10	-860C Ultra Low Temperature Freezer (Sample Collection & Storage –MO)	₹6,30,000.00	M/s. Haemolab Equipments, Cochin
11	Micropipettes-With stand (12 Nos)	₹2,50,772.00	M/s. Kripa Surgicals, Payyanur
12	Ultra –Pure Water Purification System	₹3,50,000.00	M/s. Akshaya Associates, Thalassery
13	Autoclave (2 Nos)	₹67,840.00	M/s. Scientific Medical Equipments (Kerala) Pvt. Ltd, Cochin

14	Rotator Shaker (2 Nos)	₹35,600.00	M/s. Akshaya Associates, Thalassery
15	pH Tester 1 No	₹10800.00	M/s. Universal Agencies, Trichur
16	Hot Air Oven – 1 No	₹23,000.00	
17	Thermostatic Water Bath with Thermometer – 3 Nos	₹19,500.00	
18	Digital Magnetic Stirrer – 1 No	₹13,000.00	
19	Micro Centrifuge – 2 Nos	₹11,600.00	
20	Dancing Shaker – 1 No	₹17,000.00	
21	Vortex Shaker – 1 No	₹8,000.00	
22	Orbital Shaker – 1 No	₹39,000.00	
23	Ice Flaking Machine	₹2,64,003/-	M/s. Hi-tech Instruments Inc, Chennai
24	PCR Equipment	₹16,80,000.00	M/s. Invitrogen Bioservices India Pvt. Ltd, Bangalore
25	Microscope with Digital Camera	₹1,71,684.00	M/s. Akshaya Associates, Thalassery
26	Gel Doc and Imaging System	₹12,00,000.00	M/s. Bio-Rad Laboratories (India) Pvt. Ltd, Bangalore
27	-200C Deep Freezer	₹1,68,500.00	M/s. Universal Agencies, Trichur
28	Spectrophotometer	₹3,54,000.00	
29	Hybridization Oven	₹1,68,000.00	
30	Digital Incubator (Model: YSI 438D)	₹39,212.00	M/s. Universal Agencies, Trichur
31	Microslide Cabinet (YSI-160)	₹72,823.00	
32	Electric Saw for Bone Cutting	₹1,50,000.00	M/s. Universal Agencies, Trichur
33	Gel Documentation System	₹3,90,000.00	M/s. Universal Agencies, Trichur
34	PCR (Thermal Cycler)	₹2,35,000.00	
35	1-D Electrophoresis System – Horizontal	₹50,165.00	M/s. Wipro GE Healthcare (P) Ltd, Bangalore
35	1-D Electrophoresis System - Vertical	₹63,299.00	
36	2-D Electrophoresis System	₹7,56,505.00	
37	Semi Dry Blotting Apparatus	₹1,12,660.00	
38	ECG Machine 3 Channel with Trolley – 3 Nos (IP Block)	₹1,35,000.00	M/s. Rins Marketing & Services, Kannur
39	ECG Machine 6 Channel with Trolley – 3 Nos (For IP Block)	₹1,80,000.00	
40	Infusion pumps – 10 Nos (For IP Block)	₹3,80,000.00	M/s. Rins Marketing & Services, Kannur
41	Syringe pumps (Model: GRASEBY Syringe pump 2100)	₹3,00,000.00	M/s. Rins Marketing & Services, Kannur
42	Monitor with Trolley – 12 Nos (For IP Block)	₹10,20,000.00	M/s. Rins Marketing & Services, Kannur
43	Defibrillator with Stabilizer – 1 No (For IP Block)	₹2,95,000.00	M/s. Rins Marketing & Services, Kannur
44	Fumigator – 05 Nos (For IP Block)	₹1,75,000.00	M/s. Kerala Surgical Equipment Co., Calicut
45	Monitor with Stand – 06 Nos	₹4,45,284.00	M/s. Universal Agencies, Trichur
46	Cytotoxic Safety Cabinet – 3 Nos	₹20,92,500.00	M/s. Esco Biotech Pvt. Ltd, Mumbai
47	Automated Genetic Analyzer	\$ 1,50,000.00	M/s. Invitrogen Bioservices India Pvt. Ltd, Bangalore

48	Real-Time PCR system		
49	Thermal Cycler (Standard)	₹4,45,000.00	M/s. Bions Medical Systems Pvt. Ltd, Cochin
50	Thermal Cycler (With Fast Cycling Option)		
51	Cavitron Ultrasonic Aspirator	₹29,80,000.00	M/s.South India Surgical Co. Ltd, Tvpm
52	Laparoscopic Equipment Model: OVB-1	₹26,00,000.00	M/s. Innovate Concepts, Kochi
53	Videocolposcope with Swing Arm	₹2,10,000.00	M/s. Rins Marketing & Services, Kannur
54	Power Laundry Equipments – 2 Nos	₹14,21,000.00	M/s. Lucky Engineering Works, New Delhi
55	Micromotor (with Debrider)	₹12,00,000.00	M/s. Manchel Marketing Company, Tvpm
56	Anthropomorphic Phantom	₹32,42,342.00	M/s. Meditronix Corporation, New Delhi.
57	Video Laryngoscope	₹5,85,000.00	M/s.South India Surgical Co. Ltd, Tvpm
58	Portable X-ray Unit	₹8,00,000.00	M/s. Allengers, Chandigarh
59	Radio Frequency Ablation Machine with Peristaltic pump (RFA)	₹14,25,000.00	M/s. Access Devices, Bangalore
60	Thermoluminescence Dosimetry System	₹30,51,951.00	M/s. Meditronix Corporation, New Delhi.
61	Microfluidic Based Platform for DNA,RA and Protein Quantification (Bioanalyzer)	₹15,98,000.00	M/s. Synergy Scientific Services, Chennai
62	Mediastinoscope & optional accessories	₹10,40,000.00	M/s. Neoptic Surgicals, Kochi
63	Thoracoscopic Equipment & optional accessories	₹3,00,000.00	M/s. Neoptic Surgicals, Kochi
64	Haemolab Equipments, Cochin	₹3,61,000.00	M/s. Haemolab Equipments, Cochin
65	Head Lights – 02 nos	₹1,50,000.00	M/s. Vaansari Marketing Services, Chennai
66	ICU Ventilator with Air Compressor	₹10,00,000.00	M/s. A & M Healthcare, Cochin
67	C-Arm Mobile Image Intensifier	₹34,50,000.00	M/s.Bet Medical (P) Ltd, Chennai
68	Waterproof Farmer Ionization Chamber (.6cc) with connectors and connectivity wire	₹2,03,175.00	M/s. Meditronix Corporation, New Delhi.
69	Ehtylene Oxide Sterilizer (ETO Sterializer)	₹23,85,000.00	M/s. Kerala Surgical Equipment Co., Calicut
70	ICU Monitor (Model: Philips Sur-Sign-VM8) – 06 Nos with one number Miocro Stream Capnograph	₹12,65,000.00	M/s. Kerala Surgical Equipment Co., Calicut
71	Blood Irradiator (Model: BIOBEAM GM2000)	€ 1,43,056.00	M/s. Sanlar Imex Services Pvt. Ltd, Mumbai
72	Syringe pumps – 06 Nos	₹2,04,000.00	M/s. Medasis India, Calicut
73	Surgical Laser	₹60,13,500.00	M/s. Pika Medical Private Limited, Bangalore
74	OT Autoclave	₹7,95,750.00	M/s. Surgitech India, Kannur
75	Magnifying Loupe	₹1,25,000.00	M/s. Vaansari Marketing Services, Chennai
76	Programming Software For Algorithm Development, Image Processing Data Analysis	₹1,33,462.00	M/s. CoreEL Technologies (I) Pvt. Ltd, Bangalore
77	Digital Radiography Unit (Digital X-ray)	₹75,00,000.00	M/s. Wipro GE Healthcare (P) Ltd, Bangalore

78	4DCT Scanner & accessories: Local supply items: Optional item (Integrated Planning Simulation And Targeting Assistance System): Optional Accessories:	\$ 5,48,100.00 ₹73,25,467.00 ₹40,00,000.00 ₹17,14,702.00	M/s. Wipro GE Healthcare (P) Ltd, Bangalore
79	High end Linear Accelerator and Complete accessories	\$ 21,00,000.00	M/s. Elekta Limited, UK

PURCHASE STORE & PHARMACY DIVISION

PHARMACY

All medicines related to cancer treatment, i.e, anti-cancer drugs, surgical & disposables, antibiotics, reagents, X-ray films etc;- are purchased through this Division. A total amount of Rs.12,69,71,877/- was spent for the purchase of medicines during the period. Invited tender through various news paper for Anticancer Drugs, Antibiotic and general drugs, I/V fluids, Surgical and Disposable items accordingly selected lowest rate quoted suppliers .

ACTIVITIES AND ACHIEVEMENTS:-

Due spacious problem pharmacy shifted to new place having sufficient spaces and Pharmacy extended the service 24 hrs.

ACCOUNTS

This Division plays a key role in up-keeping the fi-

ancial matters of the Centre. All works pertaining to preparation of annual budget, salary disbursal, maintaining PF accounts of staff members all payments & receipts, maintenance of all books, ledgers and registers, all banking transactions, auditing etc are handled under this Division.

STORE

This Division deals with stock handling, maintenance of Central Stock Register, condemnation, disbursement of required items to various Departments/Divisions, printing & stationary etc:-

GRANT-IN AID

During the year an amount of Rs.20 crores was provided as Grant in aid, under 'Plan' and an amount of Rs.7.05 crores under Non-plan, by Government

STAFF

Sl No.	Name	Designation
1	Sajeewan.P	Pharmacist
2	Suganth	Assistant pharmacist
3	Nisha	Assistant pharmacist
4	Dehraj. G	Assistant pharmacist
5	Sabitha M V	Assistant pharmacist
6	Darley joseph	Pharmacy Assistant
7	Bindu K T	Pharmacy Assistant
8	Baiju	Pharmacy Assistant

Item	Amount
Purchase	Rs. 12,75,75,958.00/-
Purchase return	Rs. 404081/-
Sales	Rs. 106176925/-

PUBLIC RELATIONS AND CLINICAL SERVICES DIVISION



Sri. C.S Padmakumar
Administrative Officer
(Clinical Services)

INTRODUCTION

Clinical Administration and Public Relations includes, Front Office Management, Public Relations Activities, Medical Records Management and Patients Accounting and Billing.

MAJOR ACTIVITIES:

Department of Clinical Administration & Public Relations deals with:

- Co ordination of academic programs
- Organising and Supervising Filed Work Training and Project Work Dissertations to Various Professional Courses
- Co-ordination of various Research Projects
- Liaison work with various Governmental and other agencies
- All social activities and public relations activities.
- Receiving and guiding patients and other visitors
- New Patients Registration according to their Socio Economic Background
- Case file arrangement and Issue of Identity cards
- Issue of all investigatory reports
- All cash transactions of patients
- Patients and relatives guidance and counseling
- Implementation of various patient welfare services
 - Chis Plus
 - Karunya Benevolent Fund
 - Cancer Suraksha Scheme
 - Thalolam
 - Comprehensive Health Care Scheme for Scheduled Tribe
 - Snehasanthwanam for Endosulfan victims
 - Prime Minister's Relief Fund
 - Society for Medical Assistance to the Poor
 - Patient Welfare fund of MCC
 - ESI Scheme
- Issue of various certificates to patients
- Issue of railway concession forms
- Guidance and issue of certificates for financial aid from both government and private agencies
- Death register maintenance and periodical reporting to concerned authority

- All types of correspondence related to patients
- Treatment expenditure Re imbursement procedures for various agencies
- Guidance and assistance to various trainees coming here for training
- Issue press releases to print and audio visual medias
- Management of patients and their relatives complaints and suggestions
- Apprenticeship training for Front Office Assistants and Computer Operators
- Maintain up to date registers, regarding, the names and contact numbers of all employees of the Centre
- Maintain up to date registers, regarding, the names and contact numbers of other major hospitals, Govt. offices etc.
- Maintain up to date registers showing the details of all calls (official and personal) made through the exchange.
- Connect incoming external phone calls to the concerned staff

CLINICAL ACHIEVEMENTS - 2013

Sl No.	Name	Designation
1	New Cases	3867
2	Non Cancerous Cases	2086
3	Follow up cases	57758
4	Non Cancerous cases (follow up cases)	3075
5	Total Patients	66786
6	In patients	3524
7	Day CT Injections	9009
8	IP CT Injections	1966
9	Total CT Injections	10975
10	Observation cases	
11	Major Surgeries	1010
12	Minor Surgeries	430
13	Total surgeries	1440
14	Scopies	869
15	X-ray	4262
16	U S G	944
17	Mammogram	1123
18	CT Scan	2908
19	Esophageal stenting	6
20	Biopsy	2289
21	FNAC	1010
22	Cytology	5972
23	Histopathology	5928
24	Haematology	37671
25	Biochemistry	37705

26	Urine analysis	1212
27	BMA	278
28	Peripheral smear	568
29	ECG	715
30	Bronchoscopy	970
31	RT Patients(in fractions)	25395
32	Number of Patients RT	1122
33	Brachytherapy	256
34	Brachytherapy (pt. bases)	90
35	RT Simulator	1122
36	Volunteer Training programme (ECDC)	12
37	Cancer Awareness Classess	92
38	Early Cancer Detection Camp	127
39	Exhibition	12
40	Work Shop	1
41	CME	8
42	Blood Donation	4112
43	Component Preparation	9574
44	Screening Test	4112
45	Blood Donation Camp	22
46	ABG	152
47	No.of FLUID	246
48	CNE	2
49	Linac(No.of patient RT)	472
50	Linac(RT patient in fractions)	30447
51	Tumour assay	3214

52	Second Opinion	1582
53	Culture and sensitivity	1975
54	Sputum -AFB	87
55	Environmental sample	458

56	MRI	944
57	Gram stain	335
58	Fungal culture	14
59	SEROLOGY	249

Details of Financial Assistance Schemes Implemented in MCC

Sl No.	Name	Designation
1	CHIS PLUS	2096
2	Karunya Benevolent Fund	675
3	Comprehensive Health Care Project for ST patients	81
4	PMNRF	5
5	SNEHASANDWANAM _ endosulphan victim patients	6
6	Kerala Social Security Mission – Cancer Suraksha Scheme(children below 18 yrs)	28
7	Kerala Social Security Mission –Thalolam (children below 18 yrs)	37
8	ASWAS Project(cancer control programme of Kannur Jilla panchayath)	435
9	ESI scheme	111

ACADEMIC DIVISION & LIBRARY AND INFORMATION SCIENCE



Sri. Subash Chandran
Medical Librarian

INTRODUCTION

MCC's vision is "To become a centre of excellence in cancer treatment and research, and occupy a place amongst the most eminent cancer institutions of the nation." MCC, one of the pioneer institutes in cancer research demands each and every recent updates about cancer treatment from all over the world.

Library is the heart of an institution, it is the backbone of the research and development activities in every science and technology organizations. Our Library is comes the category of special Library

which demand to integral part of the progress of MCC in its entire academic and research activities.

To cater the research activities we are going to become RFID enabled Library. As you know our library users are busy with their clinical practices at day time and so they cannot utilize their day time for research activities to overcome this unavoidable situation Library would be opened for 24 hours. To comply with the vision the library would like to adopt the RFID system. Now RFID tender process is going on. Our concept of 24x7 library is just a foot step away.

Item	Editions	Collection as on 2014 March
BOOKS	449	2581
JOURNALS	26	70
ONLINE ITEM		01

STAFF

Sl No.	Name	Designation
General Academic Division		
1.	Rajesh A K	Administrative Officer
2.	Preethu Das T K	Personal Assistant
3.	Bindhu T K	Clerk/Cashier/Typist
4.	Rejoy K	Clerk/Cashier/Typist

5.	Jayanandan A	Clerk/Cashier/Typist
6.	Shajith R P	Attender
7.	Pramod P	Attender
Academic Division & Library and Information Science		
1.	Subhash Chandran A K	Medical Librarian
2.	Harish Babu	Assistant Librarian
Public Relations and Clinical Services Division		
1.	Sri. Padmakumar C S	Administrative Officer (Clinical Services)
2.	Smt. Mahija P M	Hospital Assistant
3.	Smt. Shyni D R	Hospital Assistant
4.	Smt. Bindu V	Hospital Assistant
5.	Smt. Reena K	Hospital Assistant
6.	Smt. Anupama Achuthan	Hospital Assistant
7.	Smt. Sreeja K	Hospital Assistant
8.	Smt. Bhavana Moukthi M B	Hospital Assistant
9.	Smt. Deepa Chenoli	Hospital Assistant
10.	Smt. Remya V	Hospital Assistant
11.	Smt. Soorya M C	Hospital Assistant
12.	Smt. Bindu T N	Hospital Assistant
13.	Smt. Honey Mol	Hospital Assistant
14.	Sri. Rajeevan U	Telephone Operator
15.	Sri. Rathish	Attender
Accounts Division		
1.	Sri. Jayadeep	Clerk/Cashier/Typist
2.	Sri. Ganesan V	Clerk/Cashier/Typist
Purchase/Stores Division & Pharmacy		
1.	Smt. Lasitha K V	Store Keeper
2.	Sri. Dinesh Kumar T M	Clerk/Cashier/Typist
3.	Sri. Prasoonan PP	Clerk/Cashier/Typist
4.	Sri. Sajeevan	Pharmacist
5.	Smt. Nisha Gangan	Assistant Pharmacist
6.	Sri. Sugandham S	Assistant Pharmacist
7.	Smt. Bindhu K T	Lab/Pharmacy/Assistant
8.	Smt. Darley Joseph	Lab/Pharmacy/Assistant
9.	Sri. Baiju B	Nursing Assistant
Human Resources and Establishment Division		
1.	Surekha M C	Clerk/Cashier/Typist
2.	Sreejith P K	Clerk/Cashier/Typist
Security Division		
1.	Satheesan P M	Security Officer

FINANCIAL STATEMENTS

AUDITORS' REPORT

THE MEMBERS,
MALABAR CANCER CENTRE SOCIETY,
THALASSERY.

Gentlemen,

We have audited the accompanying financial statements of MALABAR CANCER CENTRE SOCIETY, THALASSERY, KANNUR Dt., which comprise the balance sheet as at 31st March, 2014 and income and expenditure account for the year ended 31-03-2014.

Management's Responsibility for the Financial Statements

Management is responsible for the preparations of these financial statements. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the standards on auditing issued by the Institute of Chartered Accountants of India. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain the reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedure to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risks of assessments, the auditor considers internal control relevant to the society's preparation and fair presentation of the financial statements in order to design audit procedure that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

On the basis of our audit, we report that;

- a) The fixed assets and current assets have been physically verified by the management. In our opinion and according to the information and explanations given to us, the procedures of physical verification of fixed assets and current assets followed by the management are reasonable and adequate to the size of the entity.
- b) The balances shown under sundry creditors for advances, sundry creditors, sundry debtors, deposits and advances etc. are subject to confirmation.
- c) We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.
- d) In our opinion, proper books of accounts have been kept by the society so far as appears from our examination of such books.
- e) The balance sheet and income and expenditure account dealt with by this report is in agreement with the books of accounts.
- f) Subject to the above remarks, in our opinion and to the best of our information and according to the explanations given to us, the said balance sheet and income and expenditure account read together with 'Schedule- XXVIII- significant accounting policies and notes on accounts give a true and fair view;
 - i) In so far as it relates to the balance sheet, of the state of affairs of the society as at 31st March, 2014 and
 - ii) In the case of income and expenditure account, of the excess of expenditure over income for the year ended 31-03-2014.

30-10-2014

**MALABAR CANCER CENTRE SOCIETY
THALASSERY, KANNUR**

SCHEDULE: XXVIII:

**SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS FORMING
PART OF ACCOUNTS FOR THE YEAR ENDED 31st MARCH 2014**

A) SIGNIFICANT ACCOUNTING POLICIES:

(1) BASIS OF PREPARATION OF FINANCIAL STATEMENTS:

- (a) The financial statements have been prepared under the historical cost convention and are based on accrual basis of accounting.
- (b) Accounting policies not specifically referred to otherwise are consistent with generally accepted accounting principles followed by the Society.

(2) GRANT IN-AID:

Grant in aid received from Govt. of Kerala under non plan fund and financial assistance from Kerala Blood Transfusion Council have been considered as revenue grant and credited in the income and expenditure account and Grant in aid received from Govt. of Kerala, MPLAD Scheme and Govt. of India for Tertiary Cancer Centre under plan fund for infrastructure development have been considered as capital grant and shown in the balance sheet.

(3) FIXED ASSETS:

Fixed assets are stated at cost of acquisition less accumulated depreciation.

(4) DEPRECIATION:

Depreciation on fixed assets has been charged under written down value method at the rates prescribed under the Income-Tax Rules.

(5) CLOSING STOCK:

Closing Stock comprises of stock of drugs, chemicals, consumables and stationery. Valuation has been made on the basis of cost price or net realisable value whichever is less.

(6) RETIREMENT BENEFITS:

No provision has been made in the accounts for the accrued liability of retirement benefits due the employees as on 31-03-2014, as the same is accounted on cash basis.

(7) REVENUE RECOGNITION:

Revenue is generally recognized on accrual basis. However, in the case of inpatients the amount due by them as on 31.03.2014 on various accounts like Room rent, Investigation charges, Surgery charges, Service charges etc. are billed and accounted only at the time of discharge.

(8) PROVISIONS, CONTINGENT LIABILITIES AND CONTINGENT ASSETS:

A provision is recognized when the entity has an obligation as a result of a past event, which can be reliably estimated and it is certain that an outflow of resources will be required to settle such obligation. Contingent liabilities are not recognized but are disclosed at their estimated value in notes on accounts. Contingent assets are neither recognized nor disclosed in the financial statements.

(9) IMPAIRMENT OF ASSETS:

An asset is treated as impaired when the carrying cost of such assets exceeds its recoverable value. The carrying cost of assets are reviewed at each balance sheet date to determine if there is any indication of impairment based on external/internal factors.

(10) WELFARE FUND:

A patients' welfare fund is created with the donations received from the discharged patients, their relatives, general public and voluntary contribution from employees. Amount receivable from discharged/ deceased patients which has no scope for recovery, outside investigation charges, bone marrow transplantation, medicines, food expenses, and traveling expenses etc. for the poor patients are generally debited to this fund.

(11) TAX DEDUCTED AT SOURCE:

Tax deducted from the receipts are accounted as per the position of 26AS available as on the date of audit.

B. NOTES ON ACCOUNTS:

1. The Society is in possession of the building and hospital equipments gifted by a foreign source. The value of the said assets were not taken into account for want of proper details from the donor till 31-03-2005. Since the AG's audit team had suggested to capitalize the value of assets donated by SNC Lavlin, the management of the society had made a valuation of assets as on 31-03-2001 as Rs.10,85,37,233/- and it was accounted as Fixed assets and added to the Capital fund on 01-04-2005. The accumulated depreciation up to 31-03-2005 amounting to Rs.4,51,82,866/- was accounted as prior period expenses in the accounts for the year ended 31-03-2006. Since then normal depreciation on the above said fixed assets has been charged in the accounts.
2. Though the Society has obtained prior permission from the Ministry of Home Affairs, Government of India, vide their letter No: 11/21022/94(506) / 2000-FCRA-IV dated 26/04/2001 under section 6(IA) of Foreign Contribution (Regulation) Act, 1976, for the receipt of foreign contribution to the tune of Rs. 25.30 crores from M/s SNC Lavlin Inc. Canada, no foreign contribution has been received during the year ended 31-03-2014.
3. The Society is in possession of land acquired and handed over by the state govt. It is learned that some of the land owners have filed suits for enhanced compensation on land acquisition. The Sub Court, Thalassery has ordered enhancement in few cases. The govt. of kerala have filed appeals before the Hon'ble High Court against the said enhancement and the High Court has ordered stay in few cases. As the land is being acquired by the state govt. and they are fighting against the suits, we have not made any provision for enhanced compensation in the accounts for the year ended 31-03-2014.
4. Donation received in kind are taken into fixed assets on an estimated value certified by the management and normal depreciation has been charged on it at the rate allowable under the I.T. Rules.
5. An amount of Rs.10,000/- to M/s. Heavy Engineering Co., towards inspection fee Rs.9,750/- excess payment made to M/s. Mittal International, Kannur in 2001-'02 and Rs.15,000/- paid to M/s. Aqua Chemicals and Systems Ltd, Chennai in 2002-'03 are still shown under deposits and advances pending settlement.
6. Closing stock value consists of expired medicines and amount receivable on account of expired medicines returned amounting to Rs.9,38,386/- Usually expired medicines are either replaced or value of such medicines reimbursed by the suppliers. Hence no provision has been made in the accounts as on 31.03.2014.
7. Out of the capital grant received under plan fund, the amount utilized for infrastructure development and put in to use during the year is transferred to Capital Fund and the concerned assets are shown under fixed assets and depreciation charged accordingly. However the amount utilized for infrastructure development which are not yet commissioned is shown under work in progress in the Balance sheet as at 31-03-2014.
9. The society has not received any intimation from suppliers regarding their status under the Micro, Small and Medium Enterprises Development Act, 2006 and hence disclosures, if any, relating to amount unpaid as at the year end together with the interest paid/payable as required under the said Act have not been furnished.
10. The contributions received from suppliers and outsiders are credited in an account named seminar expense fund to meet the seminar expenses of academic staff.
11. Previous year's figures have been regrouped / reclassified wherever necessary in order to suit current year's disclosure.

Sl. Number	Particulars	As on 01-04-2013	GROSS BLOCK			As on 1-03-2014	Depreciation				Net Block	
			ADDITION / DELETION		Total		Upto 31-03-2013	Rate	For the Year	Upto 31-03-2014	As on 31-03-2013	As on 31-03-2014
			Before 01-10-2013	After 01-10-2013								
1	LAND	14,567,000	-	-	-	14,567,000	-	-	-	-	14,567,000	14,567,000
2	BUILDING	142,640,196	84,998,592	7,564,036.00	92,562,628.00	235,202,824	73,512,793	10%	16,065,709.00	89,578,502.00	69,127,403	145,624,322
3	PARTITIONS AND CURTAINS	1,010,040	240,071	134,660.00	374,731.00	1,384,771	278,296	15%	155,872.00	434,168.00	731,744	950,603
4	FURNITURE AND FITTINGS	1,471,465	28,396	16,853.00	45,249.00	1,516,714	795,468	10%	71,282.00	866,750.00	675,997	649,964
5	COMPUTER SYSTEM	1,927,204	1,408,850	203,400.00	1,612,250.00	3,539,454	1,716,494	60%	1,032,756.00	2,749,250.00	210,710	790,204
6	BOOKS	901,784	336	670.00	1,006.00	902,790	426,416	15%	71,406.00	497,822.00	475,368	404,968
7	ELECTRICAL FITTINGS, PUMPS, PANELS	12,564,189	1,553,754	1,376,454	2,930,208.00	15,494,397	9,143,647		591,270	9,794,917.00	3,420,542	5,759,480
8	DIESEL GENERATORS	9,598,234	55,275	-	55,275.00	9,653,509	2,322,149		1,078,296.00	3,400,445.00	7,276,085	6,253,064
9	COMMUNICATION EQUIPMENTS	108,819	11,500	6,445.00	17,945.00	126,764	57,462	15%	9,912.00	67,374.00	51,357	59,390
10	GENERAL EQUIPMENTS	123,041	2,200	1,472,400.00	1,474,600.00	1,597,641	82,099	15%	116,901.00	199,000.00	40,942	1,398,641
11	FAX MACHINE	34,800	-	-	-	34,800	29,078	15%	858.00	29,936.00	5,722	4,864
12	BOREWELL	71,446	-	-	-	71,446	66,826	15%	693.00	67,519.00	4,620	3,927
13	WATER SUPPLY AND SANITARY FITTINGS	160,966	-	16,000.00	16,000.00	176,966	146,576	15%	3,359.00	149,935.00	14,390	27,031
14	REFRIGERATOR	192,039	71,850	160,970.00	232,820.00	424,859	121,654	15%	33,408.00	155,062.00	70,385	269,797
15	AIR CONDITIONER	593,990	184,150	925,629.00	1,109,779.00	1,703,769	216,613	15%	153,651.00	370,264.00	377,377	1,333,505
16	OXYGEN CYLINDER	23,328	-	-	-	23,328	21,317	15%	302.00	21,619.00	2,011	1,709
17	HOSPITAL & LAB EQUIPMENTS	38,488,622	17,134,326	50,761,696.00	67,896,022.00	106,384,644	22,392,212		11,303,866.00	33,696,078.00	16,096,410	72,688,566
18	CLINICAL INSTRUMENTS	551,331	198,885	394,277.00	593,162.00	1,144,493	265,350	15%	102,301.00	367,651.00	285,981	776,842
19	CLOCKS	3,605	-	-	-	3,605	2,937	15%	100.00	3,037.00	668	568
20	TYPE WRITER	4,000	-	-	-	4,000	3,598	15%	60.00	3,658.00	402	342
21	WATER BED	24,500	-	10,500.00	10,500.00	35,000	12,513	15%	2,586.00	15,099.00	11,987	19,901
22	NOTICE BOARD	11,340	-	-	-	11,340	7,970	15%	506.00	8,476.00	3,370	2,864
23	TV STAND	1,500	-	8,112.00	8,112.00	9,612	1,124	10%	443.00	1,567.00	376	8,045
24	CD PLAYER	6,600	2,600	-	2,600.00	9,200	5,427	15%	566.00	5,993.00	1,173	3,207

25	TELEVISION	110,040	16,000	64,170.00	80,170.00	190,210	27,385	15%	19,611.00	46,996.00	82,655	143,214
26	CANON DIGITAL LASER COPIER	149,550	-	389,856.00	389,856.00	539,406	101,648	15%	36,425.00	138,073.00	47,902	401,333
27	SLIDE PROJECTOR	14,644	-	-	-	14,644	12,681	15%	294.00	12,975.00	1,963	1,669
28	WHEELCHAIR	106,700	-	5,000.00	5,000.00	113,700	22,347	15%	13,328.00	35,675.00	86,353	78,025
29	SOLAR WATER HEATER	137,975	-	-	-	137,975	136,414	80%	1,249.00	137,663.00	1,561	312
30	DRINKING WATER PIPE LINING AND PUMP	1,195,521	-	-	-	1,195,521	467,124	15%	109,260.00	576,384.00	728,397	619,137
31	SOFTWARE FOR ENDOSCOPY	49,258	-	-	-	49,258	49,113	60%	87.00	49,200.00	145	58
32	OPEN WELL AND PUMP HOUSE	903,746	-	-	-	903,746	682,110	15%	33,245.00	715,355.00	221,636	188,391
33	MUSIC SYSTEM	1,818	-	-	-	1,818	1,322	15%	74.00	1,396.00	496	422
34	TOOLS	46,810	7,297	-	7,297.00	54,107	12,748	15%	6,204.00	18,952.00	34,062	35,155
35	VACCUUM CLEANER	21,975	-	16,160.00	16,160.00	38,135	4,788	15%	3,790.00	8,578.00	17,187	29,557
36	INCINERATOR CHIMNEY	246,221	-	-	-	246,221	179,128	15%	10,064.00	189,192.00	67,093	57,029
37	TELECOBALT MACHINE	29,611,679	975,000	-	975,000.00	30,586,679	24,716,141	40%	2,348,215.00	27,064,356.00	4,895,538	3,522,323
38	O2N2 MANIFOLD SYSTEM	114,020	-	377,954.00	377,954.00	491,974	65,706	15%	35,594.00	101,300.00	48,314	390,674
39	LCD PROJECTOR WITH BOARD	228,350	-	162,590.00	162,590.00	390,940	111,241	15%	29,761.00	141,002.00	117,109	249,938
40	AMPLIFIER WITH MICROPHONE	28,665	-	-	-	28,665	16,358	15%	1,846.00	18,204.00	12,307	10,461
41	MAMMOGRAPHY WITH STERIO TACTIC ATTACHMENT	2,600,000	-	-	-	2,600,000	2,375,835	15%	33,625.00	2,409,460.00	224,165	190,540
42	500 MA X RAY WITH FLUROSCOPY DX	692,000	-	-	-	692,000	632,339	15%	8,949.00	641,288.00	59,661	50,712
43	60 MA X RAY MOBILE UNIT	120,000	-	-	-	120,000	109,654	15%	1,552.00	111,206.00	10,346	8,794
44	ULTRASOUND SCANNER	3,609,150	-	-	-	3,609,150	1,656,965	15%	292,828.00	1,949,793.00	1,952,185	1,659,357
45	LABORATORY FURNITURE	202,873	-	-	-	202,873	143,658	10%	5,922.00	149,580.00	59,215	53,293
46	HOSPITAL FURNITURES	3,236,636	1,103,194	3,010,535.00	4,113,729.00	7,350,365	1,743,701	10%	410,140.00	2,153,841.00	1,492,935	5,196,524
47	OFFICE FURNITURES	2,187,420	-	19,627.00	19,627.00	2,207,047	902,529	10%	129,470.00	1,031,999.00	1,284,891	1,175,048
48	INCINERATOR	440,000	-	-	-	440,000	402,065	15%	5,690.00	407,755.00	37,935	32,245
49	ELEVATOR	1,030,000	-	-	-	1,030,000	798,553	10%	23,145.00	821,698.00	231,447	208,302
50	EPABX WITH CABLES	280,363	-	-	-	280,363	186,114	10%	9,425.00	195,539.00	94,249	84,824
51	AIR CONDITIONING IN OT AREA	1,267,500	-	131,900.00	131,900.00	1,399,400	958,036	10%	37,541.00	995,577.00	309,464	403,823

52	TREATMENT PLANT WITH ALL PUMPS AND CONTROL PANEL	1,141,800	(1,800)	-	(1,800.00)	1,140,000	885,229	10%	25,477.00	910,706.00	256,571	229,294
53	ALUMINIUM LADDER	26,578	-	8,050.00	8,050.00	34,628	5,749	15%	3,728.00	9,477.00	20,829	25,151
54	PAINTINGS	33,500	-	-	-	33,500	22,761	15%	1,611.00	24,372.00	10,739	9,128
55	WATER PURIFIER	68,770	9,800	-	9,800.00	78,570	27,637	15%	7,640.00	35,277.00	41,133	43,293
56	MOBILE FILE STORAGE SYSTEM	279,300	-	-	-	279,300	164,668	15%	17,195.00	181,863.00	114,632	97,437
57	HDR BRACHY THERAPY AND RT SIMULATOR	29,964,827	742,150	-	742,150.00	30,706,977	17,202,664	15%	2,025,647.00	19,228,311.00	12,762,163	11,478,666
58	CT SCANNER	24,387,767	204,408	4,300,000.00	4,504,408.00	28,892,175	13,961,945	15%	1,917,035.00	15,878,980.00	10,425,822	13,013,195
59	COIR MATTRESS	269,354	-	-	-	269,354	117,301	15%	22,808.00	140,109.00	152,053	129,245
60	TALLY GOLD MULTI USER SOFTWARE	36,250	-	-	-	36,250	35,600	60%	390.00	35,990.00	650	260
61	COMPUTER PRINTER AND DIGITAL CAMERA FOR					-	-			-	-	-
	COMMUNITY ONCOLOGY	46,540	-	-	-	46,540	45,706	60%	500.00	46,206.00	834	334
62	SAMSUNG WASHING MACHINE	5,250	-	-	-	5,250	2,921	15%	349.00	3,270.00	2,329	1,980
63	ELECTRIC LAWN MOVER	37,000	-	-	-	37,000	15,982	15%	3,153.00	19,135.00	21,018	17,865
64	RADIOTHERAPY ACCESSORIES	875,310	-	-	-	875,310	372,391	15%	75,438.00	447,829.00	502,919	427,481
65	TELE MEDICINE UNIT:	341,751				341,751	109,420		27,807.00	137,227.00	232,331	204,524
66	KITCHEN EQUIPMENTS	39,476	-	-	-	39,476	13,501	15%	3,896.00	17,397.00	25,975	22,079
67	KITCHEN UTENSILS	54,742	3,200	-	3,200.00	57,942	20,343	15%	5,640.00	25,983.00	34,399	31,959
68	LINEAR ACCELERATOR	112,836,656	-	-	-	112,836,656	27,661,426	15%	12,776,285.00	40,437,711.00	85,175,230	72,398,945
69	MEDICAL LIBRARY : Furniture and fittings	910,754	-	-	-	910,754	83,432	10%	82,732.00	166,164.00	827,322	744,590
	Books and journals	12,482,417	-	6,303,371.00	6,303,371.00	18,785,788	2,221,982	15%	2,011,818.00	4,233,800.00	10,260,435	14,551,988
70	FLEX BOARD	100,000	-	-	-	100,000	23,050	10%	7,695.00	30,745.00	76,950	69,255
71	MINI BUS	790,000	-	-	-	790,000	304,841	15%	72,774.00	377,615.00	485,159	412,385
72	PALLIATIVE TRAINING CENTRE:					-	-			-	-	-
	Computer	32,120	-	-	-	32,120	28,522	60%	2,159.00	30,681.00	3,598	1,439
	Projector	37,555	-	-	-	37,555	12,457	15%	3,765.00	16,222.00	25,098	21,333
	Furniture	23,033	-	-	-	23,033	5,309	10%	1,772.00	7,081.00	17,724	15,952

Books	76,649	-	-	-	76,649	25,424	15%	7,684.00	33,108.00	51,225	43,541
Steel cupboard	6,000	-	-	-	6,000	1,140	10%	486.00	1,626.00	4,860	4,374
73 FIRE EXTINGUISHERS	41,560	-	-	-	41,560	6,234	15%	5,299.00	11,533.00	35,326	30,027
74 FOGGING MACHINE	29,500	-	-	-	29,500	4,425	15%	3,761.00	8,186.00	25,075	21,314
75 MRI SCANNER	46,944,869	14,840,522	6,000,000.00	20,840,522.00	67,785,391	7,041,730	15%	8,661,549.00	15,703,279.00	39,903,139	52,082,112
76 EFFLUENT TREATMENT PLANT	1,928,723	-	-	-	1,928,723	192,872	10%	173,585.00	386,457.00	1,735,851	1,562,266
77 EQUIPMENTS FOR MEDICAL RECORDS DIVISION	1,122,003	608,422	-	608,422.00	1,730,425	126,000	15%	240,664.00	366,664.00	996,003	1,363,761
79 DIGITAL CAMERA	6,100	-	-	-	6,100	458	15%	846.00	1,304.00	5,642	4,796
80 4D CT SCANNER	-	827,837	50,787,244.25	51,615,081.25	51,615,081	-	15%	3,933,219.25	3,933,219.25	-	47,681,862
81 BUS WAITING SHELTER	-	-	179,055.00	179,055.00	179,055	-	10%	895.00	895.00	-	178,160
82 CCTV SYSTEM	-	61,443	14,896.00	76,339.00	76,339	-	15%	10,334.00	10,334.00	-	66,005
83 FUMIGATORS	-	-	175,000.00	175,000.00	175,000	-	15%	13,125.00	13,125.00	-	161,875
84 DIGITAL X-RAY MACHINE	-	-	7,501,668.00	7,501,668.00	7,501,668	-	15%	562,625.00	562,625.00	-	6,939,043
85 H I S SOFTWARE	-	-	1,100,000.00	1,100,000.00	1,100,000	-	60%	330,000.00	330,000.00	-	770,000
86 LOCKER	-	18,200	-	18,200.00	18,200	-	10%	1,820.00	1,820.00	-	16,380
87 SMART CLASS ROOM:	-	-	-	-	-	-	-	-	-	-	-
Multimedia projector and accessories	-	406,612	-	406,612.00	406,612	-	15%	60,992.00	60,992.00	-	345,620
Wireless interactive white board	-	105,000	-	105,000.00	105,000	-	15%	15,750.00	15,750.00	-	89,250
88 BADMINTON COURT	-	-	55,014.00	55,014.00	55,014	-	10%	2,751.00	2,751.00	-	52,263
89 DIGITAL TOKEN	-	15,786	-	15,786.00	15,786	-	10%	1,579.00	1,579.00	-	14,207
90 POWER LAUNDRY:	-	-	-	-	-	-	-	-	-	-	-
Building	-	698,653	33,781.00	732,434.00	732,434	-	10%	71,554.00	71,554.00	-	660,880
Equipments	-	-	1,421,000.00	1,421,000.00	1,421,000	-	15%	106,575.00	106,575.00	-	1,314,425
91 PORTABLE X RAY UNIT	-	-	800,000.00	800,000.00	800,000	-	15%	60,000.00	60,000.00	-	740,000
	508,691,107	126,532,509	145,908,973	272,441,482	781,132,589	218,886,842		67,765,844	286,652,686	289,804,265	494,479,803

**MALABAR CANCER CENTRE SOCIETY, THALASSERY, KANNUR
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31-03-2014**

EXPENDITURE	SCH No.	Amount		INCOME	SCH No.	Amount	
		Rs.				Rs.	
To Opening stock of drugs and consumables		Rs.	12,743,343.00	By Donation in kind		Rs.	404,050.00
„ Pharmacy purchases		Rs.	126,971,877.00	„ Grant in aid - Revenue grant	I	Rs.	70,550,063.00
„ Salary, stipend, wages and allowances	VII	Rs.	96,529,919.00	„ Hospital revenue	II	Rs.	70,810,687.00
„ Hospital expenses	VIII	Rs.	27,398,229.80	„ Pharmacy collection		Rs.	106,176,925.00
„ Electricity charges		Rs.	9,655,056.00	„ Agricultural income		Rs.	4,475.00
„ Printing and stationery	IX	Rs.	856,110.00	„ VAT collection		Rs.	38,534.00
„ Postage and telephone expenses	X	Rs.	575,692.00	„ CLOSING STOCK: As valued and certified by the society	III	Rs.	44,923,332.00
„ Employer's contribution to provident/pension fund		Rs.	2,172,012.00	„ Miscellaneous income	IV	Rs.	5,497,853.00
„ Rates and taxes	XI	Rs.	89,971.00	„ Interest income	V	Rs.	7,810,632.06
„ Travelling and conveyance expenses		Rs.	383,522.00	„ Income from ambulance service		Rs.	
„ Vehicle running and maintenance expenses		Rs.	1,012,123.00	„ Insurance claim		Rs.	13,940.00
„ Repairs and maintenance	XII	Rs.	4,238,534.00	„ Contribution towards various activities		Rs.	971,448.00
„ Security service charges		Rs.	3,825,822.00	„ Excess of expenditure over income transferred to balance sheet	VI	Rs.	2,483,592.00
„ Cleaning charges	XIII	Rs.	4,304,939.00			Rs.	56,019,064.88
„ Subscription	XIV	Rs.	5,822.00				
„ Pain and palliative care expenses		Rs.	278,743.00				
„ Patients free food expenses		Rs.	2,494,033.00				
„ Auditors' fee		Rs.	131,672.00				
„ Professional charges		Rs.	261,417.00				

„ Value Added Tax	Rs.	38,534.00		
„ Bank commission	Rs.	3,354.05		
„ Insurance charges	Rs.	637,000.00		
„ Advertisement charges	Rs.	264,800.00		
„ Recruitment expenses	Rs.	1,358,104.00		
„ Annual maintenance contract charges	Rs.	962,872.00		
„ Community Oncology expenses	Rs.	237,170.00		
„ Hospitality expenses	Rs.	57,651.00		
„ Meeting expenses	Rs.	138,353.00		
„ Agricultural expenses	Rs.	89,076.00		
„ Application fee for affiliation of new courses	Rs.	60,000.00		
„ Miscellaneous expenses	Rs.	163,001.00		
„ Depreciation written off	Rs.	67,765,844.09		
	Rs.	365,704,595.94		Rs. 365,704,595.94

FOR MALABAR CANCER CENTRE SOCIETY

Thalassery
30-10-2014
Dr. B. Satheesan
Director

AUDITORS' REPORT

Vide our separate report of even date attached

For REJESH & ASSOCIATES
Chartered Accountants
FRN 007361S

CA REJESH T K, FCA
M.NO.203015

MALABAR CANCER CENTRE SOCIETY, THALASSERY, KANNUR.

BALANCE SHEET AS AT 31-03-2014

LIABILITIES	SCH.No.	Amount		ASSETS	SCH No.	Amount	
		Rs.	Rs.			Rs.	Rs.
CAPITAL FUND	XV	Rs.	485,993,294.78	FIXED ASSETS	XXII	Rs.	494,479,903.00
GRANT-IN-AID - CAPITAL GRANT	XVI	Rs.	439,667,096.16	WORK IN PROGRESS UNDER PLAN FUND	XXIII	Rs.	60,340,184.00
SUNDY CREDITORS FOR ADVANCES	XVII	Rs.	112,675,537.70	DEPOSITS AND ADVANCES	XXIV	Rs.	145,113,392.40
SECURITY DEPOSIT	XVIII	Rs.	35,368,440.50	SUNDY DEBTORS	XXV	Rs.	65,214,924.00
SUNDY CREDITORS	XIX	Rs.	44,143,238.50	CLOSING STOCK	XXVI	Rs.	45,056,608.00
PATIENTS' WELFARE FUND	XX	Rs.	782,762.00	CASH AND BANK BALANCES	XXVII	Rs.	313,979,156.74
SEMINAR EXPENSE FUND		Rs.	1,426,609.50	BALANCE WITH REVENUE AUTHORITIES:			
OUTSTANDING LIABILITIES	XXI	Rs.	4,147,637.00	TDS refundable		Rs.	20,448.00
				SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS	XXVIII		
		Rs.	1,124,204,616.14			Rs.	1,124,204,616.14

FOR MALABAR CANCER CENTRE SOCIETY

Thalassery
30-10-2014

Dr. B. Satheesan
Director

AUDITORS' REPORT

Vide our separate report of even date attached

For REJESH & ASSOCIATES
Chartered Accountants
FRN 007361S

CA REJESH T K, FCA
M.NO.203015



PHOTO GALLERY



How to Support MCC

An Appeal:

As you are aware that cancer treatment is expensive and many people could not afford the expenditure without some kind of financial assistance. Our centre is also committed to offer free treatment to financially and socially backward patients and others on a concessional rate. Many of our patients had already applied for financial assistance from various agencies. So many broad-minded organizations and agencies had already helped our poor patients and so many of them were expressing their willingness to help such patients in future also. Generous donations are welcome to realize the dream: It may please be noted that donations to MCC are exempted from income tax according to rule 80G of the Income Tax Act.

Donations to MCC may be forwarded to Director, Malabar Cancer Centre or to the following Account in IDBI, Thalassery Branch:

Account Number	Bank	Branch	IFSC Code
1154104000017958	IDBI	Thalassery	IBKLO001154

Patients Free Food Scheme

Recently MCC had started a “Patients Free Food Scheme” for all patients in MCC, irrespective of their financial status. MCC is looking forward for financial assistance as donations from individuals, corporate institutions, State owned Corporations, in this regard. Since November 2008, this programme has been running successfully. However as more and more patients are visiting the Centre the funds kept for this purpose are likely to be exhausted. In this regard MCC hereby request for financial aid to run this charity work and seek help from like-minded people and organizations to join hands for this noble venture.

Generous donations are welcome to realize the dream: Donations to MCC may be forwarded to Director, Malabar Cancer Centre or to the following Account in SBI:

Account Number	Bank	Branch	IFSC Code
30469577061	State Bank of India (SBI)	Thalassery	SBIN0000926

For further details Contact:

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