



# **MALABAR CANCER CENTRE**

**THALASSERY  
KANNUR DISTRICT,  
KERALA**

(An autonomous centre under  
Government of Kerala)



# **ANNUAL REPORT**

**2018-19**

## **MALABAR CANCER CENTRE**

(An Autonomous Institution under Govt of Kerala)  
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## **ANNUAL REPORT 2018-19**





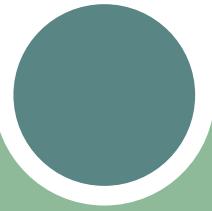
## VISION

The development of an exponentially progressing apex institution in oncology with equal on clinical care, oncology related educations and multifaceted research



## MISSION

Non compromising professionalism and quality in cancer treatment, research and education



## SERVICE STANDARDS

Quality and health care delivery

Accountability in the Governance from top to bottom

Maintaining a patient-centered clinical care

Effective communication

Internal customer satisfaction

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## GOVERNING BODY MEMBERS

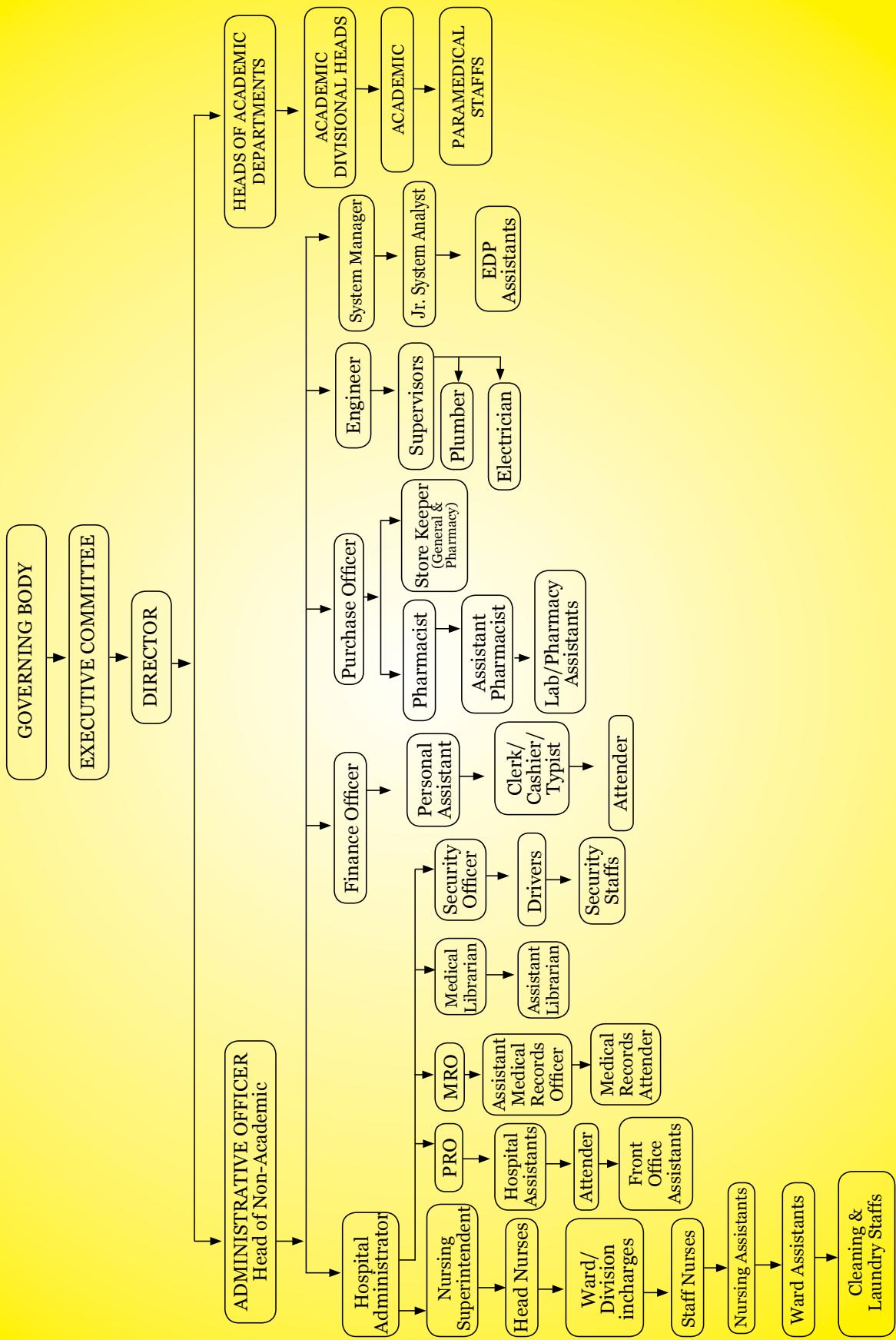
1	Shri. Pinarayi Vijayan, Hon'ble Chief Minister of Kerala	Chairman
2	Smt.K K Shailaja Teacher, Hon'ble Minister for Health & Social Justice, Kerala	Vice-Chairman
3	Shri. M M Mani, Hon'ble Minister for Electricity, Kerala	Alternate Vice-Chairman
4	Adv. A N Shamseer, M.L.A. of the Thalassery constituency	Member
5	Shri. KV Sumesh, President, District Panchayat, Kannur District	Member
6	Shri C K Rameshan, Chairman, Thalassery Municipality, Thalassery	Member
7	Shri Rajeev Sadanandan, Secretary, Department of Health & Family Welfare, Kerala	Member
8	Shri E K Prakash, Secretary, Department of Finance, Kerala	Member
9	Secretary, Department of Power, Kerala	Member
10	Secretary, Planning &Economic affairs Department, Kerala	Member
11	Secretary, Department of Science, Technology & Environment	Member
12	Director- Rajiv Gandhi Centre for Bio technology, Trivandrum	Member
13	Director of Medical Education, Directorate of Medical Education, Trivandrum	Member
14	Dr. Paul Sebastian, Director, Regional Cancer Centre, Trivandrum	Member
15	District medical Officer Kannur	Member
16	An Eminent Medical Scientist	Member
17	Principal, Medical College, Kozhikode	Member
18	Dr. Sudhakaran,Principal Medical College, Pariyaram	Member
19	One nominee of the Ministry of Health, Government of India	Member
20	One nominee of the CHARITABLE SOCIETY Established for rehabilitation and financial assistance for poor cancer patients.	Member
21	Shri. M C Pavithran, A public man from North Malabar region(to be nominated by Government of Kerala)	Member
22	One Head of the department nominated from Malabar Cancer centre, Thalassery by the Government	Member
23	Dr. Satheesan B, Director, Malabar Cancer Centre, Thalassery	Member & Secretary to Governing Body

## EXECUTIVE COMMITTEE MEMBERS

1	Shri. Rajeev Sadanandan, Secretary, Department of Health & Family Welfare, Kerala	Chairman
2	Shri. Jacob Koshy, Secretary, Finance Department	Member
3	Secretary, Power Department	Member
4	Secretary, Planning and Economic Affairs Department	Member
5	Shri C K Rameshan, Chairman, Thalassery Municipality, Thalassery	Member
6	Dr. Paul Sebastian, Director, Regional Cancer Centre, Trivandrum	Member
7	Shri. M C Pavithran, A public man from North Malabar region(to be nominated by Government of Kerala)	Member
8	Dr. Satheesan B, Director, Malabar Cancer Centre, Thalassery	Member & Secretary to Governing Body



## ORGONOGRAM



## FROM DIRECTOR'S DESK

*"There are in fact two things, science and opinion; the former begets knowledge, the latter ignorance."*  
—Hippocrates

In a tertiary cancer centre, for the effective treatment and survivorship, the approaches should be scientific and it needs to be updated time to time. Updating scientific knowledge is involved in all the aspects of cancer care ie. Early detection, diagnosis, treatment and rehabilitation. The introduction of "i breast examination" and a study on the effectiveness of thermal detection device in population screening was a revolutionary step made by MCC which was well appreciated. The more we are scientific, the better results can be produced. The thrust area of the year was introducing new equipments and devices in various levels of treatment. Improvements in service and treatment have been achieved through the addition of new technology, advanced equipment and the addition of qualified and well trained medical and Para medical staff.

102 students including 13 medical doctors, 7 MSW students, 5 medical physics interns and trainees etc. underwent short term training at MCC during this period. There are 65 research projects being carried out. There were 4620 new cancer patients registered among the total registration 6717. The number of follow up visits during the period was 70048 and there were 4530 in-patients. Around 1877 new patients received radiation therapy and 1298 major surgeries were performed in two operation theatres.

Community oncology department could play a significant role in MCC for cancer awareness and cancer control activities in major part of Kerala. Exhibition, seminars and cancer detection camp were carried out by the department. Structured program with various local self-government bodies showed positive results. These are part of epidemiological and intervention studies carried out by department of Community oncology. Community Oncology



department conducted 123 cancer detection and screening camps, 75 awareness classes and 42 Blood donation camps.

The continued support of philanthropists and various NGOs and voluntary organizations to help needy patients are duly acknowledged with respect and gratitude. A few to specifically mention are Malabar CH Centre for providing free food for all inpatients. Similarly Arsraya Charitable Society, Abhaya foundation and DePaul centre for providing accommodation and food for patients of MCC are appreciated and acknowledged.

Scientific Advisory Committee provided invaluable guidance and inputs on the development of various academic and training programs in the institution

I express my sincere thanks to all the members of Governing body, Executive committee and other standing committee's and effort of my staff in keeping and nurturing MCC as an apex institution in oncology in the state. I expect this annual report would provide a bird's eye view on the institution in 2018-19 periods.

## ADMINISTRATIVE OFFICER

### Brief Narrative

Malabar Cancer Centre (MCC) is an autonomous Centre, under Department of Health & Family Welfare, Government of Kerala. Quality healthcare services in cancer, under public sector, as it exists today are concentrated mainly with Regional Cancer Centre, Trivandrum and Malabar Cancer Centre Thalassery. There is a huge dependency on these Centres and exponential demand in the healthcare space gives us the confidence that we are moving in the right direction with the right strategies and the right talent on board. MCC's strategy is to deliver quality affordable services to every section of society. MCC aims to maintain focus on clinical excellence, affordability, and sequentially also ensure the overall development of the Institute towards a premier cancer care and research centre. We recognize that a patient feels most vulnerable when he/she arrives at a hospital. It has therefore been our constant endeavour to make our patients feel most comfortable and cared for. MCC is promoting effective patient attendant training programme that is meant to cultivate a culture of organized learning; with specific training to ensure seamless service



delivery. The past year clearly reflects the growth and development of MCC and also the physical progress achieved by the Centre in hospital services. Even though we are moving in the right direction, we could have still marched ahead in a bigger way, but was restricted due to non-execution of construction of various major projects of MCC by the Agency/ Consultant, to whom entire construction works and consultancy works were entrusted. Now the construction agency has changed and the scenario looks bright ahead.

Kerala's large and diverse population warrants an efficient healthcare infrastructure that should be accessible to all bands of the society, especially to the people belonging to the lower economic strata. Quality healthcare should be provided along with advanced medical care at a minimum possible cost. For any hospital, to render uncompromised care to its patients, continuous improvement in service delivery is a must. We as a Hospital, have over the years, determinedly and consistently invested in the latest technologies and sophisticated systems. This enables our Faculties and Para medical staff to

provide the best treatment options for our patients. We take all our efforts to bring together state of the art infrastructure, cutting-edge technology and a highly integrated and comprehensive information system along with a quest for exploring and developing newer therapies in medicine. We have to see that medicine is a noble profession and no patients should be denied treatment for lack of funds.

There has also been noticeable improvement in key areas like clinical excellence, patient care, community related programmes etc: - A series of sustainable strategic actions are designed to enhance organizational capabilities and improve patient care. In our journey of continuous improvement our prime task has been to strengthen our clinical framework. This is being carried out by continuous focus on talent, training, processes and following clinical pathways. We are indeed proud to say that today; MCC occupies a preferred place in many of the clinical areas that it has concentrated. We commend the entire medical team and supporting staff for this fantastic effort which is worthy of great praise.

Above all, we need to focus on empowering the individual to take charge of his own health, and be responsible for his well-being. The key to this success has been our consistent and on-going dedication to patient satisfaction and need-based

healthcare services. The Government of Kerala had recently introduced Karunya Arogya Suraksha Padhathi (KASP) through which insurance coverage is provided for patients. Even though the packages provided under the scheme are very less compared to the actual cost, this enables healthcare access to huge number of under-served families across the country.

A few drawbacks noticed would be reviewed at year-end and addressed appropriately. During the year priority will be given to strengthen the Imageology, Radiotherapy, Clinical Lab Services & Translational Research, Surgical Oncology Departments, Augmentation of Medical Library, Upgradation of existing Power Laundry, Water Treatment Plant, construction of 2nd Phase of Students Hostel, infrastructure for Paediatric Oncology Block etc:-

While keeping the highest level of quality and clinical excellence, MCC will continue to pursue initiatives that keep tight control on purchases, driving down capital costs by effective control and to develop new technologies. It should be seen that MCC is in a developing phase and the desired goal can be achieved only with the whole-hearted support of all our dedicated staff members. We shall continue to explore opportunities that can grow over time and continue to work towards achieving the goal of making high quality healthcare accessible to everyone.



## ABOUT MALABAR CANCER CENTER

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 neighbouring parts of Karnataka and Tamilnadu states and Union Territory of Pondicherry(Mahe). The centre, situated in a beautiful hill top in Kodiyeri in Thalassery Municipality 5km away from town established in 2001 .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. At present MCC has total bed strength of 200 with 170 in-patient beds.

The institution is a tertiary cancer centre which renders its service to society with equal thrust on clinical and oncology related education and Clinical Oncology services. MCC is being developed as a postgraduate institute of oncology sciences and research. The institution is in the process of developing and establishing a unique Clinical Research department to coordinate clinical research activities. It has

research association with School of Health Sciences, Kannur University, Centre for Electronic Materials Technology, Thrissur and P.S.Vaidhyarathnam Ayurveda College, Kottakkal, HTIC-Chennai, National cancer Grid etc. It is expected that these could bring in revolutionary changes in the management of cancer. Malabar Cancer Centre has been recognized as Research Institute by Kerala University of Health Science.

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, Hon'ble Minister for Health as Vice Chairman and Hon'ble Minister for Power as Alternate Vice-Chairman. The routine activities and functions of the Centre are supervised by the Executive Committee, 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 function by virtue of their official positions. The institute has grown to possess highly sophisticated facilities to provide cancer care. The hospital has a team of well trained staff, rendering cancer care to the needy.

## MCC PROFILE AT A GLANCE 2018-19

SI NO	NEW CASES	2018-19
1	New Cases	4620
2	Non Cancerous Cases	2097
	Total Registration	6717
3	Follow up cases	70048
4	Non Cancerousases (FU)	2626
5	Total patients	78168
6	In patients	4530

SI NO	SURGICAL ONCOLOGY	2018-19
1	Major Surgeries	1298
2	Minor Surgeries	529
3	Total surgeries	1827
4	Scopies	2153

SI NO	RADIATION ONCOLOGY	2018-19
1	Brachytherapy	414
2	Brachytherapy (pt. bases)	155
3	4DCT CT SIMULATION	2330
4	RT Elekta(New case)	1105
5	Linac RT( Total No. of New case)	897

SI NO	TRANSFUSION MEDICINE	2018-19
1	Blood Donation	3205
2	Component Preparation	8651
3	Blood Donation Camp	42

SL NO	MEDICAL ONCOLOGY	2018-19
1	Day Chemo administered	13724
2	OPD attendance in solid tumor division	20032



## MCC PROFILE AT A GLANCE 2018-19

<b>SI NO</b>	<b>COMMUNITY ONCOLOGY</b>	<b>2018-19</b>
1	Volunteer Training Programme (ECDC)	48
2	Cancer Awareness Classes	75
3	Early Cancer Detection Camps	123
4	Exhibition	48
5	Blood Donation	3205
6	Biopsy	3255
7	FNAC	740
8	Cytology	1496
9	Histopathology	5244
10	BMA	677

<b>SI NO</b>	<b>IMAGING SERVICES</b>	<b>2018-19</b>
1	X-ray	5501
2	U S G	1941
3	Mammogram	2411
4	CT Scan	4709

<b>SI NO</b>	<b>EDUCATION AND TRAINING</b>	<b>2018-19</b>
1	Medical Doctors	13
2	M.Sc. Physics	5
3	B.Sc. / M.Sc. MLT, B.Sc./ M.Sc Life Sciences	57
4	Bachelor in Audiology and Speech Language Pathology	18
5	MSW	7
6	Pharm D	2

<b>SI NO</b>	<b>IMAGING SERVICES</b>	<b>2018-19</b>
1	X-ray	5501
2	U S G	1941
3	Mammogram	2411
4	CT Scan	4709

## MCC PROFILE AT A GLANCE 2018-19

<b>BSc Course</b>		<b>Duration</b>	<b>No.of seats</b>
1	BSc MRT	4 years	25
2	BSc Nursing	4 years	40
<b>DNB courses</b>			
3	DNB-surgical oncology	3 years	3
4	DNB-Pathology	3 years	1
5	DNB-Radiation oncology	3 years	3
<b>Institutional Fellowship programme</b>			
6	Head & Neck Oncology	2 years	1
7	Gynaecologic Oncology	2 years	2
8	Hemato-Oncology & BMT	1year	2
9	Gastrointestinal oncology	1year	2
10	Oral Oncology	2 years	1
11	Aphaeresis Medicine	1year	2
12	Onco Pathology	1 year	1
13	Head and Neck Pathology	1 year	1
14	Oncology Nutrition	1 year	1
15	Onco-imaging & Interventional Radiology	1 year	2
16	High Precision Radiotherapy	1 year	1
17	Molecular Pathology	1 year	1



## DEPARTMENTS AND DIVISIONS

### Academic Departments

1. **Department of Clinical Laboratory Services and Translational Research**
  - 1.1. Oncopathology Division
  - 1.2. Biochemistry Division
  - 1.3. Microbiology Division
  - 1.4. Blood Bank and Transfusion Medicine Division
  - 1.5. Division of Genetics and Cytogenetic & Molecular Oncology
2. **Department of Clinical Haematology and Medical Oncology**
  - 2.1. Clinical Haematology Division
  - 2.2. Medical Oncology Division
  - 2.3. Division of Medicine
  - 2.4. Division of Paediatrics/ Paediatric Oncology
3. **Department of Surgical Oncology**
  - 3.1. Surgical Oncology Division
  - 3.2. Gynaecology/ Gynaecologic Oncology Division
  - 3.3. Speech and Swallowing therapy Unit
  - 3.4. CSSU
  - 3.5. Rehabilitation-Physiotherapy Unit
  - 3.6. Clinical Nutrition and Dietetics Unit
4. **Department of Radiation Oncology**
  - 4.1. Radiation Oncology Division
  - 4.2. Radiation Physics Division
5. **Department of Imageology**
6. **Department of Dentistry & Rehabilitation**
7. **Department of Cancer Palliative Medicine**
  - 7.1. Cancer Palliative Medicine Division
  - 7.2. Home Care Services Division
  - 7.3. Psycho-Oncology and Clinical Psychology Division
8. **Department of Community Oncology**
9. **Department of Cancer Registry and Epidemiology**
  - 9.1. Cancer Registry and Epidemiology Division
  - 9.2. Medical Records Division
  - 9.3. Health Information Technology Division
10. **Department of Anaesthesiology**

### Non Academic Departments

1. **Department of Engineering and Maintenance**
2. **Department of General Administration**
  - 2.1. General Administration Division
  - 2.2. Hospital Administration
  - 2.3. Finance and Accounts Division
  - 2.4. Purchase/ Pharmacy Division
  - 2.5. Store and Security Division
  - 2.6. Human Resources and Establishment Division
  - 2.7. Academic Division & Library and Information Science
  - 2.8. Public Relations and Clinical Services Division
3. **Department of Oncology Nursing.**

# ACADEMIC DEPARTMENTS & DIVISIONS

## DEPARTMENT OF CLINICAL LABORATORY SERVICES AND TRANSLATIONAL RESEARCH



### INTRODUCTION

This department is one of the largest in the institution. The rationale of creating such a vast department was to coordinate various laboratory divisions including research laboratories with clinicians under the leadership of pathologist. Pathologist is a combination of clinical and laboratory scientist and she/he can be a bridge between clinicians and researcher. Apart from this, most of the divisions under the department were devoid of faculty in the initial phases and most of the faculties were without administrative experience. For administrative ease also, such a large department was created.

Diagnostic services in the Clinical laboratory services and Translational Research, Malabar Cancer Centre, grew several folds from its inception in 2001. The department has following divisions

- Pathology Division
- Biochemistry Division
- Microbiology Division
- Blood bank and Transfusion Medicine Division
- Genetics and Cytogenetics and Molecular Oncology Division

### PATHOLOGY DIVISION

Diagnostic services in the clinical laboratory at Malabar Cancer Centre was initiated in 2001 with a staff strength of one Pathologist, one cytotechnologist, four technicians & two laboratory assistants and the following sections were functional. Diagnostic reporting work in Oncopathology was restarted in April 2011 with the joining of a visiting Pathologist & all hospital cytology samples like FNAC & effusion fluids were processed along with slide review of all referral cases. The clinical laboratory had staff strength of one senior resident in Pathology & four laboratory technicians. The existing histopathology equipments were serviced, new ones like manual rotary microtome was purchased. In the course of the year Surgical Pathology was also restarted and the department acquired new staff including one Professor & three Assistant Professors, technical staff including a Histo technologist, a cytotechnologist & cytotechnician. Cryostat was installed in September 2012 for taking frozen sections to aid in intra-operative diagnosis. Immunohistochemistry staining was installed in November 2012 enabling breast cancer patients to have ancillary hormone analysis. These tests were being outsourced till then which was causing financial burden & inconvenience to the patients.

## NEW EQUIPMENTS & FACILITIES

Sl. No.	Name of item	Quantity	Date of purchase
1	Slide filing cabinet –Capacity 50000-YORCO	1	07/05/2018
2	Tissue floatation bath – YORCO	1	19/06/2018
3	Binocular microscope –RADICAL Rxlr-4	05	15/02/2019
4	Binocular Microscope- RADICAL Rxlr-5	02	15/02/2019
5	Hot air oven- MHOS -3-LABLINE	01	06/03/2019

## STATISTICS OF TOTAL NO OF CASES

Name of procedure	No of Cases
BS(Small biopsy)	2107
BR(Radical specimen)	1256
SOB(Biopsy second opinion)	2013
PS( Peripheral smear)	1077
BMA & BMT(Bone marrow)	545
SOBMA & SOBMT( Bone marrow second opinion)	135
FN( Fine needle aspiration)	740
FC( Fluid cytology)	483
SOC( Second opinion cytology)	449
GC ( Gynaec Cytology)	145

## CLASSES/TRAINING PROGRAMMES

1. Fellowship programmes in Oncopathology & Head & Neck Oncopathology for MD.Pathology & MDS Oral Pathology candidates, respectively.
2. Training for Post graduate students –MD.Pathology & MDS. Oral Pathology from different government & private institutions.
3. Training programmes for BSc.MLT final year students of government & private medical colleges and paramedical institutes of Kerala
4. Orientation for social workers and students in lab practices
5. Academic sessions- 83 no

## PUBLICATIONS

1. Prognostic efficiency of clinic-pathologic scoring in predicting cervical lymph node metastasis in oral squamous cell carcinoma-Published in Journal of Oral and Maxillofacial Pathology in March 2019 – Dr.Sangeetha K Nayunar
2. Frozen Section Evaluation Of Methylene Blue Dye Based Sentinel Lymph Node Biopsy In Early Breast Cancer – A Feasibility Pilot Study In A Tertiary Cancer Center- Published in Kerala Medical Journal February 2019- Dr.Sangeetha K Nayunar

3. Inflammatory myofibroblastic tumor –a tumor with intermediate malignant potential- report of 3 cases-published in Journal of Clinical & Diagnostic Research 2017 December- Dr.Indu Sarath, Dr.Sangeetha K Nayunar
4. Clinic pathological spectrum of Ana plastic carcinoma of thyroid-a five year retrospective audit from a cancer centre- The Gulf Journal of Oncology in September 2018-Dr.Manjusha P, Dr.K J Philip, Dr.Sangeetha K Nayunar
5. Frozen section evaluation in Head & Neck Oncosurgery –an initial experience in a tertiary cancer centre -Published in Turkish Journal of Pathology August 2018. Dr.Aswathy M Krishnan, Dr.Sangeetha K Nayunar
6. Laryngeal basaloid squamous cell carcinoma with a substantial spindle cell component: Case presentation and updated review of literature-Published in Head & Neck Pathology June 2018. Dr.Sangeetha K Nayunar
7. Utility of Bethesda System for Reporting Thyroid Cytology - Five Year Experience in a Tertiary Cancer Centre-Dr. Published in Scholars Academic Journal of Biosciences (SAJB) May 2018. Dr.Sangeetha K Nayunar
8. Gastrointestinal Stromal Tumors- a Clinicopathological Study-Published in Journal of Indian Medical Association (JIMA) in January 2019 Dr.Sajith K Satheesh, Dr.Sangeetha K Nayunar
9. Clinicopathologic analysis of Uterine Serous Carcinoma in a cancer centre from North Kerala-a retrospective study-Published in Journal of Clinical & Diagnostic Research, May 2018 Dr.Indu Sarath, Dr.Aswathy M Krishnan, Dr.Sangeetha K Nayunar,

## **CONFERENCES, SEMINARS, WORKSHOPS & PRESENTATIONS**

1. HPV CanCon- International Conference on Human Papilloma Virus & Cancer-on January 13th 2019. Organising Secretary-Dr.Deepak Roshan. Organising Chairperson-Dr.Sangeetha K
2. Faculty in CME on Colorectal Malignancies-an update-conducted by Malabar Cancer Centre at MES Medical College, Perinthalmanna June 2018- Dr.Sangeetha K
3. Comparative study on anatomic and prognostic stage groups in breast cancer in a cancer centre - 2 year retrospective study-Dr.K J Philip presented paper - KAPCON 2018, 45th Annual conference of KCIAPM, NIMHANS Bangalore, Nov 2018
4. Clinicopathological Profile of GBM- 5year experience at cancer centre-Dr.Sithara A- presented paper at International CME at SRMCRCI,Chennai

## **RESEARCH PROGRAMMES**

1. EGFR mutations in Pulmonary Adenocarcinoma: an initial audit of two years- Dr.Anju Mohan, Dr.Sangeetha K, Dr. Deepak Roshan, Dr.Saravanan, Dr.Noushad A
2. PHENOTYPIC AND GENOTYPIC APPRAISAL OF PULMONARY MUCINOUS ADENOCARCINOMA -Dr.Aswini R, Dr.Sangeetha K, Dr. Deepak Roshan, Dr.Saravanan, Dr.Noushad A
3. An observational study to evaluate the spectrum of histomorphologic changes and pathological response following neoadjuvant oral metronomic chemotherapy in oral cavity squamous cell carcinoma-Dr.Jasmine Jose, Dr.Sithara A
4. Neuroendocrine tumors of Gastro-enteric Pancreatic sites-an audit- Dr.Nimmy John, Dr.Noushad A



## GRANTS & SCHEMES

Intramural fund for the study " Immunohistochemical expression of p16INK4a in 143 cases of Oropharyngeal squamous cell carcinoma from a tertiary cancer centre of South India: a preliminary study"- Dr. Deepak Pandiar, Dr.Sangeetha K Nayanar

## STAFF

Sl No	Name	Designation
1	Dr.Sangeetha.k.Nayanar	Professor & HOD
2	Dr.Sithara Aravind	Associate Professor
3	Dr.Aswathi.k	Assistant Professor
4	Dr.K J Philip	Assistant Professor
5	Dr.Noushad	Assistant Professor
6	Sabna Dev. S.K	Cytotechnologist
7	Nimi. G.K	Cytotechnologist
8	Ms. Soumya. V.K	Lab. Technician
9	Ms. Biji K R	Lab. Technician
10	Ms. Reena K C	Lab assistant
11	Mr. Vishnu Raj	Attender



## BIOCHEMISTRY DIVISION



### MAJOR ACHIEVEMENTS

MCC clinical lab has the facility to do all the biochemical as well as haematological assays. There are two Vitros fully automated analyzers (one for Biochemistry analysis and another for both Biochemistry and immunoassays) and one Access 2 (Beckman Coulter) for tumor marker analyser and a Minivid (Cardiac Analyser). For haematological tests we have two Beckman Coulter CBC analyzers in the lab. During this period we had purchased a CRP analyser (Alere Afnion AS100).

### NEW PROJECTS / PROCEDURES

Clinical lab started screening tests in integrated Vitros system (ECLIA Method) for HIV, HBsAg and HCV.

Completed three months M. Sc. Dissertation projects on

1. Variations of serum PSA values at different time points of treatment based on D'Amico risk stratification groups
2. Correlation of PML-RARA transcript variant with immunophenotype in AML- M3"

Number of ongoing students projects- 2

### STATISTICS

During the period in clinical lab, approximately

Sl No	Items/services	Number
1	Haematology	44472
2	Biochemistry	554880
3	Urine analysis	1950
4	Tumor markers	6940

### CONFERENCES, SEMINAR, WORKSHOP AND PRESENTATIONS:

1. Dr. Sindhu had attended as an invited speaker in the national seminar on 'Proteins and Prospects' conducted in Government Arts and Science college, Kozhinjampara, Palakkad and presented a paper titled with 'Diagnostic Proteins in Cancer' on 22/11/18
2. Dr. Sindhu had presented a poster in the international seminar on 'Innovative Technologies in Pharmaceutical Sciences' conducted by ELIMS College of Pharmacy, Thrissur and titled with 'Evaluation of Absolute Lymphocyte Count and Lymphocyte Monocyte Ratio on B Cell and T Cell Lymphomas - A Retrospective Study' on 05/10/18
3. Dr. Sindhu had attended an international conference on 'HPV & Cancer- Recent Advances' conducted by Malabar Cancer Centre, Thalassery on 13/1/19

### STAFF

Sl No	Name	Designation
1	Dr. Sindhu E. R.	Lecturer
2	Mrs. Mini	Lab Technician
3	Mrs. Namitha	Lab Technician
4	Mrs. Dhanya Prabha N	Lab Technician
5	Mrs. Aneesha	Lab Technician
6	Mrs. Sinsha NP	Lab Technician
7	Mr. Arun Manohar	Lab Technician
8	Ms. Ajisha	Lab Technician
9	Mrs. Akhila	Lab assistant

## MICROBIOLOGY DIVISION



### INTRODUCTION

The division of microbiology at Malabar cancer Centre is committed to providing accurate and reproducible results on clinical material within the shortest possible time. This department provides test turnaround times suitable to clinical situation in which the tests are requested. This has been achieved by round the clock laboratory services, reporting and use of state of the art equipment.

### ACTIVITIES

- The department offers specialized diagnostic services in the areas of:
- Bacteriology
- Mycology (Fungal infections)
- Mycobacteriology (Tuberculosis)
- Examination of urine and stool
- Serology for viral and bacterial infections.
- Molecular diagnostic methods for viral and bacterial infections.

### ABOUT THE DIVISION

The quality systems are compliant with the ISO 15189 standard guidelines.

Automated state of the art equipment is available for blood cultures, and molecular diagnostics. The department provides services on all days of the week.

The technologists and staff of the department are trained to work independently, to ensure smooth functioning and compliance with the quality systems.

The menu of tests includes all the facilities required for the diagnosis and management of infections in

cancer patients. The department provides services for environmental testing and water testing in the hospital infection control.

Implementation of best practices for infection control including surveillance of healthcare associated infections is under the scope of Microbiology.

Microbiology division is heading the all important Hospital infection control program, for which various activities are undertaken to minimize (reduce) the rates of infection there by providing a safe environment to the patients as well as to the Staff.

One Month training/observership Program conducted for undergraduate and post graduate students of various colleges. Also student's projects are carried out in our division under the supervision of faculties.

Various clinical samples from outside hospitals and colleges are also being tested and reported.

### NEW EQUIPMENTS ACQUIRED

1. Fluorescence microscope
2. GenXpert
3. BACT/ALERT Blood culture machine
4. MALDI-TOF
5. Air- sampler
6. Electric wire loop

## STATISTICS

TOTAL NO. OF SAMPLES: 5754

SI. No	Sample Type	Sample Number
1	Urine & Stool	1467
2	Blood	1619
3	Respiratory(Sputum, throat swab, BAL) Pus (wound Swab/ swab/ dead tissues/ Exudates)	1222
4	AFB Staining	202
5	Gram Staining	146
6	Fungal culture	58
7	KOH Mount	62
8	Environmental Swabs	598
9	Serology	103
10	Blood bag quality check	205
11	CMV PCR(Molecular diagnosis)	64
12	EBV PCR(Molecular diagnosis)	8

## CONFERENCES, SEMINAR, WORKSHOP AND PRESENTATIONS

CME: Microbiology Division organized a one day CME on “UPDATES IN MICROBIOLOGY AND IMMUNOLOGY-2018” On 24th November 2018 at MCC, Thalassery.

## WORKSHOP

- Dr. Parthiban, attended Workshop on Initiating Antimicrobial Stewardship Programme (AMSP) (ICMR Sponsored) and Attended CME on Anti-Microbial resistance (Current status and Way forward) – 22 and 23rd March 2019. JIPMER Puducherry
- Dr. Saravanan, attended Workshop on Initiating Antimicrobial Stewardship Programme (AMSP) (ICMR Sponsored) and Attended CME on Anti-Microbial resistance (Current status and Way forward) – 22 and 23rd March 2019. JIPMER Puducherry.

## CONFERENCE PRESENTATIONS

- Dr. M. Saravanan – Presented a scientific poster “Emergence of linezolid resistance in staphylococci at tertiary care cancer centre in North Kerala”. Microbiology CME and First Quarterly meet of IAMM- Karnataka chapter, Conducted by Department of Microbiology, Father Muller Medical College, Mangaluru on 28-07-2018
- Dr. Sajani samuel Presented a scientific poster on “Changing trends in antimicrobial resistance among Gram Negative bacilli isolated from respiratory tract of Cancer Patients” in the “16th National conference of IAAM on HUMAN MICROBIOME IN PERSONAL MEDICINE” ON 27th AND 28th Sep 2018 at Mysore.

- Dr. Sajani samuel Presented a scientific poster on “ Moraxella catarrhalis: from Emerging to Established pathogen causing RTI in Cancer patients” in the “International Conference on Antibiotic Stewardship and Infectious Disease” on “27th and 28th OCT 2018 at Amrita Institute of Medical Science Kochi.
- Dr. M. Saravanan Presented a scientific poster on “Emergence of Unusual Gram-negative bacteria among cancer patients in a tertiary care cancer centre” in the “International Conference on Antibiotic Stewardship and Infectious Disease” on 27th and 28th OCT 2018 at Amrita Institute of Medical Science Kochi.
- Dr. R. Parthiban Presented a scientific Paper on “Profile of Gram negative bacterial isolates in Blood Stream Infections and their Antimicrobial Susceptibility Pattern in a Tertiary Care Cancer Centre” in the “World Congress on Infectious Diseases and Antibiotics” on 28th and 29th NOVEMBER 2018 at J N Tata Auditorium Bangalore.
- Dr. M. Saravanan Presented a scientific Paper on “Resistant Profile of blood borne Gram - positive isolates in cancer patients at tertiary care cancer centre” in the “World Congress on Infectious Diseases and Antibiotics” on 28th and 29th NOVEMBER 2018 at J N Tata Auditorium Bangalore.
- Dr. R. Parthiban Presented a scientific Paper on “Current trends and recent techniques in Screening Human papillomavirus infections – A Review” in the “International conference on HPV and Cancer-Recent Advances” on 13/1/19 at Malabar Cancer Centre, Thalassery.
- Dr. R. Parthiban delivered a Lecture on Hospital Biomedical Waste Management and Infection control at Continuing Dental Education Program – Dept. Of Microbiology, Mahe Institute of Dental Sciences & Hospital on 18th February 2019.
- Dr. Sajani samuel attended an “International conference on HPV and Cancer- Recent Advances” on 13/1/19 at Malabar Cancer Centre, Thalassery.
- Dr. M. Saravanan attended an “International conference on HPV and Cancer- Recent Advances” on 13/1/19 at Malabar Cancer Centre, Thalassery

## **RESEARCH PROJECT PROGRAMMES**

- Dr.R.Parthiban, co-principal investigator for Ph.D Dissertation work entitled “Studies on the prevalence of opportunistic microrganisms in oral cancer patients” - a microbiome approach
- Dr.R.Parthiban, principal investigator for research work entitled “Incidence of Human Papilloma virus (HPV) types in lung cancer patients at a tertiary care cancer centre at north kerala”.
- Dr.R.Parthiban, Principal investigator for research work entitled “Phenotypic detection of Metallo-Beta Lactamase (MBL) producing Enterobacteriaceae and their prevalence in a tertiary care cancer centre”.
- Dr.Sajani samuel, Principal investigator for research work entitled “Prevalence of Aerobic bacteria and their antibiotic sensitivity pattern causing respiratory infections among cancer patients in tertiary care centre”.
- Dr.M.Saravanan, Principal investigator for research work entitled “Microbial sepsis in a tertiary cancer centre: microbiological spectrum and antimicrobial susceptibility profiles”.
- Dr.Sajani samuel, Principle investigator for research work entitled” Prevelance and Resistance pattern of Moraxella catarrhalis causing RTI in Cancer patients”.
- Dr.M. Saravanan, Principal investigator for research work entitled “Microbiological Profile and Antibiotic Sensitivity Pattern of Uropathogens in a Tertiary Care Cancer Centre”



CME on “UPDATES IN MICROBIOLOGY AND IMMUNOLOGY – 2018” was conducted on 24th November, Saturday by Microbiology division, Dept. of Clinical Laboratory Services and Translational Research (CLS&TR), Malabar Cancer Centre, Thalassery.

## STAFF

SL.No	Name	Designation
1	Dr. Gufran Ahmed	Visiting Consultant
2.	Dr. R. Parthiban	Associate Professor
3	Dr. Sajani Samuel	Assistant Professor
4.	Dr. M. Saravanan	Lecturer
4	Mrs. Ramitha M.G.	Lab Technician
5	Mr. Deepak Omanakuttan	Lab Technician

## BLOOD BANK AND TRANSFUSION MEDICINE DIVISION



### INTRODUCTION

The Division of Transfusion Medicine (Blood Bank) has state of art facilities catering patients requiring blood transfusion in and around Thalassery. The Blood Bank provides quality blood products to patients by using latest technology for blood collection, processing and testing. For the last 4 years, blood is being issued as only blood components (100%). The blood bank has latest apheresis equipment for collecting single donor platelets (SDP).

Most cancer patients require modified blood products for their transfusion..

In addition to routine blood bank activities, blood bank supports bone marrow transplant program including, facilities for HLA Typing, Flow Cytometry etc. The bank participates in EQAS program organized by BEQAS, Jaipur for blood bank activities.

### FACILITIES AVAILABLE

1. 24 x 7 Blood Bank
2. Blood Components – Packed Red cells, Platelet concentrate, Fresh Frozen Plasma, Cryoprecipitate
3. Apheresis – Platelets
4. HLA typing
5. Flow cytometry
6. Stem Cell Collection and Cryopreservation
7. Irradiation of blood components

### ACTIVITIES AND ACHIEVEMENTS

Nucleic Acid Testing (NAT) for early detection of infectious disease markers in blood donors was successfully implemented in blood bank and inaugurated by Honorable Health Minister, Mrs. Shailaja, Govt. of Kerala on 28.7.18

### NEW EQUIPMENT ACQUIRED

NAT Equipment for Infectious disease testing

Automated Bacterial disease testing

### STATISTICS

Sl No	Services	Number
1	whole blood donations	3043
2	apheresis platelet donations	344
3	voluntary outdoor blood donation camps	39
4	Total blood Components	5824

## CONFERENCE, SEMINAR, WORKSHOPS AND PRESENTATIONS

### WORKSHOP

- Dr. Mohandoss participated as faculty for JHAKAAS 2017 postgraduate training program for Transfusion medicine PGs at JIPMER, Puducherry from 9.2.18 to 11.2.18
- Blood Bank, MCC and KSACS Trivandrum organized Refresher training for Technicians of Blood Storage Centre from North Kerala from 14.2.18 to 16.2.18
- Blood Bank, MCC and KSACS Trivandrum organized refresher training for Medical Officers of Blood Storage Centre from North Kerala from 19.2.18 to 21.2.18
- Ms. Sharanya, BB Counselor attended refresher training on Counselling organized by KSACS at Trivandrum on 11.5.18
- Dr. Mohandoss attended as delegate in 3rd cell and gene therapy symposium at CMC, Vellore on 6.9.18 to 7.9.18
- Dr. Mohandoss M attended 43rd Annual Conference of Indian Society of Blood Transfusion and Immunohematology "TRANSCON 2018" at Vishakapatnam from 26 to 28 Oct 2018 as Faculty
- Dr. Mohandoss M attended 7th National Conference of Indian Society of Transfusion medicine, TRANSMEDCON Kochi from 22.11.18 to 25.11.18 as Faculty and Organizing Team member
- Dr. Mohandoss M attended 3 days training on CliniMACS Prodigy – LP Tcrab/19 depletion at StemRx, Mumbai
- Dr. Mohandoss delivered talk on Care of Seropositive Patients, Practices and Recommendations on CORE -18 held at MCC, Thalassery on 16.9.18
- Dr. Mohandoss attended 7th National Conference of Indian Society of Transfusion medicine, TRANSMEDCON Kochi from 22.11.18 to 25.11.18 and presented "Comparison of Leukapheresis Product between Continuous and Intermittent Apheresis System"

Inauguration of NAT Lab by Hon'ble Minister for Health and Social justice, Government of Kerala on 28.7.18



Felicitation of Blood Donors and Camp Organizers on World Blood Donor Day 14.06.2018 by Dr. Satheesan B, Director, MCC

## STAFF

Sl No	Name	Designation
1.	Dr. Mohandoss	Medical Officers
2.	Mr. Sabeesh	Technicians
3.	Mr. Shibin	Technicians
4.	Mr. Anoop Joy	Technicians
5.	Mr. Sajeesh	Technicians
6.	Mrs. Thahira	Technicians
7.	Ms. Gopika	Technicians
7.	Mrs. Maya	Nursing Staff
8.	Mr. Arun	Lab Attender



## GENETICS AND CYTOGENETICS & MOLECULAR ONCOLOGY DIVISION



### INTRODUCTION

Division of Genetics and Cytogenetics is mainly focusing to understand the molecular mechanism of tumorigenesis, metastasis and drug resistance of cancers. Division is in a process of development and establishment. The major research direction of division for "bench to bedside" are following:-

1. To explore the molecular mechanisms of cancer; the research fields include genomics, proteomics and signal transduction pathway.
2. To understand the genetic factors associated treatment outcome of cancer patients, such as drug resistance and drug toxicity and it will help in developing personalized therapy system.

Along with molecular research to understand biology of tumorigenesis, Division is also involved in the molecular diagnosis. Presently, translocation analysis of BCR-Abl and PML-RAR $\alpha$  is done routinely. Shortly, mutation analysis of genes will be started.

Division is also focused on the HR development by providing short-term training for BSc, MSc, life Science and B Sc MLT students and dissertation works for MSc/MD/MDS students; in near future we will be initiating doctoral course. These academic activities of the division will provide a greater level of exposure to the students in advanced molecular technique used for molecular research and molecular diagnosis.

### TEST DONE

1. Quantitative BCR-Abl
2. Qualitative BCR-Abl
3. Qualitative PML-Rara
4. AML Panel
5. ALL Panel
6. EGFR Mutation analysis
7. JAK2 Mutation analysis
8. KRAS Mutation analysis
9. FISH BCR-Abl
10. FISH PML-RAR $\alpha$
11. FISH Her2<sup>1</sup>

### PUBLICATION

- Deepak Roshan VG, Sinto MS, Thomas S, Kannan S. Cyclin D1 overexpression associated with activation of STAT3 in oral carcinoma patients from South IndiaJ Cancer Res Ther. 2018 Jan-Mar;14(2):403-408. doi: 10.4103/0973-1482.188295.
- Deepak Roshan V G, Sinto M S, Vargees BT, Kannan S. Loss of CDKN2A and CDKN2B expression is associated with disease recurrence in oral cancer. J Oral Maxillofac Pathol 2019;23:82-9
- Sheethel Kunnath Poovakka, Durga Ramadas, Gouri Ramadas, Deepak Roshan VG, "Quality affecting factors of RNA – its assessment and influence on PCR reactions", International Journal of Scientific Research in Biological Sciences, Vol.5, Issue.6, pp.127-134, 2018

## WORKSHOPS CONDUCTED

- Hands on workshop on molecular techniques in clinical perspective
- Hands on workshop on Cell culture

## RESEARCH PROGRAMMES

- Molecular dissection of pathways altered by different fusion transcripts in CML was started
- Anticancer compound evaluation
- Proteomics studies to understand cancer biology
- Genomics analysis for understanding tumor biology

## LIST OF PG PROJECTS

- Study the effect of Imatinib on B2A2 and B3A2 type CML cell lines – By Sanjana P (M.Sc Biotechnology- Bharathiar University)
- Study the effect of Dasatinib on B2A2 and B3A2 type CML cell lines – By Savad T K (M.Sc Biochemistry- Bharathiar University)
- Analysis of Differential Protein expression in B2A2 and B3A2Cell lines using 2D PAGE– By Sneha K V (M.Sc Biotechnology- Bharathiar University)
- Evaluation of BCR-ABL Fusion transcripts in Northern Kerala Population – By Shahana Shirin (M.Sc Molecular Biology – Kannur university)
- Effect of Tyrosine Kinase inhibitors on the expression of PKM1/PKM2 & MUC-1 genes in B3A2 and B2A2 Cell lines – By Sanjana. S (M.Sc Molecular Biology – Kannur university)

## GRANDS AND SCHEMES

Ongoing a grand of 23 lakhs from KSCSTE , Govt of Kerala for the project “ Molecular dissection of pathways altered by different fusion transcripts in CML “

## INVITED TALK

1. Deepak Roshan VG- CME- ROLE OF GENETCS IN CANCER DRUG DEVELOPMENT- College of Pharmaceutical Sciences Calicut, Kerala
2. Deepak Roshan V G National seminar on Molecular diagnostics Next Generation Sequencing in personalized Cancer therapy - Achievements and Challenges- Kerala University, Trivandrum
3. Deepak Roshan VG- ICMR sponsored National seminar on "Targeted Cancer Therapy and Research - Advances and Challenges"- Dayananda Sagar University, Bangalore

## STAFF

Sl No	Name	Designation
1	Dr. Deepak Roshan VG	Assistant Professor
2	Dr Vipin Gopinath	Lecturer
3	Vincy Augustin	Lab technician
4	Sreeja Kothath	Lab Asistant

## DEPARTMENT OF CLINICAL HEMATOLOGY AND MEDICAL ONCOLOGY



### INTRODUCTION

Medical oncology and hematology is the specialty of internal medicine that provides for the treatment of cancer and various blood disorders. The Department has the following divisions:

Clinical Hematology  
Medical Oncology  
Medicine  
Paediatrics/Paediatric Oncology

### ACADEMIC ACTIVITIES

1. The department academic activities include seminars , didactic lectures, case presentations etc which are done on every Thursday- 44
2. The department conducts regular classes for post basic diploma Onco nursing students, nurses, BSc MRT students- 42 such sessions
3. Eight lectures were delivered by faculties of the department in Common academic sessions

### STATISTICS

Sl No	Services	Number
1	OPD Clinical hematology	10159
2	OPD Pediatric Oncology	1193
3	New cases in OPD (Clinical hematology + Pediatric oncology)	979
4	Day Chemo administered	13724
5	OPD attendance Medical Oncology solid tumor division	20032
6	Bone Marrow study	527
7	Lumbar puncture with I.T MTX	247
8	Autologous (Auto-HSCT)	10
9	Allogenic Hematological Stem Cell Transplantation (Allo-HSCT)	2

<b>Intensive Chemo administered as In Patient in Intensive chemo ward</b>	
7 + 3	25
HIDAC	30
BFM 2002 Phase1 Induction	9
HDMTX	312
FLAG	12
DA EPOCH-R	19
FCR	1
APML Induction	5
hyper CVAD	6
ALCL 99 A/B	6
ATG	1
TPF	20

<b>Intensive Chemo administered as In Patient in Pediatric oncology ward</b>	
ALL Induction	15
HDMTX (ALL consolidation )	45
AML induction	3
AML consolidation	3
MAP regimen for OGS	31
VDC + IE	74
ALL relapse Intensive chemo blocks	8
Interfant 06 MARMA	4
NHL FAB-LMB intensive chemoblocks	26
I.V Immunoglobulin	1

## CONFERENCES ATTENDED

- Dr CKN attended Pharmacy CME at MCC as faculty
- CKN attended Gynec CME at Kannur as faculty
- Dr CKN attended Oncology CME at Cochin as faculty in Sept ad spoke on TFR in CML.
- Dr CKN attended Hematocon 2019 at Kochi in OCTOBER as faculty and spoke on Allo transplant in NHL.
- Dr CKN attended Transmedcon 2019 at Kochi in November as faculty and spoke on HLA typing
- Dr Manuprasad attended KASO Gynaecology Conference at Govt Medical College , Calicut May 2018 - talk on “Adjuvant Chemotherapy in Ovarian Cancer”
- Dr Manuprasad attended Best Of ASCO 2018 Coimbatore ,July 2018 –Faculty Round table discussion on Lung Cancer
- Dr Manuprasad attended Breast and Ovarian Cancer Update-Coimbatore Oncological Society Oct 2018- Talk on “Targeted Therapy in Ovarian Cancer”
- Dr Manuprasad attended MVR CANCON 2018 September 2018 as faculty for the session on locally advanced breast cancer.
- Dr Manuprasad attended Hematocon 2018 – Cochin Nov 2018 and presented a poster on “Health related quality of life in multiple myeloma –report from a tertiary cancer centre in South India
- Dr Praveen gave talk on targeted therapy in Breast cancer in KASO conference at WIMS, Wayanad.
- Dr Praveen gave a talk on targeted therapy in Colorectal cancers at KASO conference at MES, Perinthalmanna
- Dr Anju R K attended Transmedcon 2019 at Kochi in November as delegate and presented poster on “Blood Transfusion requirements in APML”
- Dr Vineetha attended Hematocon 2019 at Kochi in OCTOBER as delegate and presented poster on “CASUN in Myeloma”
- Dr Vineetha attended PHOCON 2019 at bangalore as delegate and presented poster on “ Different faces of AIHA in children “
- Dr Jithin T K attended PHOCON 2019 as delegate
- Dr Jithin T K attended as a faculty at Annual conference of Pediatric hemato-oncology state chapter of IAP conducted at RCC, TVM and presented a topic on Febrile neutropenia
- DR JESUPANDIYAN presented a case of unusual case of Vitamin B12 deficiency at IMA clinical Club

## TRAINING PROGRAMMES

- Dr Jesu pandian and Dr Roshan Vinod joined for one year fellowship in Clinical Hematology and BMT
- Transfusion medicine PG students from Trivandrum Medical College and Alappuzha Medical College underwent specialty posting training in the department.
- 3 Junior residents from ACME, Pariyaram had postings in the unit - 2 weeks each
- Primary cancer care training for doctors in Health services and NHM as a two day workshop

## PUBLICATIONS

- Health related Quality Of Life in patients with multiple myeloma –report from a tertiary cancer centre in rural India- Vineetha Raghavan , Manuprasad, Praveen K Shenoy, Sajeev Kumar PB,Zoheb raj,Chandran Nair accepted for publication Cancer Research Statistics and Treatment [www.crstonline.com](http://www.crstonline.com)
- Docetaxel induced Lung Injury-Uncommon complication of a commonly used chemotherapeutic agent Avaronnan Manuprasad,Prasanth Ganesan, Ganesan TS, Venkatraman R,Manikandan D,Sagar T G accepted for publication Indian Journal Of Medical and Pediatric Oncology <http://www.ijmponline.org/aheadofprint.asp>

## RESEARCH PROGRAMMES

- Molecular dissection of pathways altered by different fusion transcripts in Chronic Myeloid leukemia
- Induction mortality in newly diagnosed AML
- Impact of active tuberculosis on cancer Rx
- Factors associated with poor acceptance of auto transplant in myeloma.
- Transfusion practice in APML.
- GDP as salvage chemotherapy for NHL
- Different faces of AIHA in children
- Hypomethylating agents in myeloid malignancies.
- EGFR mutations in squamous cell Carcinoma

## PROGRAMMES CONDUCTED

1. Monthly parent orientation programmes was conducted at MCC and birthday celebrations of

kids were also celebrated each month, as part of programme.

### 2. Ray of Hope 2018

- The Pediatric Oncology team conducted a program, in relation to Children's day 2018, titled "Ray of Hope - 2018 - Meet the Young Warriors" for the parents of children taking cancer treatment at MCC on 18/11/18 at 9 am - 2 pm. Following are the programmes conducted.
- Drawing camp - An NGO named HOPE foundation sponsored the event and provided the materials for drawing gave gifts for all children attended it. Additionally, they also gave gifts for all the children attended the program.
- Program started with a candle light ceremony, with Dr Chandran.K. Nair lighting the candle
- Dr Chandran.K.Nair addressed the gathering
- A few dance items (Magic dance), mimicry and songs were performed by an organisation (One Bridge Media - Kannur & D3 Kalabhavan) which was sponsored by CH Centre
- Birthday program was conducted - in which birthdays of 3 children were celebrated. It was sponsored by Dr Aswathi (Pathology) and Dr Ranjith (Molecular Oncology)
- Survivors meet - Parents of 2 children shared their experiences at MCC
- There were performances by kids and parents
- Gifts for children who performed during the program was donated by the nursing staff in pediatric oncology ward
- Lunch for all those attended were sponsored by Care & Cure Foundation - An NGO working in Thalassery

A total of 43 children with families attended the program with an attendance of 190 people.



### 3. ICCD 2019

On the occasion of International childhood cancer day- 2019, MCC in association with HOPE foundation, conducted a public awareness campaign at Kannur town on 15/2/19. A rally was conducted which displayed the key messages to public regarding pediatric cancers. A seminar was conducted at Kannur in which presidential address was given by Dr Chandran K Nair (HOD, CHMOG) and Theme message was given by Dr Jithin TK. Many other dignitaries also attended and gave felicitations. Cultural programmes were conducted for the kids.



4. Department of CHMOG organized **LYMPHOCON 2018** – A National conference on Non-Hodgkin Lymphoma in July 2018



5. MOG ( solid tumor division ) organised ASCO updates - a one day CME for in house faculty

## INNOVATIONS

- An MoU was signed with CUDDLES Foundation for providing nutritional support for children with cancer. They started providing a pediatric nutritionist and nutritional supplements.
- Began immunotherapy in solid tumors

## STAFF

Sl No	Name	Designation
1.	Dr Chandran K Nair	Associate Professor
2.	Dr Jithin T K	Assistant Professor
3.	Dr Vineetha Raghavan	Assistant Professor
4.	Dr. Gopakumar	Assistant Professor
5.	Dr Praveen Kumar Shenoy	Senior Lecturer
6.	Dr Manuprasad	Senior Lecturer
7.	Dr. Anju R Kurup	Lecturer
8.	Dr Shiljina K M	Lecturer

## DEPARTMENT OF SURGICAL ONCOLOGY



### INTRODUCTION

The department of Surgical Oncology has grown further in the current year. There were additional staffs joining the department. Dr. Abhay Kattepur and Dr. Ashitha joined as assistant professors. A new course, Fellowship in Head and Neck oncology was started under the aegis of Foundation for Head and Neck Oncologists (FHNO), India. Infrastructural improvements were done in the department for doing advanced surgeries. Two vessel sealing devices were procured, HIPEC machine was installed HIPEC surgery was started from 4/09/2018 onwards. Third operation theatre was made functional and started from Feb 2019. As part of preparation for NABH training, the documentations in the department have improved during this year. Seven conferences were conducted by the department. Five publications were made in indexed journals.



## ACTIVITIES AND ACHIEVEMENTS

1. FHNO accreditation of the fellowship- inspection was held on 10<sup>th</sup> Jan 2019. Two evaluators assessed the academic activities and the facilities and approved for fellowship in Head and neck oncology.



## ROUTINE ACTIVITIES

1. Total Number of Major Surgeries Performed: 1094

Sl No	Site	Number
1	Head and Neck	340
2	Breast	317
3	GIT	222
4	Urology	018
5	Gynecology	138
6	Bone & Soft tissue	034
7	Thoracic	021
8	Neurosurgery	001
9	RFA	003
	Total	1094

**2. Minor Surgeries done: in brahcy OT: 573**

Sl No	Procedure	Number
1	Biopsy	246
2	Tracheostomy	051
3	Central Lines	030
4	Orchidectomy	038
5	Revision surgery	123
6	Colposcopy	016
7	Wide excision	010
8	Wound debridement	013
9	D&C	015
10	Others	031
	Total	573

**Total number of endoscopies done: 2145**

Sl No	Procedure	Number
1	DLDP	1326
2	OGD	466
3	Bronchoscopy	24
4	Colonoscopy	298
5	NPL scopy	04
6	Nasal endoscopy	02
7	TEP	06
8	Dilatation	12
9	ERCP	02
10	PEG insertion	02
11	others	03
	Total	2145

**ACADEMIC ACTIVITIES**

The routine academic activities of the department were

1. Monday , 8- 8.30 am: Case discussion

2. Tuesday to Friday ,8- 8.30 am : Short topic discussion
3. Saturday 8- 9.00 am: Grand rounds

**OTHER TRAINING PROGRAMMES CONDUCTED**

1. Introduction to surgical oncology
2. Surgical skill training

**TRAINING TO STUDENTS**

1. DNB in Surgical Oncology  
Two students are undergoing training in surgical oncology which is a three year course.
2. Fellowship in Head and Neck Oncology  
Four students are undergoing training in head and neck oncology. The course duration has been increased to two years.
3. Fellowship in Oral Oncology  
Two students joined for the course in Jan 2018. Of which one student, Dr Rahul discontinued the course in Dec 2018 due to personal reasons. Two students joined in Jan 2019.
4. FHNO fellowship in Head and neck Oncology  
This course was started in March 2019 onwards. One student, Dr Raveena Nair joined for the course.
5. Fellowship in Gynaec Oncology  
The course was made two years programme from 2017 onwards. Two students joined in 2017, but one student, Dr Parmita Tiwari discontinued in June 2018.
6. Training for MDS students  
Trained 12 MDS (OMFS) students from various Dental Colleges in Kerala.
7. Training for BASLP students  
Trained 28 students for one month each, in speech &swallowing therapy

**PAPERS PUBLISHED**

1. En Bloc resection with partial sacrectomy helps to achieve R0 resection in locally advanced rectal cancer; Experience from a tertiary cancer centre. DrNizamudheen et al; Indian Jnl Of Surgical Oncology, March 2019
2. Improved survival among oral cancer patients; Findings from retrospective study at a tertiary care centre in rural Kerala , India. Dr Sajith babu et al; World Jnl of

## Surgical Oncology, 2019

3. Early calcium supplementation after total thyroidectomy can prevent symptomatic hypocalcaemia- findings from a retrospective study. Dr Sajith Babu et al, Jan 2019.
4. Recurrence pattern of glottic cancer patients treated by Laser cordectomy; Intent to treat analysis. Dr Sajith Babu et al. Journal of head and neck physicians and surgeons. Nov 2018.
5. Does adverse histopathological features like peri neural invasion, depth of invasion and lympho vascular invasion warrant adjuvant treatment in early oral squamous cell carcinoma. Dr. Shivakumar et al. Journal of head and neck physicians and surgeons. Feb 2018.

## CONFERENCES CONDUCTED

1. DOST 4 : 2<sup>nd</sup> Dec 2018, demonstration of surgical techniques in local flaps in head and neck surgery
2. International HPV conference- 13<sup>th</sup> Jan 2019. In association with CLSTR, conducted the conference at MCC
3. CORE- on 16/09/2018. In association with the dept of Anaesthesiology, conducted this conference for the OT technicians.
4. DOST 3- on July 2018. Demonstration of surgical techniques in laryngeal cancers.
1. KASO peripheral meet at Perinthalmanna in June 2018 on colorectal cancers.
2. KASO peripheral meet at Calicut in May 2018 on Gynaecological cancers.
3. KASO peripheral meet at Wayanad in April 2018 on breast cancers.

## CONFERENCES PRESENTATIONS

- International HPV conference- three posters.
- FHNO 2018- 04 poster, one oral presentation
- IASO 2018, Thiruvananthapuram – One video, 04 poster presentations, one panellist

## ACHIEVEMENTS

- Dr. Sajith Babu got second prize for the consultant video presentation at FHNO conference held at Kolkata in Oct 2018.

## ONGOING PROJECTS

1. SENPOS trial
2. GLOB-SURG: Surgical Morbidity project by NCG

## STAFF

Sl No	Name	Designation
1.	Dr Satheesan B	Professor& Director
2.	Dr Sajith Babu	Asso Professor
3.	Dr Nizamudheen	Assist Professor
4.	Dr Adarsh Darmarajan	Assist Professor
5.	Dr. Abhay Kattepur	Assist Professor
6.	Dr Shamna M	Assist Professor
7.	Dr Ashitha	Assist Professor



## SPEECH AND SWALLOWING THERAPY UNIT



### INTRODUCTION

This unit deals with rehabilitation of cancer patients in swallowing and speech during and after treatment of cancer. It provides both in-patient and out-patient care.

### SERVICES

1. Counselling- Pre and post treatment counselling
2. Swallowing assessment- Clinical, subjective and objective
3. Swallowing therapy- Postures , maneuvers and ROM exercises
4. Speech therapy- Alaryngeal speech training
5. Voice therapy

### ACTIVITIES

#### Pre treatment

- Counselling for patients and family members regarding the implications of planned treatment for speech, voice& swallowing functions.
- Assessment of articulation and voice skills.
- Swallowing assessment (bedside/FEES/videofluoroscopic).

#### During treatment

Radiotherapy in combination with chemotherapy or alone may produce tissue changes resulting in alteration in speech, voice or swallowing...

- Oral motor, laryngeal or pharyngeal exercises to strengthen and maintain range of motion, precision and mobility of the structures needed for voice, speech & swallowing.

#### Post treatment

Assessment of the functional communication skills with provision of appropriate treatment,, the swallowing function with provision of appropriate treatment including the use of specific swallowing manoeuvres and postures, swallowing therapy focusing on the use of specific oral,laryngeal/ pharyngeal exercise.

### STATISTICS

Sl No	Service	Number
1	Speech consultation	864
2	Swallowing therapy	433
3	Swallowing assessment	301



4	Speech therapy	236
5	FEES -	35
6	Videofluoroscopy	13

## CONFERENCES, SEMINAR, WORKSHOPS AND PRESENTATIONS

1. Attended a conference on demonstration of surgical techniques 3- larynx current concepts and advances in management, organized by MCC Thalassery on 15<sup>th</sup>July 2018.
2. Attended DEGLUTICON 2018 organized by ENT department of Azeezia Medical College-Kollam on December 16 2018.
3. Attended ISHA KSB 11<sup>th</sup> annual conference on 15<sup>th</sup> and 16<sup>th</sup>September 2018 at Munnar.
4. Attended BMCAMSCON 2019 organized by Baby Memorial Hospital Calicut on 23<sup>rd</sup> and 24<sup>th</sup> march 2019
5. Presented a topic “Other voice rehabilitation techniques in Laryngectomies” in DOST 3 organized by Malabar cancer centre 15<sup>th</sup>July 2018.
6. Presented a topic “Instrumental assessment of dysphagia “in 11<sup>th</sup>annual conference organized by ISHA KSB on 15<sup>th</sup> and 16<sup>th</sup>September 2018 Munnar.
7. Presented a topic “videofluoscopic assessment of dysphagia in adults” in BMCAMSON 2019 organized by baby memorial Calicut on 23<sup>rd</sup> and 24<sup>th</sup> march.

## STAFF

Sl No	Name	Designation
1.	Mr. Aneeth	Speech and swallowing Therapist

## CSSU (CENTRAL STERILE SUPPLY) UNIT



### INTRODUCTION

The Central Sterile Supply unit started functioning in new building and it is planned as per NABH requirements. It has three separated zone. Zone-1 is unclean area, Zone-2 clean area and Zone -3 sterile area. The unit has advanced equipments

1. Steam sterilizer (mmmm Germany).
1. Plasma sterilizer (Getinge turkey)
2. 3 ETO sterilizer (3m company)
3. Ultrasonic cleaner (Elma Germany)
4. Hand labelling machine (USA)
5. Gauze cutting machine
6. Compressed Air gun
7. Stainless steel furnitures etc...

### STAFF

Sl No	Name	Designation
1.	Mr. Krishna Kumar	OT Technician
2.	Mr. Midhun	Nursing Assistant



## PHYSIOTHERAPY UNIT



### INTRODUCTION

The physiotherapy section is equipped for rehabilitation of patients on treatment and follows up. It was established in 2010-11 period

### STATISTICS

Sl No	Service	Number
1	Total Number of patients seen in OPD	1281
2	Total Number of patients seen in IP	3179

### ACADEMIC ACTIVITIES

1. Participated as Resource person in “DOST -3-DEMONSTRATION OF SURGICAL TECHNIQUE -LARYNX, CURRENT CONCEPTS AND ADVANCES IN MANAGEMENT, JULY 15 2018
2. Participated as Resource person in pink ribbon day programme in MCC “Role of Physiotherapy In Breast Cancer Rehabilitation “ ON OCTOBER 2018
3. Participated as Resource person in ‘LARYGECTION PATIENTS AWARENESS PROGRAMME - DWANI’ JULY 14
4. Participated as Resource person in “VIDEOS OF LOCAL & REGIONAL FLAP RECONSTRUCTION IN ORAL CANCER SURGERY, December 2018
5. Participated as Resource person in 2 days National conference &workshop on soft tissue manipulation organized by College of Physiotherapy Anjarakkandy Medical College, March 2019

### STAFF

Sl No	Name of staff	Designation
1	Ms.Roopa	Physiotherapist

## CLINICAL NUTRITION & DIETETICS UNITS



### INTRODUCTION

Dietetics section was introduced in MCC in 2011-12 periods and it provides professional support to both in-patients and out-patients.

### STATISTICS

Sl No	Service	Number
1	Total Number of patients seen in OPD	3256
2	Total Number of patients seen in IP	8484

### RESOURCE PERSON

1. Participated as Resource person “over view of cancer Nutrition” education programme for staff nurses in kerala government hospitals of kannur district, organized by state Nutrition bureau of Kerala on March 2019
2. Participated as Resource person “Rainbow Nutrition” education programme for Health Inspectors in kerala government hospitals of kannur district, organized by state Nutrition bureau of Kerala on March 2019
3. Participated as Resource person in MVR Nutricon 2019 in the topic “Nutritional Challenges in Cancer” on March 8 th 2019 at MVR cancer centre, Kozhikode
4. Awareness class for mothers of ICDS children Diet and child growth at anganwadi, vattoli, kannur on April 21 st 2018
5. Syllabus based lecture given to Bsc Nursing students of INSER, MCC as a external faculty in Nutrition in academic year 2018-2019 (Theory and practical)
6. Class taken for women in community “Nutrition and wellness for women” at kuttimakkol, Thalassery on 08/09/2018
7. Nutrition classes given to schools of kannur districts as a part of Safe and Nutritious food campaign @ School programme 2018 organised by Food safety department, kerala Government
  - i. Kuthuparamb Govt High School and Thokkilamghadi Higher secondary schools on November 21 st 2018
  - ii. 28/11/2018 at Pinarayi Higher secondary school and Mattannur higher secondary school
  - iii. 05/12/2018 at two schools in Dharmmadam circles
8. Class took for adolescent girls about Nutrition on 30/10/2018 under Vanitha Sisu vikasanam ICDS, Thalassery.

## **DELEGATE**

1. Participated as Resource person in ICU Nutrition updates conference organised by Baby memmorial Hospital, Calicut on 31 st March 2019.
2. Attended 10 th International conference of Appolo hospitals 4 th to 5 th August 2018
3. Attended 51 st Annual National conference of Indian dietetic association IDACON 2018, held at Indoor from 30 th September to 2 nd October 2018.

## **ARTICLE PUBLISHED**

1. Article published in Arogya padmam Health magazine regarding “Safety of Non Stick Pan” in April 2018
2. Article published in Arogya padmam Health magazine regarding “Immunity and Vitamin C” in August 2018

## **EDUCATIONAL PROGRAMMES/TRAINING AND COURSES**

- I. Two students from St Joseph's college for women, Alappuzha jointed for 3 months internship training programme from April 4<sup>th</sup> to June 7<sup>th</sup> 2018
- II. Two dietician from WIMS Wayanad jointed for 3 months Onco nutrition training on 12/09/2018
- III. Fellowship in nutrition Oncology new student jointed in January 2019
- IV. Training given to IMA voluntaries of palliative care in training programme organized by palliative department of MCC in august 2018
- V. Class taken for Laryngectomy patients in NAVADWANI July 2018 at MCC

## **STAFF**

<b>Sl No</b>	<b>Name of Staff</b>	<b>Designation</b>
1	Ms.Reena	Dietitian

## DEPARTMENT OF RADIATION ONCOLOGY



### INTRODUCTION

The department of radiation oncology is equipped with facilities for external beam radiotherapy and high dose brachytherapy. The department started functioning in 2005 with the installation of a telecobalt unit. Now there are 8 radiation oncologists, 4 radiation physicists and 9 Radiation oncology technicians. The department is equipped with 2 linear accelerators (Varian - Clinac iX, and Elekta – Versa HD), one HDR brachytherapy unit, and one CT simulator. A conventional simulator (IMAGIN) and a Telecobalt machine (Equinox) are under installation..

### EXISTING FACILITIES

1. External Beam Radiotherapy- Two linear accelerators a] Clinac Ix b] Versa HD
2. HDR Brachytherapy
3. CT simulator
4. Radiation physics lab

### ACADEMIC ACTIVITIES

1. Fifth batch of Physics interns from University of Calicut joined the department in October 2018..
2. Five MSc Physics students had done their projects in the department under the supervision of physicists.
3. Eighth batch of BSc MRT students (KUHS) joined in 01/08/18
4. Fifth Batch of BSc MRT joined for the year training in April 2018
5. Convocation ceremony was conducted for all BSc MRT students who completed their course successfully.

## STATISTICS

SL No	Treatment Given	Number
1	Patients treated with Radiotherapy	1877
2	Treatment on Cobalt	Nil (decommissioned)
3	Palliative Treatments	946
4	Radical Treatment	931
5	Treatment on Linear Accelerator	784
6	Number of VMAT	343
7	Number of IMRT	3
8	Number of 3DCRT	370
9	Number of Electrons	11
10	Number of SBRT	1
11	Number of Hybrid Arc	26
12	Treatment with HDR Brachytherapy	364
13	Intracavitary brachytherapy	355
14	Interstitial brachytherapy	9
15	Total number of cases planned on 4DCT	2175
16	Number of palliative cases	850
17	Number of curative cases	1003
18	Total number of cases planned on conventional simulator	0 (Under installation)

## PROJECTS

### COMPLETED PROJECTS

1	Factors contributing to weight loss in patients on radiation therapy for head and neck cancers	Dr. Geetha.M
2	Comparison of ICRU point base and GEC-ESTRO organ at Risk doses in intracavitary brachytherapy in cervical cancer	Dr. Vinin.N.V
3	Clinical outcome of palliative oral metronomic chemotherapy in head and neck cancer patients coming to a tertiary cancer centre	Dr. Vinin.N.V
4	Electrolyte abnormality in patients undergoing concurrent chemo radiation for head and neck malignancy	Dr. Joneetha Jones
4	Analysis of patients with rare uterine malignancies at a tertiary cancer center in North Kerala	Dr. Greeshma.K.E

5	Analysis of acute hematological toxicities of cervix treated with concurrent chemo radiation	Dr. Greeshma.K.E
6	A study on disease progression in non small cell carcinoma lung patients treated with definitive chemo radiation	Dr. Shoaib Nawaz.P.N
7	Retrospective evaluation of outcomes of neoadjuvant chemotherapy followed by radical surgery in adeno carcinoma esophagus	Dr. Anindya Mukherjee
8	Quantification of photon contamination for different electron energies	Mrs. Silpa Ajaykumar
9	Assessment of depth dose variation due to introduction of inhomogeneous material	Mrs. Silpa Ajaykumar
10	Output comparison of SRS cone and MLC shaped field	Mrs. Suja C A
11	Dosimetric impact of applicators in electron beam therapy	Mrs. Resmi K Bharathan
12	Output Calibration of Photon Beam	Mrs. Resmi K Bharathan

## ONGOING PROJECTS

1	Assessment of financial burden in patients with head and neck cancer undergoing curative intent treatment	Dr. Geetha.M
2	Dose volume analysis for acute gastrointestinal toxicity in patients on pelvic radiotherapy	Dr. Geetha M
3	Patterns of failure in node positive cervical cancer patients treated with radiotherapy	Dr. Geetha M
4	Dosimetric comparison of tandem and ovoids tandem and ring application for intracavitary brachy therapy in carcinoma cervix	Dr. Vinin
5	Randomized Controlled Trial Assessing addition of neoadjuvant and maintenance oral metronomic chemotherapy to standard surgery and adjuvant therapy in stage III, IV operable oral cancers	Dr. Vinin.N.V
6	Is oral metronomic chemotherapy the way ahead for advanced head & neck cancer treated with palliative intent	Dr. Vinin.N.V
7	Organ at risk doses in three dimensional conformal radio therapy in carcinoma breast following breast conservation surgery	Dr. Jonnetha Jones
8	Comparison of two contouring methods of bone marrow and correlation with bone marrow toxicity in patients with carcinoma cervix receiving IMRT with concurrent chemotherapy- pilot study	Dr. Greeshma.K.E
9	A study on setup variations during treatment and assessment of adequacy of current CTV- PTV margins in head & neck radiotherapy	Dr. Greeshma
10	Survival analysis of high grade gliomas a tertiary cancer centre experience	Dr. Shoaib Nawaz
11	Qualitative external beam radiotherapy in carcinoma Esophagus: A quality of life analysis	Dr. Shoaib Nawaz
12	Thyroid gland- evaluating the need for a dose volume constraint	Dr. Anindya Mukherjee

13	Association between quality of life and clinical response to definitive chemo radiotherapy in patients with carcinoma cervix	Dr.Anindya Mukharjee
14	Bowel and bladder toxicity and volumetric dose parameters in carcinoma cervix patients in treated with definite radiation therapy	Dr.Arun P Narendran
15	Variation in inter fraction bladder volumes during neo adjuvant chemo radiation for rectal cancers	Dr.Nabeel Yahia
16	Tumor regression after neoadjuvant chemoradiation in carcinoma rectum: A Tertiary Cancer Centre Experience	Dr. Shoaib Nawaz
17	Analytical study of flatness and symmetry of electron beams with 2D array detector	Mrs. Suja C A
18	Measurement of Absorbed dose during CBCT imaging	Mrs.lisa Jose

## RESEARCH PROJECTS

1. Assessment of financial burden in patients with head and neck cancer undergoing curative intent treatment-Dr. Geetha.M
2. Dose volume analysis for acute gastrointestinal toxicity in patients on pelvic radiotherapy-Dr.Geetha M
3. Patterns of failure in node positive cervical cancer patients treated with radiotherapy-Dr.Geetha M
4. Dosimetric comparison of tandem and ovoids tandem and ring application for intracavitary brachey therapy in carcinoma cervix- Dr.Vinin
5. Randomized Controlled Trial Assessing addition of neoadjuvant and maintenance oral metronomic chemotherapy to standard surgery and adjuvant therapy in stage III, IV operable oral cancers- Dr. Vinin.N.V
6. Is oral metronomic chemotherapy the way ahead for advanced head & neck cancer treated with palliative intent?- Dr. Vinin.N.V
7. Orgaon at risk doses in three dimensional conformal radio therapy in carcinoma breast following breast conservation surgery-Dr. Jonnetha Jones
8. Comparison of two contouring methods of bone marrow and correlation with bone marrow toxicity in patients with carcinoma cervix receiving IMRT with concurrent chemotherapy- pilot study-Dr. Greeshma.K.E
9. A study on setup variations during treatment and assessment of adequacy of current CTV- PTV margins in head & neck radiotherapy- Dr.Greeshma
10. Survival analysis of high grade gliomas a tertiary cancer centre experience-Dr. Shoaib Nawaz
11. Qualitative external beam radiotherapy in carcinoma Esophagus: A quality of life analysis-Dr. Shoaib Nawaz
12. Thyroid gland- evaluating the need for a dose volume constraint-Dr.Anindya Mukherjee
13. Association between quality of life and clinical response to definitive chemo radiotherapy in patients with carcinoma cervix-Dr.Anindya Mukharjee
14. Bowel and bladder toxicity and volumetric dose parameters in carcinoma cervix patients in treated with definite radiation therapy-Dr.Arun P Narendran
15. Variation in inter fraction bladder volumes during neo adjuvant chemo radiation for rectal cancers- Dr.Nabeel Yahia

16. Tumor regression after neoadjuvant chemoradiation in carcinoma rectum: A Tertiary Cancer Centre Experience-Dr. Shoaib Nawaz
17. Analytical study of flatness and symmetry of electron beams with 2D array detector-Mrs. Suja C A
18. Measurement of Absorbed dose during CBCT imaging- Mrs. Lisa Jose
19. Factors contributing to weight loss in patients on radiation therapy fro head and neck cancers-Dr. Geetha.M
20. Comparison of ICRU point base and GEC-ESTRO organ at Risk doses in intracavitary brachytherapy in cervical cancer - Dr. Vinin.N.V
21. Clinical outcome of palliative oral metronomic chemotherapy in head and neck cancer patients coming to a tertiary cancer centre-Dr. Vinin.N.V
22. Electrolyte abnormality in patients undergoing concurrent chemo radiation for head and neck malignancy-Dr. Joneetha Jones
23. Analysis of patients with rare uterine malignancies at a tertiary cancer center in North Kerala-Dr. Greeshma.K.E
24. Analysis of acute hematological toxicities of cervix treated with concurrent chemo radiation-Dr. Greeshma.K.E
25. A study on disease progression in non small cell carcinoma lung patients treated with definitive chemo radiation-Dr. Shoaib Nawaz.P.N
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29. Output comparison of SRS cone and MLC shaped field -Mrs. Suja C A
30. Dosimetric impact of applicators in electron beam therapy- Mrs.Resmi K Bharathan
31. Output Calibration of Photon Beam-Mrs. Resmi K Bharathan

## **CONFERENCES/SEMINAR/WORKSHOP**

1. Department of radiation oncology conducted a CME on High grade gliomas – GLIOMEET on 14/10/19
2. Dr. Geetha presented a poster on Estimation of lung dose and its association with pneumonitis following radiotherapy in breast cancer patients in AROICON 2018 in November 2018 held at Thiruvananthapuram
3. Dr Vinin presented a poster on in AROICON 2018 in November 2018 held at Thiruvananthapuram,
4. Dr.Joneetha presented a poster on in AROICON 2018 in November 2018 held at Thiruvananthapuram
5. Dr. Anindya Mukherjee presented a poster on Retrospective evaluation of outcomes of neoadjuvant chemotherapy followed by radical surgery in adenocarcinoma esophagus in AROICON 2018 in November 2018 held at Thiruvananthapuram,
6. Dr. Greeshma. K.E presented a paper on Rare uterine malignancies in AROICON 2018 in November 2018 held at Thiruvananthapuram
7. Dr. Shoaib Nawaz presented a paper on outcome of Non Small cell carcinoma patients treated with chemoradiation - A Tertiary cancer centre experience in AROICON 2018 in November 2018 held at Thiruvananthapuram

8. Dr. Vinin. N.V attended National conference conducted by MVR cancer Centre Calicut in September 2018 and presented a poster on Organ at risk doses during high dose rate intra cavity Brachytherapy for cervical cancer-A Dosimetric study
9. Dr. Geetha. M, Dr. Joneetha Jones, Dr. Greeshma. K.E and DR. Arun. P. Narendran attended Oncology 2018 national conference held at Cochin in September 2018. Dr. Joneetha presented a poster on
10. Dr. Vinin presented a paper on Interstitial brachytherapy at a CME conducted by AROI Kerala Chapter at Thiruvananthapuram on 20.11.18
11. Dr. Geetha.M made a presentation on advances in radiotherapy in the management of carcinoma and endometrium
12. Dr. Vinin. N.V made a presentation on Radiation therapy in breast cancer in a CME conducted by KASO on 20.04.18
13. Dr. Nabeel and Dr. Advait attended a conference on Gastrointestinal Tumors GICON at AJ Institute of Medical science , Mangaluru on 28.10.20181

## STAFF

Sl No	Staff	Designation
1.	Dr.Geetha.M	Associate Professor & Head
2.	Dr.Vinin.N.V	Assistant Professor
3.	Dr.Joneetha Jones	Assistant Professor
4.	Dr.Greeshma.K.E	Assistant Professor
5.	Dr. shoaibNawaz.P.N	Assistant Professor
6.	Dr. Arun. P Narendran	Assistant Professor
7.	Dr. Nabeel Yahiya	Assistant Professor,
8	Dr, Anindya Mukherjee	Assistant Professor
9	Dr. Akhil P Suresh	Assistant Professor,
10	Mrs.SilpaAjaykumar	Lecturer in Radiation Physics
11	Mrs. Suja.C.A	Lecturer in Radiation Physics
12	Mrs. Resmi K Bharathan	Lecturer in Radiation Physics
13	Mrs. Lisha Jose	Lecturer in Radiation Physics
14	Mr.Arun Kumar.E.S	Dosimetrist
15	Mrs.SrijiSoman	Technician
16	Mr. Rajaneesh Kumar. O.K	Technician
17	Mrs.Rijisha	Technician
18	Mr.Nijeesh.P.T	Technician

19	Mr. Harshal. C.H	Technician
20	Mrs. Beena.P.K	Technician
21	Mrs. Dhanya.V	Technician
22	Mr. Faisal.A	Technician
23	Mrs. Gayatri	Technician
24	Mr. Sandeep Kumar	Attender/MouldRoom Assistant
25	Mr. Sujith.T	Attender
26	Mrs. Divya	Staff nurse
27	Mrs. Sreeja	Staff nurse



## DEPARTMENT OF IMAGEOLOGY



### INTRODUCTION

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 like digital mammogram with 3D tomosynthesis, Digital radiography, C-arm, Maxio robot for guidance in interventional procedures and a Radio frequency ablation machine. Recently department acquired high end ultrasound (ToshibaAplio 500) with facility for TRUS biopsy, contrast ultrasound, fusion imaging and multiorgan elastography. We also acquired the Automated Breast Ultrasound (iABUS by Episonica), which is the first in India in government set up.

Department is in the expansion phase with process being started for acquisition of new high end CT scan and interventional radiology DSA unit. New building is also under construction. Process for acquisition of new enterprise RIS- PACS has also being started. Curriculum for starting fellowship in Oncoimaging and interventional radiology was prepared and course started in February 2019.

### NEW COURSES STARTED

Started Fellowship programme in Oncoimaging and Interventional Radiology in February 2019. One candidate joined and is pursuing the course.

### ACTIVITIES AND ACHIEVEMENTS

Our BscMRT student Karunya bagged 3rd prize in ISRT State Conference held at Kerala Forest Research Institute, Peechi, Thrissur, Kerala on 30th December, 2018 and the topic was “Robotic interventions in Radiology – how we do it”

Sheena T P, Radiographer , Department of Imageology presented a paper on” The retrospective audit of mammographically detected microcalcifications only BIRADS 4 breast lesion with histopathologic correlation” in 5th National Conference of ISRT held at Lucknow on 27th and 28th October, 2018. It was selected as one of the six best paper presentations.

Completed the tender process of PET CT and enterprise PACS.

## STATISTICS

SL No	Procedure	Number
1	No. of X rays	6637
2	Portable x ray	523
3	USG	1941
4	Mammogram	2338
5	CT	9122
6	MRI full study	1838
7	MR RT planning	124
8	MRI screening studies	395
9	USG guided biopsy	120
10	USG guided FNAC	99
11	USG guided aspiration	37
12	USG guided wire localization	49
13	USG guided pigtail insertion	6
14	CT guided FNAC/Biopsies	306
15	CT guided pigtail	8
16	Stereotactic wire localization	13
17	RFA	4
18	Robot guided FNAC/biopsy	3
19	Coiling	1
20	Barium studies	57
21	Video fluoroscopy	21
22	C arm procedures	3

## PUBLICATIONS

Tumour related denervation pseudohypertrophy of tongue – a clinical entity in disguise.

## CONFERENCES, SEMINARS, WORKSHOP AND PRESENTATIONS

- Conducted one day CME on Cardiac Imaging in Oncology for technologist and doctors as part of International Day of Radiology celebrations -2018 in MCC on 1st December, 2018. External faculties invited were Dr Rajesh Kannan, Associate Professor, AIMS, Cochin, Dr Jineesh, Assistant Professor, SCTIMST, Trivandrum and Mr Mahesh, Senior MRI technologist, SCTIMST, Trivandrum.
- Dr Satheesh Babu, Associate Professor was invited as faculty in following conferences
  - Panel discussion on “Gynec-Oncology Update” conducted by Department of Gynecology-Gynec -Oncology Division, Government Medical College, Kozhikode and Malabar Cancer center and Kerala Association of Surgical Oncology (KASO) at Govt. Medical College, Kozhikode on 20/05/2018.

- b. "Continuing medical education colorectal cancer- An update" as part of Tour of KASO conducted by MES Academy of Medical Sciences on 24th June, 2018. Delivered a talk on 'Imaging of rectal cancers- Essential concepts' and participated in the panel discussion on 'Rectal Cancer – Evaluation, treatment decisions, morbidity, follow up, prognosis and recurrence.
- c. "Role of Imaging in the evaluation of Laryngeal pathology" in Demonstration of Surgical Techniques 3 (DOST 3) – Larynx – Current concepts and advances in management conducted by Malabar Cancer Center, Thalassery on 15th July, 2018.
- d. MVR CANCON to deliver a talk on "Essential radiology in Gynec oncology" on 29th September, 2018 conducted by MVR Cancer Center, Kozhikode, Kerala.
- e. 'SCISRT 2018', State conference organized by ISRT academic club, Thrissur at Kerala Forest Research institute, Peechi, Thrissur, Kerala on 30th December, 2018 and delivered a talk on "Image guided minimally invasive interventions in Oncology".
- f. YROF Academic session "MIRROR 2019" held at AIMS, Kochi on 13th January, 2019 and delivered a talk on "Exploring the pelvic anatomy".
- g. Attained Level 1 certification in Adult Cardiac MRI at a Workshop held at Visakhapatnam on 16th and 17th March, 2019.
- Sheena T P , Radiographer , Imageology presented following papers in various conferences
- h. The retrospective audit of mammographically detected microcalcifications only BIRADS 4 breast lesion with histopathologic correlation – 5th National Conference of ISRT held at Lucknow on 27th and 28th October, 2018.
- i. Radiological anatomy of heart – International Day of Radiology Celebration on Cardiac Imaging in Oncology held in MCC on 1st December, 2018
- j. Role of automated breast ultrasound in breast imaging – ISRT state conference held at Kerala Forest Research institute, Peechi, Thrissur, Kerala on 30th December, 2018.
- NimyaParameswaran and Srinsi, Radiographers, Department of Imageology presented a poster on "Stereotactic wire localization- How we do it " at ISRT state conference held in Kerala Forest Research Institute, Peechi, Thrissur, Kerala on 30th December, 2018.
- Praveen Kumar and SreeAchudayalal, Radiographers, Department of Imageology presented a poster on "Adrenal wash out study" at ISRT state conference held in Kerala Forest Research Institute, Peechi, Thrissur, Kerala on 30th December, 2018.
- Muhammed Naseem, Radiographer, Department of Imageology, talked on "Radiological anatomy of coronary arteries" in the one day CME on "Cardiac Imaging in Oncology "conducted in MCC on 1st December ,2018 as part of International Day of Radiology.

## **RESEARCH PROGRAMS**

### **ONGOING PROJECTS**

Comparative analysis of contrast enhanced ultrasound and MRI in prediction of residual disease following unplanned excision of soft tissue sarcoma among patients treated at Tertiary Cancer Hospital in Northern Kerala.

## COMPLETED PROJECTS

1. Comparative diagnostic performance of sonomammogram and iABUS in breast lesion detection in women referred for screening to Malabar Cancer center – A pilot study
2. Role of diffusion weighted magnetic resonance imaging in predicting treatment response following chemo radiotherapy in patients with advanced carcinoma rectum – A pilot study
3. Utility of dynamic contrast enhanced T1 weighted MRI in the assessment of uterine and vaginal recurrence after radiotherapy

## STAFF

Sl No	Staff	Designation
1.	Dr Satheesh Babu	Associate Professor
2	Dr.Vinin.N.V	Assistant Professor
3	Dr.Greeshma.K.E	Assistant Professor
4	Dr. Nabeel Yahiya	Assistant Professor
5	Sheena T P	Technicians
6	Sindhu K U	Technicians
7.	Vini Raveendran	Technicians
8	Nimmya Parameswaran	Technicians
9	Muhammed Naseem	Technicians
10	Srinsi N K	Technicians
11	Praveen Kumar	Technicians
12	SreeAchudayalal	Technicians
13	Sharath P V	Technicians
14	Nidhu C D	Technicians
15	AnuAnandanAchari	Technicians
16	Shajeena	Technicians
17	Noufal P	Technicians
18	Greena Francis	Technicians

## DEPARTMENT OF DENTISTRY & REHABILITATION



### INTRODUCTION

Department of dentistry rehabilitation provides dental services to all the registered cancer patients. Pre-radiation dental screening is made mandatory for all head and neck cancer patients. Dental restorations, oral prophylaxis extractions, fixed and removable prosthesis are provided for such patients. All the patients will be regularly followed up for optimum dental health.

Haematological patients and patients with solid tumours having skeletal metastasis are also screened for dental health and necessary dental treatment carried out.

Surgical patients who are in need of obturators are planned in accordance with the head and neck surgery departments.

Maxillofacial prosthesis services are also being provided.

### EXISTING FACILITIES

Dental x-ray unit

Facilities for dental prophylaxis

### NEW FACILITIES

New dental chair installed

Intra-oral periapical x ray with RVG installed

### ACTIVITIES AND ACHIEVEMENTS

One year senior house surgery programme- one candidate completed one year tenure

## STATISTICS

Sl No	Services	Number
1	Dental OP	3985
2	Dental extractions	1644
3	Oral prophylaxis procedures/Scaling	57
4	GIC restorations	67
5	Obturators	16
6	Root canal treatments	81
7	Complete dentures	21
8	Removable partial dentures	25
9	Implants	5

## CONFERENCE, SEMINAR, WORKSHOPS AND PRESENTATIONS

1. Dr.Pramod Sankar attended 2nd IPS Kerala state conference.  
Thrissur Kerala on 29 APRIL-2018
2. Dr.Pramod Sankar attended Application of CBCT 23 September 2018 Kannur
3. Dr.Pramod Sankar presented a talk on “SMILE AFTER CANCER “9 Oct 2018  
At IDA hall Kannur

## RESEARCH PROGRAMMES

Evaluation of effectiveness of dental intervention and oral care protocol recommended for patients undergoing radiotherapy in a tertiary cancer centre - A Prospective study

Drug related and dental related factors for developing osteonecrosis of the jaw among cancer patients who receives anti resorptive medication at a tertiary cancer centre in North Kerala, India - A five year prospective study

## STAFF

Sl No	Name	Designation
1	Dr. Pramod Sankar. S	Associate Professor &HOD

## DEPARTMENT OF CANCER PALLIATIVE MEDICINE



### 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.

### 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 644 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 AND TRAINING PROGRAMMES

1. Mrs. Abhina S.S attended the Education in Palliative and End of Life care in Oncology (EPEC-Oncology) Trainer's Conference held at Tata Memorial Hospital, Mumbai on May 2-3, 201
2. Mrs. Abhina took a session on Stoma care for 1st batch of 3rd year BSc Nursing students from Koyili College of Nursing (15.5.18)
3. Mrs. Abhina took a session on Stoma care for 2nd batch of 3rd year BSc Nursing students from Koyili College of Nursing (22.5.18)
4. June 2018 IAPC course in "Essentials of Palliative care" started with 10 doctors. This is the 9th batch in MCC. Contact sessions held on 10.6.18 and 24.6.18

5. 18.6.18-9th batch BCCPAN course started with 4 students.
6. 29.6.18-A presentation on “COMMUNICATION” was done in the morning academics for the academic staffs of MCC.
7. 7.7.18-A meeting for training “SRISHTI” members in Mural painting was organized with Mrs. Sulochana, a mural painting artist. It was decided to conduct training every Saturday and Sunday.
8. 18.7.18 -First batch of volunteers training with 5 volunteers each from 5 palliative care units under PIK started. Training was for 5 days. Training in psycho oncology, palliative care, stoma care, lymphedema care was the main focus. Training ended on 24.7.18.
9. 21.7.18-Inauguration of “VARNAVASANTHAM”, training of SRISTI members in Mural painting by Dr.Satheesan Balasubramanian, Director MCC.
10. 1.8.18-Second batch of volunteers training with 5 volunteers each from 5 palliative care units under PIK started. Training was for 5 days. Training in psycho oncology, palliative care, stoma care, lymphedema care were the main focus.Training ended on 7.8.18.
11. 8.8.18-Third batch of volunteers training with 5 volunteers each from 5 palliative care units under PIK started. Training was for 5 days. Training in psycho oncology, palliative care, stoma care, lymphedema care were the main focus.Training ended on 14.8.18.
12. 22.8.18-Dr.M.S.Biji was invited as a faculty for the National Fellowship in Palliative Medicine conduted at IPM,Calicut..a session on Neuropathic pain and a session on prescriptions and case discussion was taken.
13. 29.8.18-Fourth batch volunteers training with 5 volunteers each from 5 palliative care units under PIK started. Training was for 5 days. Training in psycho oncology, palliative care, stoma care, lymphedema care were the main focus. Training ended on 4.9.18.
14. 1.9.18-A session on Palliative care was taken by Dr.M.S.Biji for the nurses from Health services.
15. 5.9.18-Fifth batch volunteers training with 5 volunteers each from 5 palliative care units under PIK started. Training was for 5 days. Training in psycho oncology, palliative care, stoma care, Lymphedema care was the main focus. Training ended on 11.9.18.
16. 9.9.18-Dr.M.S.Biji was invited as a guest faculty for a CME on pain conducted by the Orthopedics department of Anjarkandy Medical College .A session on “Barriers in adequate pain relief in Palliative care was taken.
17. 30.9.18-Dr M.S.Biji attended MVRCANCON 2018 as a panelist for the topic “Palliative care in the community”.
18. 7.9.18-The Theory exam for the 9th batch of BCCPAN was conducted .4 candidates attended the examination.
19. 14.9.18-Practical exam for the 9th batch BCCPAN was conducted. Mrs. Alice Stella, National faculty of IAPC was the external examiner.
20. 13.10.18 –World Palliative care day was observed. A program “SRISHTIYUDE PUDHIYE KAALVEYP” was organized in collaboration with Women’s wing of IMA Thalassery ,for the SRISHTI members. SRISHTI members were trained in PAPER PEN making by Mrs.Zafeera Asim and team from Hobby Centre,Thalassery.About 50 members participated on the program which was inaugurated by MCC Director , Dr.Satheesan Balasubramanian.



21. 7.11.18-Cancer Awareness day was observed on 7.11.18.A discussion between the volunteers who underwent 5 days sensitization program in psycho-oncology from MCC ,and the cancer winners was held. Also the certificate for the training program of the volunteers was distributed by Director Satheesan B.The program was felicitated by Mr.Narayanan ,IAPC General secretary and Dr.Pavithran Raeroth,Principal ,Institute of Nursing Science and Research
22. 3.1.19-Received the 2<sup>nd</sup> prize in e-governance award under e-citizen service delivery category from Health secretary of Kerala.



23. 15.1.19-Palliative care day was observed. A program “Mizhiunmeelanam” of the first painting of the SRISHTI participants of VARNAVASANTHAM was done. Dr. M. S. Biji welcomed the gathering. Presidential address was given by Dr. Satheesan . B. Sri. Baburaj, Senior co ordinating editor ,Malayala Manorama was the chief guest. It was attended by 55 members.

24. 7th -10th February 2019-Attended the 26th International conference of IAPC ,IAPCON Kochi 2019 at AELI Hills,Aluva and received 3rd prize in poster presentation on “Illness perception in pediatric patients and their parents treated at Malabar Cancer Centre”. Also was a faculty and gave a talk on “e-palliative initiative of MCC”



25. 8.3.19-On International Women's Day, Dr. M. S. Biji was felicitated by Kerala Foundation for the contribution to the field of Palliative Medicine.

## PUBLICATIONS

- Article: Validation of malayalam version of national comprehensive cancer network distress thermometer and its feasibility in oncology patients.  
MS Biji<sup>1</sup>, Sampada Dessai<sup>2</sup>, N Sindhu<sup>1</sup>, Sithara Aravind<sup>3</sup>, B Satheesan<sup>4</sup> Indian Journal of Palliative care  
Year : 2018 | Volume : 24 | Issue : 1 | Page : 67-71
- Conference paper: “Profile of pain score and analgesic usage in children with hematological malignancies treated at a tertiary cancer centre in Kerala “.  
Biji M S, Vineetha Raghavan, Jithin T K, Abhina S S, Maya Padmanabhan, Chandran K Nair, Satheesan B
- Article: The incidence and risk factors for development of lower limb lymphedema after treatment for gynaecological cancers.  
Noori Khalid<sup>1</sup>, Adarsh Dharmarajan<sup>1</sup>, Satheeshan B<sup>1</sup>., Biji M. S<sup>2</sup>., Abina S.S<sup>2</sup>, Remya Binesh<sup>1</sup>  
Int J Reprod Contracept Obstet Gynecol. 2018 Mar; 7(3):1168-1172
- Conference Paper: Illness perception in pediatric patients and their parents treated at Malabar Cancer Centre.  
Biji M.S, Jithin T.K, Vineetha Raghavan, Abhina S.S, Maya Padmanabhan, Satheesan B

## **COURSES CONDUCTED**

1. IAPC course in “Essentials of Palliative care” for doctors and nurses-7 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

## **ONGOING PROJECTS**

1. PI in the study “Illness perception in pediatric patients and their parents treated at Malabar Cancer Centre”.

## **AWARDS**

1. Dr .M.S.Biji got the third prize in poster presentation in the 26<sup>th</sup> International conference of IAPC, IAPCON Kochi 2019 at AELI Hills, Aluva held on 7<sup>th</sup> -10<sup>th</sup> February 2019 for the poster on “Illness perception in pediatric patients and their parents treated at Malabar Cancer Centre”.
2. e-palliative care project of MCC received the 2<sup>nd</sup> prize in e-governance award under e-citizen service delivery category from Health secretary of Kerala on 3.1.19.

## **STAFF**

<b>Sl No</b>	<b>Name</b>	<b>Designation</b>
1	Dr.M.S.Biji	Assistant Professor &HOD
2	Mrs. Abhina S.S	Staff Nurse

## PSYCHO-ONCOLOGY DIVISION



### INTRODUCTION

Division of Psycho-oncology is currently under the supervision of Director. This division is developed as an academic, research and clinical services section under Palliative medicine. All new cases are screened at the counselling section of the division so also the in-patients. Distress thermometer is being used as sixth vital sign for in-patients and appropriate management is provided.

### ACTIVITIES ORGANIZED/ CONDUCTED/ COORDINATED

#### 1. Distress screening for all In patients implemented from April 2018

National Comprehensive Cancer Network (NCCN) guidelines describes distress as the 6<sup>th</sup> vital sign and recommends the need to measure, intervene and manage distress among cancer patients. In view of that, daily distress assessment is implemented in the In-Patient wards of MCC, after training the nursing staffs.

#### 2. Conducted self-development half day training program for BSc MRT students

On 26<sup>th</sup> May, Self-development, motivation enhancement, and stress management training was given to the I year BSc MRT students through a half day activity based programme.

#### 3. Palliative volunteers training program

Psycho-oncology division took part in providing training for the Five day palliative volunteers training program along with the Dept. of Cancer Palliative Medicine. Five batches of volunteers were given training from July 18<sup>th</sup> to Sept 11<sup>th</sup>. Three lectures for volunteers on Psychological well-being and Quality of Life of Cancer patients, Counselling and Distress Management, and Communication skills and two role play sessions were given for each batch. This is to equip the volunteers to deal with psycho-social problems faced by the palliative patients during their home visit.

#### 4. World Mental Health Day - Young people and Mental Health in a Changing World

World Mental Health Day was observed on October 10<sup>th</sup>, 2018 at Malabar Cancer Centre. The programme presided by the Director, Dr Satheesan. B was inaugurated by Malayalam Film Director Mr. Midhun Manuel Thomas in the Seminar Hall of MCC at 3.00pm. The meeting was felicitated by Dr. Pavithran Rayroth, Principal INSeR, MCC and Dr. Sangeetha. K. Nayanar, HOD, CLSTR. The theme for the year "Young people and Mental health in a changing World" was presented by Ms. Jisha Abraham, Lecturer in Psycho-oncology, MCC. Poster designing and Essay writing Competitions were organized for students of MCC based on the theme 'Young people and mental health in a changing world" and students were given cash prize for the best Poster and Essay.

#### 5. BSc (Psychology) III year students visit(from WIRAS college) - 14th November

III year BSc Psychology students of Wadihuda Institute of Research and Advance Studies did institutional visit along with three faculties to MCC. They were taken for a brief visit to all departments of MCC, and explained to them the role and activities of Psycho-oncology and need of mental health professionals in a Cancer Centre. They interacted with one of our support group member to understand cancer from the perspective of a survivor.



#### 6. Session for BSc MRT students

As part of the student support and guidance cell activities of MCC, a session on student Mental Health was arranged for the BSc MRT students of MCC in February. Dr Sajeev Kumar, Associate Professor, Dept of Psychiatry, Kannur Medical College has conducted a class about substance use/abuse, addiction behaviour, and behaviour changes in adolescents and young adults. The class was attended by 72 students.

#### 7. Two day workshop on Solution Focused Practice on March 9th & 10<sup>th</sup>, 2019.

Two day workshop on Solution Focused Practice (SFP) has been conducted on March 9<sup>th</sup> and 10<sup>th</sup>, 2019 in the Seminar hall of MCC. The training was led by Dr. Jaseem Koorankant, Asst Professor (Clinical Psychology) and SFP Trainer, from Institute of Mental health and Neurosciences (IMHANS), Calicut. Fifteen participants from different parts of the country attended this workshop. Workshop gave practical training on Intervening and managing through interviewing, focusing on solutions rather on problems and different steps to reach the solution while dealing with psychological problems of clients. Dr. Sangeetha. K. Nayanar, Professor and Head of Pathology department has given an introductory speech to the participants in the workshop.

### CLINICAL ACTIVITIES

Period	Pre treatment Counselling sessions	Genetic Counselling sessions	Psycho-oncology consultation sessions
April 2018 to March 2019	1748	193	648

### INDIVIDUAL STAFF ACTIVITIES

1. Session on 'Psycho-social aspects of Tobacco cessation' at Central Prison, Kannur with Community Oncology on World No Tobacco Day in May by Mr. Sobhith V K.
2. Mr. Sobhith V K Coordinated with Gramika channel on cancer awareness program through media.

3. Presentation and discussions on the psycho-social aspects of cancer and prevention by Ms. Jisha Abraham to be included in the syllabus of high school students coordinated by Community oncology department (July 21st, Aug 4th).
4. Ms. Jisha Abraham went as Faculty for Mental Health Day theme presentation (Young people and Mental health in a changing world) for The NSS volunteers of Krishnamenon Memorial Govt. Womens College, Kannur on 9th October.
5. Ms. Jisha Abraham attended two day Workshop Solution Focused Brief Therapy at Institute of Mental health and Neurosciences, Calicut on 1<sup>st</sup> & 2<sup>nd</sup> December.
6. Mr. Sobhith V K attended two day International Workshop on Health Social Work: Theories, Interventions and Model on Feb 15 & 16 at Rajagiri College of Social Sciences, Ernakulam.
7. Ms. Jisha Abraham conducted a Session on Cancer, Substance use and Deaddiction behaviour strategies at Pretheeksha Deaddiction Centre, Thalassery on 16th Jan.

## ACADEMICS

Staffs are actively involved in the academic activities of the hospital by taking lectures for students of BSc Nursing, BSc MRT, Post Basic diploma Oncology Nursing.

## STAFF

Sl No	Name	Designation
1	Ms Jisha Abraham	Lecturer
2	Mr Sobhith V K	Medical Social Worker



## DEPARTMENT OF COMMUNITY ONCOLOGY



### INTRODUCTION

Community oncology Department started functioning as a full-fledged department since 2010 January .The Department has been regularly conducting cancer awareness classes, early detection camps, volunteer training programs, health exhibitions and school tobacco awareness programs and community participatory research activities in 5 districts of North Kerala (Kozhikode, Kannur, Wayanad, Malappuram ,Kasargode, Palakkad )and Mahe(U T of Pondicherry). A tobacco cessation clinic and an anti-tobacco cell function under the department.

### ROUTINE ACTIVITIES

1. **Awareness programs**
  - a. **Cancer awareness campaign:** cancer awareness classes for general public and health workers in cooperation with various organizations, residential groups, clubs etc.
  - b. **Tobacco awareness campaign at schools:** anti-tobacco awareness classes using audio visual aids were conducted at different schools.
  - c. **Exhibitions and observation of cancer related health days:** cancer and tobacco related health exhibitions were organized at different public programs and schools. No tobacco day, cancer awareness day etc. were observed with massive public programs.
  - d. **Trainings and workshops:** training in tobacco control and cancer screening for health workers, volunteers, JPHNs, nurses are regularly conducted.
  - e. **Awareness generating public competitions:** painting and literary competitions were organized for school children and general public on tobacco control and cancer prevention.
  - f. Quarterly newsletter NETHI on tobacco awareness for school children.
  - g. Publication of IEC materials for awareness generation.
  - h. Screening of short film for tobacco awareness “U- Turn “in schools and public programs.
  - i. Community participatory research activities

## **2. SCREENING CAMPS**

- a. Early cancer screening camps: oral, breast and cervical cancer screening camps were organized at different districts of the state namely Kannur, Kasargode, Wynad, Calicut, Malappuram, Palakkad and Mahe (U T of Puduchery).
- b. Survey based screening camps
- c. Tribal community programmes: tribal camps at Aralam and Wayanad.
- d. Risk group screening camps for HIV patients, sex workers etc.

## **3. TOBACCO CESSATION CLINIC**

Tobacco cessation treatment is provided to those addicted to all forms of tobacco use. People identified at the camps were directed to the department OPD. Division also conducts various tobacco awareness programs for public and school children. Research on various aspect of tobacco use is also conducted in the division. Tobacco cessation OPD functions on all Wednesdays.

## **4. ANTI-TOBACCO CELL**

Anti-tobacco cell was formed on 31-10-11. The cell consists 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. Satheesan Balasubramaniam (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.

## **5. MUSEUM**

The department prepares and maintains a museum of cancer inflicted organs which is also utilized in cancer awareness health exhibitions for awareness generation

## **ACTIVITIES**

1. Kolavallur Police station officers along with youngsters in the region visited the Hospital and interacted with few patients. Thalassery ASP Ms Chaithra Theresa John inaugurated the program in April 2018.
2. “Chakkamaholsavum”.-A cancer prevention food festival was organised at Kannapuram Panchayath from April 27-19<sup>th</sup>. The program reminded the people of the relevance and need of using locally available fruits and vegetables in their fight against cancer.
3. A mega breast cancer screening program was conducted at Kannapuram panchayath using ibreast exam device from 21 – 30<sup>th</sup> of May for all women above 30 years of age.3457 ladies underwent screening of which 203 were referred to MCC for mammogram.
4. MCC had a pavilion on cancer awareness in a mega exhibition conducted in Collectorate ground in Kannur from 19 th May for 10 days by NRHM and district collector to commemorate 100 days of completion of present Government .
5. International day against drug abuse and illicit trafficking, June 26: International day against drug abuse and illicit trafficking was observed with various programs. A tobacco awareness exhibition and rally was conducted at Jawahar School Mahe from 24 to 26 June 2018. The program was inaugurated by Dr V Ramachandran MLA. Another school awareness class was conducted on June 26<sup>th</sup> at Brennan HSS Thalassery which was inaugurated by Dr Satheesan Balasubramanian, Director

6. Workshop-Inclusion of cancer awareness in school curriculum – after the preliminary meeting on 25-10-17, a module preparation workshop was held on 20<sup>th</sup> and 21<sup>st</sup> of July at MCC. It was attended by faculties from DIET and MCC
7. Awareness visit to MCC by Students (“KUNJARIVUKAL”), Panchayath members, ASHA workers, camp organizers were conducted regularly with awareness seminar on cancer followed by visit to various departments of MCC by the participants. 6 visits were organized
8. “NETHI” news letter release: 14<sup>th</sup> issue of NETHI newsletter was released on 5-7-18 at a function held at Chaliyar PHC by Chaliyar Panchayath President. 15<sup>th</sup> issue of Nethi was released in February.
9. Inauguration of MCC’s Associate centre clinic: Associate centre is a facility for early cancer detection and awareness generation with the participation of NGOs. Thalassery social service society took initiative in developing the first Associate centre in Alakkode and the same was inaugurated on 22 September at Alakkode. Sri K C Joseph MLA Inaugurated the function
10. As part of observing breast cancer awareness month in October an awareness program on breast cancer was conducted for the members of bar association , Thalassery
11. Cancer niyanthritha gramam - A cancer control project by Pariyaram Grama Panchayath. A seminar for panchayath members, health workers and volunteers was conducted on October 28<sup>th</sup>, inaugurated by Sri K V Sumesh, jilla panchayath President
12. National cancer awareness day, November 7<sup>th</sup> –
  1. A programme for members of tribal settlement area of Aaralam farm “koottu thedi oorilekhu” was conducted in association with PTA ,Govt Brennen school,Lions club ,Balavakasa commission and MCC .The inmates of the farm enjoyed hospitality of Brennen school, had an opportunity to meet eminent personalities like District judge, chair man of Balavakasa commission, and a trip to Overberry’s folly and watched movie “Kayamkulam Kochunni”
  2. Programmes like awareness classes, run against cancer, awareness rallys, literary competitions were also conducted in various places like Pariyaram panchayath, Kannapuram panchayath, Kuttiattoor panchayath and in various schools under the guidance of mcc
  3. An awareness seminar was conducted at kootuparamba HSS in association with Thalassery social service society and Child line ,Kannur.
13. World cancer day observation February 4<sup>th</sup>: Malabar cancer centre in association with TSS, Thalassery observed world cancer day. Cancer awareness class and oral cancer screening were conducted as part of the program.
14. “Ayurdeoptam” project- A district level program for setting up of early cancer detection centres (ECDC) in PHCs in Kannur district. Training of 25 nurses in charge of ECDC clinic was conducted from November 6<sup>th</sup> to Feb 7<sup>th</sup>. Two day workshop for Doctors under the Ayurdeoptam Project was conducted on January ‘14 and 15<sup>th</sup>

## STATISTICS

Ecdc camps	Awareness class	School tobacco program	Health exhibition	Volunteer training	MCC visit
123	79	9	49	19	6

## CERVICAL CANCER SCREENING

Pap smear	ASCUS	ASC-H	LSIL	HSIL	FNAC
Total-1289	12	3	9	1	nil

## ORAL CANCER SCREENING

Total screened	Oral cancer	leukoplakia	Lichen planus	O S M F	Erythro plakia	Tobacco pouch keratosis
3420	1	37	47	33	2	38

## BREAST CANCER SCREENING

Total screened	Breast cancer	Fibrocystic disease of breast	Mammogram advised
2634	3	200	181

## RESEARCH PROGRAMS

- i. Pariyaram cancer control project
- ii. Project regarding inclusion of cancer topics in School curriculum- primer finalization workshop to be conducted in May
- iii. Breast cancer screening program for women (30-70 yrs) in Kannapuram panchayath using ibreast exam with collaboration of UELifesciences Pvt Ltd has been completed and results are under evaluation
- iv. Project for starting Associate centres under MCC for cancer control as part of decentralization of cancer control activities
- v. CANKAS-B +VE –Kasargode cancer control project is ongoing

## PUBLICATION

1. Hand book on tobacco
2. NETHI news letter –a publication of anti tobacco cell of MCC every 3 months
3. Hand book for nurses and volunteers in cancer control
4. Pamphlets on oral ,breast and cervical cancers

## STAFF

Sl No	Name	Designation
1	Dr.Neethu A.P	HOD i/c
2	Dr.Phinse .M.Philip	Lecturer
3	Mr. Santhosh Kumar K	Lab Assistant
4	Mrs.Nisha	Nursing assistant

## DEPARTMENT OF CANCER REGISTRY & EPIDEMIOLOGY



### INTRODUCTION

The department of cancer registry systematically collects, stores, summarizes, and distributes information about cancer patients who are treated in MCC or live in a particular geographic area. These data describe the patient and the disease. Data collected include patient demographic information, cancer identification, diagnostic procedures, cancer-directed treatment, and survival. These data can be analyzed and the information distributed for the education of the medical professional and the community.

### FUNCTIONS OF CANCER REGISTRY

The cancer registry functions are

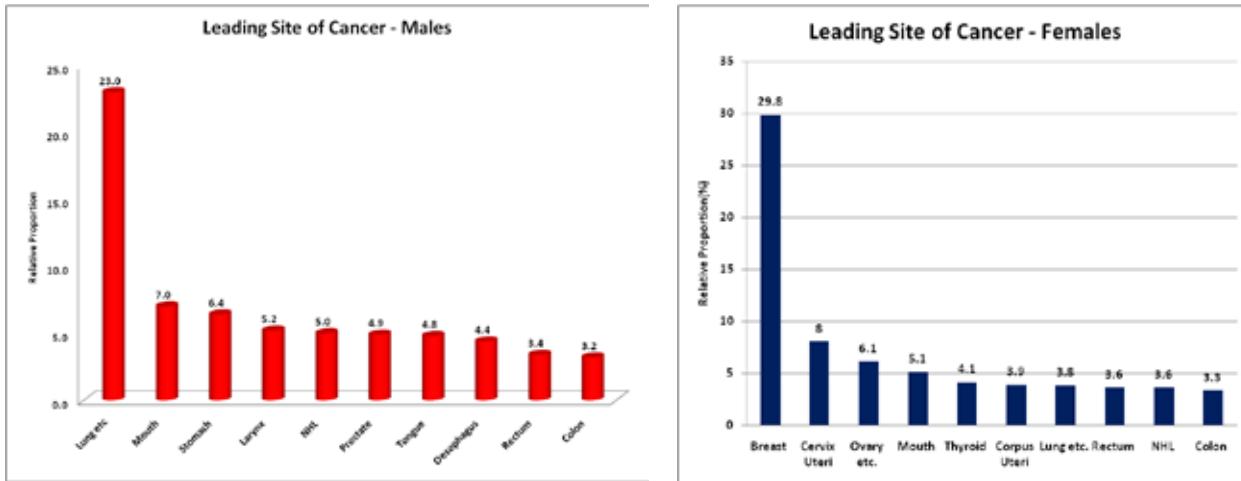
- Case finding (case ascertainment): Identifying reportable cases.
- Abstracting: Using the medical record as well as other sources to identify and document information about the patient and the patient's disease in a standard manner on a paper or computerized form.
- Follow-up: For the patient's lifetime, the registry continues to monitor the patient's health status at periodic intervals.
- Quality control: Procedures that ensure the accuracy and completeness of registry data.
- Reporting: Analyzing data and distributing information using the registry database.

In collaboration with National Cancer Registry Programme of Indian Council of Medical Research (ICMR), a Hospital Based Cancer Registry (HBCR) was initiated on November 2010 and started functioning from February 2011 onwards. This department was set up to provide the cancer statistics reported at MCC and the information on patient care. HBCR is partially supported by NCRP- ICMR.

### HOSPITAL BASED CANCER REGISTRY

The department started hospital based cancer registry for the year 2010 partially supported by the NCRP, ICMR, Bangalore and published five Annual reports of Hospital Based Cancer Registry from 2010 to 2014. During this period the department published the 7<sup>th</sup> hospital based cancer registry report for the year 2016.

The number of cancer patients recorded in the HBCR 2015 was 3924 [males 2125(54.2%) and females 1799(45.8%)]



### State/District wise distribution of cancer patients registered in 2018-19

District	Patients	%
Kannur	2679	51.57%
Kozhikode	872	16.79%
Kasaragod	828	15.94%
Malappuram	310	5.97%
Wayanad	254	4.89%
Palakkad	117	2.25%
Thrissur	31	0.60%
Ernakulam	11	0.21%
Kollam	4	0.08%
Alappuzha	4	0.08%
Thiruvananthapuram	3	0.06%
Idukki	3	0.06%
Pathanamthitta	2	0.04%
Kottayam	2	0.04%

Other states	No. Of patients
Puduchery	30
Tamilnadu	12
Karnataka	27
Goa	1
Bihar	1
West Bengal	4



## MALABAR POPULATION BASED CANCER REGISTRY

The Malabar Population Based Cancer registry was launched in 2014 for three districts Kannur, Kasaragod and Mahe. Population-based cancer registries seek to collect data on all new cases of cancer/mortality occurring in a well-defined population. As a result, and in contrast to hospital-based registries, the main objective of this type of cancer registry is to produce statistics on the occurrence of cancer in a defined population and to provide a framework for assessing and controlling the impact of cancer in the community. The department published the 1st Malabar Population Based Cancer Registry Report for the year 2014. The department expanded MPBCR area to the 5 more districts Kozhikode, Malappuram, Wayanad, Thrissur and Palakkad.

## PATTERNS OF CANCER AND SURVIVAL STUDIES

Surveillance programme on cancers of the breast, cervix, and head and neck patients reporting to the MCC in collaboration with NCRP was started 2013. For this project, the department monitor the patient's health status at periodic intervals.

## LIFESTYLE AND CANCER

To assess the epidemiological evidence on diet and cancer and to make public health recommendations, the department started the project titled "Lifestyle and Cancer".

## CONFERENCE/SEMINAR/WORKSHOP/TRAINING

- The ICMR project staff Mr. Nijin P and SmtSubina K attended Two day workshop on HBCR Data Management Software on 21/01/2019 & 22/01/2019, at NCDIR/ICMR, Bangalore.
- Ratheesan K, Vipina K, Shafeer and Haritha Priya attended Two day workshop on PBCR on 21/01/2019 & 22/01/2019, at NCDIR/ICMR, Bangalore.
- Bindu T attended International Collaboration for Research Methods Development in Oncology (CReDo) Workshop as a Faculty from 3<sup>rd</sup> March 2019 to 8<sup>th</sup> March 2019 at Mumbai .
- Dr. Saina Sunilkumar, Bindu T and Ratheesan K given Training to JPHN, palliative nurse for the project CANKAS Be +VE in Kasaragod district .
- National cancer grid-Kerala state chapter formation-At Copper Folia, Calicut on 10/11/2018.
- Workshop on Principles of Cancer Epidemiology at the Biostatistics Resource and Training Centre, Department of Biostatistics , Christian Medical College, Bagayam, Vellore from October 11-13, 2018.
- 'Report Writing Workshop on Cancer 2012-2016' as faculty held on 13th & 14th March 2019 at ICMR-NCDIR, Bangalore

## RESEARCH

- Hospital Based Cancer Registry
- Malabar population Based Cancer Registry
- Patterns of care and Survival studies on cancer of cervix, breast and head &neck
- Lifestyle & Cancer
- CANKAS Be +veProject at Kasaragod district –given Technical support, analysis completed and report published.

## PUBLICATIONS

- Hospital Based Cancer Registry Report 2016
- CANKAS Be +ve Report for Kasaragod District
- Abhayam News letter (3 editions for the year 2018).: Chief Editor: Dr. B. Satheesan,Editorial team: Dr. Saina Sunilkumar, Bindu T, Harish Babu, Sobith VK & Sheena E

## DAYS OBSERVED

- National breast cancer awareness day (pink ribbon day) was observed on 27/10/2018.

## GRANTS & SCHEMES

- Funded Project of NCRP, ICMR-Hospital Based Cancer Registries Data Management Software

Sl. No	Letter No. and Date	Amount
1.	NCDIR/HBCR-DM/15/2018/2800	1,81,540/-
2.	NCDIR/e-Mor-MCCD/8/2019/3166	2,40,000/-

## STAFF

Sl No	Name	Designation
1	Dr Saina Sunilkumar	Lecturer, HOD i/c
2	Bindu T	Lecturer in Biostatistics
3	Ratheesan K	Lecturer in Biostatistics
4	Prachith K S	Coding Clerk

## MEDICAL RECORDS DIVISION



### MAJOR ACTIVITIES

- Retrieval of revisit files
- Assembling of Discharge case records
- Deficiency checking and completion
- Coding of discharge files using ICD-10
- Intimation of notifiable diseases
- Intimation of Death to municipality

DEATH INTIMATION DONE DURING THE PERIOD-132

NO OF OUTGOING FILES-39,200

### STAFF

Sl No	Name	Designation
1	Jayadev G	Medical Record Officer
2	Sneha	Medical Record Assistant
3	Nameetha s	Medical Record Attender

## HEALTH INFORMATION TECHNOLOGY DIVISION



### INTRODUCTION

Health Information Technology Division under Department of Cancer Registry and Epidemiology is 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 arena of Health Information Technology. We are successfully implemented Phase-I of e-Hospital Software of National Informatics Centre. This is an integrated Hospital Management Information System (HMIS) that automate the activities of the hospital and improve patient care. We are designed and developed the e-Palliative software in research collaboration with Centre for Development of Imaging Technology(C-DIT), Thiruvananthapuram and implemented successfully in association with Department of Palliative Medicine and local palliative centers. 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, where in the world of information technology is going to initiate health information technology.

The e-Palliative Care Project won II Prize in Kerala State e-Governance Awards 2016 & 2017 in e-Citizen Service Delivery Category and the Aware & Awake: online cancer awareness Project won II Prize in Social Media & e-Governance Category

### MAJOR ACTIVITIES

1. Implementation of e-Hospital: an Integrated Hospital Information and Management System of National Informatics Centre.
2. E-Palliative Care Project in research collaboration with C-DIT.
3. Maintenance of official Website of MCC- [www.mcc.kerala.gov.in](http://www.mcc.kerala.gov.in)
4. Official E-mail service with SMS facility implemented for all Employees
5. Aware & Awake: online cancer awareness project in association with National Service Scheme, IHRD and funded by V-Guard industries Ltd. Kochi.
6. Research collaboration with C-DIT, Thiruvananthapuram, HTIC Chennai and NIELIT Calicut in the area of Health IT.
7. Online OPD Registration/Appointment system using the ORS Portal.
8. Implemented High speed National Knowledge Network (NKN) at MCC.
9. Implemented Virtual Tumour Board of National Cancer Grid
10. High speed National Cancer Grid (NCG) Jio Connectivity.
11. Server and Database Administration, Management and Maintenance

12. Computer Hardware Maintenance
13. Bio-metric attendance system with ID card
14. Mobile app and Cancer mapping (GIS) Software for Malabar Population Based Cancer Registry.
15. Telemedicine facility
16. Online application facility
17. Online examination facilities for recruitments on contract/project basis.
18. Online Screening Test facility for admission to fellowship Programme.
19. Online Birth & Death Registration in association with Information Kerala Mission.
20. Implemented Campus wide Wi-Fi connectivity, Public Addressing System and Security Surveillance System
21. Implemented e-Procurement Mission Mode Project of Govt. of Kerala
22. Laboratory equipments interfaced with e-Hospital Software.
23. Advanced Diploma in Health Information Technology Course (MEDIT) in Collaboration with C-DIT.
24. Computer Training Lab with 30 networked computers, Interactive Projector, etc.
25. Implemented Malayalam Computing at MCC
26. Support for brochure, booklet, pamphlet, etc. Design and development.
27. Guidelines for computer usage and Guidelines for using official Email Service were introduced.
28. Academic Project support for MCA, B. Tech, M.Sc. IT, M.Sc. Computer Science, BCA, B.Sc. Computer Science, B.Sc. IT Students.

## **STAFF**

<b>Sl No</b>	<b>Name</b>	<b>Designation</b>
1.	Ranjith M K	System Manager
2.	Bavina C	Junior System Analysts

## DEPARTMENT OF ANAESTHESIOLOGY



### INTRODUCTION

Department of Anaesthesiology was developed only in 2010 with Dr.N.C.Krishnan joining on contract basis. The visiting anesthesiologists were the backbone of the department till 2015 when a permanent anesthesiologist joined the department. The department is equipped with state of art equipment and instruments.

### EXISTING FACILITIES

Three major operation theatres (rooms)

Postoperative recovery cum surgical intensive care units with nine beds

High end portable ultra sonography

### NEW EQUIPMENTS

- C-mac pocket monitor Karl Storz
- C-mac pediatric D blade - Karl Storz
- C-mac #0 miller blade - Karl Storz
- C-mac #4 blade - Karl Storz
- Fiberoptic Bronchoscope 2.8 probe size – Karl Storz
- Fiberoptic laryngoscope with set of 4 blades – Karl Storz
- High end Multipara monitot – Nihon Kohden model 3763
- High end Biphasic defibrillator with pacing and AED facility- Nihon Kohden

### PACU and SICU

- Nine bedded Post Anaesthesia Care Unit (PACU) and SICU was inaugurated on Feb 2019. It is equipped with most modern equipments and ICU cots. Also provided with 2 isolation rooms for contact isolation and is planning to upgrade one to a negative pressure isolation room. New Equipments acquired in PACU and SICU during the period:

- High end Syringe pumps supplied with stackable racks – Terumo
- Infusion pumps - Terumo
- High end Ventilators – GE model R860
- Flexible Intubating Video Endoscope with C-MAC and D blade- Karl Storz
- BiPAP machine – Resmed
- High end Multipara monitor – Nihon Kohden model 3562
- Sequential compression device – Covidien
- High end Nebuliser unit – Vibration mesh technology – Aeroneb

## STATISTICS

Sl No	Procedure	Numbers
1	General anaesthesia	742
2	General anaesthesia+Epidural analgesia	295
3	SAB	277
4	CSEB	18
5	CSEB+ GA	Nil
6	GA+SAB	Nil
7	EPIDURAL	8
8	REGIONAL BLOCKS	1
9	SHORT GA	10
10	MAC	2

## CONFERENCES, WORKSHOPS/SEMINARS

- Conference on operation theatre etiquette(CORE-18) done on 16/10/18

## ACTIVITIES AND ACHIEVEMENTS

- Anaesthesia trainee Candidates Anusree and Vijina won first prize in quiz program held in conference CORE-18

## STAFF

Sl No	Name	Designation
1	Dr. Nived.K	Associate professor
2	Dr. Jashma.C	Assistant professor
3	Mr Vipin.K	Operation Theatre Anaesthesia Technician
4	Mr Balu Krishna	Operation Theatre Anaesthesia Technician
5	Mr Sreejesh.P.P	Operation Theatre Anaesthesia Technician
6	Mr Mayan John	Dialysis Technician

# NON ACADEMIC DEPARTMENTS & DIVISIONS

## **DEPARTMENT OF ENGINEERING AND MAINTENANCE**



### **INTRODUCTION**

MCC is having a fully fledged Engineering Department which undertakes all the major and minor construction works of MCC since the beginning and is maintaining whole hospital building machineries/equipments, furniture hospital electrical installations such as 11KV Electrical substation, (4 pole yard) with 2 dedicated 11 KV feeder ,1600 KVA Transformer, HT vacuum circuit breakers, Diesel Generators , Lift ,Telecommunication system Water supply & sanitary installations, Operation and Maintenance of Effluent Treatment Plant, maintenance of Radiation equipments, MRI ,CT etc . In addition to the above, Engineering dept. handling the AMC of all Hospital equipments and insurance processing of whole Hospital equipments, buildings, roads and other structures under different categories and taking necessary steps to settle claims whenever a damage/replacement occurs. For each and every needs of the hospital Engineering provides all timely supports as and when required. We communicate with consultants in our construction works and gave necessary instructions regarding works and liaison works with BSNL, KSEB, Electrical Inspectorate Municipality Self governing bodies for regularizing the building permit etc. We prepare the drawings and estimates of the various projects of MCC and take steps to implement work as per government rules.

### **ACHIEVEMENTS & ACTIVITIES**

1. Construction of Pediatric Oncology Block- 98% completed with Plinth area 3450.04sq.m Interior decoration & beautification of Paediatric Oncology Block--Malabar Cancer Centre planned to finish the Paediatric Oncology Block as kids' friendly hospital building, so that the furniture, wall, floor ceiling, exterior finishing etc. shall be different from a traditional building design. Sticker works of this is going on
2. Construction of Nuclear Medicine Block is in the finishing stage
3. Environmental clearance:- MCC has got Environmental Clearance for the Proposed Expansion of Existing Malabar Cancer Centre vide order No: 1175/EC/SEIAA/KL/2018 dated 01-03-2019 through Our SPV, BSNL who had appointed M/s KITCO Ltd. for conducting environmental clearance study and obtaining clearance from SEIAA
4. Construction of laboratory block with plinth area 2350.00sq.m in progress( 70% of civil work has been completed)

5. Construction of 18nos General Staff quarters with plinth area 2351.38sq.m is in progress (60% Completed))
6. Construction of extension of Canteen with[Plinth area: 366.08 sq.m has started and 25% of works completed
7. Construction of Compound wall- near Chamakulam (RS. No: 46/7 & 44/12): is going on (70% completed)
8. Construction of waiting area and resting area for Bystanders [MLA ADS]: Plinth area 387.05 sqm- is going on (20% completed).
9. SITC 1010KVA LT Diesel Generator, Main Panel Board (MSB) and Connected works completed and DG charged
10. Providing Centralized Medical Gas Line works in Paediatric Oncology Block are completed
11. Extension of two wheeler parking shed are completed and opened for staff
12. The interlocking pavers laid in the way in & way out road of our Hospital were damaged and movement of vehicle and pedestrians face difficulty. we had relayed the interlocking
13. Construction of Creche (civil & plumbing works)[Plinth area: 62.62sq.m]pavers over bitumen
14. An indoor badminton court has been constructed near Nurses hospital as per the request from Doctors and staff by M/s ULCCS as free of cost
15. Calibration of medical equipments- As per NABH norms all the medical equipments in the hospital has been calibrated, to assure the quality and performance of equipments.

MCC has send two engineering staff to attend the workshop conducted by EMC at Trivandrum on energy Efficiency Financing August 2018

MCC has send Engineering staffs to witness testing of the 1010 KVA DG at Chennai  
 MCC has send two engineering staff to a site visit of the national energy conservation award winner organization conducted by EMC at Coimbatore in April 2018

<b>Sl No</b>	<b>Name</b>	<b>Designation</b>
1	Mr Sudeep K T	Engineer
2	Mrs Reena P C	Supervisor, electrical
3	Mr K Chandran	Supervisor, Plumbing
4	Mr T V Satheesh	Supervisor, electrical
5	Mrs Shijina E	Supervisor, civil
6	Mrs Lijikrishnan	Biomedical Technician
7	Mr Sushanth	Electrician
8	Mr Nyju	Electrician
9	Mr Anil kumar S	Electrician
10	Mr Rasheed	Plumber
11	Mr Jinsithlal O N	Plumber

## **DEPARTMENT OF GENERAL ADMINISTRATION**



### **INTRODUCTION**

The department of general administration has several divisions under it. Administrative officer is the head of the department. It deals with all administration of the institution including staff recruitment( academic and non academic ), security, purchase, clinical services ,library and information sciences etc

Recruitment of employees, training, functioning, setting the salaries and benefits of employees and managing employee-employer relations, are some of the primary duties of the Administration. The responsibility of the Administration includes, organizing and supporting the major activities of the Institute and integrating various functions and services. It is a multifaceted Department, comprising of many Divisions and types of personnel, and services. It requires adequate facilities trained employees, efficient systems and controls, and other supporting staff. The policy making body of the Institute is the Governing Body (GB) and the day to day activities are controlled by the Executive Committee (EC). In order to meet the objectives of the Institute, the Administration coordinates the activities of the Centre and creates polices so that all areas of the Institute staff functions efficiently. The Administration recruits, hires hospital staff such as Doctors, Academicians, Engineers, Nurses and other Para-medical and scientific/technical staff, for the entire staff requirements of the Institute. The employees are periodically evaluated and proper guidance and training are provided to them to bring out the maximum output. The Director and other Senior Officers lead these administrative services and is directly responsible for the day-to-day operation.

Administration Department is entrusted with the task of evaluating the staff on a periodical basis and judging the level of their performance and also developing policies and procedures that facilitate the efficiency of daily operations. It reviews, implements and analyzes the overall budget of the Institute and the budgets of different areas of the Institute to make sure they are realistic and stringently followed. At times, it acts as a moderator for staff complaints and tries to resolve the grievances arising out of patient care services. In addition to a great deal of paperwork and daily administrative tasks, the administration also thinks about the future of the Institute and provide additional in-puts on short-term and long-term plans, for its growth and development. It also ensures that Institute objectives are met through the process of selection, development, organization, motivation, management, evaluation and the promotion of human resources. The Administration complies with Government regulations set out for the Institute and its staff. The Department consists of 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 Administrative Department is running the activities with minimum staff strength, i.e.

less than 5% of total staff strength of the entire Institution. The Department controls the overall activities of the Centre and consists of the following major Divisions:

The General Administration 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.

## STAFF

Sl No	Name	Designation
1.	Mr. Rajesh A K	Administrative Officer
2.	Mrs. Preethudas	P A to Director
3.	Mr. Jayanandan A	Clerk/ Cashier/ Typist
4.	Mr. Sreejith P K	Clerk/ Cashier/ Typist
5.	Mr. Dinesh Kumar. T.M	Clerk/ Cashier/ Typist
6.	Mrs .Bindu.T.K	Clerk/ Cashier/ Typist
7.	Mrs.Surekha.M.C	Clerk/ Cashier/ Typist
8.	Mr. Shajith.R.P	Attender

## FINANCE AND ACCOUNTS DIVISION



### INTRODUCTION

Finance & Accounts Division of Malabar Cancer Centre is involved in planning, budgeting, accounting, financial reporting, internal controls including internal audit, procurement, and disbursement of funds and monitoring the physical and financial performance, with the main aim of managing resources efficiently and achieving pre-determined objectives. Sound financial management is a critical input for decision making and programme success. Accurate and timely financial information provides a basis for informed decisions about the programme, fund release and assists in reducing delays in necessary delays in implementation of various activities.

As Malabar Cancer Centre is an autonomous non-profit organization under the Department of Health & Family welfare focusing quality healthcare in oncology with affordable cost index or nil out of pocket expenditure. In general 15-20% of maintenance /operational expenditure, including staff salary, are supported by the Government. Rest of the operation cost of MCC needs to be met by MCC's own income. The service rates are fixed accordingly to cover the rest of expenditure, i.e. 80-85%, which is not provided by the Government through Non plan head.

In order to prevent treatment burden over beneficiary, the said 80-85% is fixed on clear cut study with breakeven index. Moreover all major treatment schemes has been supported by MCC especially Employees State Insurance (ESI), Pondicherry Medical Relief Society (PMRS), Cancer Suraksha Scheme (CSS), Snehasanthwanam, KarunyaArogyaSurakshaPathathi (KASP), Karunya Benevolent Fund (KBF) etc. As these insurance schemes are not fully covered the treatment cost, rest of the expenditure are borne by MCC, from own pocket.

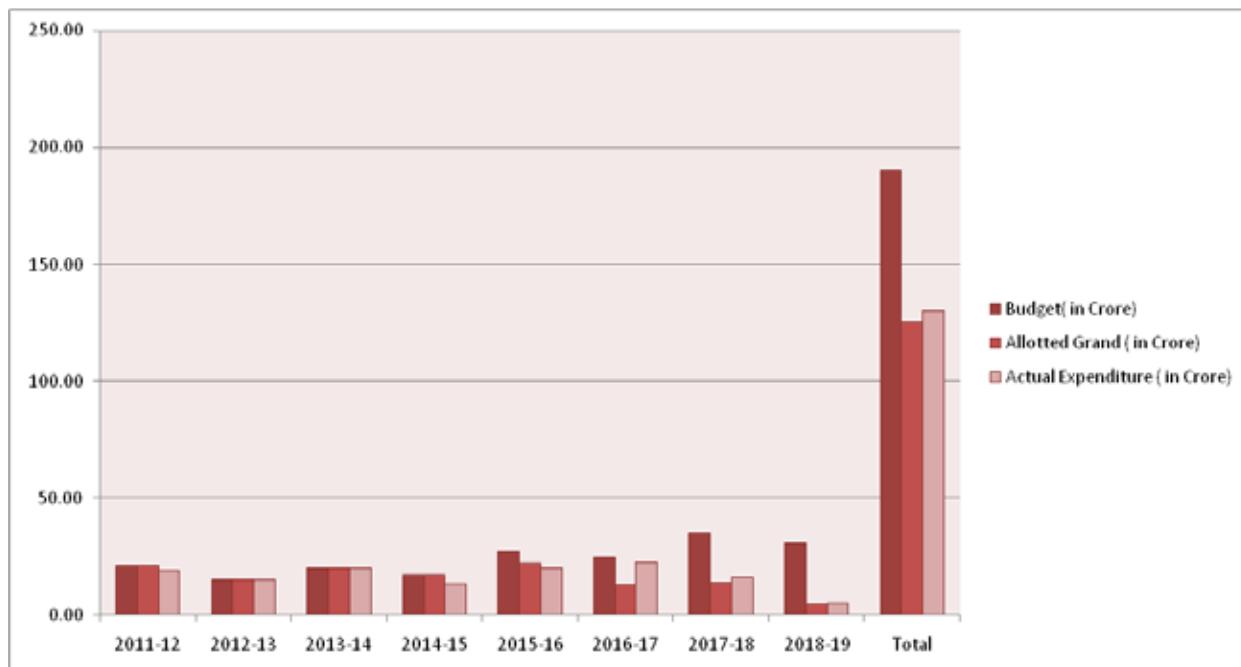
## BENEFICIARIES FACILITATED UNDER VARIOUS SCHEMES IN 2018-19

Scheme Name	Count	Scheme Name	Count
CHIS PLUS	5329	ESI	112
Karunya Benevolent Fund	5264	PMRS	46
Sukrutham	641	Sneha Santhwanam	34
CST	223	PWS	17
PMNR	116	THALOLAM	17
CSS	115	ASWAS	5
Total	11919		

Moreover, MCC have our own category assessment mechanism, by which patients are categorized according to their financial capacity. The Category Assessment mechanism have 7 grades, starting from A to G, which is assessed by Clinicians/counselors against approved parameters, keeping in mind that no beneficiaries shall be denied the treatment.

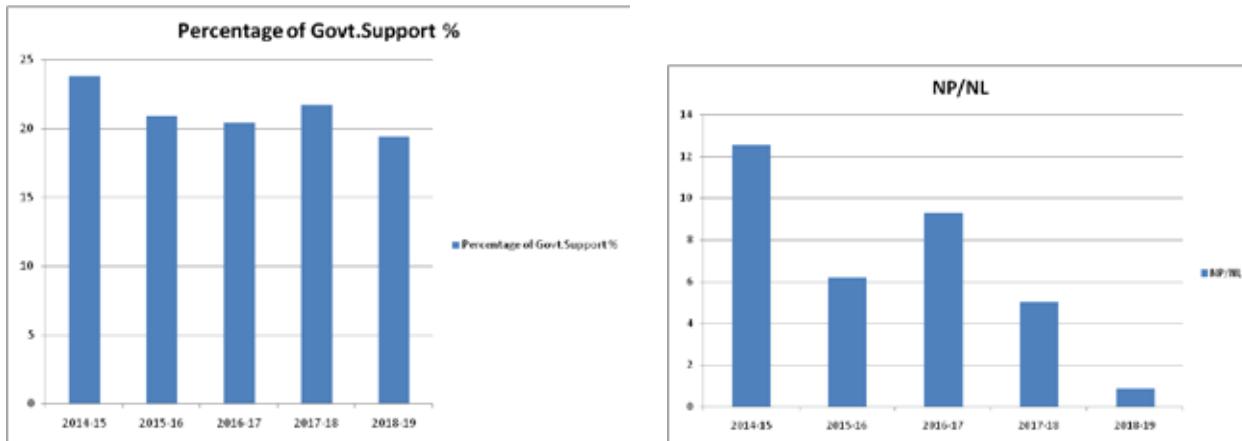
## PLAN FUND UTILIZATION IN 2018-19 FY

Vide order No. G.O. (Rt)No.2449/2018/H&FWD Dated Thiruvananthapuram 31/07/2018, Administrative sanction for an amount of Rs.30.80 crore has received from government for various activities of MCC. The fund utilization under Government Plan fund from 2011-12 onwards are cited below;



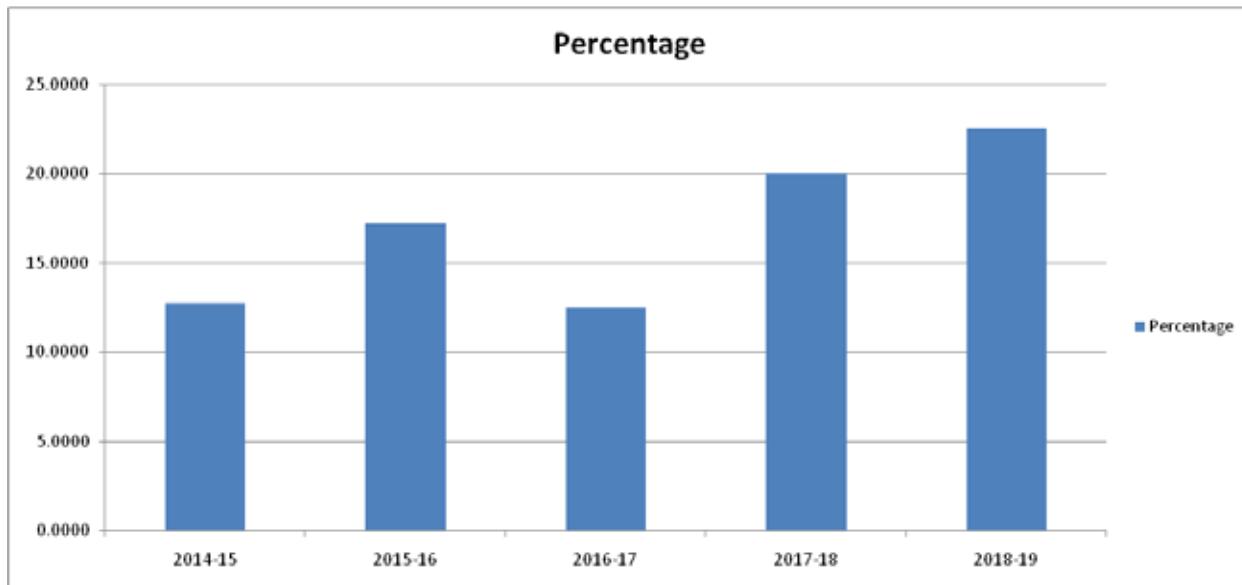
## FINANCIAL OUTCOME INCLUDING GOVERNMENT SUPPORT OF LAST 5 YEAR

The total budget provisions under non plan head from Government is 19.25% of total expenditure during 2018-19 FY. Rest of the expenditure shall be met from own income of MCC. Accordingly MCC finalized the account with a net profit of .87% excluding depreciation on 2018-19 FY. The graphical representation of government support and Net Profit/loss of MCC of last 5 years is mentioned below



## ECONOMIC DEVELOPMENT OF MCC OF LAST 5 YEAR

The economic sustainability for last 5 year shows a fluctuating trend. MCC is striving hard to achieve 100% of income to meet the expenditure without compromising the quality care and not to increase the pocket expenditure of beneficiaries. MCC had adopted the policy for developing the institution as an exponentially progressing apex institution with equal trust on clinical care, oncology related education and multifaceted research. Accordingly institution is aimed to be developed as a Post Graduate Institute in Oncology & Research Centre.



## STAFF

Sl No	Name	Designation
1.	Mr. Reji Sankar S T	Finance Officer
2.	Mr. Jayadeep E K	Clerk/ Cashier/ Typist
3.	Mr. Anoop. V.S	Clerk/ Cashier/ Typist
4.	Mr. Ganesan. V	Clerk/ Cashier/ Typist

## PURCHASE DIVISION



### INTRODUCTION

All purchase matters including medicine purchase are handled by this Division. All purchases of the Centre are routed through this Division, including local purchases. Purchase procedures are carried out, following Store Purchase Rules. The Division is handled by the Purchase Officer. The important functions of this Division are as follows:

- To ensure competent quality execution of all regular purchasing duties and administrative works.
- To prepare reports and summarize data including sales report and book value.
- To support relevant departments with quotations for the purpose of tenders.
- To monitor and co-ordinate deliveries of items between suppliers to ensure that all items are delivered to site/store on time.
- To plan and manage inventory levels of materials or products.

### MAJOR EQUIPMENTS PURCHASED DURING THE PERIOD ARE AS FOLLOWS

Sl. No	Equipment	Name of the Supplier	Amount
1	CSSD Equipments: Washer Disinfector (01 No), Drying Cabinet (02 Nos), Spray Gun Rinser (01 No), Documentation Labeller (02 Nos), Reverse Osmosis Plant 1500 LPH (1 No.), Flash Sterilizer (1 No), Horizontal Sterilizer 400 – 600 Litre (01 No), Ultrasonic Cleaner -40 L (01 No), Hand Dryer (01 No), Gauze Cutting Machine (02 Nos), Manual Trolley Washer (01 No), Inspection Lamp with Magnifier (1 No), Multi-Roll Tape Dispenser (1No.).	M/s. Care Systems, M/s. Pride India Engineering Solutions,	Rs.88,83,463.00

2	AUTOMATED RAPID BACTERIAL DETECTION SYSTEM (Model: BACT/ALERT 3D 60, Make: BIOMERIEUX)	M/s. Bio Diagnostics	Rs.8,00,000.00
3	Binocular Microscope (Model: RXLr-4) -05 nos	M/s, Radical Scientific Equipments Pvt. Ltd	Rs.2,50,000.00
4	HIGH END APHERESIS EQUIPMENT ( Make & Model: SPECTRA OPTIA TERUMO BCT)	M/s. Meridian Life Care	Rs.19,92,000.00
5	PCR CABINET (Labline PCR cabinet, Model: LPCR-1)	M/s. Scientific Medical Equipments (Kerala) Pvt. Ltd	Rs.1,47,500.00
6	3 PART CELL COUNTER (Medonic M-series M32M)	M/s. Labx, Thiruvananthapuram	Rs.3,18,600.00
7	MALDI TOF BASED MICROBIAL IDENTIFICATION SYSTEM [Model: VITEK MS Plus, Make: BIOMERIEUX]	M/s. Bio Diagnostics	Rs.1,40,00,000.00
8	GeneXpert TB (Xpert TB MTB/RIF assay) (Model: Gene Xpert-GXIV/2-D, Make: Cepheid)	M/s. SRV South India Traders	Rs.20,00,000.00
9	Trinocular Research Microscope with Fluorescent Attachment (Model No: RXLr-4, HSN Code 9011)	M/s. Radical Scientific Equipments Pvt. Ltd	Rs.2,33,640.00
10	LOOP ELECTRIC STERILIZER [Hiloop Electric Steriliser (Code No. LA832)	M/s. New India Surgicals and Chemicals	Rs.45,430.00
11	AUTOMATIC AIR SAMPLER[Air Sampling Systems-LA637)	M/s. New India Surgicals and Chemicals	Rs.1,47,500.00
12	AUTOMATED BLOOD CULTURE SYSTEM (Model: BACT/ALERT 3D 120, Make: BIOMERIEUX)	M/s. Bio Diagnostics	Rs.10,70,000.00
13	Automated Cell Isolation, Enrichment and Cell Expansion System with required accessories [Make & Model: CliniMACS Prodigy System, MiltenyiBiotec]	M/s. Cytocare Technologies Pvt. Ltd,	Rs.2,25,00,000.00
14	High Speed Florescent Activated Cell Sorter [Make & Model: BECTON DICKINSON, FACSAria III]	M/s. BECTON DICKINSON HOLDINGS PTE. LTD.	Rs 13325000
15	Genomic Work Station with required accessories (Hardware DELL System & Software Strand NGS)	M/s. Bionivid Technology Pvt. Ltd,	Rs.33,00,000.00
16	TALI Based Cytometer[Model: Countess II FL Automated Cell Counter (CAT No: AMQAF 1000)]	M/s. Biovision,	Rs.4,34,000.00

17	Distilled Water Unit (Model: Labostar 10 RO DI)	M/s. Inexus Biotech Pvt. Ltd	Rs.3,12,700.00
18	Ultra Purified Water Plant (Labostar PRO DI 2)	M/s. Inexus Biotech Pvt. Ltd,	Rs.2,77,300.00
19	Automatic Autoclave (Automatic PRABAL – MODEL: #7482, MAKE: Equitron)	M/s. Calgon Scientific Co.	Rs.2,76,622.00
20	Infusion Pump: 3 No for Stem cell Unit. (Make & Model: Terumo, LF-600)	M/s. Link Surgical And Medi Systems.	Rs. 1,50,000.00
21	Cytotoxic Cabinet:1 no.(Heal Force HF Safe 1200 C)	M/s. Biolinx India Pvt Ltd	Rs.6,30,000.00
22	High End ICU Ventilator .(Make : GE Healthcare, Model: Carescape R 860) – 6 nos	M/s. Wipro GE Healthcare Pvt. Ltd.,	Rs 9087000.00
23	Nebulizer (2 Nos): Model – AERONEB PRO Micro pump nebulizer	M/s. Medicuits Inc.	Rs.2,00,000.00
24	Paediatric Intubation Fibroscope (Model: Karl Storz 2.8MM FOB)	M/s. Karl Storz Endoscopy India Pvt. Ltd	Rs.9,00,000.00
25	Adult Flexible Video Bronchoscope or Endoscope and Video Laryngo Scope – 1 No.	M/s. Karl Storz Endoscopy India Pvt. Ltd	Rs.29,50,000.00
25	Bipap Machine (2 Nos):	M/s. Link Surgical And Medi Systems.	Rs.4,50,000.00
26	HIPEC MACHINE – 1 No.	M/s. Regency Life Science	Rs 9451657.00
27	Abdominal Retractor	M/s. Alliance Surgicals& Instruments	Rs.4,20,000.00
28	Urology Instrument	M/s. Olympus Healthcare	Rs.45,00,000.00
29	TCI & TIVA Syringe pump – 2 nos	M/s. AIMS, Madappally	Rs.2,10,000.00
30	Dental Chair	M/s. Medi Needs, Kannur	Rs.4,75,000.00
31	OT LED Light	M/s. Vishal Surgical Equipments Co.	Rs.11,20,000.00
32	Binocular Microscope – 2 nos	M/s. Radical Scientific	Rs.3,00,000.00
	Total		Rs. 10,11,57,405.00

## **MEDICINE /CONSUMABLES &REAGENTS PURCHASE**

The entire medicines, consumables, surgical disposables, X-ray films, common drugs, antibiotics, re-agents etc:-, required for the Centre, is purchased through this Division. E-tender procedures are followed for the purchase of medicines on yearly basis. Purchase procedures are initiated by giving wide publicity through newspapers and website of MCC. A pre bid meeting is conducted with potential Suppliers and tenders are floated. Selected firms are to execute a Supply agreement with MCC and payment shall be released based on the supply and proper checking of bills. Non-quoted medicines/emergency medicines are purchased from Neethi stores /Local market, subject to availability. Total purchase amount of medicines during the year 2018-19 is Rs. 170509740 /- (Rupees Seventeen Crore Five Lakh Nine thousand Seven fourty only). And the total Purchase Amount of Reagents & consumables during the year 2018-19 is Rs45928435 /- ( rupees Four Crore fifty nine lakh twenty eight thousand four hundred thirty five only )

## **STAFF**

<b>Sl No</b>	<b>Name</b>	<b>Designation</b>
1.	Mr. Jiju T T V	Purchase Officer
2.	Mr. Prasoonan.P.P	Clerk/ Cashier/ Typist
3.	Mr. Rejoy K	Clerk/ Cashier/ Typist
4.	Mrs. Mini..P	Clerk/ Cashier/ Typist
5.	Mrs. Sandhya.K.P	Hospital Assistant

## **PHARMACY DIVISION**



## **INTRODUCTION**

MCC Pharmacy, due to the peculiar location of the Centre, has much significance in providing medicines for the patients in MCC. As the Centre is situated far away from Thalassery town it is necessary that all required medicines needs to have adequate stock. Non-availability of medicines in the Pharmacy will force poor patients to travel long way to Thalassery for availing the medicines. Moreover there is also possibility that cancer drugs might not be available in medical stores in Thalassery area.

The main activities of Pharmacy are as follows:

1. To ensure that sufficient quantity of medicines and other items are stored/stocked in the Store for ready issue.
2. To assist the Clinicians in obtaining latest information regarding any drug in terms of its trade name, manufacturers name, source details of package etc;\_
3. To check the drugs and other items on receipt in the Pharmacy, from stores/suppliers/main store regarding their nomenclature, date of manufacture, date of expiry, shelf life and any sign of deterioration, damage or defects if any.
4. To issue drugs and other items from Pharmacy to OPD/Wards/ICU's/OT and other Departments after

receiving proper indents.

5. To maintain the details of drugs and other items issued in register.
6. To ensure that medicinal products are stored appropriately and securely to ensure freshness and potency
7. To keep up to date with recent developments in the pharmaceutical industry.

At present there are two Pharmacies operating in MCC, one the main Pharmacy and the other (IP Pharmacy) in the 2nd floor, exclusively for IP patients. The main Pharmacy is having the facility of Cold storage system (Walk in cooler) for maintaining the potency of Drugs. Separate Narcotic Drugs counter is also provided in main Pharmacy. All medicines and consumables related to cancer treatment, i.e, anti-cancer drugs, surgical & disposables, antibiotics, reagents, X-ray films etc;- are purchased through this Division. The Pharmacy Division consists of Pharmacy Main Store, Main Pharmacy, IP Pharmacy and Storage area. The Main Pharmacy functions 24 x 7 hrs and the IP Pharmacy functions during day time. On requirement and proper indent from the Pharmacist, drugs are purchased through the Purchase Division and supplied to the Pharmacy main Store. The main store keeps records of the stock and issue medicines to various sections like main Pharmacy, IP pharmacy, Wards, Operation theatre etc:-. Considering the large number of patients, medicines are issued through token system, which reduces the rush in front of Pharmacy. This Division is headed by the Pharmacist, and supported by Assistant Pharmacists, Pharmacy Assistants, Data entry operator and Ward Assistants. A detail of purchase and sales during the year 2018-19 is as below:

- Total purchase amount - Rs. 170509740/-
- Total sale amount - Rs. 184038978/-

## STAFF

Sl no	Name	Designation
1	Mr. Sajeevan.P	Pharmacist
2	Ms. Rachana. M	Pharmacist
3	Mr. Viju V S	Store Keeper
4	Mr. Sugandham	Assistant Pharmacist
5	Ms. Nisha Gangan TV	Assistant Pharmacist
6	Ms. Sajitha P	Assistant Pharmacist
7	Ms. Sajila V K	Assistant Pharmacist
8	Ms. Sabitha M V	Pharmacy Assistant
9	Ms. Bindu K T	Pharmacy Assistant
10	Ms. Darley Joseph	Pharmacy Assistant

## STORE DIVISION



### INTRODUCTION

This Division is headed by Store Keeper and deals with stock handling, maintenance of Central Stock Register, condemnation, disbursement of required items to various Departments/Divisions, printing & stationary, local purchase etc:- Stock verification is carried out in all Departments/Divisions and Pharmacy of the Centre annually.

The Store Keeper is under direct control of Purchase Officer. This Division works in tandem with the Purchase Division and mainly looks after the physical custody of stores, proper inventory control, preservation of stores, receipt of stores, movement of stores, including packing and forwarding, issue of stores, accounting of stores. This Division

ensures that bills with documents in respect of accepted items are cleared immediately to the Accounts section, with a copy to the purchase section and will watch purchase orders periodically for dates of delivery, especially when such items are critical in stock and inform purchase section.

### STAFF

Sl No	Name	Designation
1	Mrs. Lasitha	Store keeper

## SECURITY DIVISION



### INTRODUCTION

The security wing of MCC plays a pivotal role in maintaining overall security of MCC and is headed by Security Officer. He will be the direct supervision of Director/Administrative Officer. Security guards -servicemen and are outsourced through KEXCON (Kerala Sate Ex-Servicemen Development and Rehabilitation Corporation). They guard the Campus and Centre 24x7 and are posted in various areas of this Centre, for the smooth functioning. Vigilant security measures need to be undertaken as lot of highly sophisticated and costly state of art equipments and some equipment are installed under Atomic Energy Regulatory Board (AERB) regulations. AERB insists tight security for these equipments and this Centre comes under the direct supervision of District Superintendent of Police. Security measures are even tightened up by installing surveillance cameras as and where required. This Division also acts as In charge of Drivers and the Hospital vehicles.

### STAFF

Sl. No	Name	Designation
1	Mr. Satheesan P M	Security Officer
2	Mr. Nidheesh P V	Driver
3	Mr. Babu	Driver
4	Mr. Ratheesh	Driver
5.	Mr. Rajeevan k	Driver



## HUMAN RESOURCES AND ESTABLISHMENT DIVISION



### INTRODUCTION

Staff requirements for each section of the Hospital, including Senior Administrative Staff, Academic Staff Non-academic staff, Paramedical staff, Technical staff, Junior Administrative staff, Last grade staff etc: - are being timely met by the efforts of this Division. Approved recruitment guidelines are implemented for all recruitment procedures for the appointment of academic and non-academic staff. As per Service Rules of MCC the recruitment authority for Academic staff/ Senior Administrative Staff is the Staff Selection Committee. The present Staff Selection comprises of the following members:

1	Secretary to Government, Health Department or his nominee	Chairman
2	Secretary to Government, Planning & Economic Affairs Department or his nominee	Member
3	Secretary to Government, Finance Department or his nominee	Member
4	Members of Scientific Committee	Members
5	External subject expert(s)	Member
6	Director, Malabar Cancer Centre Society, Thalassery	Convener

The recruitment authority for Paramedical, Nursing, Auxiliary, Technical staff, Junior administration staff Last grade etc: is the Director or Recruitment Committee constituted for the purpose. The present Recruitment Committee comprises of the follows:

- Director-MCC
- External Subject Expert (s)
- HOD of concerned Department
- HOD- Clinical Laboratory Services and Translational Research/Senior HOD of any Clinical Department (Clinical Hematology/Radiation Oncology/Surgical Oncology)
- Administrative Officer

**Employees who have joined the institution during the financial year 2018-19**

<b>Sl No</b>	<b>Name of Employee</b>	<b>Designation</b>	<b>Department/ Division</b>	<b>DOJ</b>
1	Lisha Jose	Lecturer	Radiation Physics	07-04-2018
2	Divya SS	Staff Nurse - Gr. II	Nursing	10-04-2018
3	Bhavadas K	Staff Nurse - Gr. II	Nursing	23-04-2018
4	Praseeda K	Staff Nurse - Gr. II	Nursing	02-05-2018
5	Srijil A	Staff Nurse - Gr. II	Nursing	05-05-2018
6	Aiswarya KS	Staff Nurse - Gr. II	Nursing	08-05-2018
7	Vineeth Krishnan EM	Staff Nurse - Gr. II	Nursing	10-05-2018
8	Praseetha M	Staff Nurse - Gr. II	Nursing	10-05-2018
9	Prasanth C Das	Staff Nurse - Gr. II	Nursing	10-05-2018
10	Harikrishna PG	Staff Nurse - Gr. II	Nursing	14-05-2018
11	Remya L	Staff Nurse - Gr. II	Nursing	17-05-2018
12	Sini SS	Staff Nurse - Gr. II	Nursing	17-05-2018
13	Shiniraj R	Staff Nurse - Gr. II	Nursing	17-05-2018
14	Nimmy PV	Staff Nurse - Gr. II	Nursing	17-05-2018
15	Haseena PA	Staff Nurse - Gr. II	Nursing	17-05-2018
16	Nisha AR	Staff Nurse - Gr. II	Nursing	18-05-2018
17	Akash Surendran	Staff Nurse - Gr. II	Nursing	18-05-2018
18	Arathy R	Staff Nurse - Gr. II	Nursing	21-05-2018
19	Jibin KV	Staff Nurse - Gr. II	Nursing	21-05-2018
20	Shiras N	Staff Nurse - Gr. II	Nursing	21-05-2018
21	Sijo Augustine	Staff Nurse - Gr. II	Nursing	29-05-2018
22	Nimmya Parameswaran	Radiographer	Radiation oncology	01-06-2018
23	Muhammed Nazeem	Radiographer	Radiation oncology	01-06-2018
24	Aswathy R	Staff Nurse - Gr. II	Nursing	04-06-2018
25	Manjusree G	Hospital Assistant	Public Relation	04-06-2018
26	Eana S	Staff Nurse - Gr. II	Nursing	05-06-2018
27	AnuAnandanAchari	Radiographer	Nursing	11-06-2018
28	Chithira B	Staff Nurse - Gr. II	Nursing	25-06-2018
29	Jiju Thaliyil Thekke Veettill	Purchase Officer	Purchase/ Stores Division	11-07-2018
30	RejiSankar ST	Accounts officer	Accounts	11-07-2018
31	Riyas M	Lecturer	Biostatistics	16-07-2018
32	Suji AS	Staff Nurse - Gr. II	Nursing	20-07-2018
33	Jolly KJ	Staff Nurse - Gr. II	Nursing	26-07-2018
34	Rinsiya K	Staff Nurse - Gr. II	Nursing	26-07-2018

35	Jincy Xavier	Staff Nurse - Gr. II	Nursing	02-08-2018
36	Haseena Mol KA	Staff Nurse - Gr. II	Nursing	09-08-2018
37	Roni Antony	Staff Nurse - Gr. II	Nursing	13-08-2018
38	Bhavya KK	Staff Nurse - Gr. II	Nursing	13-08-2018
39	Manjima T	Staff Nurse - Gr. II	Nursing	13-08-2018
40	Sabitha CS	Staff Nurse - Gr. II	Nursing	13-08-2018
41	Navya TK	Staff Nurse - Gr. II	Nursing	14-08-2018
42	Anjana SR	Staff Nurse - Gr. II	Nursing	03-09-2018
43	Bijeesh Mohan	Staff Nurse - Gr. II	Nursing	11-09-2018
44	Dr. Vipin Gopinath	Lecturer	Molecular Oncology	11-09-2018
45	Satheesh M	Staff Nurse - Gr. II	Nursing	12-09-2018
46	Sheeba S	Staff Nurse - Gr. II	Nursing	13-09-2018
47	Rajalakshmi V	Staff Nurse - Gr. II	Nursing	13-09-2018
48	Divya IV	Staff Nurse - Gr. II	Nursing	13-09-2018
49	Sunera Rajan	Staff Nurse - Gr. II	Nursing	13-09-2018
50	Sreeja K	Staff Nurse - Gr. II	Nursing	13-09-2018
51	Sreenivas	Staff Nurse - Gr. II	Nursing	13-09-2018
52	Bertin Stephen	Staff Nurse - Gr. II	Nursing	14-09-2018
53	Abhay K. Kattepur	Assistant Professor	Surgical Oncology	17-09-2018
54	Shajeena K	Radiographer	Radiotherapy	22-09-2018
55	Srinsi NK	Radiographer	Radiotherapy	26-09-2018
56	Praveen kumar P	Radiographer	Radiotherapy	27-09-2018
57	Noufal P	Radiographer	Radiotherapy	01-10-2018
58	Nidhu CD	Radiographer	Radiotherapy	08-10-2018
59	Simi Mol V	Staff Nurse - Gr. II	Nursing	08-10-2018
60	Aneesha S	Staff Nurse - Gr. II	Nursing	11-10-2018
61	Seena Mathew	Staff Nurse - Gr. II	Nursing	01-12-2018
62	Soumya Jose	Staff Nurse - Gr. II	Nursing	06-12-2018
63	Kasthoori S	Staff Nurse - Gr. II	Nursing	04-01-2019
64	Reshma B	Staff Nurse - Gr. II	Nursing	29-01-2019
65	Dr. Akhil P Suresh	Assistant Professor	Radiation Oncology	11-02-2019
66	Indhu P	Nursing Assistant	Nursing	15-02-2019
67	Neena AP	Nursing Assistant	Nursing	15-02-2019
68	Dr. Priya Jayarajan	Assistant Professor	Respiratory Medicine	06-03-2019
69	Dr. Ashitha RG	Assistant Professor	Gynaecology	08-03-2019
70	Anitha T	Hospital Administrator	Clinical Administration & Public Relation	21-03-2019

**Employees who have relieved from the institution during the financial year 2018-19**

<b>Sl No</b>	<b>Name of Employee</b>	<b>Designation</b>	<b>Department/ Division</b>	<b>DOJ</b>	<b>Relieved on</b>
1	Satheesh.T.V	Supervisor Electrical	Engineering	10-03-2001	13-04-2018
2	Josna AJ	Dosimetrist/Physics Assistant	Radiation Oncology	15-03-2017	13-06-2018
3	Praveesh P	Staff Nurse - Gr. II	Nursing	25-06-2018	26-06-2018
4	Sajila VK	Assistant Pharmacist	Pharmacy	22-02-2016	04-08-2018
5	Ranjith P Nair	Lecturer	Molecular Oncology	08-06-2017	14-08-2018
6	Rachana M.	Pharmacist	Pharmacy	10-02-2016	15-09-2018
7	Dr. Basavaraj Ankalkoti	Assistant Professor	Surgical Oncology	11.07.2016	22-09-2018
8	Fasna S	Radiographer	Radiotherapy	29-08-2018	13/10/2018
9	Vidya VS	Staff Nurse - Gr. II	Nursing	16-05-2018	15-10-2018
10	Nimsha SF	Staff Nurse - Gr. II	Nursing	18-09-2018	18-12-2018
11	Abdul Majid P	Staff Nurse - Gr. II	Nursing	22-03-2018	06-01-2019
12	Dr. Anindya Mukherjee	Assistant Professor	Radiation Oncology	21-10-2017	16-01-2019
13	Dr. Adarsh A	Assistant Professor	Surgical Oncology	08-01-2018	18-01-2019
14	Suvila VS	Staff Nurse - Gr. II	Nursing	11-06-2018	18-02-2019
15	Remya O	Staff Nurse - Gr. II	Nursing	26-03-2018	20-02-2019
16	Akhil AS	Staff Nurse - Gr. II	Nursing	01-10-2018	20-03-2019
17	Aswani Raj	Staff Nurse - Gr. II	Nursing	26-03-2018	20-03-2019
18	Rajinesh Kumar.O.K	Radiographer	Radiotherapy	26-09-2011	21-03-2019
19	Honey Augustine	Staff Nurse - Gr. II	Nursing	30-04-2018	24-03-2019
20	Muhammed Ameen	Staff Nurse - Gr. II	Nursing	10-04-2018	26-03-2019
21	Shini S	Staff Nurse - Gr. II	Nursing	21-03-2019	17-04-2019



### MEDICAL LIBRARY

#### INTRODUCTION

Medical Library is the centre of clinical information centre for the hospital, is keeping pace with recent state of art technology and library activities and continuous to functions as information resource centre. Library is the heart of the institution. It is the backbone of research and development activities every organizations. Our library deemed to the integral part of the progress of MCC in all its academic activities. Our Medical Library caters to the needs of Doctors, nurses, others Para medical staffs and students from other hospitals or academic institutions from all over the country

#### ACTIVITIES AND ACHIEVEMENTS

- accessioned 143 books after verification.
- Classified and catalogued the purchased books.
- Renewed the subscription of 26 printed journals.
- Renewed the subscription of online journals.
- Renewed the subscription of UptoDate.
- Provided training for users to how to use the e-journals.
- Installed UptoDate mobile app and access provided to Clinicians

#### DATABASE (SUBSCRIPTION)

- Clinical Key
- Wiley Online
- Ovid
- Springer Nature
- Taylor and Francis
- Oxford University Press
- UptoDate (Clinical Database)
- 

#### DEPARTMENTAL LIBRARY

Departmental Library started in 2012 and at present we have 8 departmental and 2 divisional libraries.

#### STATISTICS

Books : 3256

Journals

o Printed : 26

o On line : 62

Clinical database : 01

Number of books journals issued during the period : 81

## **SERVICES**

**REFERENCE SERVICES:** Our reference section has special collection in the field of oncology with special emphasis on diagnosis, treatment and prevention along with research and education. Reference section started in 2013.

**24X7 SERVICES:** Our library users are busy with their clinical practices during day time and so they cannot utilize their daytime for their research activities. To get 24 x 7 access for users Medical Library by implementing RFID with CCTV camera in the library.

## **MEDICAL BOOK PURCHASE**

156 Books Purchase completed

27 Medical Journal (print) Purchase completed

## **NURSING COLLEGE PURCHASE**

1618 Books purchase almost completed

13 Nursing Journals (print) Purchase completed.

## **DIGITAL DUPLICATOR FACILITIES**

Digital duplicator/Print duplicator created to produce high volume of good quality print copies at lower cost than toner copies.

No of print taken from digital duplicator -18600

## **HOSPITAL LIBRARY**

A Hospital Library for the patients, their bystanders and staff, was established in 2004. The library is funded by Kerala state Library council.

## **ACTIVITIES**

- Subscribed periodicals/magazines utilizing funds from KSLC and Thalassery Municipality.
- Selection and procurement of books from various book stores in Kannur utilizing funds from KSLC.
- Issued Periodicals and Books to the patients, patient bystanders and staff of MCC
- Prepared and send monthly report of the library activities to the KSLC and DLC

## **STATISTICS**

- Number of Books purchased - Nil
- Number of Magazines subscribed - 45
- Number of Newspaper - 05
- Number of New Members - 35
- Total Number of Books issued - 459
- Total Number of Magazines issued - 277

## **STAFF**

<b>Sl No</b>	<b>Name</b>	<b>Designation</b>
1	Mr Subhash Chandran	Medical Librarian
2	Mr Harish Babu	Asst Librarian

## CLINICAL ADMINISTRATION AND PUBLIC RELATIONS DIVISION



### INTRODUCTION

The Clinical Administration and Public Relations Division is the control center of the hospital, providing 24-hours attention towards the handing and serving of all patients' requirements and needs. The Hospital Assistant is responsible for facilitating the smooth and accurate flow of information regarding hospital-wide services, location of patients, location of hospital departments, location of meetings, etc., ensuring excellent customer service to patients and visitors. The reception-cum-information counter which serves the reception, information and communication needs of patients and visitors should be convenient to people as they enter the lobby.

### MAJOR ACTIVITIES ARE

- Co ordination of academic programs
- 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
  - Sukrutham
  - Cancer Suraksha Scheme
  - Thalolam
  - Comprehensive Health Care Scheme for Scheduled Tribe
  - Snehasanthwanam for Endosulfan victims
  - RBSK
  - Society for Medical Assistance to the Poor
  - ESI Scheme
  - Pondichery Medical Relief Society
  - Prime Minister's Relief Fund
  - Chief Ministers Relief Fund
  - Patient Welfare fund of MCC
- 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

## STATISTICS

SL.NO	Descriptions	TOTAL
1	New Cases	4620
2	Non Cancerous Cases	2097
	Total Registrations	6717
3	Follow up cases	70048
4	Non Cancerousases(FU)	2626
5	Total patients	78168
6	In patients	4530

## DETAILS OF FINANCIAL ASSISTANCE SCHEMES IMPLEMENTED IN MCC

Schemes	No. Of Patients	Amount
CHIS PLUS	5329	121429355
Karunya Benevolent Fund	4982	177739317
Sukrutham	635	26843260
Comprehensive Health Care Project	223	8637824
ESI	112	9038835
PMNRF	116	1972148
Cancer Suraksha Scheme	115	9682477
PMRS	46	2769983
Thalolam	17	332660.9
SNEHASANDWANAM	34	1639499
Patient Welfare Fund	17	101331
<b>TOTAL</b>	<b>11626</b>	<b>360186690</b>

## KERALA STATE RIGHT TO SERVICE ACT – 2012

Kerala State Right to Service Act – 2012 has implemented in MCC from 2014 May onwards. During the year 2018 – 19, 25, 765 applications have been received for various services and the same has been resolved within time limit. The details of service available are shown below:

SL.No	Name of Service	Designated Officer	Time limit	First appellate authority	Second appellate authority
1	Right to obtain Medical Certificates/Treatment Certificates for various purposes	Treating Doctor	3 days	Administrative Officer (Clinical Services)	Director
2	Right to obtain Certificates for financial assistance from various sources	Treating Doctor	3 days	Administrative Officer (Clinical Services)	Director
3	Right to obtain Certificates for re reimbursement claims for investigations/treatment	Treating Doctor	7 days	Administrative Officer (Clinical Services)	Director
4	Right to obtain Train concession forms for cancer patients	Hospital Assistant	1 day	Administrative Officer (Clinical Services)	Director

SL.No	Name of Service	No. of applications received
1	Right to obtain Medical Certificates/Treatment Certificates for various purposes	7794
2	Right to obtain Certificates for financial assistance from various sources	5101
3	Right to obtain Certificates for re reimbursement claims for investigations/treatment	284
4	Right to obtain Train concession forms for cancer patients	12586
TOTAL		25765

### MALAYALAM – OFFICIAL LANGUAGE

- More than 95% of the files in MCC are in Malayalam language
- Formulated Bharana Bhasha EkopanaSamidhi
- Formulated Paribhasha Cell

SL.No	Total No. of files	No. of files in Malayalam	No. of files in English	% of files in Malayalam
2018 - 2019	4179	3963	216	95%

## STAFF

Sl. No	Name	Designation
1	Mrs. Anitha T	Hospital Administrator
2	Mr. C S Padmakumar	Public Relation Officer
3	Mrs. Mahija P M	Hospital Assistant
4	Mrs. Shyni D. R	Hospital Assistant
5	Mrs. Bindu V	Hospital Assistant
6	Mrs. Reena K	Hospital Assistant
7	Mrs. Anupama Achuthan	Hospital Assistant
8	Mrs. Sreeja K	Hospital Assistant
9	Mrs .Bhavana MoukthiMB	Hospital Assistant
10	Mrs.Remya V	Hospital Assistant
11	Mrs.Soorya M.C	Hospital Assistant
12	Mrs.Bindu T.N	Hospital Assistant
13	Mrs.Honey Mol	Hospital Assistant
14	Mrs.Aswani V	Hospital Assistant
15	Mrs Safna Sari	Hospital Assistant
16	Mrs Gladish A	Hospital Assistant
17	Miss Manjusree G	Hospital Assistant
18	Mrs BinduT.K	Clerk/Cashier/Typist
19	Mr. Rajeevan U	Telephone Operator
20	Mr. Pramod P	Attender
21	Mr. Rathish	Attender

## DEPARTMENT OF ONCOLOGY NURSING



### INTRODUCTION

Department of Oncology Nursing is one of the largest department in the institution. Apart from clinical care to patients, the department provides practical training to nursing students and nurses from various institutions. Regular in-house training for staff nurses is a major responsibility.

### EXISTING FACILITIES

217 Bedded hospital with 170 in-patient beds

### NEW ADVANCEMENTS

1. Started Distress thermometer scoring for all in-patients as sixth vital sign
2. NABH related activities

### ACTIVITIES

- Nurses day: may 12th 2018 observed as nurses day. Chief Guest was Miss Chaitra Teresa John IPS Thalassery. Award distributed for (Best Nurse, Best nursing assistant, appreciation award and best ward & Department).A fund created for poor patient
- CNE: CNE on CVAD care conducted on 1/7/2018.workshop on CVAD care conducted by faculty from Mrs. IREN RUBEN RAVIKANTH SUNDER TMH, Mumbai. Panel discussion and various sessions regarding CVAD care were included.
- Induction training: Induction training conducted for about fifty newly joined staff nurses
- In-service education: Regular in-service education conducted.
- Undergoing oncology training for staff nurses from various district hospitals in Kerala,
- Periodic mock drills conducted (Code: Blue, Red, Pink)
- HIC (Hospital Infection Control) programme functioning actively.

## STAFF

Sl. No	Name	Designation
1	M V Subadra	Nursing Superintendent
2	Shyni A F	Head Nurse
3	Liby George	Head Nurse
4	Sreelatha N	Staff Nurse - Gr. II
5	Sabitha	Staff Nurse - Gr. II
6	Sindhu N R	Staff Nurse - Gr. II
7	Maya PK	Staff Nurse - Gr. II
8	Sheeja N	Staff Nurse - Gr. II
9	Bijitha P	Staff Nurse - Gr. II
10	Smitha Grace	Staff Nurse - Gr. II
11	Sindhu S	Staff Nurse - Gr. II
12	Shaia E	Staff Nurse - Gr. II
13	Navamy T C	Staff Nurse - Gr. II
14	Seena E	Staff Nurse - Gr. II
15	Jisha k	Staff Nurse - Gr. II
16	Kavitha C N	Staff Nurse - Gr. II
17	Saritha N	Staff Nurse - Gr. II
18	Ligy Jose	Staff Nurse - Gr. II
19	Sajina N	Staff Nurse - Gr. II
20	Smithamol D	Staff Nurse - Gr. II
21	Sujatha K	Staff Nurse - Gr. II
22	Sheena C	Staff Nurse - Gr. II
23	Prajina E	Staff Nurse - Gr. II
24	Sreeja Kumari	Staff Nurse - Gr. II
25	Saritha K R	Staff Nurse - Gr. II
26	Remya M	Staff Nurse - Gr. II
27	Sunitha Kumari	Staff Nurse - Gr. II

28	Asha mol M A	Staff Nurse - Gr. II
29	Anuthara R	Staff Nurse - Gr. II
30	Jemy Mathew	Staff Nurse - Gr. II
31	Shiji Paulose	Staff Nurse - Gr. II
32	Sumi P R	Staff Nurse - Gr. II
33	Bindu Raman	Staff Nurse - Gr. II
34	Shibi Mol	Staff Nurse - Gr. II
35	Shabina P	Staff Nurse - Gr. II
36	Blassy P	Staff Nurse - Gr. II
37	Athira K	Staff Nurse - Gr. II
38	Sherjin	Staff Nurse - Gr. II
39	Jaleema M L	Staff Nurse - Gr. II
40	Shijila V	Staff Nurse - Gr. II
41	Sajitha P	Staff Nurse - Gr. II
42	Sibi K Daniel	Staff Nurse - Gr. II
43	Jisha P	Staff Nurse - Gr. II
44	Asha John	Staff Nurse - Gr. II
45	Sreejisha P	Staff Nurse - Gr. II
46	Nirmala N	Staff Nurse - Gr. II
47	Shiji P	Staff Nurse - Gr. II
48	Suma Devi	Staff Nurse - Gr. II
49	Shimna S	Staff Nurse - Gr. II
50	Silja Kurian	Staff Nurse - Gr. II
51	Sachithra	Staff Nurse - Gr. II
52	Abhina	Staff Nurse - Gr. II
53	Abhilash PS	Staff Nurse - Gr. II
54	Soumya Mathew CM	Staff Nurse - Gr. II
55	Anjana GN	Staff Nurse - Gr. II

56	Sajika MJ	Staff Nurse - Gr. II	85	Dhanya P M	Nursing Assistant
57	Vijina K	Staff Nurse - Gr. II	86	Dhaya E	Nursing Assistant
58	Divya CM	Staff Nurse - Gr. II	87	Shibila K	Nursing Assistant
59	Abdul Majid P	Staff Nurse - Gr. II	88	Rekha M	Nursing Assistant
60	Ajayakumar VD	Staff Nurse - Gr. II	89	Midhun G	Nursing Assistant
61	Ameer Sanchani O	Staff Nurse - Gr. II	90	Neethu BS	Nursing Assistant
62	Rinsha PK	Staff Nurse - Gr. II	91	Shamla N	Nursing Assistant
63	Jithin TP	Staff Nurse - Gr. II	92	Bindu KM	Nursing Assistant
64	Soumya PG	Staff Nurse - Gr. II	93	Nisha T	Nursing Assistant
65	Varsha VV	Staff Nurse - Gr. II	94	Ragi Sindhya	Nursing Assistant
66	Jayasree VK	Staff Nurse - Gr. II	95	Rehana T	Nursing Assistant
67	Shamseer K	Staff Nurse - Gr. II	96	Zeenath	Nursing Assistant
68	ChithraVeena B	Staff Nurse - Gr. II	97	Shanthini	Nursing Assistant
69	Gis Jose	Staff Nurse - Gr. II	98	Prajina E K	Nursing Assistant
70	Aswani Raj	Staff Nurse - Gr. II	99	Jinshi RS	Nursing Assistant
71	Remya O	Staff Nurse - Gr. II	100	Kavitha Prakash	Nursing Assistant
72	Nidhina KP	Staff Nurse - Gr. II	101	Sajna KK	Nursing Assistant
73	Lethiamma P R	Nursing Assistant	102	Silna KK	Nursing Assistant
74	Jerry A	Nursing Assistant	103	Abitha CA	Nursing Assistant
75	Kalamol G	Nursing Assistant	104	Jiji PS	Nursing Assistant
76	Deepa Prabha	Nursing Assistant	105	Suma S.	Nursing Assistant
77	Baiju B	Nursing Assistant			
78	Shobidha L	Nursing Assistant			
79	Biju Prasad	Nursing Assistant			
80	Shibu S	Nursing Assistant			
81	Mary I C	Nursing Assistant			
82	Mercy John	Nursing Assistant			
83	Ajimol Dominic	Nursing Assistant			
84	Sreejith S	Nursing Assistant			

# RESEARCH, PUBLICATION AND OTHER COMMITTEES

## RESEARCH



### INTRODUCTION

Research in Malabar Cancer Centre is conducted while maintaining the highest ethical and scientific standards; Malabar Cancer Centre engages in cutting edge clinical research in major Oncological disciplines and emphasizes interdisciplinary research. The Institutional Review Board is responsible for overseeing the scientific and ethical issues associated with any research conducted in the institute. The institute has memoranda of understanding with several governmental organizations so that their expertise can be used in clinical research. In order to ensure that research is conducted under the most stringent conditions the institute has an Institutional Review Board(IRB).

The IRB is made of two separate bodies

- a. The Scientific Review Committee (SRC)
- b. The Institutional Ethics Committee (IEC). Both these bodies are constituted as per the guidelines provided by the ICMR for conducting biomedical research

### SCIENTIFIC REVIEW COMMITTEE (SRC)

The SRC meets twice in every month (2<sup>nd</sup> and 4<sup>th</sup> Saturday) and / or as and when required. SRC is tasked with reviewing the scientific merit of any new research proposal. All research proposals have to be submitted by the first week of every month so that it can be reviewed by the SRC. The SRC reviews the proposed scientific study and gives recommendations the scientific merit and methodology adopted in the study. Once studies have been approved by the SRC they are submitted to the IEC for ethical approval, if any.

### COMMITTEE MEMBERS

SL.No	Name	Designation & Department
1	Dr.Satheesan B	Professor, Dept of surgical Oncology
2	Dr.Sangeetha K Nayanar	Professor, Department of Clinical Lab service & Translational Research
3	Dr. Chandran K Nair	Professor, Department of Clinical Hematology and & Medical Oncology
4	Dr.Sajith Babu T P	Associate Professor, Dept of surgical Oncology
5	Dr.Geetha M	Associate Professor, Department of Radiation Oncology
6	Dr. Parthipan Rudrapathy	Associate Professor, Division of microbiology
7	Dr.Pramod Sankar S	Associate Professor, Department of Dentistry & Rehabilitation
8	Dr.Satheesh Babu	Associate Professor, Department of Imageology
9	Dr. Nived K	Associate Professor, Department of Onco-Anesthesiology
10	Dr.Sithara Aravind	Associate Professor, Division of Oncopathology
11	Mrs.Maya Padmanabhan	Office bear, Division of Clinical Research & Biostatistics

## RESEARCH PROPOSALS APPROVED BY SRC

Sl. No	Project Title	Principal Investigator
1	An exploratory study on the effectiveness of a structured health education program based on current school curriculum in improving knowledge, attitude, practice about cancer among students, teacher and parents	Dr.Satheesan B
2	Non invaise and low cost strategy for early detection of clinically relevant breast lesions in low resource settings	Dr.Satheesan B
3	Evaluation of Dosimetric leaf gap as quality control tool for accurate VMAT delivery	Mrs. Suja C A
4	Perimberal dose measurement and validation of wedge angle for enhanced dynamic wedge-	Mrs. Resmi K Bharathan
5	Investigating the Dosimetric effect of varying grid size on dose calculation accuracy in VMAT planning-	Mrs.Silpa Ajaykumar
6	Structural analysis of mutated EGFR protein and interaction with TKI using in silico method	Dr.Deepak Roshan V G
7	Comparative study on the anatomic stage group and prognostic stage group among invasive breast cancer patients-Two year retrospective study	Dr. Kandathil Joseph Philip
8	Survival analysis of Laryngectomies	Dr. Sajith Babu T.P
9	Comparison of treatment regimens for post operative Hypocalcemia after total thyroidectomy with or without neck dissection a retrospective analysis	Dr. Sajith Babu T.P
10	Appraisal of soft tissue tumor cases at a cancer centre in south India-	Dr. Sangeetha K Nayunar
11	A study to assess upstaging in women with ovarian and endometernal cancer undergoing re-staging surgery in a tertiary care center	Dr.Adarsh D
12	Experience of reverse and oral flap surgery done for malignancies of foot at tertiary cancer centre	Dr. Satheesan B
13	Electrolyte abnormality in patients undergoing concurrent chemo radiation for head and neck malignancy	Dr. Joneetha Jones
14	Prevalence and Resistance pattern of <i>Moraxella catarrhalis</i> causing respiratory tract infections in cancer patients	Dr. Sajani Samuel
15	Correlation of PML-RAR a transcript variants with immunophenotype in AML –M3	Dr.Sindhu E R
16	Correlation of serum PSA to the Gleason score, stage & risk groups according to D'AMICO stratification of PCA	Dr.Sindhu E R
17	Hypomethylating agents in myeloid malignancies: retrospective audit from a tertiary care centre	Dr.Vineetha Raghavan
18	GDP as salvage chemotherapy for relapsed lymphomas: retrospective audit from a tertiary cancer centre	Dr.Chandran K Nair

19	Different faces of Autoimmune Hemolytic anemia in children	Dr.Vineetha Raghavan
20	Evaluation of BCR-ABL Fusion transcript in north Kerala population	Dr. Renjith P Nair
21	Effect of Tyrosine Kinase Inhibitors on the expression of PKM1/PKM2 and MUC-1 genes in B3A2 and B2A2 cell lines CML	Dr.Deepak Roshan V G
22	Illness perceptions in a pediatric cancer population at a tertiary Cancer Centre	Dr.Biji M.S
23	Predictive factors for pathological complete response in patients with rectal cancer undergoing NA therapy	Dr.Satheesan B
24	Retrospective audit of mammographically detected micro calcification only BIRADS 4 breast lesion	Dr.Satheesh Babu T V
25	Preservation of anterior tibial artery in limb salvage surgery for proximal tibial tumors: A retrospective study from a tertiary cancer centre	Dr.Satheesan B
26	Survival Analysis of T4B cancers of Oral cavity following surgery and adjuvant therapy	Dr. Sajith Babu T.P
27	LNR or LODDS a better prognostic factor of recurrence and survival compared to pN stage in Oral Cancer: A retrospective analysis	Dr. Sajith Babu T.P
28	Comparison of ICRU point based and GEC-ESTRO organ at Risk doses in intracavitary brachytherapy in cervical cancer	Dr.Vinin
29	To assess the accuracy of risk of malignancy index four(RMI 4) & adnex model in predicting ovarian malignancy: a retrospective analysis	Dr.Adarsh D
30	An audit of outcome of patients with epidermal growth factor receptor mutations in non squamous non small cell lung cancer from a tertiary cancer center in northern Kerala	Dr.Praveen Kumar Shenoy
31	Transfusion practice in acute promyelocytic leukemia patients-Experience from tertiary care cancer center	Dr.Anju Kurup
32	Association between quality of life and clinical response to definitive chemo radiotherapy in patients with carcinoma cervix	Dr. Anindya Mukharjee
33	Neuroendocrine Neoplasms of GIT, Liver and Pancreas- 5 Year experience at cancer centre	Dr.Noushad A
34	Analysis on composition of Leukapheresis product- A comparison between intermittent and continuous flow aphaeresis equipments	Dr.M.Mohandoss
35	Qualitative external beam radiotherapy in carcinoma Esophagus: A quality of life analysis	Dr.Shoaib Nawaz

36	Quality and outcome in global cancer surgery: A prospective international cohort study	Dr.Satheesan B
37	Clinico pathological profile of endometrial carcinoma from a tertiary cancer centre	Dr.Aswathi Krishnan
38	A cross sectional study to assess the awareness of good clinical practice among health care providers: Does this enough for initiate clinical Research?	Maya Padmanabhan
39	Dose volume analysis for acute gastrointestinal toxicity in patients on pelvic radiotherapy	Dr.Geetha M
40	Dosimetric comparison of tandem and ovoids tandem and ring application for intracavitary brachey therapy in carcinoma cervix	Dr.Vinin
41	Bowel and bladder toxicity and volumetric dose parameters in carcinoma cervix patients in treated with definite radiation therapy	Dr.Arun P Narendran
42	Survival analysis of high grade gliomas a tertiary cancer centre experience	Dr.Shoaib Nawaz
43	Variation in inter fraction bladder volumes during neo adjuvant chemo radiation for rectal cancers	Dr.Nabeel Yahia
44	Orgaon at risk doses in three dimensional conformal radio therapy in carcinoma breast following breast conservation surgery	Dr.Joneetha Jones
45	A study on setup variations during treatment and assessment of adequacy of current CTV- PTV margins in head & neck radiotherapy	Dr.Greeshma
46	Impact of different Material in contralateral breast dose during breast radiotherapy	Mrs. Resmi K Bharathan
47	Patterns of failure in node positive cervical cancer patients treated with radiotherapy	Dr.Geetha M
48	Measurement of Absorbed dose during CBCT imaging	Mrs. Lisa Jose
49	Analytical study of flatness and symmetry of electron beams with 2D array detector	Mrs. Suja C A
50	Microbiological profile and antibiotic sensitivity pattern of uropathogens in a tertiary care cancer centre	Dr.Saravanan
51	A study on influence of donor Hematocrit on the procedural parameters of concentrated SDP collected by two apheresis devices	Dr.Mohandoss
52	Anatomical reliability of antero lateral intercostals muscle performance: a relook into the scope for a regional composite bone flap	Dr.Adarsh Anand
53	Low rectal cancer surgical and Oncological outcome	Dr.Nizamudheen M.P

54	From radiological assumption to pathological conviction, early experience with video mediastins copy in a tertiary cancer center	Dr.Nizamudheen M P
55	Abdominal lymph nodal involvement in squamous cell carcinoma of esophagus and its impact on prognosis:-	Dr.Nizamudheen M P
56	Patterns of failure Inside Nodal CTV in Cervical Cancer: A multi-institutional audit	Dr.Geetha M
57	Predictive factors for Pathological Complete Response in patients with Locally Advanced Rectal Cancer undergoing Neo-adjuvant Chemo radiation Therapy	Dr.Nizamudheen M P
58	Factors associated with poor acceptance rates of autologous transplantation among transplant eligible myeloma patients	Dr.Chandran K Nair
59	Treatment compliance and survival outcomes in rectal cancer patients	Dr.Abhay K Kattepur
60	Study to assess the Impact Of palliative chemotherapy on Health Related Quality Of Life in patients with Advanced Non Small Cell Lung Cancer	Dr.Manu Prasad
61	Impact of active tuberculosis on standard treatment of cancer	Dr.Chandran K Nair
62	Induction Mortality In Newly Diagnosed AML at a Tertiary Cancer Centre	Dr. Chandran K Nair
63	An Exploratory study to evaluate the extent of Disability and factors influencing "Return to Work" among cancer patients	Mrs. Maya Padmanabhan
64	Tumor regression after neoadjuvant chemoradiation in carcinoma rectum: A Tertiary Cancer Centre Experience	Dr. Shoaib Nawaz
65	Implementation of NCDIR Electronic Mortality Software (NCDIR-e-Mor)-Strengthen Medical Certification of Cause of Death	Dr. Saina Sunil Kumar

## INSTITUTIONAL ETHICS COMMITTEE

Constituted as per ICMR guidelines in August 2013. The IEC meets once in every three months and / or as and when required

### COMMITTEE MEMBERS

Sl No	Name	Current Organization	Designation/ role of member in Ethics committee
1	Dr. T. N. Babu Ravindran	Senior Medical Consultant Indira Gandhi Co-Operative Hospital, Manjodi, Thalassery, Kannur, Kerala, PIN- 670 103	Chairman
2	Dr. Satheesan Balasubramanian	Director, Malabar Cancer Centre, Thalassery, Kerala, PIN 670 103	Member Secretary
3	Dr. Balakrishnan Valliyot	Professor of Medicine Head, Centre for Medical Research & Non-communicable diseases, Academy of Medical Sciences, Pariyaram, Kannur, Kerala -670503	Member (Scientist)
4	Dr. Sangeetha K. Nayunar	Professor & Head Department of Clinical service & Translational Research, Malabar Cancer Centre, Thalassery, Kerala, PIN 670 103	Member(Basic Medical Scientist)
5	Dr. Jeeja M.C	Additional professor, Department of Pharmacology Govt, Medical College, Manjeri, Malappuram PIN:676121	Member (Pharmacology)
6	Dr. Biju George	Associate Professor in Community Medicine, Govt. Medical College, Kozhikode, Kerala	Member (Scientist)
7	Adv. Preethi Parambath	Addl Govt Pleader & Public Prosecutor, Kannur District Court, Thalassery, PIN-670102	Member(Legal expert)
8	Adv. John Joseph	Advocate, Near District Court, Thalassery, "Thalackal" House Nagarath Peedika, Temple Gate P.O., Thalassery, Kannur, Kerala, PIN- 670 102	Member (Legal Expert)
9	Dr. K. R. Vasudevan	Consultant Physician "ARCHANA", Kovilakam Road, Nilambur (P.O), Malappuram, Kerala, India. PIN- 679329	Member (Clinician)

10	Rev.Fr Thomas Thengumpally	Chancellor Archdiocese, Arch Bishop House, Thalassery, PB No. 70 Kerala, India. PIN -670101.	Member (Theologist)
11	Mr. G.V. Rakesh	Correspondent Mathrubhumi Daily G.V. House, Ponniam P.O., Thalassery, Kannur, Kerala, PIN- 670641.	Member (Lay Person)
12	Mrs. Chinnammu Sivadas	Managing Trustee, Salil Sivadas Foundation, Salil Bhavan”, P.O. Sivapuram, Dist. Kannur, Kerala, PIN 670 702.	Member (Social Scientist)

### RESEARCH PROPOSALS APPROVED BY IEC

1	Incidence of human papilloma virus (HPV) types in lung cancer patients a tertiary care cancer centre at north Kerala	Dr. Parthipan Rudrapathy
2	Assessment of financial burden in patients with head and neck cancer undergoing curative intent treatment	Dr. Geetha M
3	Thyroid gland- evaluating the need for a dose volume constraint	Dr. Anindya Mukherjee
4	Decentralization of cancer screening through associate centers: a community based pilot study	Dr. Neethu A P
5	An exploratory study on the effectiveness of a structured health education program based on current school curriculum in improving knowledge, attitude, practice about cancer among students, teacher and parents	Dr. Phinse M Philip
6	Non invasive and low cost strategy for early detection of clinically relevant breast lesions in low resource settings	Dr. Neethu A P
7	Illness Perception in a pediatric cancer population at a Tertiary Cancer Centre	Dr. M.S Biji
8	Predictive Factors for Pathological complete response in patients with rectal cancer undergoing neo-adjuvant therapy	Dr. John Alappat
9	Association between quality of life and clinical response to definitive Chemoradiotherapy in patients with carcinoma cervix	Dr. Anindya Mukherjee
10	Palliative External Beam Radiotherapy in Carcinoma Esophagus: A Quality of Life Analysis	Dr. Shoaib Nawaz.P.N
11	Quality and outcome in global cancer surgery: A prospective international cohort study	Dr. Nizamudheen M.P

## SCIENTIFIC ADVISORY COMMITTEE

Scientific advisory committee will periodically review the training, services and research activities of the Malabar Cancer Center and evaluate and make recommendations to the Executive Committee (EC) and Governing Body of the Malabar Cancer center

### COMMITTEE MEMBERS

SL.No	Name & Designation	Position
1	Dr. T G Sagar Director, Cancer Centre (Adayar) Chennai-600 020, India	Chairman
2	Dr. Manoj V Murhekar Scientist-G & Director National Institute of Epidemiology (ICMR) 2nd Main Road, Tamil Nadu Housing Board Ayapakkam, Near Ambattur, Chennai-600 077, India	Member
3	Dr. Dr. C.Ramachandra Director, Kidwai Memorial Institute of Oncology Dr. M. H. Marigowda Road Karnataka – 560029, India	Member
4	Dr. Harikumaran Nair Dean (Research), Kerala University of Health Sciences Thrissur, Kerala-680 596, India	Member
5	Dr. R.M. Nehru Officer-in-Charge, Scientific Officer-G Southern Regional Regulatory Centre Atomic Energy Regulatory Board Anupuram – 603127, Kancheepuram District, Tamil Nadu, India	Member
6	Dr. K Jayakumar Associate Professor, Department of Statistics University of Calicut Malapuram Dist., Kerala- 673 635	Member
7	Dr. C. Sadasivan Professor & HOD Department of Biotechnology & Microbiology Kannur University, Thalassery Campus Kannur, Kerala-670 661, India	Member
8	Dr. Shripad D. Banavali Professor & HOD Department of Medical & Pediatric Oncology Tata Memorial Hospital Parel, Mumbai-400 012, India	Member
9	Dr. Satheesan B Director Malabar Cancer Centre, Thalassery, Kannur-670 103	Convener-Member

## Research Publications

1. Early Calcium Supplementation After Total Thyroidectomy Can Prevent Symptomatic Hypocalcemia - Findings from a Retrospective Study ,Manu Santosh, Sajith Babu Thavarool, Sandeep Vijay , Adharsh Anand, Guru Charan Sahu,Satheeshan Balasubramaniam, G. J. O. Issue 29, 2019
2. Improved survival among oral cancer patients: findings from a retrospective study at a tertiary care cancer centre in rural Kerala, India, Sajith Babu Thavarool1 , Geetha Muttath, Sangeetha Nayanar, Karthickeyan Duraisamy, Prasanth Bhat, Kalpita Shringarpure, Priyakanta Nayak, Jaya Prasad Tripathy, Alfonso Thaddeus, Sairu Philip, Satheesan, World Journal of Surgical Oncology (2019) 17:15
3. A case of pediatric leukemia with multi drug resistant bacterial infections, Saravanan Murugesan, Parthiban Rudrapathy, Sajani Samuel, International Journal of Contemporary Pediatrics, Int J Contemp Pediatr. 2019 Jan;6(1):221-223
4. Dosimetric study of small circular cutouts for electron beam therapy, Resmikbharathan, International journal of scientific Research, Vol.8, Issue01, Jan 2019
5. En Bloc Resection with Partial Sacrectomy Helps to Achieve R0 Resection in Locally Advanced Rectal Cancer, Experience from a Tertiary Cancer Center, Nizamudheen M. Pareekutty , Satheesan Balasubramanian , Sachin Kadam , Dipin Jayaprakash ,Basavaraj Ankalkoti , Sangeetha Nayanar ,Geetha Muttath , Bindu Anilkumar, Indian Journal of Surgical Oncology (March 2019) 10(1):141–148
6. Does Adverse Histopathological Features Like Perineural Invasion, Depth of Invasion and Lymphovascular Invasion Warrant Adjuvant Treatment in Early Oral Squamous Cell Carcinoma? Shivakumar Thiagarajan, Sajith Babu Thavarool,, Nagendra Kadapa, Hamsa Nandini, Journal of Head & Neck Physicians and Surgeons,2018
7. Recurrence Pattern of Glottic Cancer Patients Treated by Laser Cordectomy: Intent to Treat Analysis,Sajith Babu Thavarool, Amit Tyagi, K N Harsha, Bhushan Kathuria, Nagendra Kadappa,Sithara Aravind,, K M Aswathi, Sangeetha Nayanar, Satheesan Balasubramaniam, J Head Neck Physicians Surg 2018;XX:XX-XX.
8. Emergence of Unusual Gram - Negative Bacteria Among Cancer Patients in a Tertiary Care Cancer Centre at North Kerala, Saravanan Murugesan, Parthiban Rudrapathy, Sajani Samuel, Online Journal of Health and Allied Sciences, Volume 17, Issue 4; Oct-Dec 2018
9. Population-based cancer screening through community participation: Outcome of a district wide oral cancer screening program from rural Kannur, Kerala, India, Phinse Mappalakayil Philip, Priyakanta Nayak,, Sairu Philip,, Neethu Ambali Parambil, Karthickeyan Duraisamy,Satheesan Balasubramanian, South Asian J Cancer 2018;7:244-8.
10. Community-based interventions for health promotion and disease prevention in noncommunicable diseases: A narrative review Phinse Mappalakayil Philip, Srinivasan Kannan, Neetu Ambali Parambil, J Edu Health Promot 2018;7:141.
11. Community engaged breast cancer screening program in Kannur District, Kerala, India: A ray of hope for early diagnosis and treatment Neethu Ambali Parambil, Sairu Philip , Jaya Prasad Tripathy , Phinse M Philip, Karthickeyan Duraisamy, Satheesan Balasubramanian ((Indian Journal of Cancer-Accepted for publication in October 2018 .Under issue preparation)
12. Validation of Malayalam version of national comprehensive cancer network distress thermometer and its feasibility in oncology patients. MS Biji, Sampada Dessai , N Sindhu , Sithara Aravind , B Satheesan, Indian Journal of Palliative care, Year : 2018, Volume : 24,Issue : 1,Page : 67-71
13. The incidence and risk factors for development of lower limb Lymphedema after treatment for gynaecological cancers.Noori Khalid ,Adarsh Dharmarajan ,Satheeshan B.,Biji M. S ., Abina S.S ,Remya Binesh , Int J Reprod Contracept Obstet Gynecol. 2018 Mar; 7(3):1168-1172

14. Utility of fine needle aspiration cytology as a diagnostic tool in evaluating cervical lymph node enlargement in a tertiary cancer centre, IJAR. 2018; 8(8): 97- 9.
15. Clinico pathological spectrum of ana plasticcarcinoma of thyroid – 5 year experience from a tertiary cancer centre. Manjusha P, Philip KJ, Nayanan SK. Gulf J Oncolog. 2018; 1(28):17-22.
16. Utility of immune cytochemistry as an adjunct tool to FNA in routine cytological practices. Philip KJ, Nayanan SK. IJSR. 2018; 7(8): 179-81.

## OTHER COMMITTEES

Sl. No.	Name of Committees
1	Academic Council
2	Administrative Council
3	Building Committee
4	Canteen Core Committee
5	Complaint Committee
6	CSR Committee
7	Patient Welfare Committee
8	Technical Committee
9	Stock Verification Committee
10	Data Monitoring & Safety Committee
11	Pre Bid Committee
12	Radiation Safety Committee
13	Waste management Committee
14	Website Committee



## **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 Friday 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**

<b>Sl No</b>	<b>Course</b>	<b>Duration</b>	<b>University/ Board</b>
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, Kozhikode
3	Certificate Course in Community Palliative in Auxiliary Nursing Course(CCPAN)	3 Months	Institute of Palliative Medicine, Kozhikode
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 Gynec Oncology	2 Years	Institutional fellowship
7	Fellowship in Oncopathology	2 Year	Institutional fellowship
8	Fellowship in Head & Neck Pathology		
9	Fellowship in Nutrition Oncology	1 Year	Institutional fellowship
10	Indian Association of Palliative Care Courses		
11	Post Basic Diploma in Oncology Nursing	1 Year	



## **INDEPENDENT AUDITOR'S REPORT**

The Members  
The Malabar Cancer Centre  
Thalassery.

### **Opinion:**

We have audited the accompanying financial statements of **MALABAR CANCER CENTRE, KODIYERI** which comprises the Balance Sheet as at 31<sup>st</sup> March 2019 and the Income and expenditure account for the period 01-04-2018 to 31-03-2019.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the entity as at 31<sup>st</sup> March 2019 and of its financial performance for the period then ended.

### **Basis for Opinion:**

We conducted our audit in accordance with the Standards on Auditing (SAs) issued by the Institute of Chartered Accountants of India. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the entity in accordance with the ethical requirements that are relevant to our audit of the financial statements and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our Audit opinion.

### **Responsibilities of Management and those charged with governance for the Financial Statements:**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the aforesaid Accounting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.



(Cont'd on P - 2)

Those charged with governance are responsible for overseeing the entity's financial reporting process

**Auditor's Responsibilities for the Audit of the Financial Statements:**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements

**Other matters:**

- a) We draw attention to Note No. 33(B)(2)(a) regarding balance in grant in aid under plan fund shown under the head 'Grant-in-Aid (Plan)' which includes Rs.46.26 lakhs, representing actual expenditure of eligible projects being less than the grant in aid received towards the said projects. The society is in the process of obtaining the administrative sanction in respect of utilization of the said surplus amount for other eligible projects.
- b) We also draw attention to Note No. 33(B)(2)(b) regarding balance in grant in aid shown under the head 'Grant-in-Aid (Plan)' which includes grant in aid received under plan fund in respect of a project which is pending commencement/completion. Necessary steps are being taken to commence the pending projects.

Our opinion is not qualified in respect of the above matters.

**Report on other legal and regulatory requirements:**

Further, we report that:

- a) 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;
- b) In our opinion, proper books of account have been kept by the Society so far as appears from our examination of those books;
- c) Balance Sheet and Statement of Income and Expenditure dealt with by this Report are in agreement with the books of account.

Thalassery  
28-10-2019



For REJEESH & ASSOCIATES  
Chartered Accountants  
FRN:007361S  
  
CA. REJEESH T K, M No: 203015  
Proprietor

**MALABAR CANCER CENTRE SOCIETY, THALASSERY, KANNUR**  
**INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31-03-2019**

PREVIOUS YEAR (RS)	EXPENDITURE	NOT E NO.	CURRENT YEAR (RS)	PREVIOUS YEAR (RS)	INCOME	NOT E NO.	CURRENT YEAR (RS)
17,66,32,327	To Pharmacy consumption	13	17,05,09,740	11,01,82,885	By Grant in aid - Revenue grant	27	11,01,56,000
19,10,28,703	" Salary, stipend, wages and allowances	14	24,05,25,155	21,40,55,461	Revenue from hospital operations	28	25,50,31,096
74,27,709	" Employer's contribution to provident fund		79,17,212	18,67,15,181	Pharmacy collection		18,40,38,978
33,12,164	" Recruitment expenses		21,73,225	14,19,958	Penal liquidation charges		1,12,012
4,53,45,975	" Consumables/ Other treatment expenses	15	5,63,47,109	9,24,530	Rental income	29	9,35,926
1,97,02,328	" Energy charges	16	2,12,04,170	52,24,863	Income from training and teaching	30	86,62,340
11,39,659	" Printing and stationery	17	13,04,232	27,73,798	Donations and contributions	31	59,18,788
6,84,990	" Postage and telephone expenses		5,29,108	1,51,500	Income from early cancer detection camp		1,41,505
3,77,861	" Rates and taxes	18	4,25,609	61,770	Income from ambulance service		56,390
7,35,421	" Travelling and conveyance expenses	19	12,50,677	77,54,788	Interest income		73,28,546
12,89,012	" Vehicle running and maintenance expenses	20	14,13,955	1,69,296	Other incomes	32	44,48,999
39,90,548	" Repairs and maintenance	21	31,13,869	34,71,549	Agricultural income		11,332
1,02,01,665	" Security service charges		1,20,52,746	"	Insurance claim received		4,43,000
1,00,77,303	" Cleaning and laundering charges		1,10,91,021	"	Excess of expenditure over income		
40,78,783	" Subscription	22	66,42,108	6,90,08,204	Transferred to balance sheet		12,23,24,192
26,78,287	" Free food to patients and bystanders	23	29,85,005				
2,82,300	" Auditors' fee		3,10,500				
11,10,473	" Professional charges		2,92,470				
8,50,000	" Insurance charges		14,79,079				
21,65,060	" Advertisement charges		9,65,953				
2,05,50,023	" Annual maintenance contract charges	24	2,43,73,554				
1,78,903	" Community oncology expenses		1,56,630				
5,21,726	" Affiliation and registration fee		91,500				
17,09,534	" Programmatic expenses	25	5,19,972				
11,64,944	" Miscellaneous expenses	26	44,46,870				
9,46,78,087	" Depreciation written off	7	12,72,87,636				
60,19,13,783			69,96,09,105	60,19,13,783			69,96,09,105

AUDITORS' REPORT

Vide our separate report of even date attached

Chartered Accountants

FRN:007361S

CA REJEEV T K M No: 203015  
 Proprietor

**MALABAR CANCER CENTRE SOCIETY, THALASSERY, KANNUR.**

**BALANCE SHEET AS AT 31-03-2012**

(Amounts in Rs.)

PREVIOUS YEAR	CAPITAL & LIABILITIES	NOTE NO.	CURRENT YEAR	PREVIOUS YEAR	ASSETS	NOTE NO.	CURRENT YEAR
65,79,23,532	CAPITAL FUND	1	84,90,89,170	63,37,84,778	FIXED ASSETS	7	86,63,56,616
42,19,49,874	GRANT-IN-AID - CAPITAL GRANT (PENDING UTILISATION)	2	46,46,64,317		WORK IN PROGRESS UNDER PLAN FUND	8	21,27,21,901
10,37,07,669	ADVANCES & DEPOSITS	3	11,11,80,107	30,81,35,274	DEPOSITS AND ADVANCES	9	1,07,41,039
14,76,99,294	TRADE CREDITORS	4	10,88,75,795	89,28,067	TRADE DEBTORS	10	22,06,32,209
22,27,390	PATIENTS' WELFARE FUND	5	35,21,159	18,82,28,551	CLOSING STOCK	11	5,58,88,197
6,45,249	SEMINAR EXPENSE FUND		16,82,683	5,23,99,203	CASH AND BANK BALANCES	12	20,74,85,600
31,06,117	OUTSTANDING LIABILITIES	6	3,88,12,532	14,47,83,131	SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS	23	
							1,57,78,25,763
				1,35,78,25,763			
							1,33,72,59,124

**AUDITORS REPORT**

Vide our separate report of even date attached.

For REJEESH & ASSOCIATES  
Chartered Accountants  
FRN: 007361S



CA REJEESH T K, MNA: 200916  
Proprietor



Place: Thalassery  
Date: 28-10-2019

## **THE MALABAR CANCER CENTRE SOCIETY, THALASSERY, KANNUR**

### **NOTE NO.33:**

#### **SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS FORMING PART OF ACCOUNTS FOR THE YEAR ENDED 31<sup>ST</sup> MARCH 2019.**

##### **A) SIGNIFICANT ACCOUNTING POLICIES:**

###### **1) BASIS OF PREPARATION OF FINANCIAL STATEMENTS:**

The financial statements have been prepared under the historical cost convention and on accrual basis of accounting unless otherwise specifically stated.

###### **2) USE OF ESTIMATES**

The presentation of financial statements in conformity with the generally accepted accounting principles require estimates and assumptions to be made that affect the reported amount of assets and liabilities on the date of the financial statements and the reported amount of revenue and expenses during the reporting period. Difference between the actual result and estimates are recognized in the period in which the results are known/ materialized.

###### **3) GRANT IN-AID:**

###### **a) Revenue Grant**

Grant in aid received from Govt. of Kerala under non plan fund is considered as revenue grant and credited in the income and expenditure account as and when received.

###### **b) Capital Grant**

Grant in aid received from Govt. of Kerala, MPLAD Scheme and Govt. of India for Tertiary Cancer Centre under plan fund for infrastructure development is considered as capital grant. Grant in Aid received under plan funds is transferred and included under capital fund account on completion of the project.

###### **4) FIXED ASSETS:**

Fixed assets are stated at cost of acquisition less depreciation. Fixed assets received as donations in kind are accounted at nominal value.

**5) DEPRECIATION:**

Depreciation on fixed assets has been charged under written down value method at the rates prescribed under the Income-Tax Rules except in the case of library books which are depreciated @ 15%.

**6) INVENTORIES:**

Inventories comprising medicines and consumables are valued at lower of cost or net realizable value, item wise. Cost of the above inventories comprises of all costs of purchase and other costs incurred in bringing the inventories to their present location after adjusting for VAT wherever applicable.

**7) EMPLOYEE BENEFITS:**

The retirement benefits/compensated absences due to employees at the time of retirement/termination was accounted for on cash basis till 31-03-2018. During the year the society has formed a trust viz., Malabar Cancer Centre Employees Group Gratuity Fund Trust and entered into an agreement with LIC of India to set up a group gratuity scheme for providing gratuity benefits for its employees upon retirement.

**8) REVENUE RECOGNITION:**

Revenue is recognized on accrual basis except revenue due from inpatients as on 31.03.2019 on various accounts like room rent, investigation charges, surgery charges, service charges etc. are recognized only at the time of their discharge.

Interest income is recognized on time proportion basis taking into account amount outstanding and rate applicable.

**9) PROVISIONS, CONTINGENT LIABILITIES AND CONTINGENT ASSETS:**

Provisions are recognized when the society has a present obligation as a result of a past event, for which it is probable that a cash outflow will be required and a reliable estimate can be made of the amount of the obligation. Provisions are discounted to its present value and are determined based on the society's estimate required to settle the obligation at the balance sheet date. These are reviewed at each balance sheet date and adjusted to reflect the correct society's estimates.

Contingent liabilities are disclosed when the society has a possible obligation or a present obligation and it is probable that a cash flow will be required to settle the obligation.

Contingent assets are neither recognized nor disclosed in the accounts.

## **5) IMPAIRMENT OF ASSETS:**

The society assesses at each balance sheet date whether there is any indication that an asset may be impaired. An asset is identified as impaired, when the carrying value of the asset exceeds its recoverable value. Based on such assessment, impairment loss if any is recognized in the income and expenditure account of the period in which the asset is identified as impaired. The impairment loss recognized in the prior accounting periods is reversed if there has been a change in the estimate of recoverable amount.

## **6. NOTES ON ACCOUNTS:**

1. The society is in possession of the building and hospital equipments gifted by a foreign source. The values 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 capitalise 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. GRANT IN AID**

a) Balance in grant in aid under plan fund shown under the head 'Grant-in-Aid (Plan)' includes Rs.46.26 Lakhs, representing actual expenditure of eligible projects being less than the grant in aid received towards the said projects. The society is in the process of obtaining the administrative sanction in respect of utilization of the said surplus amount for other eligible projects.

b) Balance in grant in aid shown under the head 'Grant-in-Aid (Plan)' includes grant in aid received under plan fund in respect of a project which is pending commencement/completion. Necessary steps are being taken to commence the pending project.

3. SNC Lavlin Inc. Canada had promised for a foreign contribution of Rs.2,530 lakhs and 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- 1Y dated 26/04/2001 under section 6(IA) of Foreign Contribution (Regulation) Act, 1976. However, no foreign contribution has been received as at the year ended 31-03-2019.

4. Advances received under patient welfare schemes represent amount received from Karunya Benevolent Fund, Sukrutham Anti Cancer Treatment Scheme, Prime Minister National Relief Fund, etc received towards the treatment facilities to be extended to individual patients. Further the society has also extended treatment facilities to various patients under these patient welfare schemes prior to the receipt of amount under these schemes. The amount receivable under Karunya Benevolent Fund, based on the instruction No.KBF/B/57/2012 dated 21.10.2017, issued by the Administrator of Karunya Benevolent Fund, the amount received in advance towards the treatment of patients can be utilised towards the treatment of other patients under this scheme. Based on the said instruction, the amount receivable under the scheme are net off against the advance received. The society is in the process of compiling patient wise list receivable/payable under the KBF scheme and in the opinion of the society, the amount receivable under the scheme are fully receivable and no provision is required to be made at this stage.

5. The society is unable to reconcile receipts to the tune of Rs. 1,61,980/- credited in bank account no. 1154104000017958 with IDBI Bank, Thalassery for want of remittance details from various parties and is shown under advance from patients as a current liability.

6. As given in Accounting Policy No. 7, the society was following the practice of accounting of retirement benefit/compensated absences due to employees on cash basis and the liability towards retirement/terminal benefits have not been quantified and not provided for in the statement of accounts till 31-03-2018. During the year the society has formed a trust viz., Malabar Cancer Centre Employees Group Gratuity Fund Trust and entered in to an agreement with LIC of India to set up a group gratuity scheme for providing gratuity benefits for its employees upon retirement. The society has paid group gratuity premium to the tune of Rs. 1 crore in 2018-'19 which is shown under salary, stipend, wages and allowances.

7. 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 yearend together with the interest paid/payable as required under the said Act have not been furnished.

8. Previous year's figures have been regrouped / reclassified wherever necessary in order to suit current year's disclosure.

Place: Thalassery

Date: 28-10-2019



For REJEESH & ASSOCIATES  
Chartered Accountants  
FRN:007361S

CA. REJEESH T K, M No: 203015  
Proprietor

## **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 Benevolent 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**

The Patient Welfare 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. This fund is utilized for the treatment/investigations for the needy patients after proper assessment.

## **HOSPITAL LIBRARY FOR PATIENTS AND RELATIVES**

A unique Hospital library for patients, their relatives and staff is functioning in the centre since 2004. The library is funded by Kerala State Library Council.

## **HOME CARE SERVICES**

Home care services provided to patients staying nearby and who are unable to travel to MCC for availing treatment.

## **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 five supports groups for the welfare and rehabilitation of Breast and Colostomy, Bone Marrow Transplantation, All survivors, Limb Salvage Surgery patients;

1. Thejas: Thejas (Breast Support group) is started on 30-09-2009
2. Spandhanam: Ostomy Association started on 21-11-2011
3. Navajeevan
4. Amrutham
5. Sanjeevani

# 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 likeminded 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	SBINoooo926

## ***For further details Contact:***

Shri. Rajesh A.K,  
Administrative Officer,  
Malabar Cancer Centre, Thalassery  
Mobile: (+91) 9496048800  
Phone: 0490 2355881, Fax: 0490 2355880  
E-mail: [mcctly@gmail.com](mailto:mcctly@gmail.com), [aomcctly@gmail.com](mailto:aomcctly@gmail.com)  
Web: [www.mcc.kerala.gov.in](http://www.mcc.kerala.gov.in)

## **Right To Information Act**

Malabar Cancer Centre (MCC) has implemented the Right to Information Act 2005. Citizens can seek information about the activities of MCC by submitting a written request with contact details like Name, address, telephone number, etc and particulars of the information sought by submitting a fee of Rs.10 at the cash counter, or Demand Draft drawn in favour of the Director, Malabar Cancer Centre payable at Thalassery. Court fee stamp/post orders will not be considered.

In accordance with the provisions contained in the section 5(i) of the Right to Information Act, 2005 the following officers are designated as the State Public Information Officer and Appellate Authority of Malabar Cancer Centre.

### **Asst. Public Information Officer**

#### **Smt. Lasitha KV**

Store Keeper

Malabar Cancer Centre Thalassery  
Moozhikkara (P.O), Kannur Dist.,  
Kerala, India-670103.  
Phone:(+91)0490 2355881,  
Fax: (+91) 0490 2355880

### **Public Information Officer**

#### **Sri. A.K. Rajesh**

Administrative Officer

Malabar Cancer Centre Thalassery  
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Kerala, India-670103.  
Phone:(+91)0490 2355881,  
Mobile:(+91) 94960 48800  
Fax: (+91) 0490 2355880

### **Appellate Authority**

#### **Dr. B. Satheesan**

Director

Malabar Cancer Centre Thalassery  
Moozhikkara (P.O), Kannur Dist.,  
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## ***MALABAR CANCER CENTRE***

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