



MALABAR CANCER CENTRE



ANNUAL REPORT 2019-2020

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MALABAR CANCER CENTRE

(An Autonomous Institution under Govt of Kerala)
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ANNUAL REPORT 2019-20

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

CHAIRMAN

SHRI. PINARAYI VIJAYAN,
HON'BLE CHIEF MINISTER OF KERALA

VICE-CHAIRMAN

SMT. K. K. SHAILAJA TEACHER,
HON'BLE MINISTER FOR HEALTH & SOCIAL JUSTICE

ALTERNATE VICE-CHAIRMAN

SHRI. M M MANI, MINISTER FOR ELECTRICITY, KERALA

Members

- **Adv. A.N. Shamseer MLA**, Thalassery Assembly Constituency
- **Shri. K.V. Sumesh**, President, District Panchayat, Kannur
- **Shri. C.K. Rameshan**, Chairman, Thalassery Municipality
- **Dr. Rajan Khobragade IAS**, Principal Secretary, Department of Health & Family Welfare
- **Smt. Usha**, Additional Secretary, Department of Finance, Kerala
- **Secretary**, Department of Power, Kerala
- **Secretary**, Department of Science, Technology & Environment
- **Secretary**, Planning & Economic Affairs Department, Kerala
- **Director**, Rajiv Gandhi Centre for Bio Technology, Trivandrum
- **Director of Medical Education**, Directorate of Medical Education, Trivandrum
- **Dr. Rekha A Nair**, Director, Regional Cancer Centre, Thiruvananthapuram
- **District Medical Officer**, Kannur
- **An Eminent Medical Scientist**
- **One Nominee of The Ministry of Health**, Government of India
- **Dr. V.P. Sasidharan**, Principal, Medical College, Kozhikode
- **Dr. Sudhakaran K**, Principal, Medical College, Pariyaram
- **A Public Man from North Malabar Region** (To Be Nominated By Government of Kerala)
- **One Head of The Department Nominated From Malabar Cancer Centre**, Thalassery by The Government.
- **One Nominee of The Charitable Society** Established for Rehabilitation and Financial Assistance for Poor Cancer Patients.

MEMBER & SECRETARY

Dr. B. Satheesan, Director, Malabar Cancer Centre

EXECUTIVE COMMITTEE

CHAIRMAN

Dr. Rajan Khobragade, IAS, Principal Secretary, Health & Family Welfare Department

MEMBERS

Shri. Adv. A N Shamseer MLA

Shri. C K Rameshan, Chairman, Thalassery, Municipality

Secretary, Department of Power, Government of Kerala

Smt. Usha, Additional Secretary to Government, Finance

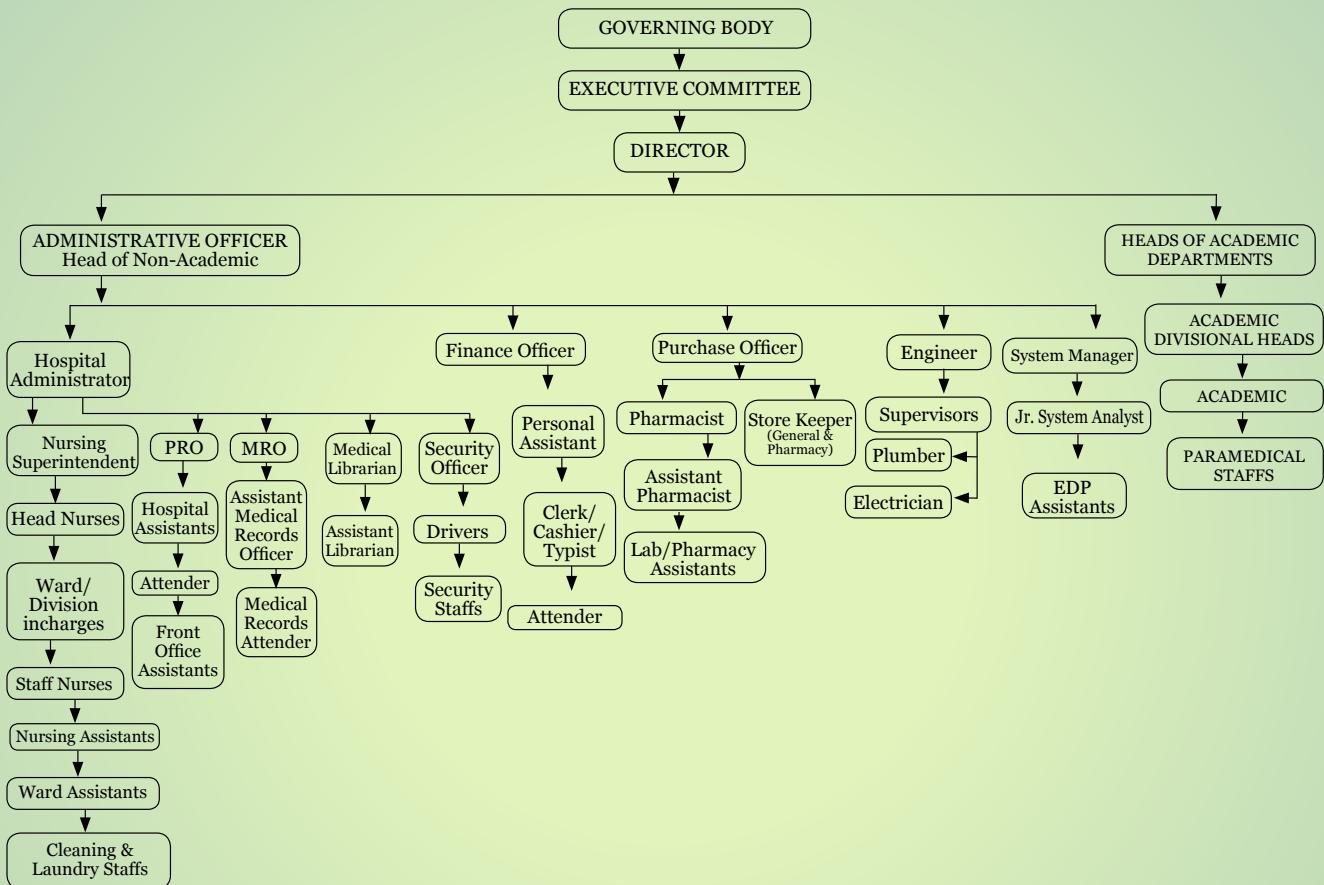
Secretary, Department of Planning & Economic Affairs, Government of Kerala

Dr. Rekha R Nair, Director, Regional Cancer Centre, Trivandrum

MEMBER/CONVENER

Dr. B. Satheesan, Director, Malabar Cancer Centre

ORGONOGRAM



FROM DIRECTOR'S DESK



The events and challenges in life gives the life its momentum. An organization also grows through the events, programs and small achievements. Though on a big canvas, these small steps may not be significant but it has quite hard work behind the same. There are a few things which may bring immediate results and some other which will bring results later only. But the actions are to be taken in the present. And its impact can be seen later.

The thrust of the year was on bringing in new equipment, devices and facilities in various levels of treatment. Improvements in service and treatment could be achieved through the addition of new technology, advanced equipment and the addition of qualified and well trained medical and Para medical staff

There were 6456 new registration during the year. The number of follow up visits during the period was 68555 and there were 4579 in-patients. Around 2118 new patients received radiation therapy and 1393 major surgeries were performed in two operation theatres. 156 students including 20 medical doctors, 2 MSW students, 1 medical physics interns and trainees etc. underwent short term training in MCC during this period. There are 65 research projects being carried out.

Community oncology department could play a significant role in MCC for cancer awareness and cancer control activities in various parts 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 14 cancer detection camps and 59 Exhibition and 127

awareness classes. 35 Blood donation camps could be conducted in kannur and nearby districts.

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 herewith.

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 for their exemplary support and guidance in nurturing MCC as an apex institution in the state. I expect this annual report would provide a bird's eye view on the institution in 2019-20 periods.

ADMINISTRATIVE OFFICER

BRIEF OVERVIEW

Malabar Cancer Centre (MCC) is an autonomous Centre, under Department of Health & Family Welfare, Government of Kerala. The cancer care in the state has evolved over past two decades and it is considered as one of the best facilities in the country. The Regional Cancer Centre in Thiruvananthapuram and Malabar Cancer Centre in Thalassery do cater to a large proportion of cancer patients in the state. There is a huge dependency on these Centres. The 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 endeavor to make the 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 reflects the growth and development of the institution and also the physical progress achieved by the Centre in hospital services. 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.

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 203 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 research and Clinical care. 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 HTIC-Chennai, various institutions of 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 and Kannur University.

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 2019-20

SL NO	PROFILE	TOTAL
1	NEW CASE	4491
2	NON CANCEROUS CASE	1965
	TOTAL REGISTRATION	6456
3	FOLLOW UP PATIENTS	68555
4	TOTAL PATIENTS	75843
5	IN PATIENTS	4579

SL NO	SURGICAL ONCOLOGY	TOTAL
1	MAJOR SURGERIES	1205
2	MINOR SURGERIES	596
3	TOTAL SURGERIES	1801
4	SCOPES	2261

SL NO	RADIATION ONCOLOGY	TOTAL
1	CURATIVE RT	957
2	PALLIATIVE RT	1076
3	BRACHY THERAPY	478
4	4D CT SIMULATION	1699

SL NO	CLINICAL HEMATOLOGY AND MEDICAL ONCOLOGY	TOTAL
1	OPD ATTENDANCE (CLINICAL HEMATOLOGY + PEDIATRIC ONCOLOGY)	15156
2	OPD ATTENDANCE (MEDICAL ONCOLOGY SOLID TUMOR DIVISION)	15700
3	NEW CASES IN OPD (CLINICAL HEMATOLOGY + PEDIATRIC ONCOLOGY)	961
4	DAY CHEMO ADMINISTERED	13416

SL NO	CLINICAL LABORATORY SERVICES AND TRANSLATIONAL RESEARCH	TOTAL
1	BIOPSY	3199
2	FNAC	696
3	CYTOMOGY	96
4	HISTOPATHOLOGY	5148
5	BLOOD DONATION	3006
6	BMA	676

SL NO	COMMUNITY ONCOLOGY	TOTAL
1	VOLUNTEER TRAINING PROGAMME(ECDC)	151
2	CANCER AWARENESS CLASSES	127
3	EARLY CANCER DETECTION CAMPS	14
4	EXIBITION	59

SL NO	IMAGEOLOGY	TOTAL
1	X-ray	5776
2	USG	2048
3	MAMMOGRAM	2444
4	CT SCAN	7464
5	MRI	1182

SL NO	EDUCATION & TRAINING	TOTAL
1	MEDICAL DOCTORS	17
2	BSc/MSc MLT,BSc/ MSc LIFE SCIENCE	104
3	MSW	09
4	OBSERVERSHIP	02
5	INTERNSHIP	27

SL NO	BSc COURSE	DURATION/ SEAT
1	MRT	4/25
2	NURSING	4/40

SL NO	DNB COURSE	DURATION/ SEAT
1	SURGICAL ONCOLOGY	3/3
2	PATHOLOGY	3/1
3	RADIATION ONCOLOGY	3/2

SL NO	FELLOWSHIP PROGRAMME	DURATION/ SEAT
1	HEAD AND NECK ONCOLOGY	2/1
2	GYNAECOLOGIC ONCOLOGY	2/2
3	HEMATO-ONCOLOGY & BMT	1/2
4	GASTROINTESTINAL ONCOLOGY	1/2
5	ORAL ONCOLOGY	2/1
6	APHAERESIS MEDICINE	1/2
7	ONCOPATHOLOGY	1/1
8	HEAD AND NECK PATHOLOGY	1/1
9	ONCOLOGY NUTRITION	1/1
10	ONCO-IMAGING & INTERVENTIONAL RADIOLOGY	1/2
11	HIGH PRECISION RADIOTHERAPY	1/1
12	MOLECULAR PATHOLOGY	1/1

SL NO	COMMITTEE MEETINGS	TOTAL
	EXTERNAL COMMITTEE	
1	SCIENTIFIC ADVISORY COMMITTEE (SAC)	01
2	RESEARCH ADVISORY COMMITTEE (RAC)	01
3	INSTITUTIONAL ETHICS COMMITTEE (IEC)	03
4	INTRA MURAL RESEARCH FUND REVIEW	01
5	BUILDING COMMITTEE	2
	INTERNAL COMMITTEE-ACADEMIC	
1	ACADEMIC COUNCIL	12
2	INSTITUTIONAL REVIEW BOARD –SCIENTIFIC COMMITTEE (IRB-SRC)	19
	INTERNAL COMMITTEE-ADMIN	
1	HOD COMMITTEE	04
2	ADMIN COMMITTEE	07
3	NURSING ADMINISTRATION	03
4	SCHEME REVIEW COMMITTEE	11
5	BIOMEDICAL WASTE MANAGEMENT COMMITTEE	05
6	PHARMACO THERAPEUTICS COMMITTEE	04
7	HOSPITAL BLOOD TRANSFUSION COMMITTEE	04
8	HOSPITAL INFECTION CONTROL COMMITTEE	06
9	MEDICAL RECORD AUDIT COMMITTEE	02
10	FACILITY MANAGEMENT & SAFETY COMMITTEE	02
11	CLINICIANS COMMITTEE	08
12	GRIEVENCE HANDLING COMMITTEE	03
13	INTERNAL AUDIT COMMITTEE	01
14	QUALITY CELL	04
15	HOD COMMITTEE QA	04
16	CODE BLUE COMMITTEE	04
17	CREDENTIALING & PRIVILEGING COMMITTEE	01
18	RADIATION SAFETY COMMITTEE	01
19	CLINICAL AUDIT COMMITTEE	03

DEPARTMENTS AND DIVISIONS

ACADEMIC DEPARTMENTS

1. **DEPARTMENT OF CLINICAL HAEMATOLOGY AND MEDICAL ONCOLOGY**
 - CLINICAL HEMATOLOGY DIVISION
 - MEDICAL ONCOLOGY DIVISION
 - DIVISION OF PAEDIATRICS/ PAEDIATRIC ONCOLOGY
2. **DEPARTMENT OF SURGICAL ONCOLOGY**
 - SURGICAL ONCOLOGY DIVISION
 - REHABILITATION-PHYSIOTHERAPY SPEECH AND SWALLOWING THERAPY UNIT
 - CLINICAL NUTRITION AND DIETETICS UNIT
 - CSSU
3. **DEPARTMENT OF RADIATION ONCOLOGY**
 - RADIATION ONCOLOGY DIVISION
 - RADIATION PHYSICS DIVISION
4. **DEPARTMENT OF IMAGEOLOGY**
5. **DEPARTMENT OF CLINICAL LABORATORY SERVICES AND TRANSLATIONAL RESEARCH**
 - ONCOPATHOLOGY DIVISION
 - BIOCHEMISTRY DIVISION
 - MICROBIOLOGY DIVISION
 - BLOOD BANK AND TRANSFUSION MEDICINE DIVISION
 - GENETICS ,CYTOGENETICS MOLECULAR ONCOLOGY DIVISION
6. **DEPARTMENT OF DENTISTRY AND REHABILITATION**
7. **DEPARTMENT OF CANCER PALLIATIVE MEDICINE**
 - CANCER PALLIATIVE MEDICINE DIVISION
 - PSYCHO-ONCOLOGY AND CLINICAL PSYCHOLOGY DIVISION
8. **DEPARTMENT OF COMMUNITY ONCOLOGY**
9. **DEPARTMENT OF CANCER REGISTRY AND EPIDEMIOLOGY**
 - CANCER REGISTRY AND EPIDEMIOLOGY DIVISION
 - MEDICAL RECORDS DIVISION
 - HEALTH INFORMATION TECHNOLOGY DIVISION
 - CLINICAL RESEARCH AND BIOSTATISTICS DIVISION
10. **DEPARTMENT OF ANESTHESIOLOGY**

NON ACADEMIC DEPARTMENTS

1. **DEPARTMENT OF GENERAL ADMINISTRATION**
 - GENERAL ADMINISTRATION DIVISION
 - HOSPITAL ADMINISTRATION
 - ACCOUNTS DIVISION
 - PURCHASE/ STORES DIVISION & PHARMACY
 - HUMAN RESOURCES AND ESTABLISHMENT DIVISION
 - SECURITY DIVISION
 - LIBRARY AND INFORMATION SCIENCE DIVISION
2. **DEPARTMENT OF ONCOLOGY NURSING**
3. **DEPARTMENT OF ENGINEERING AND MAINTENANCE**

ACADEMIC DEPARTMENTS & DIVISIONS

DEPARTMENT OF CLINICAL HAEMATOLOGY AND MEDICAL ONCOLOGY



INTRODUCTION

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

- a. Clinical Hematology
- b. Medical Oncology
- c. Paediatrics/Paediatric Oncology

ACADEMIC ACTIVITIES

Department regularly conducts department academics in the form of seminars, case topic presentations and journal clubs. Regular training sessions for nurses are carried out

STATISTICS

SL NO	TITLE	NUMBER OF CASES
1	OPD attendance (Clinical hematology + Pediatric oncology)	15156
2	New cases in OPD(Clinical hematology + Pediatric oncology)	961
3	OPD attendance(Medical Oncology solid tumor division)	15700
4	Bone Marrow study	519
5	Lumbar puncture with I.T MTX	353
6	Day Chemo administered	13416

BONE MARROW TRANSPLANT

	AUTOLOGOUS	ALLOGENIC
TOTAL	20	7

INTENSIVE CHEMO ADMINISTERED AS IN PATIENT		
	INTENSIVE CHEMO WARD	PEDIATRIC ONCOLOGY WARD
TOTAL	139	179

CONFERENCES ATTENDED

1. Dr Manuprasad attended 17th Annual Conference of Women's Cancer Initiative and Tata Memorial Hospital on Gynecological cancers at Mumbai Nov 2019 as Faculty
2. Dr Praveen attended annual conference of ISHBT-Hematocon 2019 at New Delhi –Poster on Fear of Cancer Recurrence in Myeloma Nov 7th -10th
3. Dr Manuprasad attended 3rd Year End Review in Lung Cancer December 20-21 at Mumbai as Faculty
4. Dr Manuprasad attended MVR Cancon 2019 Aug 30-Sept 1 st MVR Cancer centre, Calicut as a faculty
5. Dr Manuprasad presented a Poster - Gemcitabine/Dexamethasone/Cisplatin (GDP) Experience from a tertiary cancer centre-1rst annual conference of Hematology Cancer Consortium Aug 2019,Cochin
6. Dr Manu Prasad Poster - Adjuvant short course Transtuzumab in breast cancer MVR CANCON 2019 30th Aug to 1st Sept MVR Cancer centre Calicut
7. Dr Praveen attended 3rd Year End Review in Lung Cancer December 20-21 at Mumbai as Faculty
8. Dr Praveen attended Neuro onco EBM as faculty at TMH, Mumbai on 28th Feb to March 1st as faculty
9. Dr Vineetha presented a Topic presentation at guest faculty programme at Government medical college , Kannur "Different faces of AIHA" in November 2019
10. Dr Vineetha presented topic "Transfusion errors-challenges in clinical practise" at CME on Safety Measures of Healthcare Workers in Clinical Settings at MCC, Thalassery in January 2020
11. Dr Vineetha presented the poster "An uncommon case of congenital neutropenia in a 9 year old child"at PHOCON 2019 at Varanasi.
12. Dr Vineetha presented poster "Hypomethylating agents in myeloid malignancies : retrospective audit from a tertiary care centre" at HCC 2019 at Kochi
13. Dr Vineetha attended CME in Pediatric Hematology and Oncology on Feb 1st and 2nd at P.G.I, Chandigarh as delegate.
14. Dr Chandran k Nair attended "EBMT" Meet at Delhi on 25 th and 26 may 2019 as faculty
15. Dr Chandran k Nair attended CME Program in advance in hematology at M.S. Ramaiah Medical College Bangalore On 2nd November 2019 as faculty
16. Dr Chandran k Nair attended "APICON KANNUR "On 23 November 2019
17. Dr Chandran k Nair attended "PHARMACY CME "On 1st March 2019

CONFERENCES CONDUCTED

- Kerala PHOCON 2019 – Pediatric Oncology division conducted the annual state conference of pediatric hematology oncology chapter of IAP Kerala at Malabar Cancer Centre on 6th October 2019
- ASCO UPDATE 2019- Key abstracts in ASCO 2019 - for faculty and residents in MCC on 06/07/2019

PUBLICATIONS

1. Avaronnan Manuprasad, Vineetha Raghavan, Zoheb raj, Sajeev Kumar PB, Praveen Kumar Shenoy, Chandran K Nair Unmet need in patients with multiple myeloma –a cross sectional study from India Oncology and Radiotherapy Journal (Onkologia I radioterapia) 1 (46) 2019: 090-094
2. Manuprasad A, Ganesan P, Mahajan V, Ganesan TS, Radhakrishnan V, Dhanushkodi M, Sagar TG. Docetaxel Induced Lung Injury: An under recognized complication of a commonly used chemotherapeutic agent. Indian Journal Of Medical and Pediatric Oncology 2019;40:208-11
3. Manuprasad A, Praveen Kumar Shenoy, Joneetha Jones, Vinin NV, Geetha M. Short Course Adjuvant Trastuzumab in Breast Cancer – Experience from a tertiary cancer centre in rural India- accepted in Cancer Research Statistics and Treatment 2020;3: 69.
4. Manuprasad A, Praveen K Shenoy, Shiljina KM, Vineetha Raghavan, Chandran KNair- Gemcitabine/ Dexamethasone/Cisplatin (GDP) Salvage in relapsed lymphoma-A single institutional experience - Cancer Res Stat Treat 2020;3: 13-8
5. Dr Vineetha, Dr Jithin T K, Dr Satheeshan B 'Predictors of survival in children with osteogenic sarcoma undergoing Limb Salvage Surgery - experience from a tertiary cancer centre in rural India' accepted for publication in IJMPO in January 2020
6. Nair CK, Selvaraj K, Raghavan V, A M, Shenoy PK, Kurup A, Duraisamy K, Shringarpure K, Venugopal V. Limiting Factors for Autologous Transplantation Among Transplant-eligible Multiple Myeloma Patients: Lesson From A Tertiary Cancer Centre In Rural India. Leuk Res. 2019 Aug
7. Kurup A, Nair CK, Raghavan V, A M, PK, Manuprasad A. Pattern of extranodal involvement and its impact on survival in Diffuse Large B Cell Lymphoma from a tertiary cancer centre in rural India. Journal of Cancer Research and Therapeutics
8. M. S. Biji, V. Vinayagamoorthy, T. K. Jithin, Vineetha Raghavan, Kalaiselvi Selvaraj, Karthickeyan Duraisamy, Kalpita Shringarpure, S. S. Abhinaa, Vanitha Priya Deenathayalan, Kedar Mehta, Priya Rathi & Lulu Mathews (2019) Pain Management in Children With Cancer Using World Health Organization Guidelines at a Tertiary Cancer Center in Rural India, Journal of Pain & Palliative Care Pharmacotherapy, DOI: 10.1080/15360288.2019.1651438
9. Infection at diagnosis—a unique challenge in acute myeloid leukemia treatment in developing world. Jesu Pandian, Vineetha Raghavan, A Manuprasad, Praveen Kumar Shenoy & Chandran K. Nair .Supportive Care in Cancer (2020)

NEW PROJECTS

1. Factors Influencing Stem Cell Mobilization In Patients With Hematologic Malignancies
2. Outcomes of different treatment modalities in Autoimmune haemolytic Anaemia
3. Outcomes of first 100 transplants in a newly set up transplant centre located in rural part of southern India
4. Predictors of blood transfusion requirements in AML
5. Transfusion dependency and intensity on outcomes in AML
6. Utility of surveillance mammogram in patients with treated non metastatic breast cancer
7. Impact of palliative chemotherapy in HRQOL in patients with advanced NSCLC
8. Delay in treatment affecting prognosis in ALL

OTHER ACTIVITIES

PROGRAMS CONDUCTED

- Started conducting Parent support group meetings for parents of children with cancer from November 2019 along with the monthly parent orientation program and birthday celebration.
- **RAY OF HOPE 2019**
 - The pediatric Oncology team Conducted Ray of HOPE - Survivor Family Meet 2019 for the parents of children who survived cancer and the parents of children undergoing cancer treatment at MCC. The program was held on 22 December 2019 from 9 am to 1.30 pm.
 - “Bundle of HOPE “a new project of HOPE Child Cancer Care Foundation. The project aims to provide a bag of essentials which contains specific things would require during their stay at the hospital to the parent when a child is diagnosed with cancer.
 - Parents support Group “Mukulam” - Support group of parents of children with cancer which aims to alleviate the distress among them.
- **NAVAJEEVAN** - get together of survivors (post BMT) conducted on 31st august 2019 at seminar hall, MCC.
- MoU with NGOs - Signed MoU with 2 NGOs - HOPE Foundation and Cuddles Foundation - in improving quality of care provided to children with cancer by providing Manpower support.

PROGRAM CONDUCTED

- Public awareness campaign in relation to ICCD 2020-12/2/20
- conducted an awareness campaign regarding pediatric cancers at Govt. Brennen College, Thalassery on 12/2/2020 for the college students. Program was supported by Indian Academy of Pediatrics, HOPE foundation, Care and Cure foundation and various student bodies at Brennen College.
- Campaign included an Ottan thullal program, through which story of a child with cancer was told. The story emphasized how the society reacted to such a diagnosis, dilemma of parents and need for scientific treatment. Ottan thullal was performed by Kalamandalam Mahendran and team. Script for the same was written by Dr Adharsh (MCC).
- A poster competition for college students was conducted on the theme - “With scientific treatment and support from society, cancer in children is curable”.
- An awareness class regarding childhood cancer- myths and reality, role of society and how they can help was taken by Dr Jithin T K (Pediatric Oncology, MCC) for the college students. A session on Need for blood and stem cell donation and the newly introduced stem cell registry at MCC was taken by Dr Mohandoss (Transfusion Medicine, MCC).
- On the occasion of ICCD 2020, an awareness campaign at General Hospital Thalassery was conducted. Pamphlets with information regarding childhood cancer and role of society were distributed among the people visiting the general hospital.

NEW PROCEDURES

First Allogeneic BMT for storage disorder/genetic disorder at MCC in a 2 year old child with MPS type 1

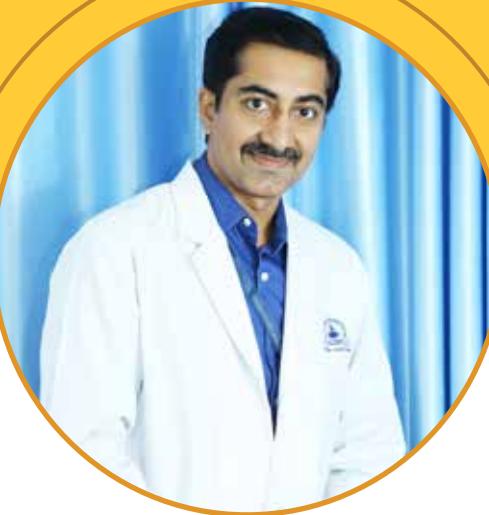
COURSES:

1. Institutional Fellowship in Hemato-oncology and BMT-1 seat

STAFF

SL NO	NAME	DESIGNATION
1.	Dr Chandran K Nair	Professor& Head
2.	Dr Vineetha Raghavan	Assistant Professor
3.	Dr Manuprasad	Assistant Professor
4.	Dr Praveen Kumar Shenoy	Assistant Professor
5.	Dr Jithin T K	Assistant Professor
6.	Dr.Gopakumar	Assistant Professor
7.	Dr. Anju R Kurup	Lecturer

DEPARTMENT OF SURGICAL ONCOLOGY



INTRODUCTION

The academic aspect of the department got strengthened this year as more residents joined. Totally there are 13 residents in the department including 5 DNB residents and 2 FHNO fellows. The academic activities are streamlined. Infrastructure improved this year with the addition of renovated

operation theatres which abide the NABH standards. Three new faculties joined – Dr Anand Ebin, Dr Sandeep Vijay and Dr Anoop A. This has strengthened the department further. Dr Sajith Babu got promoted to Professor in Nov 2019 and Dr Nizamudheen as Associate Professor from Jan 2020.

ACTIVITIES AND ACHIEVEMENTS

1. TOTAL NUMBER OF MAJOR SURGERIES PERFORMED: 1205

SL NO	SITE	NUMBER
1	Head and Neck	341
2	Breast	346
3	GIT	278
4	Urology	034
5	Gynecology	169
6	Bone & Soft tissue	021
7	Thoracic	012
8	Neurosurgery	000
9	RFA	004
	TOTAL	1205

2. MINOR SURGERIES DONE IN BRAHCY OT: 596

SL NO	PROCEDURE	NUMBER
1	Biopsy	257
2	Tracheostomy	051
3	Central Lines	033
4	Orchidectomy	041
5	Revision surgery	123
6	Colposcopy	018
7	Wide excision	010
8	Wound debridement	016
9	D&C	016
10	Others	031
	TOTAL	596

3. TOTAL NUMBER OF ENDOSCOPIES DONE: 2261

SL NO	PROCEDURE	NUMBER
1	DLDP	1396
2	OGD	500
3	Bronchoscopy	27
4	Colonoscopy	310
5	NPL scopy	04
6	Nasal endoscopy	02
7	TEP	06
8	Dilatation	12
9	ERCP	02
10	PEG insertion	02
11	others	00
	TOTAL	2261

PAPERS PUBLISHED

1. Pareekutty NM, Kattepur AK, Alapatt JJ, Satheesan B. Unplanned excision in soft-tissue sarcomas – Is it the unkindest cut of all?. *Cancer Res Stat Treat* 2019;2:152-7
2. Nizamudheen M Pareekutty, Vivek M Ananthakrishnamoorthy, Abhay K Kattepur, Satheesan Balasubramanian, Roopa Vazhayil, RatheesanKumbakara. Anterior tibial artery preservation during limb salvage surgery: a novel technique with possible functional benefits. *Onkologia Radioterapia*. Volume 13, Issue 4, 2019
3. Ankalkoti B, Pareekutty NM, Kattepur AK, Kumbakara R, Vazhayil R, Balasubramanian S. Life and limb after limb salvage surgery for osteosarcoma in an Indian tertiary cancer center. *Cancer Res Stat Treat* 2019;2:145-51

4. Ankalkoti B, Satheesan B, Dipin J, Nizamudheen M P, Sangeetha N. Retrospective Audit of Various Surgical Modalities Adopted for Giant Cell Tumor in a Rural Tertiary Cancer Center. Indian Journal of Surgical Oncology, 06 May 2019, 10(3):489-493
5. Kattepur AK, Pareekutty NM, Alapatt JJ, Balasubramanian S. Acute necrotizing pancreatitis after esophagectomy: A nail in the coffin? J Curr Oncol 2019; 2:84-8.
6. Vijay S, Thavarool SB, Manu S, George N, Nair RR. Low survival of advanced laryngeal cancers: Time to change the treatment regime?. J Head Neck Physicians Surg 2019;7:67-71
7. Dharmarajan, Adarsh et al. Impact of perioperative period on disease-free survival among carcinoma ovary patients treated with the interval cyto-reductive surgery at a tertiary cancer centre in Kerala, India: a retrospective study. International Journal of Reproduction, Contraception, Obstetrics and Gynecology, [S.l.], v. 9, n. 1, p. 28-33, dec. 2019. ISSN 2320-1789.

CONFERENCES CONDUCTED

1. TELY ENT -2019, recent updates in head and neck surgery, held at Malabar cancer Centre, on 28th July 2019.

CONFERENCES PRESENTATIONS

1. Dr Sajith Babu was invited as Speaker at KASICON, conducted by dept of General Surgery, Thrissur.
2. At IAOHNS 2019 and 11th SAARC ENT Conference held at Gurgaon on 16-18th Aug 2019 with Dr Sajith Babu had consultant paper presentation on “Tracheo esophageal prosthesis insertion under endoscopic guidance and local anaesthesia- Feasibility and outcome”
3. Dr Sajith Babu was invited for Faculty Presentation on “Infrahyoid flap” and judge for the poster and video presentations at the 19th National conference of FHNO 2019 and IFHNOS 2019 held at Chennai from 10-13th October 2019.
4. Dr Sajith Babu was invited as Faculty at Oncosurg 2019 held at Tata Memorial Cancer Hospital, 2019 with video presentation on infra hyoid flap.
5. Dr Sandeep Vijay – Survival of larynx, poster at FHNO 2019
6. Dr Naveen G- Oral presentation on swallowing in tongue cancers at FHNO 2019
7. Dr Raveena Nair- Poster on complications in head and neck surgery at FHNO 2019
8. Dr Ajayakumar - Oral presentation on contra lateral neck at FHNO 2019
9. Dr.Vivek – oral presentation on imaging in unplanned excision in limb sarcomas. Date & time

COURSES

1. DNB Surgical oncology- 3 seats
2. Institutional Fellowship in Head and neck oncology-2
3. Institutional Fellowship in Oral Oncology-1
4. Institutional Fellowship in Gynaec oncology-2

STAFF

SL NO	NAME	DESIGNATION
1.	Dr Satheesan B	Professor & Director
2.	Dr Sajith Babu T P	Professor & HOD
3.	Dr Nizamudheen	Associate Professor
4.	Dr Adarsh Darmarajan	Asst Professor
5.	Dr Shamna M	Asst Professor
6.	Dr Anand Ebin Thomas	Asst Professor
7.	Dr Ashitha	Asst Professor
8.	Dr Sandeep Vijay	Asst Professor
9.	Dr Anoop A	Asst Professor
10.	Mr Rasiq	Endoscopic Technician

SPEECH AND SWALLOWING UNIT



INTRODUCTION

A speech language pathologist is involved in the rehabilitation of the patients with head and neck cancers. Swallow and speech pathology services for both inpatients and outpatient are provided.

INPATIENT/OUTPATIENT, DIAGNOSTIC AND THERAPEUTIC SERVICES PROVIDED

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

STATISTICS

SL NO	SERVICES	NUMBER
1	Speech consultation	976
2	Swallowing therapy	603
3	Swallowing assessment	333
4	Speech therapy	572
5	Speech assessment	73
6	FEES	101
7	Videofluoroscopy	10

STAFF

SL NO	NAME	DESIGNATION
1.	Mr. Aneeth	Speech and swallowing Therapist

REHABILITATION & PHYSIOTHERAPY UNIT



INTRODUCTION

Cancer rehabilitation requires multidisciplinary approach. Physiotherapy division at MCC also play important roles in rehabilitation of Patients. Here we asses and manage all kind of surgical Oncology patients. Consultation given to radiation oncology, hemato oncology, pediatric oncology, medical oncology and also palliative patients.

CLINICAL SERVICES: STATISTICS

SL NO	ITEMS	NUMBER
1	Total Number of patients seen in OPD	754
2	Total Number of patients seen in IP	2990

STAFF

SL NO	NAME OF STAFF	DESIGNATION
1	Mrs. Roopa	Physiotherapist

CLINICAL NUTRITION AND DIETETICS UNIT



INTRODUCTION

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

CLINICAL SERVICES: STATISTICS

SL NO	ITEMS	NUMBER
1	Total Number of patients seen in OPD	2593
2	Total Number of patients seen in IP	8811

ARTICLE PUBLISHED

1. Article published in health magazine Arogya masika regarding Dieting Do's and don'ts on July 2019
2. Article in Arogya masika, health magazine regarding "Super foods to reduce cholesterol" in the month of august 2019
3. Article published in Arogyapadmam Health magazine regarding "Health benefit of sea foods" in August
4. Article published in Arogyapadmam regarding "Small fish are healthier" in October 2019.

STAFF

SL NO	NAME OF STAFF	DESIGNATION
1	Mrs. Reena	Dietitian

CSSU (CENTRAL STERILE SUPPLY UNIT)



INTRODUCTION

The Central Sterile Supply Department work started from in the month of March 2018. Now the work going on NABH Standard.

The CSSD designed by three separated zone. Zone-1 is unclean area, Zone-2 clean area and Zone -3 sterile area. All required equipment is advanced model.

1. Steam sterilizer
2. Steam Sterilizer
3. plasma sterilizer
4. ETO sterilizer
5. Sealing machine
6. Washer disinfecter
7. Ultrasonic cleaner
8. Hot air oven
9. Hand labelling machine
10. Gauze cutting machine
11. Compressed Air gun
12. Reels cutting machine
13. Stainless steel furnitures, computers, wooden table, chairs etc...

STAFF

SL NO	NAME	DESIGNATION
1.	Mr. Krishna Kumar	OT Anesthesia Technician
2.	Mr. Midhun	Nursing Assistant

DEPARTMENT OF RADIATION ONCOLOGY



INTRODUCTION

Department of Radiation Oncology has 8 radiation oncologists, 4 Medical physicists and 10 Radiotherapy technicians and supporting staff. The department is equipped with 2 linear accelerators (Varian - ClinaciX, and Elekta – Versa HD), one HDR brachytherapy unit, one CT simulator, one conventional simulator (IMAGIN – under installation and one Telecobalt machine (Equinox) which is under installation.

ACTIVITIES & ACHIEVEMENTS

1. Sixth batch of Physics interns joined the department from October 2019. They will be doing their internship for one year. The

four students will do their project work along with the routine quality assurance and clinical work. Regular academic sessions are conducted for them under the guidance of medical physicists.

2. Ninth batch of BSc MRT students (KUHS) joined in 01/09/19
3. Sixth Batch of Bsc MRT joined for the year training in April 2019
4. Department of radiation oncology conducted ARC 2019 for Medical Physicists and ART 2019 for radiotherapy technicians and Radiographers.

PATIENT SERVICES

SL NO	TREATMENT GIVEN	NUMBER
1	Patients treated with Radiotherapy	2118
2	Palliative Treatments	1076
3	Radical Treatment	957
4	Treatment on Linear Accelerator	2033
5	Number of 2DRT	179
6	Number of VMAT	350
7	Number of IMRT	3

8	Number of 3DCRT	385
9	Number of ABC	6
10	Number of Electrons	5
11	Number of SBRT	5
12	Number of Hybrid Arc	24
13	Treatment with HDR Brachytherapy	478
14	Intracavitary Brachytherapy	470
15	Interstitial Brachytherapy	8
16	Total number of cases planned with CT simulator	1707
17	Number of Brachytherapy simulation	251
18	Total number of cases planned on conventional simulator	116

PROJECTS

COMPLETED PROJECTS

SL NO	TITLE	PI
1	Dose volume analysis for acute gastrointestinal toxicity in patients on pelvic radiotherapy	Dr.Geetha M
2	Patterns of failure in node positive cervical cancer patients treated with radiotherapy	Dr.Geetha M
3	Dosimetric comparison of tandem and ovoids tandem and ring application for intracavitarybrachey therapy in carcinoma cervix	Dr.Vinin
4	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
5	Is oral metronomic chemotherapy the way ahead for advanced head & neck cancer treated with palliative intent	Dr. Vinin.N.V
5	Orgaon at risk doses in three dimensional conformal radio therapy in carcinoma breast following breast conservation surgery	Dr.Jonnetha Jones
6	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
7	A study on setup variations during treatment and assessment of adequacy of current CTV- PTV margins in head & neck radiotherapy	Dr.Greeshma
8	Survival analysis of high grade gliomas a tertiary cancer centre experience	Dr.Shoaib Nawaz
9	Qualitative external beam radiotherapy in carcinoma Esophagus: A quality of life analysis	Dr.Shoaib Nawaz

10	Thyroid gland- evaluating the need for a dose volume constraint	Dr.Anindya Mukherjee
11	Association between quality of life and clinical response to definitive chemo radiotherapy in patients with carcinoma cervix	Dr.Anindya Mukherjee
12	Bowel and bladder toxicity and volumetric dose parameters in carcinoma cervix patients in treated with definite radiation therapy	Dr.Arun P Narendran

ONGOING PROJECTS

SL NO	TITLE	PI
1	Association of Delayed adjuvant Radiation therapy and survival in endometrial cancer	Dr. Geetha.M
2	Patterns of failure in cervical cancers patients treated with radiation therapy	Dr. Geetha.M
3	CT and MRI based gross tumour volume comparison in laryngopharyngeal cancers	Dr. Vinin. N. V
4	Treatment outcome and outcome in elderly patients treated with radical radiation in head and neck cancers	Dr. Joneetha Jones
5	A study on patterns of locoregional recurrence in patients with carcinoma breast receiving adjuvant radiotherapy	Dr. Greeshma. K.E
6	Impact of Extra Nodal Extension in oral cancers-	Dr. Shoaib Nawaz. P.N
7	Inter-fractional, bladder and rectal volume variation and prostate displacement in VMAT for carcinoma prostate	Dr. Arun. P. Narendran
8	Tolerance of preoperative chemoradiotherapy in elderly patients with locally advanced Rectal cancer	Dr. Nabeel Yahiya
9	An audit of treatment package time in oral cavity cancer patients treated with adjuvant radiotherapy	Dr. Akhil. P. Suresh
10	Dosimetric comparison of Flattened and Flattening Filter Free beams in VMAT Treatment Plans of Head and Neck Cancers	Silpa Ajay Kumar
11	Dosimetric study on breathing adapted radiotherapy.	Suja.C.A
12	Surface dose perturbation due to airgap between patient and bolus in electron beam therapy	Resmi. K. Bharathan
13	Dosimetric Analysis of Multiple Treatment Planning Techniques for Synchronous Bilateral Breast Carcinoma	Lisha Jose

PUBLICATIONS

1. Late Toxicities Among Laryngopharyngeal Cancers Patients Treated With Different Schedules of Concurrent Chemoradiation at a Rural Tertiary Cancer Care Center Geetha Muttath, NV Vinin, Kalpita Shringarpure, Joneetha Jones, Satheesan Balasubramanian, Sajithbabu Thavarool, Shilpa Ajaykumar.
2. Stereotactic Ablative Body Radiotherapy in Non-small Cell Carcinoma Lung in Elderly: Initial Experience from a Rural Tertiary Cancer Centre Vinin NV, Joneetha Jones*, Geetha M, Nabeel Yahiya, Shoaib Nawaz PN, Arun P Narendran, Greeshma KE, Nidhin Ra D and Resmi K Bharathan

3. Dosimetric comparison of tandem and ovoids with tandem and ring for intracavitary brachytherapy for carcinoma cervix Vinin NV, Adarsh Dharmarajan2, Sahin PM1, Joneetha Jones1, Resmi K Bharathan1, Nabeel Yahiya1, Geetha Muttath.
4. Comparison of ICRU and GEC-ESTRO Organ at Risk Doses in Intracavitary Brachytherapy for Carcinoma Cervix Vinin NV, Joneetha Jones, Shimjith Narayanan, Resmi K Bharathan, Nabeel Yahiya EK, Arun P Narendran, Greeshma KE, Shoaib Nawaz PN and GeethaMuttath Department of Radiation Oncology, Malabar Cancer Centre, Kerala, India.

STAFF

SL NO	STAFF	DESIGNATION
1	Dr.Geetha.M	Associate Professor & Head
2	Dr.Vinin.N.V	Associate Professor
3	Dr.Joneetha Jones	Assistant Professor
4	Dr.Greeshma.K.E	Assistant Professor
5	Dr. Shoaib Nawaz.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.ArunKumar.E.S	Dosimetrist
15	Mrs. Preethy. U	Dosimetrist
15	Mrs.SrijiSoman	Technician
16	Mrs.Rijisha	Technician
17	Mr.Nijeesh.P.T	Technician
18	Mr. Harshal. C.H	Technician
19	Mrs.Beena.P.K	Technician
20	Mrs. Dhanya.V	Technician
21	Mr. Faisal.A	Technician
22	Mrs. Gayatri	Technician
23	Mrs. Rajitha	Technician
24	Mr. Sunoj. K. Anand	Technician
25	Mr.Sandeep Kumar	Attender
26	Mr. Sujith.T	Attender
27	Mrs. Shijila	Staff nurse
27	Mrs. Sumitha	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 and the Automated Breast Ultrasound (iABUS by Episonica)., New extension block of Imageology The new additions are interventional radiology suit and new high end fluoro CT

NEW COURSES STARTED

Started Fellowship programme in Oncoimaging and Interventional Radiology in February 2019. One candidate has successfully completed the course. Department is in the process of starting Breast imaging fellowship and Diploma in Radiodiagnosis under National Board.

ACTIVITIES AND ACHIEVEMENTS

1. Installation of high end Fluoro- CT completed and started functioning from March 2020 onwards.
2. Division of Interventional Radiology (IR) was started functioning from January 2020. Installation of DSA was completed on December 2020 and first patient was treated on 21/01/2020. Till the end of March, 18 patients were treated in IR. Treatment provided includes Trans-arterial chemoembolization, percutaneous transhepatic biliary drainage, biliary stenting, Radiofrequency ablation and Fluoro- guided NG/NJ insertion.
3. Completed the tender process of PET CT and tender process for portable digital X ray is in progress.
4. Department received a high end ultrasound and portable digital x ray from Samsung company as part of Corporate Social Responsibility (CSR) fund.

CLINICAL SERVICES:

The following are the statistics for the Department during the year

SL NO	ITEMS/PROCEDURES	NUMBERS
1	No. of X rays	5776
2	Portable x ray	536
3	USG	2048
4	Mammogram	2444
5	CT	7464
6	MRI full study	1556
7	MR RT planning	121
8	MRI screening studies	370
9	USG guided biopsy	202
10	USG guided FNAC	215
11	USG guided aspiration	39
12	USG guided wire localization	45
13	USG guided pigtail insertion	10
14	CT guided FNAC/Biopsies	299
15	CT guided pigtail insertion	6
16	Stereotactic wire localization -	10
17	Robot guided RFA	6
18	Robot guided FNAC/biopsy	4
19	Coiling	11
20	Barium studies	24
21	Video fluoroscopy	1
22	C arm procedures	0

INTERVENTIONAL RADIOLOGY

SL NO	ITEMS/PROCEDURES	NUMBERS
1	TACE	04
2	RFA	06
3	Percutaneous transhepatic biliary drainage	01
4	PTBD + Biliary stenting	01
5	NJ/NG tube	03

Conferences, Seminars, Workshop and presentations

- Mrs. Sheena T P, radiographer of Department of Imageology presented a poster "Retrospective audit of mammographically detected microcalcification only BIRADS 4 breast lesion with histopathological correlation" in 19th Congress of the ASEAN Association of Radiology, Singapore on 15th-17th August, 2019.

- b. Conducted ART 2019, Imaging and radiotherapy techniques in pelvic oncology – An appraisal, organized by Dept. of Imageology & Dept. of Radiation Oncology in association with ISRT Kerala chapter at MCC on 23rd November, 2019
- c. ‘Role of mammogram in predicting molecular subtype of breast cancers’ - Presented by Dr. Srikiran at BISICON 2019, 7th Annual Conference of Breast Imaging Society of India, Hyderabad.

RESEARCH PROGRAMS

ONGOING PROJECTS IN MCC

- 1. ‘Diagnostic accuracy of signal intensity ratio in in-phase and opposed phase of phase imaging for characterisation of benign and malignant vertebral lesions’.
- 2. Spectrum of pulmonary findings in HRCT of haematological malignancies
- 3. Role of mammography in prediction of molecular subtypes
- 4. Synchronous metastasis in carcinoma rectum patients with extramural venous invasion

COMPLETED PROJECTS IN MCC

- 1. 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.
- 2. Accuracy of diffusion weighted imaging in differentiating metastatic and benign cervical lymph nodes in head and neck squamous cell carcinoma: An ROC curve analysis

COURSES

- 1. Institutional Fellowship programme in Oncoimaging and Interventional Radiology

STAFF

SL NO	NAME	DESIGNATION
1	Dr Satheesh Babu	Associate Professor
2	Dr Neha Mohan	Asst. Professor
3	Mrs Sheena T P	Technician
4	Mrs Sindhu	Technician
5	Mrs Vini Raveendran	Technician
6	Mrs Nimmya Parameswaran	Technician
7	Mr Muhammed Naseem	Technician
8	Mrs Srinsi N K	Technician
9	Mr Praveen Kumar	Technician
10	Ms Nidhu C D	Technician
11	Ms Anu Anandan Achari	Technician
12	Ms Shajeena	Technician
13	Mr Noufal P	Technician
14	Ms Shikha M K	Technician
15	Ms Sabina C V	Technician
16	Mrs Shamna P	EDP Assistant

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. 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. Diagnostic reporting work in Oncopathology was restarted in April 2011 with the joining of a visiting Pathologist. At present the department is a fully developed state of art facility with 6 pathologists.

ACTIVITIES & ACHIEVEMENTS

NEW EQUIPMENTS & FACILITIES

The Divisions of Oncopathology & Molecular Oncology/Genetics shifted to the new premises with an area of 25,000 square feet with separate lab facilities for Histology, Cytology, Haematology, Genomics, Molecular, Karyotyping, Cell Culture, Museum, Bio Bank and 3D Bioprinting. There are facilities for Conference hall, discussion rooms, practical demonstrations and department library.

LIST OF EQUIPMENTS PURCHASED

SL.NO	NAME OF ITEM	QUANTITY
1	Slide filing cabinet – Capacity -50000 -YORCO	1
2	Block filing cabinet- Capacity 25000 -YORCO	1
3	Vortex Mixer – ISWIX MV	1
4	DRS#2000 with Dryer- SAKURA	1
5	ThinPrep 2000 Processor- HOLOGIC	1
6	Refrigerator – 308 L - LG	1

STATISTICS OF CLINICAL PROCEDURE

SL NO	PROCEDURE	NUMBER OF CASES
1	BS(Small biopsy)	2367
2	BR(Radical specimen)	1399
3	SOB(Biopsy second opinion)	2103
4	PS(Peripheral smear)	1338
5	BMA & BMT(Bone marrow)	659
6	SOBMA & SOBMT(Bone marrow second opinion)	173
7	FN(Fine needle aspiration)	792
8	FC(Fluid cytology)	625
9	SOC(Second opinion cytology)	299
10	GC (Gynaec Cytology)	146

CLASSES/TRAINING PROGRAMMES

- Fellowship programmes in Oncopathology & Head & Neck Oncopathology for MD.Pathology & MDS Oral Pathology candidates, respectively.
- DNB Pathology(Broad Speciality) first batch with one student commenced in May 2019
- Training for Post graduate students –MD.Pathology & MDS. Oral Pathology from different government and private institutions.
- Training programmes for BSc.MLT final year students of government and private medical colleges and paramedical institutes of Kerala
- Orientation for social workers and students in lab practices
- Academic sessions- 121

PUBLICATIONS

1. Laryngeal Basaloid Squamous Cell Carcinoma with a Substantial Spindle Cell Component: Case Presentation and Updated Review of Literature. Deepak Pandiar, Sangeetha K. Nayanar, Basavaraj Ankalkoti, Sajith Babu. Head and Neck Pathology <https://doi.org/10.1007/s12105-018-0942-2>.
2. Prognostic efficiency of clinicopathologic scoring to predict cervical lymph node metastasis in oral squamous cell carcinoma. Sangeetha Keloth Nayanar, Jaya Prasad Tripathy, Karthickeyan Duraisamy, Sajith Babu. Journal of Oral and Maxillofacial Pathology Volume XX. Month 2019
3. Immunohistochemical expression of p16INK4a in 143 cases of oropharyngeal squamous cell carcinoma from a tertiary cancer centre of South India: a preliminary study- Deepak Pandiar, Sangeetha K Nayanar, Sajith BabuThavarool .Accepted for Indian Journal of Medical Research in January 2020
4. Incipient Warthin tumor of intra-parotid lymph node in a patient with squamous cell carcinoma of external auditory canal: an incidental finding. Deepak Pandiar, Sithara Aravind, Sajith BabuThavarool. Accepted for publication in National Journal of Maxillofacial surgery.

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	Dr. Anand Vijayanarayanan	Assistant Professor
7.	Mrs. Sabna Dev. S.K	Cytotechnologist
8	Mrs. Nimi. G.K	Cytotechnologist
9	Mrs. Soumya. V.K	Lab. Technician
10	Ms. Biji K R	Lab. Technician
11	Mrs. Reena K C	Lab assistant
12	Mr. Vishnu Raj	Attender

BIOCHEMISTRY DIVISION



INTRODUCTION

MCC clinical lab has the facility to do all the biochemical as well as hematological 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 hematological tests we have two Beckman Coulter CBC analyzers in the lab. During this period we had purchased Electrophoretic apparatus, osmometer and automated coagulation analyser

MAJOR ACHIEVEMENTS

Conducted half day seminar for lab technicians, nurses and clinicians on 'Continuing medical education (CME) entitled with 'CLINICAL SIGNIFICANCE OF INFECTIOUS DISEASE SCREENING' on 7/9/2019 (Half Day seminar). Total number of participants was 80 from MCC

Three days training Training Programme on 'Safety Measures of Healthcare Workers in Clinical Settings' In Association with: Kerala State Council For Science, Technology & Environment, Govt. of Kerala 10th to 12th January 2020 for 50 hospital workers from MCC and other hospitals

NEW PROJECTS / PROCEDURES STARTED:

New Test- Clinical lab started -Osmolality test.

STATISTICS

During the period in clinical lab, approximately

SL NO	ITEMS/SERVICES	NUMBER
1	Heamatology	40904
2	Biochemistry	502910
3	Urine analysis	1128
4	Tumor markers	6314

STAFF

SL NO.	NAME	DESIGNATION
1	Dr. Sindhu E. R.	Lecturer
2	Mrs. Mini	Lab Technician
3	Mr. Aneesh	Lab Technician
4	Mrs. Namitha	Lab Technician
5	Mrs. Dhanya Prabha N	Lab Technician
6	Mrs. Aneesha	Lab Technician
7	Mrs. Sinsha NP	Lab Technician
8	Mrs. Akhila	Lab assistant

MICROBIOLOGY DIVISION



INTRODUCTION

The division of microbiology 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.

NEW EQUIPMENTS ACQUIRED

Reagent Refrigerator

STATISTICS

TOTAL NO. OF SAMPLES: 6039

SL. NO	SAMPLE TYPE	SAMPLES NO
1	Urine	1161
2	Stool	107
3	Blood	1533
4	Respiratory(Sputum, throat swab, BAL)	400
5	Pus (wound Swab/ swab/ dead tissues/ Exudates)	817
6	AFB Staining	231
7	Gram Staining	121
8	Fungal culture	66
9	KOH Mount	53
10	Environmental Swabs	734
11	Serology	74
12	Blood bag quality check	199
13	CMV & EBV PCR(Molecular diagnosis)	103
14	CBNAT	21
15	Bacterial identification (Out Side Hospitals & Colleges)	78
16.	Blood Culture (Out Side)	39
17.	Water Analysis	83
18.	Disinfectant Testing	219

CONFERENCES, SEMINAR, WORKSHOP, PRESENTATIONS AND OTHER ACTIVITIES

- Dr. PARTHIBAN delivered a talk on “Theoretical underpennings in Medical Microbiology” in a State level Conference on 20th July 2019 at INSeR, MCC, Thalassery.
- Dr. SAJANI SAMUEL delivered a talk on “Emerging and Re- Emerging Microbial Infections” in a State level Conference on 20th July 2019 at INSeR, MCC, Thalassery.
- Dr. PARTHIBAN delivered a talk on “Management of Hospital Infection Control” 10th January 2020 at MCC, Thalassery in association with Kerala State Council for Science, Technology and Environment.
- Dr. SAJANI SAMUEL Presented a scientific poster on “Multi drug Resistant Gram Negative bacilli causing Respiratory infections in Cancer patients” in the “International Conference CIDS CON 2019” on “23rd- 25th August 2019 at Kochi.
- Dr. PARTHIBAN attended a CME on “Antimicrobial Stewardship” at Yenepoya Medical College, Mangalore on 27th September 2019.
- Dr. SAJANI SAMUEL attended a CME on “Antimicrobial Stewardship” at Yenepoya Medical College, Mangalore on 27th September 2019.
- Dr. M. SARAVANAN attended a CME on “Antimicrobial Stewardship” at Yenepoya Medical College, Mangalore on 27th September 2019.
- Dr. M. SARAVANAN Presented a Scientific Paper “Distribution and Antimicrobial Susceptibility Pattern of Gram-negative Pathogens Causing Urinary Tract Infections in Cancer Patients, North Kerala”. Conference on Antimicrobial Stewardship and Infection Control Strategies (ASICS’19) 19th July 2019 at Mahatma Gandhi Medical College and Research Institute, Pondicherry.
- Mrs. RAMITHA attended a CME on “Antimicrobial Stewardship” at Yenepoya Medical College, Mangalore on 27th September 2019.
- Dr. SAJANI SAMUEL attended “SORT IT (Operational Research Course on NCDS- 2019- Academy for Public Health) Course from 15th to 17th December 2019 at MCC, Thalassery.
- Dr. SAJANI SAMUEL attended a State Level conference on “Cognizance of Challenges in clinical Microbiology- MICRO KAR 2020” on 31st January to 1st February 2020 at Mysore.

CONFERENCE/CME/WEBINAR/MEETINGS ORGANIZED

- Scientific Session – Antimicrobial Stewardship Programme – Dr. BalaVinoth, – 27th July 2019.
- Awareness Talk – “Performance Standards of Personal Protective Equipment and its Handling” – Mrs. Sreelekha – Chief Nursing Officer, RCC, Trivandrum; 23rd November 2019.
- Interactive Webinar – Real World Experience with a Novel BL/BLI as part of Hospital Infection Control in collaboration with Pfizer Company – 20th February 2020.

RESEARCH PROJECT PROGRAMMES

- Dr. SAJANI SAMUEL, Principal investigator for research work entitled “Phenotypic and Molecular characterization of fungal pathogens causing Respiratory infections in Patients with Hematological Malignancy”- A Prospective study- IEC approved study awaited Intra Mural Funding.
- Dr. SAJANI SAMUEL, Principal investigator for research work entitled “Unusual bacterial isolates and its Antimicrobial susceptibility profile causing blood stream infections in Cancer patients in a Tertiary Cancer Centre”- A Retrospective study.

- Dr. SAJANI SAMUEL, Principal investigator for research work entitled “Extended Spectrum Beta-Lactamase producing Gram Negative Bacilli causing Urinary Tract Infections in Cancer patients in a Tertiary Cancer Centre- A Prospective Study.
- Dr. M. SARAVANAN - Microbial trends and drug-resistance profile of isolates causing infections in febrile neutropenia patients with hematological malignancies and solid tumors - A Prospective study
- Dr. M. SARAVANAN - Microbial pathogens and their susceptibility pattern in Surgical site infections among cancer patients - A Retrospective study
- Dr. M. SARAVANAN - Methicillin-Resistant Staphylococci prevalence in cancer patients at a tertiary care cancer centre – A Retrospective study.
- Ours is a COVID testing lab (approved by ICMR and government of Kerala) for testing patient samples by RT – PCR and Gene X pert technology.

STAFF

SL.NO	NAME	DESIGNATION
1	Dr. R. Parthiban	Associate Professor
2	Dr. Sajani Samuel	Assistant Professor
3	Dr. M. Saravanan	Assistant Professor
4	Dr. Sarath K.E.	Lecturer
5	Mrs. Ramitha M.G.	Lab Technician
6	Mr. Deepak Omanakuttan	Lab Technician

BLOOD BANK AND TRANSFUSION MEDICINE DIVISION



INTRODUCTION

The Division of Transfusion Medicine (Blood Bank) started functioning in the year 2002 and has state of art facilities to cater 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. In addition to routine blood bank activities, the division supports bone marrow transplant program

CURRENT FACILITIES

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

STATISTICS

SL NO	ITEMS	NUMBERS
1	Whole Blood Donors	2566
2	Apheresis Donors	455
3	Blood Issued as components	5715

ACADEMIC / TRAINING PROGRAMME

- Blood Bank, MCC with support of Kerala State AIDS Control Society (KSACS), Trivandrum organized 3 days refresher training for
 - Technicians of Blood Banks from 07.03.19 to 09.03.19. (24 technicians participated)
 - Technicians of Blood Banks from North Kerala from 04.09.19 to 06.09.19 (26 technicians participated)
 - Medical Officers of Blood Banks from North Kerala from 17.09.19 to 19.09.19 (11 BBMO's participated)
 - Staff Nurses of Blood Banks from North Kerala from 24.09.19 to 26.09.19 (14 Staff Nurses participated)
- Postgraduates in MD Transfusion Medicine from Medical Colleges, attended Peripheral Postings in MCC
 - Two PG's from GMC, Trivandrum (16.07.19 to 31.07.19)
 - One PG from GMC, Trivandrum (16.08.19 to 31.08.19)

- One PG from Govt. TDMC, Alappuzha (15.12.19 to 31.12.19)
- One PG from SCTIMST, Trivandrum (13.01.20 to 25.01.20)
- Dr Mohandoss M, attended the National Conference (TRANSMEDCON) conducted by Indian Society of Transfusion Medicine 2019) on 08.01.20 to 11.01.20 at Mumbai and presented
 - Oral Paper: Predictors of Blood Transfusion Requirements in Acute Myeloid Leukemia
 - Poster: Determination of Mononuclear Cell Counts by Peripheral Smear and Flowcytometry in PBSC products

PUBLICATIONS

1. Murugesan M, Shringarpure K, Karthickeyan DSA, Nair CK, Nayanar SK, Venugopal V, et al. Clinical and equipment-related factors associated with the adequate peripheral blood stem cell collection in autologous transplant at a tertiary cancer center in Kerala - A retrospective cohort study. *Transfus Apher Sci* 2019;58:457–63. doi:10.1016/j.transci.2019.05.007.
2. KC Gayathiri, Murugesan M, Nayanar SK, Malodan R, Padmanaban M. Comparison of abo antibody levels in apheresis platelets suspended in platelet additive solution and plasma. *Hematol Transfus Cell Ther* 2020;June. doi:10.1016/j.hctc.2020.03.008.
3. Murugesan M, Nair CK, Nayanar SK, Pentapati KC. Analysis of flow cytometric enumeration of CD34+ cells in leukapheresis product from South Indian cancer centre. *Online J Heal Allied Sci* 2019;18:1–4.
4. Murugesan M, Nair CK, Nayanar SK, Pentapati KC. Flow cytometric enumeration of CD34+ hematopoietic stem cells: A comparison between single- versus dual-platform methodology using the International Society of Hematotherapy and Graft Engineering protocol. *Asian J Transfus Sci* 2019;13:43–6. doi:10.4103/ajts.AJTS_83_18.
5. Chellaiya GK, Murugesan M, Nayanar SK. A Study on Influence of Donor Hematocrit on the Procedural Parameters of Concentrated Single Donor Platelets Collected by Two Apheresis Devices. *Indian J Hematol Blood Transfus* 2020;36:135–40. doi:10.1007/s12288-019-01163-0.

STAFF

SL NO	NAME OF STAFF	DESIGNATION
1	Dr Mohandoss M	Associate Professor, BBMO
2	Mr Sabeesh P	BB Technician
3	Mr Sajeesh VM	BB Technician
4	Mr Shibin CV	BB Technician
5	Mr Anoop Joy	BB Technician
6	Mrs. Thahira D	BB Technician
7	Mr Arun KV	Lab Attender

GENETICS AND CYTOGENETICS & MOLECULAR ONCOLOGY DIVISION



INTRODUCTION

Division of Genetics was established during October 2104 under the Dept of Clinical Services and Translational Research. Division is under process of development and establishment with an aim of molecular research and molecular diagnosis. The major research direction of the division for “bench to bedside” is to understand the genetic factors associated with treatment outcome of cancer patients, such as drug resistance and drug toxicity, which will help in developing personalized therapy system. Molecular diagnosis in oncology is mainly focused on the detection of mutation of genes. Division is also involved in the HR development programmes by providing short-term training and dissertation works for BSc/MSc/ MD/MDS students. The division has initiated doctoral course, fellowship and PG diploma.

CURRENT FACILITIES

- Real-time PCR
- PCR
- Automated DNA sequencer
- Bionalyzer
- Chemi Doc system
- Fluorescent Microscope with karyotyping work station
- -20 and -80 deep freezer
- 2 Electrophoresis systems
- NGS
- MS/MS
- Cell culture

NEW DEVELOPMENTS

- Started Biobank facility
- Started PhD program
- Started functioning in new lab block
- Started new test AML panel and ALL panel
- Along with Division Microbiology COVID testing started at MCC

NEW COURSES STARTED

1. Institutional Fellowship in Molecular Pathology :- 1 seat
2. Institutional PG diploma in molecular diagnosis :- 5 seat
3. Institutional PG diploma in Omics :- 3 seat
4. PhD program under Kannur University :- 8 seats

WORKSHOPS

1. Hands on workshop in Basics in molecular Techniques in clinical perspective
2. Hands on workshop in Cell culture

STATISTICS

SL NO	TEST	NUMBERS
1	Translocation analysis (qualitative) BCR-Abl	42
2	Translocation analysis (qualitative) PML-RARa	18
3	Translocation analysis (quantitative) BCR-Abl	120
4	Mutation Analysis JAK2	32
5	AML panel	25
6	ALL panel	29
7	HER2 FISH	44
8	BCR-Abl FISH	19
9	EGFR mutation analyses	101

STAFF

SL NO	NAME	DESIGNATION
1	Dr Deepak Roshan	Assistant Professor
2	Dr Vipin Gopinath	Lecturer
3	Mrs. Vincy	Lab Technician
4	Mr Sreehari	Lab Technician
5	Mrs. Sreeja	Lab Assistant

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.

Hematological 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.

ACTIVITIES AND ACHIEVEMENTS

A total of 3220 patients attended the clinic. The treatment wise statistics are given below.

STATISTICS

A total of 3220 patients attended the clinic. The treatment wise statistics are given below.

SL.NO	ITEMS/ PROCEDURES	NUMBER
1	OP	3220
2	extractions	1141
3	oral prophylaxis procedures	37
4	restorations	52
5	obturators	13
6	root canal treatments	49
7	complete dentures	27
8	removable partial dentures	22
9	Dental implants	4
10	Fixed partial dentures	30 units
11	Maxillo facial prosthesis	2

CONFERENCE, SEMINAR, WORKSHOPS AND PRESENTATIONS

1. Dr. Pramod attended the 51st KSDC- the state level IDA conference held at Kozhikode
2. Dr. Pramod completed certification program in quality assurance from KUHS, Thrissur
3. Dr. Pramod completed NBQP certified course in “Implementation of NABH entry level standards in Hospitals”. Now Dr. Pramod is a certified professional – CPQIH- B

STAFF

SL NO	NAME	DESIGNATION
1	Dr Pramod Sankar	Associate Professor

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 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 570 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

- 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.
- June 2019 IAPC course in "Essentials of Palliative care" started with 11 doctors and 1 nurse. This is the 10th batch in MCC. Contact sessions held on 2.6.19, 8.6.19 and 9.6.19
- 12.5.19-The second batch of volunteers training program started with 25 volunteers from 5 units of PIK (Palliative Initiative in Kannur). Theory class was held on 12th June followed by 4 days of practical session for each unit thereafter.
 - 13th, 14th, 17th&18th June 2019-Kanivu Palliative clinic, Thalassery
 - 19th, 20th, 24,25th June 2019-Karunya Palliative clinic, Kudukkumotta

- 26th, 27th, 28th&1st July 2019-Karunya Palliative clinic, Kottila
- 4th, 5th, 8th&9th July 2019-Samaritan Palliative clinic
- 11th, 12th, 15th&16th July 2019-Amma palliative clinic, Mattanur
- 21.8.19-Invited as a faculty for National Fellowship in Palliative Medicine at Institute of Palliative Medicine, Calicut.
- 28.8.19-The final exam for the IAPC course was held.6 candidates of the 11 attended the course.1 candidate who did the course from Hyderabad also attended the exam here.
- 12.10.19-World Hospice and Palliative Care day was observed in Malabar Cancer centre on 12th October 2019.The theme for this year's day is Palliative care: "My care, my right". This year's program at MCC was dedicated to the SPANDANAM (Stoma support group of MCC) members. The program was – "Stoma care: Queries and solutions".
- 20.12.19-22.12.19 –Attended the 3rd Annual Year End Review 2019, Lung Cancer Edition as a faculty at Hotel Courtyard Marriott, Mumbai.
- 22.1.20 –In connection with Palliative care day observed on 15thjan, organized a workshop on: Effective Communication". Mrs. Alice Stella Virginia, IAPC National faculty was the faculty. Around 40 BSc Nursing students and 25 BSc MRT students attended the workshop.
- 13.02.20-Dr.M.S.Biji attended The Stanford Quality improvement workshop held at Assam.
- 14th-16th February 2020:Dr.M.S.Biji attended the 27th International Conference of IAPC (IAPCON) held at Guwahati Medical College, Assam and presented a paper on "Sexual dysfunction in women treated for gynecological malignancies at a Tertiary Cancer Centre" and was well appreciated by the audience.

PUBLICATIONS

1. Article: Pain Management in Children With Cancer Using World Health Organization Guidelines at a Tertiary Cancer Center in Rural India.

M.S. Biji V. Vinayagamoorthy, T. K. Jithin, Raghavan, Kalaiselvi, Karthickeyan, Shringarpure, Deenathayalan, Kedar, Priya Rathi &Lulu Mathews <https://doi.org/10.1080/15360288.2019.1651438>.

COURSES CONDUCTED

IAPC course in "Essentials of Palliative care" for doctors and nurses-10 batches completed.

ONGOING PROJECTS

1. Illness perception in pediatric patients and their parents treated at Malabar Cancer Centre.
2. Sexual dysfunction in women treated for gynecological malignancies at a Tertiary Cancer Centre

STAFF

SL NO	NAME	DESIGNATION
1	Dr. M.S.Biji	Assistant Professor &HOD
2	Mrs.Sheeja Nellikka	Staff Nurse

PSYCHO-ONCOLOGY DIVISION



INTRODUCTION

Division of Psycho-oncology focuses on providing psycho-social interventions for patients and families from cancer diagnosis till survivorship and palliation, thereby improving their Quality of Life. It also provides alcohol and tobacco de-addiction counselling for the patients. Apart from this, the division deals with stress management and recreation activities of the staffs dealing with cancer patients. The division combines Psychiatry, Psychology and Medical Social work aspects into Cancer.

ACTIVITIES ORGANIZED/ CONDUCTED/ COORDINATED BY THE DIVISION

1. **World No tobacco day**

As part of the World No tobacco day activities of MCC, a session on “Awareness ill effects of Tobacco and prevention” was arranged for the BSc MRT students of MCC on May 31st. Ms. Jisha Abraham, Lecturer in Psycho-oncology delivered the talk.

2. **International Yoga day**

Division coordinated with organizing International Yoga day on June 21, 2019 by giving one day Yoga training for BSc MRT and BSc Nursing students. Yoga trainer, Mr T. Prakashan led the session.

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 in October, 2019. 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 - Working together to prevent suicide**

World Mental Health Day was observed on October 11th, 2019 at Malabar Cancer Centre.

5. **Nurses training**

Staff nurses of the hospital were given a session in 3 batches on ‘Quality of life and psychological well-being of cancer patients’ in October.

6. **Students Support and Guidance Program (SSGP)**

Staffs were actively coordinating the student support activities of Malabar Cancer Centre College, Lecturer in psycho-oncology being the nodal officer of the programme. Division is giving psycho-social support for students those in need as referred by the concerned faculties.

7. **Individual staff consultations**

Division was supporting the staffs of the hospital by providing psychological support to deal with their personal and work related stress.

CLINICAL ACTIVITIES

PERIOD	NEW PATIENT COUNSELLING SESSIONS	GENETIC COUNSELLING SESSIONS	PSYCHO-ONCOLOGY CONSULTATION SESSIONS
April 2019 to March 2020	1546	133	670

ACADEMICS

Staffs were actively involved in the academic activities of the hospital by taking lectures on Psychology and Sociology for students of BSc Nursing, BSc MRT, Post Basic diploma Oncology Nursing. Staffs were active in the duties entrusted by KUHS as a faculty.

RESEARCH

- Completed a study on 'Pattern of Distress among Cancer patients assessed during New Patient Counseling: A Retrospective Cross-sectional study'
- Initiated a cross-sectional study on fatigue, perceived stress, anxiety and depression among adult survivors of hematological malignancies.

INTERNS/OBSERVERS

The division is providing internship for the students of Social Work and Psychology. In this academic year, 12 students came for observership/internship/fieldwork. Eleven students from Social Work and 1 student from public health were posted in the division. They were actively involved in understanding and providing the psychological social and economical interventions for patients and were supportive in the activities of the hospital.

STAFF ACTIVITIES

- 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.
- Ms. Jisha Abraham attended 6 month certificate program in 'Health care counselling: Biopsychosocial approach' conducted by Kerala University of Health Sciences, Thrissur, May to October 2019.
- Ms. Jisha Abraham presented a poster on Pattern of Distress among Cancer patients assessed during New Patient Counseling and its association with Demographic factors and the site of Cancer at the 1st Cancer Conference on Real World Evidence, at Chennai, August 2019.
- 'Role of Counselling in Tobacco cessation' was presented by Ms. Jisha Abraham at the Tobacco Cessation workshop conducted for staffs of RNTCP by Dept. of Community Oncology at Malabar Cancer Centre, January 2020.
- Ms. Jisha Abraham was a faculty for seminar on Safety measures for health care workers organized by Kerala State Council for Science, Technology & environment and Division of Biochemistry at Malabar Cancer Centre, January 2020.
- Ms. Jisha Abraham went as an Invited faculty for a talk on 'Psycho-oncology', at Dept. of Psychology, Farook College, Calicut, on 28th February, 2020.

7. Ms Jisha Abraham presented a paper 'Distress management: A case study' and poster on Neuropsychological functioning of Long term adult survivors of pediatric ALL at international psycho-oncology Society Academy 2020 organized by Cancer Institute, Chennai, February 2020.
8. Best poster award: Ms Jisha Abraham received best poster award for the presentation on Neuropsychological functioning of Long term adult survivors of pediatric ALL at International psycho-oncology Society Academy 2020, Chennai.
9. Faculty for IPOS Academy 2020 and presented on Psychotherapeutic interventions in managing emergencies in oncology organized by Cancer Institute, Chennai, Feb 2020.
10. Participated in the 'Challenge Cancer' program organized Asianet news and bedaduka Gramapanchayat in Kasargod district, February 2020.

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, and Palakkad) and Mahe (U T of Pondicherry). A tobacco cessation clinic and an anti-tobacco cell function under the department.

ACTIVITIES AND ACHIEVEMENTS

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, online 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. 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.

3. 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. Satheeshan 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.

4. KANNUR DISTRICT CANCER CONTROL CONSORTIUM (KCCC):

As a part of including socially committed individuals and organizations in cancer control activities of MCC, we have formed Kannur district cancer control consortium for cancer control activities. It is formed with an objective to work under the guidance and technical support of Malabar Cancer centre Thalassery to initiate and promote health care with community participation, to create awareness about prevention of cancer, to eliminate fear and stigma about cancer, to spread the message about curability of cancer and to provide rehabilitation to cancer survivors.

5. EARLY CANCER DETECTION CLINIC

MCC has initiated early cancer detection clinics led by trained nurses at various panchayaths (cherukunnu PHC at Kannapuram, keezhpally PHC at Aralam) in Kannur district and kasargod district (Cheruvathur CHC and Neeleswaram Taluk hospital). Early cancer detection clinics are also initiated in collaboration with NGOs and are functioning well (centers at Alakode and Chittarikkal in collaboration with Thalassery Social service society).

6. 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. 29th and 30th April: Uppala Cancer care foundation conducted a two day program on cancer awareness at Uppala with awareness classes and exhibitions.
2. May 14th and 15th: School curriculum study workshop for result analysis, evaluation and report making.
3. May 14th: Meeting of cancer control consortium regarding observation of world no tobacco day
4. May 17th and 18th: Chakka maholsavum and food fest at Kannapuram. Awareness classes were taken on cancer prevention and cancer myths.
5. May 31st: District level Observation of world no tobacco day. Kannur district cancer control consortium and affiliated organizations conducted various programs at different parts of the district. The district level program was held at BEMP high school, Thalassery with awareness rally, street play, single canvas painting, and health exhibition. Programs were also held at Kannur, Koothuparamba, Dharmshala and Mattanur. Literary competition on tobacco awareness for physically and mentally challenged children in association with TSSS Thalassery at Thaliparamba as a part of observing World no tobacco day.

Awareness rally, health exhibition and awareness class in connection with world no tobacco day on June 3rd in collaboration with Panniannoor panchayath.

6. School curriculum report writing workshop on 6th and 7th at MCC
7. ESAF member service department conducted breast cancer awareness campaign on 20th, 21st and 24th of June.
8. Breast cancer awareness campaign in collaboration with Kerala Foundation on 25th, 27th, 28th and 29th of June
9. Observation of international day against drug abuse and illicit trafficking on June 23, 25, 26
 - A. June 23rd: conducted district level literary and painting competition on tobacco awareness on 23rd at St Joseph's HSS Thalassery as a program of Kannur District Cancer Control Consortium inaugurated by Deputy Commissioner of Excise. There was also an awareness bike rally conducted by BREXA.
 - B. June 25th: Inauguration world drug abuse day program by Kerala foundation at Shivapuram HSS.
 - C. June 26th: Kannur district cancer control consortium and Excise department conducted district level observation of world anti drugs day at town hall, Thalassery. The program was inaugurated by district police superintendent Mr Pradesh Kumar. The message for the day was given by Deputy Excise commissioner P K Suresh. The key note address was given by Dr Satheeshan Balasubramanian, Director MCC. There was a solo performance with anti tobacco message by Excise officer Mr Prabhunath. Mattanur Mini arts and sports club in collaboration with KCCC and Amma pain and palliative unit conducted various programs as part of observing the world anti drugs day.
10. July 3rd: Anti tobacco cell meeting held at MCC.
11. July 9th: Trainers training program for EXCISE officials on tobacco and cancer at Jilla panchayath Mini conference hall, Kannur. The program was inaugurated by Jilla panchayath president and was presided by deputy excise commissioner PK Suresh. Forty-five officials participated in the training program.
12. July 16th: Workshop on comprehensive cervical cancer control program which is a part of “cancer vimuktha gramam” project. The outline of the project was presented by Director, Malabar cancer centre. Further proceedings were discussed.
13. July 30th: the second phase of cancer control activities of pariyaram grama panchayath was inaugurated by Panchayath president. The outline of the project was presented by Director, Malabar cancer centre. Future activities were planned. It was decided to conduct awareness activity related to cancer prevention through healthy food and to conduct “bhakshysadass” in all wards and schools of the panchayath from 15th August.
14. Various meetings and discussions for formulating the Byelaw of Kannur district cancer control consortium were also done. The application form for consortium membership was finalized,
15. As a part of coordinating state wide cancer control activities as per the vision document ‘Kerala Cancer Control Strategy 2018-30’, a round table discussion workshop on IEC materials, training modules was conducted on 29th august at 9.30am to 1.00pm at conference hall, MCC. It would be better to have common language and content for activities related to creation of cancer awareness and public education. Uniformity for capacity building in district, Taluk and FHCs by a common curriculum and training schedule are desirable. Faculty from MCC, RCC, CCRC, Govt MCH, Kottayam and Manjeri participated
16. Training program for Scout and guides on cancer awareness as part of acquiring badge was held on

24, 26, 27 September 2019. These students' volunteers will spread word on cancer prevention in the society.

17. Breast cancer awareness month: As part of observing breast cancer awareness month, conducted 19 breast cancer awareness programs in rural areas of Kannur.
18. "Save Youth, Save the Society": Mass Awareness campaign for youth - a joint initiative of Mahe administration, Malabar Cancer Centre, Child Line Mahe and Janwani 90.8 fm community radio. The program was inaugurated by Dr V Ramachandran, MLA Mahe in the presence of regional administrator, Mahe on 4th October 2019.
19. National cancer awareness day: Program was conducted in association with NAM school, Peringathoor, KCCC and Bharat Scouts and guides. The program was inaugurated by Mr PP Sreejith, Inspector of Police Panoor. Programs include Cancer awareness class, cancer pledge and motivational speech by cancer survivor Mrs. Sheela, Breast cancer support group, Thejus.
20. Cervical cancer eradication program at Kannapuram was inaugurated by MLA T V Rajesh on 30-11-19
21. Kannapuram Grama panchayath cancer control program second phase (cervical cancer eradication program). The volunteer training program was inaugurated on December 16 by Dr Satheesan Balasubramanian.
22. National Tobacco Control Program: Tobacco Cessation Training Program for Health Service Doctors and Supporting Staff was conducted on 10th January 2020. DMO (H) Kannur, NHM Kannur and community oncology department, Malabar Cancer Centre, Thalassery jointly organized the program. TB unit Medical officers, TB unit senior treatment supervisors, TB unit health visitors and medical officers from selected family health centers participated in the program. The primary objective of the program was capacity building of participants for delivering brief intervention for tobacco cessation. The specific objectives were to improve the knowledge and skills of medical officers for providing Nicotine replacement therapy and other pharmacotherapy for tobacco cessation.
23. Observation of world cancer day Feb 4th:
 - Awareness program on cancer for students of college of commerce at Kannur
 - Awareness program on cancer for students of P R Memorial School Kolavalloor, Panoor
24. Inauguration of ECDC clinic at Chittarikkal initiated by TSSS Thalassery on 25-2-20 by Dr Satheesan Balasubramanian, Director MCC.
25. Due to restrictions imposed by COVID 19, community programs were not conducted after March 10th. From March 19th onwards Community oncology became part of COVID CELL ,MCC and are involved in screening of patients and bystanders, triage OPD, preparing awareness pamphlets, COVID guidelines for MCC, conducting review meetings, giving guidelines for quarantine, isolation and safe practices in MCC. Under guidance of the dept KCCC is also involved in various socially committed programs like providing necessary amenities, distribution of medicines etc.

STATISTICS

Cancer Awareness Program for Public	School Cancer/ Tobacco Awareness Program	Public Program For Observation Of Days	Health Exhibition Days	Volunteer Training Program	MCC Visit	Ecde Follow Up Visit
122	19	14	46	119	1	12

TOBACCO CESSATION CLINIC STATISTICS

OPD days	New case	Follow up cases
38	41	79

DETAILS OF ECDC AT ASSOCIATE CENTERS OF MCC FROM ESTABLISHMENT TO JANUARY 2020

- PHC based ECDC clinics- Cherukunnu, Kuttiattoor, Aralam (Kannur Dist), Cheruvathur, Thrikkarpur (Kasargod dist)
- NGO Based ECDC clinic-Alakkode, Thomapuram (Inauguration on 25/2/20) under Thalassery Social Service Society. Details:

Sl. No.	PROCEDURE	CHERUVATHUR	THRIKKARIPUR	ALAKKODE	CHERUKUNNU	KUTTIATTOOR	AARALAM
1	Total persons reported	1764	786	234	160	2	2
2	Oral screening+ tobacco counseling	41	175	126 (6 cessation)	31	2	0
3	Pap smears	1378	272	50	48	0	2
4	Breast screening	1460	339	103	138 (iBreast exam) 62 (iBreast exam)	1	0
5	No. of cases referred to MCC/elsewhere	5	-	3	-	1	0
6	Cancer cases detected	3 (ca breast) 2 (Ca cervix)	-	1 (Ca male breast)	-	1 (oral ca)	0

RESEARCH PROGRAMS

1. Pariyaram cancer control project
2. Project regarding inclusion of cancer topics in School curriculum –results evaluated and report prepared
3. Project for starting Associate centres under MCC for cancer control as part of decentralization of cancer control activities
4. Kannapuram cervical cancer eradication project

PUBLICATION

1. Hand book on tobacco
2. NETHI news letter –a publication of antitobacco 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 and epidemiology was established in the year 2011 and started Hospital Based Cancer Registry (HBCR) partially supported by National Cancer Registry Programme. From 01/03/2017, MCC came into the national network and was funded by NCDIR/ICMR. The main objectives of the department are:

1. To generate reliable data on the magnitude and patterns of cancer
2. Undertake epidemiological studies based on results of registry data
3. Help in designing, planning, monitoring and evaluation of cancer control activities
4. Develop training programmes in cancer registration and epidemiology.

SERVICES: FACILITIES AND MILE STONES

HOSPITAL BASED CANCER REGISTRY:

The primary purpose of Hospital Based Cancer Registries is to contribute to patient care by providing readily accessible information on the patients with cancer, the treatment received and its results. The data is also used for clinical research and for epidemiological purposes. Hospital based cancer registries are concerned with recording of information on the cancer patients seen in a particular hospital (Isabel dos Santos Silva et al, 1999). Within the hospital, a registry is often considered to be an integral part of the hospital's cancer programme or health care delivery system.

PATTERNS OF CARE AND SURVIVAL STUDIES IN BREAST, HEAD & NECK CANCERS & CERVIX

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 monitors the patient's health status at periodic intervals.

POPULATION BASED CANCER REGISTRY

The department launched Malabar Population Based Cancer Registry (MPBCR) in January 2014 for three districts Kannur, Kasaragod and Mahe and published the first report in 2017. 2015 report has been accepted by NCDIR/ICMR. It has met all the quality indicators of international standards. 2016 data has

been submitted for approval from NCDIR/ICMR. Population-based cancer registries seek to collect data on all new cases of cancer occurring in a well-defined population. The department expanded the PBCR area to 5 more districts (Calicut, Thrissur, Malappuram, Wayanad and Palakkad) in 2018.

LIFE STYLE & 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” in 2013.

New project- E-mor under NCDIR /ICMR started. Recruitment of staff for this project has completed.

E-MOR PROJECT

E-Mor project by NCDIR/ICMR, was sanctioned on 13/03/2018. Data was collected from 01/12/2018 onwards.

The NCDIR e-Mortality software is information technology software to record cause of death information of all deaths occurring in hospitals. Record underlying cause of death in the Medical Certification of Cause of Death (MCCD) Form 4 / 4A. Strengthening cause of death statistics in India. Improve the quality of cause of mortality statistics in India. Build death auditing system in hospitals.

TRAINING

1. PBCR Expansion Software - video conference conducted on 29-02-2020 with C-DIT team.
2. Training workshop on NCDIR e-Mor software 23rd may ICMR Bangalore.
3. Training on NCDIR e-Mor software for recruited staff through Zoom Video Conference on 27th November 2019 from ICMR-NCDIR, Bengaluru.

STAFF

SL NO	NAME	DESIGNATION
1	Dr. Saina Sunilkumar	Lecturer,HOD i/c
2	Mrs. Bindu T	Lecturer in Biostatistics
3	Mr. Ratheesan K	Lecturer in Biostatistics
4	Mr. 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
- Transferred all inactive files to storage area

DEATH INTIMATION DONE DURING THE PERIOD -116

TOTAL NO OF OUTGOING FILES -59423

STAFF

SL NO	NAME	DESIGNATION
1	Mr Jayadev G	Medical Record Officer
2	Mrs Karthika	Medical Record Assistant
3	Ms 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.

Currently the division is in direct control of Director

THE MAJOR ACTIVITIES OF THE DIVISION ARE AS FOLLOWS

- Administration & Management of e-Hospital Software implemented at MCC.
- Implementation of e-Office project is progressing.
- Updating and maintaining official website of MCC.
- Server and Database Administration, Management and Maintenance
- Desktop Computers (200+), Laptop, Printer (80+), Scanner, Projectors, Local Area Network (40+Switches & 12 Racks), Network devices, UTM, etc. Maintenance and support
- Maintenance of CCTV Security Surveillance System, PA system & Wi-Fi Connectivity
- Designed, developed and Implemented e-Palliative Software
- Managing Virtual Tumor Board, Virtual Consultations and Telemedicine
- Support for Online meeting, Online Classes, etc.
- Developed & Implemented online examination facilities and online career applications.
- Developed & Implemented Intra MCC software for issuing various certificates
- Developed & Implemented File Tracking System
- Managing, Administrating, providing support for e-Procurement Project, Canteen Billing and Management Software, Online Birth & Death Registration, GeM, HR & Pay Role Management Software (Trial run), Bio-medical Asset Management & Maintenance System, Mobile app for PBCR, Online Registration90 System through ORS portal, PACS, etc.
- Interfacing Bio chemistry Analyzers with e-hospital
- Implemented eSanjeevani OPD in five days in a week.
- Official E-mail to all Employees
- Patient support through Whatsapp Group and Social media
- Implemented Biometric Punching System and Proximity ID card.
- Managing National Knowledge Network (NKN), National Cancer Grid MPLS LAN, and NMECT connectivity.
- Support given for printing, scanning, preparing Brochure, poster, banners, etc

STAFF

SL NO	NAME	DESIGNATION
1.	Mr Ranjith M K	System Manager
2.	Mrs Bavina C	Junior System Analysts



INTRODUCTION

The Division of Clinical Research & Biostatistics (CRB) formally organized in 2013 under the Department of Cancer Registry and Epidemiology. The Division of CRB was created primarily to coordinate the clinical, epidemiological and translational researches in the institution, coordination of collaborative research ventures, education in the field of biostatistics, Bioethics and clinical research, administrative responsibilities in institutional academics, various courses and training conducted in MCC, organization and monitoring of Institutional Review Boards-Scientific Review committee (IRB-SRC), Institutional Ethics Committee (IEC), various external standing committee and provide statistical consultation for the academic faculties and other components of oncology departments. The mission of the Division of Clinical Research and Biostatistics is to develop, disseminate and apply bio statistical and analytical methods for research in the cancer, encompassing both research design and analysis. Division is to support the conduct of clinical data management for clinical trials in compliance with ICH-GCP, regulatory requirements. At presently the department is working under the supervision of Director, MCC.

SERVICES

- Design of clinical trials
- Design of observational studies
- Review of protocols
- Statistical data analysis
- Statistical computing
- Development of statistical methods
- Promote Research & Academic activities
- Administrative support for IRB-SRC, IEC and various internal and external standing committees, various courses and training in MCC

SPECIFIC OBJECTIVES

- To coordinate and conduct teaching of Research Methodology and Statistics for all Academic faculties and students.
- To conduct training programmes in Research Methodology, Statistics and related areas for students and faculty.
- To acquire statistical, epidemiological and related software packages and resources required for researchers.
- To provide statistical research design and data analysis consultancy for researches, faculty and students.

THE FOLLOWING COMMITTEES ARE FUNCTIONING AND MONITORED UNDER THE SUPERVISION OF DIVISION OF CRB

1. INSTITUTIONAL REVIEW BOARD-SCIENTIFIC REVIEW COMMITTEE (IRB-SRC)

The Institutional Review Board - Scientific Review Committee (IRB-SRC)- is an administrative and scientific body established to scrutinize and review the scientific content of research proposals. This is aimed to protect the rights and welfare of human research subjects recruited to participate in research activities conducted under the auspices of the institution..The IRB-SRC members are constituted with the internal faculty those who are above Associate Professor and above and invited external experts in relevant spectrum.

2. INSTITUTIONAL ETHICS COMMITTEE (IEC)

IEC started functioning in 2013 and acquired the approval and registration of Drug Control General of India (DCGI) on 29.10.2015. Ethics committee strictly following the GCP guidelines and Schedule 'Y'. IEC of MCC is constituted as per the guidelines by ICMR with 12 members, including 10 external members and two internal members. The Committee takes care the review of ethical aspects of the study proposals forwarded by the Scientific Review Committee (SRC). The Committee meeting is scheduled once in three month

3. SCIENTIFIC ADVISORY COMMITTEE (SAC)

This external committee is formed to provide impetus to academic and research endeavors of MCC. It meets annually to review the status of activities in the relevant fields, nature of publications and research, the scientific and academic progress of institution and it advises on future activities. It started functioning in 2013. It has nine nominated members from various spheres of oncology and research across the country. The committee looks into the area of training in oncology and related areas, oncology services, research in oncology and policy related programme.

4. RESEARCH ADVISORY COMMITTEE (RAC)

The purpose of the Research Advisory Committee (RAC) is to provide strategic guidance and support to develop an innovative inter-disciplinary research in Malabar Cancer Centre with an objective of better understanding and management of cancer. The committee was established in 2017 with the aim of setting up the interdisciplinary research center, registering our center to National bodies like DSIR/SIRO. It assists in forming collaborations with different national and international research centers. The ultimate aim of developing MCC as a centre of excellence is one of the objective behind constituting the RAC.

5. INTRAMURAL RESEARCH ADVISORY COMMITTEE (IMRAC)

The Intramural Research advisory Committee was established in 2013 with the aim of supporting young/new faculty members(s) to conduct researches with nominal funding support. This is expected to enhance their chances to get external funding support from external agency. All grant applications for research funding undergo evaluation through peer review, in which external expert panels determine the suitability of proposals. There is no internal member and the committee is independent in decision making

6. ACADEMIC MONITORING CELL (AMC)

Academic Monitoring Cell (AMC) with the power of monitoring and evaluate all the academic activities of the MCC including DNB, Fellowship, BSc MRT, PG dissertation, internship and observership programme. The cell shall monitor the academic calendar, course calendar including academic schedule, roster for faculties and shall monitor its implementation. It shall provide assistance and inputs to Curriculum Implementation Cell. It shall do all the correspondence and compliance checking periodically and report to Director. The cell shall convene meeting on quarterly basis or whenever it is required. An evaluation report of the same should be submitted to Director.

ACADEMIC PROGRAMME CONDUCTED

Academic Programme conducted:

- Research Ethics, Good Clinical Practices (GCP) & Current Regulations" On 22nd June 2019

Academic programme attended

PROGRAMME	ROLE	ATTENDED BY
Certificate programme in Research Methodology and certificate programme in Biostatistics conducted by KUHS on 13 th – 14 th June 2019 at KUHS Head quarter	Resource person	<ul style="list-style-type: none"> • Mrs. Maya Padmanabhan • Mr.Riyas M
Faculty improvement programme, KUHS at Thiruvananthapuram on 18-19 th Jan 2019	Faculty	Mrs. Maya Padmanabhan
Research Methodology for MD students conducted by KUHS at MCC on 6-7 th Feb 2019	Faculty	<ul style="list-style-type: none"> • Mrs. Maya Padmanabhan • Mr.Riyas M
International Collaboration for Research methods Development in Oncology (CReDO) workshop from 2 nd to 7 th March 2020	Observer	Mrs. Maya Padmanabhan

OTHER RESEARCH ACTIVITIES CONDUCTED

No. of Institutional Review Board-Scientific Review Committee	19
No. of proposals approved by the IRB-SRC	93
No. of proposals approved by the SRC	76
No. of Institutional Ethics Committee	3
No. of proposals approved by the IEC	17
No. of Scientific Review committee	1
No. of Scientific Advisory Committee	1
No. of Intra Mural Research fund-External Committee	1
No. of Academic Monitoring Cell	2 (Initiated from Feb, 2020)

STAFF

SL.NO	NAME	DESIGNATION
1	Mrs. Maya Padmanabhan	Lecturer
2	Mr. Riyas M	Lecturer
3	Mr. Viju V	Clerk Cum Typist

DEPARTMENT OF ANAESTHESIOLOGY



INTRODUCTION

Though the Department of Anaesthesiology was formally formed only in 2010-11 with the contract appointment of Col Prof Dr N C Krishnan. The permanent faculty joined only in 2015. Now the department is developed into a state of art facility. All clinical departments are anchored to this specialty. The department follows an integrated approach and standard protocols for patient care, education and research.

On January 13 2020 major OT complex started functioning after renovation work of OT-1 and OT-2.

Now the institution has three major operation theatres and a brachytherapy OT. The major OT Complex is designed with Air Handling Unit with laminar flow, HEPA filter and Temperature, Pressure, Humidity monitoring. Each major OT is equipped with Anaesthesia workstation, Pendent, Intubation Trolley, Drug Repository, Energy devices, Suction devices, stainless steel cupboard, stainless steel tables and trolleys.

CURRENT FACILITIES

- High-end Anaesthesia work station with electronic gas mixing, End Tidal gas monitoring.
- Multipara monitors with cardiac output monitoring, EtCO₂, SpO₂, Invasive and non invasive blood pressure monitoring, temperature monitoring, CVP monitoring.
- Syringe pumps, infusion pumps, fluid pressure bags and body warmers
- Neuromuscular transmission monitoring
- Total Intravenous Anaesthesia, Target Controlled infusion and PCA pumps.
- Ultrasound machine for central venous catheterization and regional anaesthesia

NEW FACILITIES

1. Work station-ZEUS infinity empowered
2. Monitor – NIHON KOHDEN G9, G7 with transport monitors
3. PCA pump

STATISTICS

SL NO	PROCEDURE	NUMBERS
1	General anaesthesia (GA)	792
2	General anaesthesia (GA)+Epidural analgesia (EA)	304
3	Sub Archnoid Block	252
4	CSEB	24
5	CSEB+ GA	Nil
6	GA+SAB	02
7	Epidural Anaesthesia	02
8	Regional Blocks	01
9	Short General Anaesthesia	13
10	MAC	Nil

ACADEMIC / TRAINING PROGRAMMES

- Topic discussions-All Mondays
- Journal club-All Wednesdays
- Staff academics (OT&SICU)-All Saturdays

STAFF

SL.NO	NAME	DESIGNATION
1	Dr.Nived	Associate Professor
2	Dr Jashma.c	Assistant professor
3	Dr Joona p	Assistant professor
4	Dr Roopesh	Assistant professor
5	Dr Sonali	Assistant professor
6	Mr Vipin.K	Anaesthesia technician
7	Mr Mayan John	Dialysis technician
8	Mr Sreejesh P.B	OT and Anaesthesia technician
9	Mr Balukrishnan.S.R	OT and Anaesthesia technician

NON-ACADEMIC DEPARTMENTS & DIVISIONS

DEPARTMENT OF GENERAL ADMINISTRATION



INTRODUCTION

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 policies 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.

GENERAL ADMINISTRATION DIVISION

This Division handles the overall activities of the Centre which includes maintenance of dispatch and inward registers, Government correspondences, issue of orders, circulars, maintenance of files related to various contracts, convening of various meetings, tapal section etc:- This Division frames policies, guidelines and procedures and make sure that they are adhered to by the staff. This Division also handles activities related to the Hospital and also liaison work with Government and other Departments.

ESTABLISHMENT

This Division maintains all the personal records of staff, their service matters, recruitment procedures, appointment, posting, leave matters, attendance etc: - The overall matters of staffs are looked after by this Section and plays a pivotal role in maintaining discipline of the institution.

STAFF JOINED THE INSTITUTION DURING THE PERIOD				
Sl.	NAME	DESIGNATION	DEPARTMENT	DOJ
1	Dr. Gopakumar K G	Assistant Professor	Pediatric Oncology	01/04/2019
2	Jayakrishna Prabhu B	Staff Nurse - Gr. II	Oncology Nursing	01/04/2019
3	Deepa Mathew	Staff Nurse - Gr. II	Oncology Nursing	14/05/2019
4	Deepuraj P	Staff Nurse - Gr. II	Oncology Nursing	15/05/2019
5	Sabitha M S	Staff Nurse - Gr. II	Oncology Nursing	18/05/2019
6	Rejitha Mohan	Technician Radiation Oncology	Radiation oncology	18/05/2019
7	Sunoj K Anand	Technician Radiation Oncology	Radiation oncology	20/05/2019
8	Ajith N	Staff Nurse - Gr. II	Oncology Nursing	03/06/2019
9	Sabeena Mathew	Staff Nurse - Gr. II	Oncology Nursing	10/06/2019
10	Karthika O	Medical Record Assistant	Medical Records	21/06/2019
11	Abhilash K K	Staff Nurse - Gr. II	Oncology Nursing	25/06/2019
12	Sreehari O P	Technician Clinical Lab	Pathology	01/07/2019
13	Sindhu M	Staff Nurse - Gr. II	Oncology Nursing	29/07/2019
14	Sabina C V	Radiographer	Radiotherapy	13/08/2019
15	Shikha M K	Radiographer	Radiotherapy	13/08/2019
16	Dr. Anand Ebin Thomas	Assistant Professor	Surgical Oncology	02/09/2019
17	Dr. Neha Mohan	Assistant Professor	Imageology	16/09/2019
18	Dr. Anand Vijaya Narayanan	Assistant Professor	Oncopathology	01/10/2019
19	Jitha Joseph	Staff Nurse - Gr. II	Oncology Nursing	01/10/2019
20	Sneha V N	Pharmacist	Pharmacy	03/10/2019
21	Nidheesh K	Assistant Pharmacist	Pharmacy	11/10/2019
22	Maneesh P	Staff Nurse Gr-II	Oncology Nursing	14/10/2019
23	Anju Baby	Staff Nurse Gr-II	Oncology Nursing	15/10/2019
24	Preethy U P	Dosimetrist/Physics Assistant	Radiation oncology	16/10/2019
25	Dr. Sandeep Vijay Padinjakara	Assistant Professor	Head & Neck Oncology	28/11/2019
26	Asmina P M	Staff Nurse Gr-II	Oncology Nursing	02/12/2019
27	Sivakumar G S	Staff Nurse Gr-II	Oncology Nursing	02/12/2019
28	Rishana K	Staff Nurse Gr-II	Oncology Nursing	02/12/2019
29	Dr. Joona P	Assistant Professor	Anaesthesiology	09/12/2019
30	Dr. Sonali Opneja	Assistant Professor	Anaesthesiology	09/12/2019
31	Dr. Roopesh Sureshan	Assistant Professor	Anaesthesiology	09/12/2019
32	Meera R Nair	Staff Nurse Gr-II	Oncology Nursing	27/12/2019
33	Dr. Anoop A	Assistant Professor	Head & Neck Oncology	01/01/2020
34	Neha S	Staff Nurse Gr-II	Oncology Nursing	01/01/2020
35	Asha Gopi G S	Staff Nurse Gr-II	Oncology Nursing	01/01/2020
36	Archana V	Staff Nurse Gr-II	Oncology Nursing	13/01/2020
37	Fathimath Suhara	Staff Nurse Gr-II	Oncology Nursing	02/03/2020
38	Ansil M	Staff Nurse Gr-II	Oncology Nursing	09/03/2020
39	Naseema P P	Staff Nurse Gr-II	Oncology Nursing	09/03/2020

STAFF RELIEVED FROM THE INSTITUTION DURING THE PERIOD

Sl.	NAME	DESIGNATION	DEPARTMENT	DOJ	DATE OF RELIEVED
1	Shini S	Staff Nurse - Gr. II	Nursing	21/03/2019	17/04/2019
2	Chithra Veena B	Staff Nurse - Gr. II	Nursing	26/03/2018	10/06/2019
3	Jyothi thomas P	Staff Nurse - Gr. II	Nursing	11/06/2018	08/07/2019
4	Greena Francis	Technician Nuclear Medicine	Pathology	12/07/2018	24/07/2019
5	Sajeevan P	Pharmacist	Pharmacy	28/12/2000	31/07/2019
6	Sarath PV	Radiographer	Nursing	08/06/2018	10/08/2019
7	Sreeachudayalal	Radiographer	Radiotherapy	31/10/2018	10/08/2019
8	Abhilash PS	Staff Nurse - Gr. II	Nursing	19/03/2018	26/08/2019
9	Anjana BR	Staff Nurse - Gr. II	Nursing	23/04/2018	26/08/2019
10	Remya M	Staff Nurse - Gr. II	Nursing	22/10/2012	18/09/2019
11	Dr. Abhay K. Kattepur	Assistant Professor	Surgical Oncology	17/09/2018	29/11/2019
12	Remya L	Staff Nurse - Gr. II	Nursing	17/05/2018	19/12/2019
13	Varsha VV	Staff Nurse - Gr. II	Nursing	26/03/2018	20/12/2019
14	Rinsiya K	Staff Nurse - Gr. II	Nursing	26/07/2018	31/12/2019
15	Divya SS	Staff Nurse - Gr. II	Nursing	10/04/2018	09/01/2020
16	Arathy R	Staff Nurse - Gr. II	Nursing	21/05/2018	26/02/2020

RECRUITMENT PROCEDURES

As per Service Rules of MCC, under Chapter-V-Recruitment Rules, it is mentioned that the Recruiting authority to various posts shall be as follows:

Director	Government of Kerala
Academic staff -	Staff Selection Committee of MCC
Paramedical, Nursing, auxiliary, Technical staff, Junior Administration staff, Last grade	Director - Recruitment Committee constituted for the purpose.

ACADEMIC STAFF

The recruitment of Academic staff is conducted by Staff Selection Committee, consisting of the following, as decided by the Governing Body f MCC:

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

Nationwide notification shall be published in leading newspapers and website of MCC, as and when

vacancy arises for permanent posts. Accordingly applications received, within the stipulated date, shall be evaluated by the Academic Sub Committee of MCC, which includes Heads of 4 Clinical Departments i.e. Of Clinical Lab Services, Hematology & Medical Oncology, Surgical Oncology and Radiation Oncology. A convenient date shall be fixed for Selection Interview, in consultation with Interview Board members. The eligible candidates shall be invited for the Selection Interview.

On the day of Interview, the candidates shall be seated in a separate area and all their electronic gadgets shall be collect and kept separately. The documents of each candidate shall be verified and the eligible candidate will only be allowed to mark their attendance. The Interview guidelines for academic staff, approved by the Executive Committee of MCC.

NON-ACADEMIC STAFF

The recruitment of non-academic staff of MCC is conducted by Recruitment Committee, consisting of the following, as decided by the Executive Committee of MCC:

- 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.

State wide notification will be published in leading newspapers and website of MCC, for filling vacant posts, on permanent basis. Applications received will be forwarded to LBS, Trivandrum for scrutiny and conducting written test for candidates. Written test carries 75 marks out of 100. LBS will prepare a provisional rank list of candidates who had appeared for written test and the same will be forwarded to MCC. Out of the rank list the first four provisionally ranked candidates, for each post (1:4 ratio), will be invited to attend Selection Interview conducted by MCC. Interview carries 25 marks out of 100. While verification of certificates and testimonials all communication devices including electronic gadgets will be collected from the candidates and are seated separately. A set of questions are prepared just before the interview by the subject experts, which carries 15 marks out of 25. Same questions are asked to all candidates and candidates after interview are not allowed to contact other candidates. Moreover the interview board members will be informed of the marks scored by the candidates in the written test, only after interview is over. This is to avoid bias.

Accordingly a rank list will be prepared, and published in the website, immediately after the Interview. Communal rotation is followed for appointment of all non-academic staff in MCC.

STAFF

SL NO	NAME	DESIGNATION
1.	Mr. Rajesh A K	Administrative Officer
2.	Mrs. Preethudas	Personal Assistant
3.	Mr. Rejoy K	Clerk/ Cashier/ Typist
4.	Mr. Sreejith P K	Clerk/ Cashier/ Typist
5.	Mrs .Bindu.T.K	Clerk/ Cashier/ Typist
6.	Mrs.Surekha.M.C	Clerk/ Cashier/ Typist
7.	Mrs.Mini.P	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, 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.

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 and rest of the operation cost of MCC needs to be met by own itself. 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 beneficiaries, 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 Surakshya Scheme (CSS), Snehasanthwanam, Karunya Arogya Suraksha Pathathi (KASP), Karunya Benavolent Fund (KBF) etc. As these Insurance Schemes are not fully covering the treatment cost, rest of the expenditure is borne by MCC, from own pocket.

BENEFICIARIES FACILITATED UNDER VARIOUS SCHEMES IN 2019-20

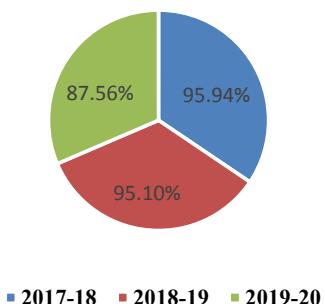
SCHEME NAME	COUNT	SCHEME NAME	COUNT
Karunya Benevolent Fund 2018	2289	PMRS	35
KASP 2019	2274	PWS	28
CHIS PLUS	2247	We Care Project	5
KASP 2019 Out of Package	1541	ASWAS	3
CST	287	Madhyam Health Care Project	3
PMNR	154	Community Project	2
CSS	153	SCTIMST Staff/Dependents Credit Scheme	2
ESI	115	Thalolam	2
PM Foundation Financial Assistance	66	Arogyakiranam	1
Sneha Santhwanam	52	Sukrutham	1
Total	9260		

MCC has its own category assessment mechanism if some of the beneficiaries neither have treatment supporting schemes nor have financial stability. Category Assessment mechanism have 7 grades starting from A to G, which is assessed by clinicians/counselors, against approved parameters on intention that no beneficiaries shall be denied the treatment, due to financial issues. Accordingly in 2019-20 an amount of Rs.4.20 crore has been accounted as subsidy for beneficiaries.

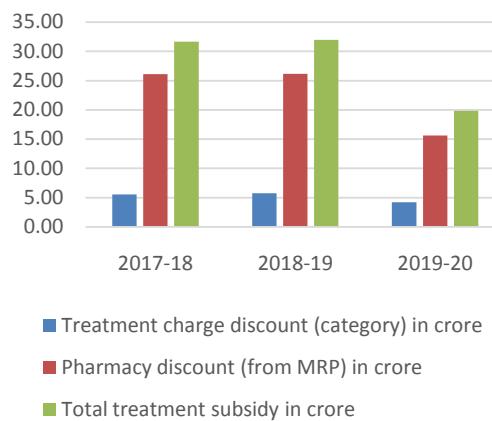
Percentage of patients given free treatment using various financial assistance schemes & Subsidy given based on Economic status of Last 3 year

Particulars	2017-18	2018-19	2019-20
Total % of patients given free treatment using various financial assistance schemes.	95.94%	95.10%	87.56%
Treatment charge discount (category) in crore	5.54	5.77	4.20
Pharmacy discount (from MRP) in crore	26.13	26.18	15.62
Total treatment subsidy in crore	31.67	31.95	19.82

Total % of patients given free treatment using various financial assistance schemes.



Subsidy



PLAN FUND ALLOCATION & UTILIZATION IN 2019-20 FY

Vide order no. G.O.(Rt) No.07/2020/H&FWD dated 01.01.2020, Administrative sanction for an amount of Rs.28.00 crore has received from government for various activities of MCC. The fund utilization under Government Plan fund from 2015-16 onwards are cited below;

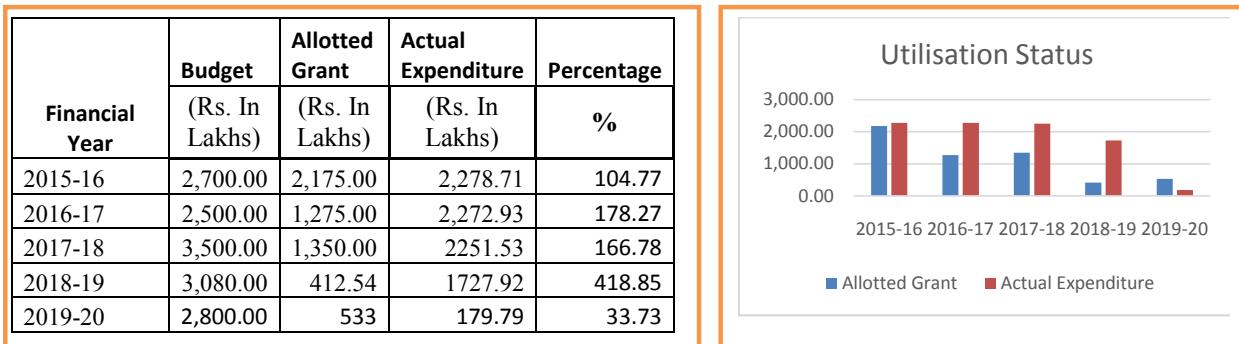
Plan Budget Allocation Status

Financial Year	Budget	Allotted Grant	Allocation (% Wise)	Short (% Wise)
2015-16	2,700.00	2,175.00	80.56	19.44
2016-17	2,500.00	1,275.00	51	49
2017-18	3,500.00	1,350.00	38.57	61.43
2018-19	3,080.00	412.54	13.39	86.61
2019-20	2,800.00	533	19.04	80.96

Allocation Status



Plan Budget Utilisation Status

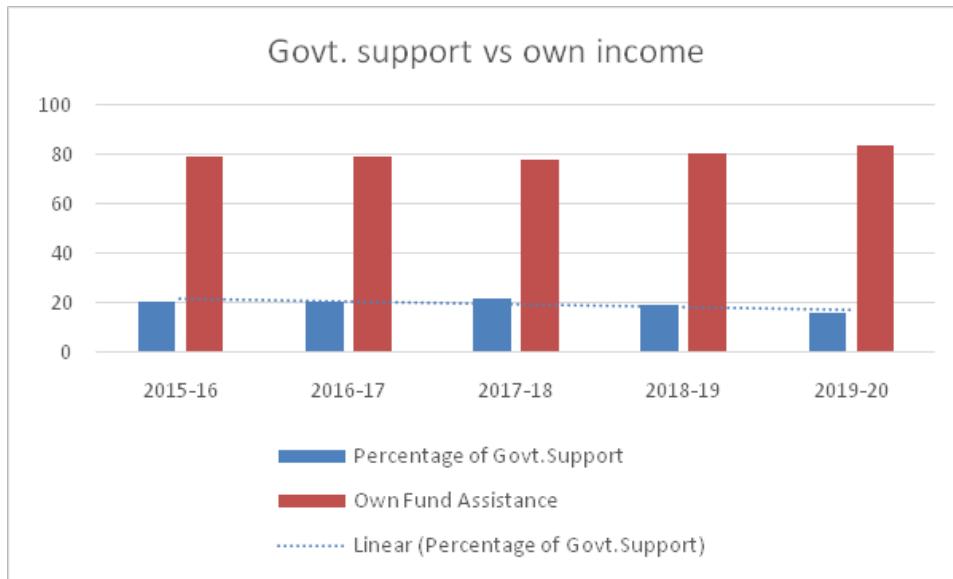


The disproportionate expenditure are due to delay in release of funds, delay in starting constructions, multiple tendering because of poor turn out of firms in purchase of major equipment, etc.

Financial Outcome Including Government Support of Last 5 Year

The total budget provisions under non plan head from government are 13.42% of total expenditure during 2019-20 FY. Rest of the expenditure shall be met from own income of MCC. Accordingly MCC finalized (Not audited) the account with a net loss of 14.57 % excluding depreciation on 2019-20 FY. The graphical representation of government support and Net Profit/loss of MCC of last 5 years is mentioned below.

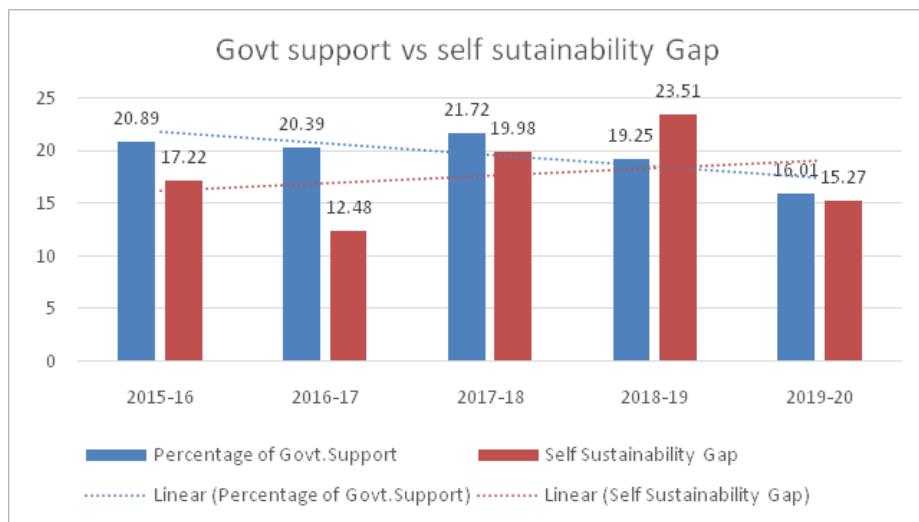
Year	Bud. Provision	Amount Released	Difference	Own Income - MCC	Actual Expenditure	Percentage of Govt. Support	Own Fund Assistance
	(Rs. In Lakhs)	(Rs. In Lakhs)	(Rs. In Lakhs)	(Rs. In Lakhs)	(Rs. In Lakhs)	%	%
2015-16	868.45	868.45	0	3547.24	4157.92	20.89	79.11
2016-17	977.85	977.85	0	4263.84	4796.05	20.39	79.61
2017-18	1101.56	1101.56	0	4227.49	5072.35	21.72	78.28
2018-19	1101.56	1101.56	0	4633.87	5723.22	19.25	80.75
2019-20	1199.78	1014.57	185.21	5497.12	6336.39	16.01	83.99



Self – Sustainability of MCC in Last Five Year

The economic sustainability for last 5 year shows a fluctuating trend and MCC is working 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 adopted the policy for developing the institution as an exponentially progressing apex institution with equal thrust on clinical care, oncology related education and multifaceted research. Accordingly institution will progress in to a Post Graduate Institute in Oncology and Research and will achieve 100% economic stability.

Year	Percentage of Govt. Support	Own Fund Assistance	Net Profit/ Loss	Self Sustainability Gap
	%	%	%	%
2015-16	20.89	79.11	6.20	17.22
2016-17	20.39	79.61	9.29	12.48
2017-18	21.72	78.28	5.06	19.98
2018-19	19.25	80.75	0.21	23.51
2019-20	16.01	83.99	2.77	15.27



STAFF

SL NO	NAME	DESIGNATION
1.	Mr. Reji Sankar	Finance Officer
2.	Mr. Jayadeep	Clerk/ Cashier/ Typist
3.	Mr. Anoop V S	Clerk/ Cashier/ Typist
5.	Mr. Ganeshan	Clerk/ Cashier/ Typist

PURCHASE/ STORES DIVISION & PHARMACY



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

Sl.	EQUIPMENT	NAME OF THE SUPPLIER	AMOUNT
1	Core Network Switch & Accessories–	M/s. Sacaya Technologies Pvt Ltd	Rs.9,27,200.00
2	Diathermy Vessel Sealing And Accessories	M/s.Axis Medical Systems	Rs.14,53,933.00
3	Flexible Laryngoscope	M/s. KARL STORZ Endoscopy India Pvt Ltd	Rs.4,99,999.00
4	Thompson Retraction System	M/s. Alliance Surgical & instruments	Rs.9,50,000.00
5	OPD ENDOSCOPE UNIT	M/s. Serum biologicals	Rs.15,34,000.00
6	Modular Lab Furniture	M/s. Modern lab interio.	Rs.19,89,870.00
7	-86°C FREEZER (Make: PHCbi, Japan & Model: MDF DU 702VX)	M/s. SciMed (Asia) Pte. Ltd,	JPY 11,82,500.00 + INR 209735/- (customs duty amount)
8	Flow Cytometer 10 Colour and Accessories [Make & Model: BECTON DICKINSON, FACSLyric System]	BECTON DICKINSON HOLDINGS PTE. LTD	USD 54,450/- + INR 7,45,856/- (customs duty amount)
9	Liquid Based Cytology SYSTEM & Automated Stainer	M/s. Trivitron Health Care Pvt Ltd.	Rs.42,25,834 /-

10	Binocular Microscope	M/s. Radical Scientific Equipments Pvt. Ltd.	Rs.2,50,000.00
11	40 KVA Modular UPS	M/s. Hykon India Ltd.	Rs. 8,74,000.00
12	Intervention Radiology System – Cath Lab with accessories (Make & Model: Siemens Healthineers, Artis Zee Pure-floor mounted Single Plane)	M/s. Siemens Healthcare Private Limited	USD5,21,500.00 Plus customs duty + INR 2,75,05,307.36 (Accessories)
13	CT Scanner (Model: Revolution Evo)	M/s. Wipro E Healthcare Pvt. Ltd.,	Rs. 6 crore
14	Theratron Equinox model Telecobalt machine with required accessories (Make: Best Theratronics, Canada)	M/s. TeamBest Theratronics Asia Pvt. Ltd,	USD3,60,122.00 + Customs duty
15	DIGITAL RADIOTHERAPY SIMULATOR (Make & Model: Panacea Medical Technologies Pvt. Ltd, IMAGIN)	M/s. Panacea Medical Technologies Pvt. Ltd.	Rs.1,85,00,000/-
16	Biosafety Cabinets-Class II A2 (Model: HF Safe 1200LC) @ Rs.4,43,000/- (GST included) – 3 nos,	M/s. Biolinx India Pvt. Ltd,	Rs.13,29,000.00
17	Tissue Culture Hood (Model: HF Safe 1200LC)	M/s. Biolinx India Pvt. Ltd,	Rs.3,36,800/-
18	-80°C Deep Freezer (Model: DW-HL538S, Make: BLUE STAR)	M/s. Biolinx India Pvt. Ltd,	Rs.5,50,000/-
19	-20°C Deep Freezer (Model: DW-YL450S, Make: BLUE STAR)	M/s. Biolinx India Pvt. Ltd,	Rs.1,50,000/-
20	Automated Electrophoresis With Immunofixation (Make: Helena Bioscience, Model: SAS-3 & SAS-4)	M/s. Meridian diagnostics,	Rs.24,40,000/-
21	Fully Automated Coagulation Analyzer (Make: STAGO, FRANCE, Model: STA SATELITE MAX)	M/s. Bio-Diagnostics	Rs.10,00,000/-
22	Osmometer (Make & Model: Wescor Elitech Group Vapro 5600)	M/s. Labx, Thiruvananthapuram	Rs.7,00,000/-
23	High Speed Table Top Centrifuge (Model: Sorvall ST 8, Make: Thermo Fisher Scientific)	M/s. Kochin inlab equipments india pvt ltd,	Rs.3,35,000/-
24	Refrigerated Centrifuge For Blood Bags And Accessories (Model: Cryofuge 16, Make: Thermo Fisher Scientific)	M/s. Kochin Inlab Equipments India Pvt Ltd	Rs.42,00,000/-
25	Pcr – Thermal Cycler (Model: Abi, Proflex 3x32, Thermo Fisher Scientific)	M/s. Biovision	Rs.6,10,000/-

26	High Speed Table Top Centrifuge (Make: Labwe Benchtop Multi Pipe Centrifuge – Imported, Model: Bt5c	M/s. Universal Agencies	Rs.2,22,900/-
27	-20°C DEEP FREEZER (Cat No. DW-YL450, Make: BLUE STAR)	M/s. Biolinx India Pvt. Ltd,	Rs.3,54,000.00
28	Reagent Refrigerator (Cat No. YC-330, Make: BLUE STAR) - 03 Nos	M/s. Biolinx India Pvt. Ltd,	Rs.7,08,000/-
29	Hospital Cots	M/s. Midmark (India) Private Limited.	Rs.31,28,522/-
29	High End Multipara Monitors	M/s. Medi Serve.	Rs.29,36,000
30	Syringe Pump (Pediatric Block): 10 Nos	M/s Link Surgicals and Medi System	Rs.5,70,000/-
31	Infusion Pump (Pediatric Block) : 15 Nos	M/s Link Surgicals and Medi System	Rs. 8,10,000/-
32	Hospital Cleaning Equipments	M/s. ROOTS Multiclean Ltd.	Rs.6,47,161
33	Bio Safety Cabinet (2 nos)	M/s. BiolinxIndia Pvt Ltd	Rs.13,00,000/-
34	Network Switch & Accessories	M/s. Sacaya Technologies Pvt Ltd	Rs.3,50,300/-
35	Forced Air Warmer (Body Warmer	M/s. Classic Healthcare	Rs. 2,62,080/-
36	High End Multipara Monitor	M/s. Mediserve	Rs.1,02,00,000/-
	TOTAL		Rs 22, 19, 86,727/-

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 2019-20 is Rs. 134797220/- (Rupees Thirteen crore fourty seven Lakh Ninty seven thousand two hundred and twenty only). And the total Purchase Amount of Reagents & consumables during the year 2019-20 is Rs 48383288 /- (rupees Four Crore Eighty three lakh eighty three thousand two hundred eighty eight)

STAFF

SL NO	NAME	DESIGNATION
1.	Mr. Jayanandan A	Clerk/ Cashier/ Typist
2.	Mr. Dinesh Kumar. T.M	Clerk/ Cashier/ Typist
3.	Mr. Prasoonan.P.P	Clerk/ Cashier/ Typist
4	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.

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 2019-20 is as below:

Total purchase amount	-	Rs. 134797220/-
Total sale amount	-	Rs. 171901022/-STAFF

STAFF

SL NO	NAME	DESIGNATION
1	Mrs. Sneha V N	Pharmacist
2	Mr. Sugandham	Assistant Pharmacist & Pharmacy In charge
3	Mr. Viju V S	Store Keeper
4	Mrs. Nisha Gangan T V	Assistant Pharmacist
5	Mrs. Sajitha P	Assistant Pharmacist
6	Mr. Nidheesh K	Assistant Pharmacist
7	Mrs. Sabitha M V	Pharmacy Assistant
8	Mrs. Bindu K T	Pharmacy Assistant
9	Mrs. 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 the overall security of MCC and is headed by Security Officer. He will be under the direct supervision of Director/Administrative Officer. Security guards are ex-servicemen and are outsourced through KEXCON (Kerala State 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 equipment and some equipment are installed under Atomic Energy Regulatory Board (AERB) regulations. AERB insists tight security for these equipment and Security Plan of the Centre is approved and under the District Police Chief (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

LIBRARY AND INFORMATION SCIENCE DIVISION



INTRODUCTION

Medical Library provides integrated library infrastructure for effective use of electronic resources. All administrative work involving purchase of Books, subscription of journals, scrutiny of bills for the payment, calling for tenders, quotations etc, are carried out, under this division.

DEPARTMENTAL LIBRARY

Departmental Library was started in 2012 and at present we have 8 departmental and 3 divisional libraries.

DEPARTMENTS

1. Department of Clinical Laboratory Services and Translational Research
2. Department of Surgical Oncology
3. Department of Imageology
4. Department of Clinical Haematology and Medical Oncology
5. Department of Cancer Registry and Epidemiology
6. Department of Community Oncology
7. Department of Oncology Nursing
8. Department of Onco anaesthesiology

DIVISIONS

- Molecular Oncology
- Blood Bank & Transfusion Medicine
- Medical Records

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.

24 x 7 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.

FACILITIES

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 -12500

LIST OF ONLINE JOURNALS/DATABASE PURCHASED

1. Wiley online
2. Ovid
3. Springer Nature
4. Taylor & Francis

NUMBER OF PRINTED BOOKS/ PRINTED PERIODICALS

ISSUED DURING THE PERIOD: 042

STATISTICS

BOOKS : 3262

JOURNALS

Printed : 25

On line : 40

HOSPITAL LIBRARY

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.

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	-	289
Number of Magazines subscribed	-	42
Number of Newspaper	-	5
Number of New Members	-	035
Total Number of Books issued	-	445
Total Number of Magazines issued	-	185

STAFF

Sl. No	Name	Designation
1	Mr. Subhash Chandran AK	Medical Librarian
2	Mr. Harish Babu	Asst. Librarian

CLINICAL ADMINISTRATION & PUBLIC RELATIONS



INTRODUCTION

Department of Hospital Administration and Public Relations is the control center of the hospital which looks after the entire operations of the hospital. Various administration activities related to Hospital operations are dealt by various sections of the department. The activities coming under each section is dealt by the Hospital Assistants. The Front office Assistants(FOA) who are outsourced through Kudumbasree works under Hospital assistants in each section. The department provides 24*7 services catering to the needs of the patients. Various sections of the department include registration, OP management, admission, IP management, Billing, insurance and other schemes, certificates and reimbursement, help desk, quality assurance and patient welfare. The media and public relations are also dealt by the department. Public Relations Officer cum Social Investigator manages media, PR and various patient related schemes. The major activities of the department are

- Co ordination of entire hospital activities
- Co ordination of various training programs for the staff.
- Co-ordination of various Research Projects
- Liaison work with various Governmental and other agencies
- Billing of Hospital services
- Patients and relatives guidance and counseling
- Implementation of various patient welfare services
- Organizing Public events
- Quality assurance and various certification related activities
- Management of Patient relationship
- Management of communications across hospital & with the patients and other stake holders
- Assistance in conducting various fellowships, internships and other training programs to external and internal students.
- Issue press releases to print and audio visual medias
- Management of patients and their relatives concerns, complaints and suggestions
- Issue of various certificates and forms related to patients' treatment.

VARIOUS SCHEMES DEALT BY THE DEPARTMENT ARE

- Karunya Arogya Suraksha Padhati
- Karunya Benevolent Fund
- 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
- Prime Minister's Relief Fund
- Chief Ministers Relief Fund
- Patient Welfare fund of MCC: Fund created by donations receiving from various organizations, individuals etc to help patients who do not have any financial support system.

DETAILS OF FINANCIAL ASSISTANCE SCHEMES IMPLEMENTED IN MCC 2019-20

SCHEMES	2019-20 NO OF BENEFICIARIES	AMOUNT
KASP2019-20	2774	107685877.47
KASP out of package	1542	35634663.81
CHIS PLUS	2247	24055136.46
Karunya Benevolent Fund 2018	1797	68490066.48
Comprehensive Health Care Project	287	12776692.98
ESI	115	14363499.82
PMNRF	155	2232691.4
Cancer Suraksha Scheme	153	14111591.25
PMRS	35	1673273.98
Thalolam	2	335008.92
SNEHASANDWANAM	52	1112739.91
Patient Welfare Fund	23	88032.19
ASWAS	3	7935

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 2019-20 24,319 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	Public Relations Officer	3 days	Hospital Administrator	Administrative Officer
2	Right to obtain Certificates for financial assistance from various sources	Public Relations Officer	3 days	Hospital Administrator	Administrative Officer
3	Right to obtain Certificates for re imbursement claims for investigations/treatment	Public Relations Officer	7 days	Hospital Administrator	Administrative Officer
4	Right to obtain Train concession forms for cancer patients	Public Relations Officer	1 day	Hospital Administrator	Administrative Officer

SL.NO	NAME OF SERVICE	NO. OF APPLICATIONS RECEIVED
1	Right to obtain Medical Certificates/Treatment Certificates for various purposes	8014
2	Right to obtain Certificates for financial assistance from various sources	3980
3	Right to obtain Certificates for re imbursement claims for investigations/treatment	340
4	Right to obtain Train concession forms for cancer patients	11978
TOTAL		24312

MALAYALAM – OFFICIAL LANGUAGE

- More than 94% of the files in MCC are in Malayalam language
- Formulated BharanaBhashaEkopanaSamidhi
- Formulated Paribhasha Cell

YEAR	TOTAL NO. OF FILES	NO. OF FILES IN MALAYALAM	NO. OF FILES IN ENGLISH	% OF FILES IN MALAYALAM
2019-20	4260	4045	215	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.Bindu T.N	Hospital Assistant
12	Mrs.Honey Mol	Hospital Assistant
13	Mrs.Aswani V	Hospital Assistant
14	Mrs Safna Sari	Hospital Assistant
15	Mrs Gladish A	Hospital Assistant
16	Miss Manjusree G	Hospital Assistant
17	Mrs BinduT.K	Clerk/Cashier/Typist
18	Mr. Rajeevan U	Telephone Operator
19	Mr. Pramod P	Attender
20	Mr. Rathish	Attender

DEPARTMENT OF ONCOLOGY NURSING



INTRODUCTION

The main stratum of workforce in MCC is constituted by well trained professional nurses. There are various nurse led clinics such as CVAD, Stoma care, Lymphedema Clinics etc.

In view of COVID 19 outbreak onco-nursing department planned and implemented strategies to fight COVID as per the guidelines of COVID cell Malabar cancer centre. It include

- Screening of all patient, relatives and staffs on daily basis.
- Covid sampling for all suspected patients and staff.
- A well equipped isolation room with ventilator facility set in the ward.
- In order to tackle any emergency situation related to corona outbreak, COVID 19 RRT onconursing group was created.
- Provided training to all the staff nurses and Residency oncology nurses regarding the ventilator care and management of patient on ventilator.
- Prepared informative videos about donning and doffing of PPE do's and don'ts during covid19 and staff awareness then circulated these videos among all staffs.
- Training by infection control team on infection control policies to all hospital staffs.
- Information regarding webinar and online classes provided and started online classes for nurses through clinical nursing education unit.
- Quarantine facility for hospital staffs arranged in the hospital premises.

NURSING INSERVICE EDUCATION PROGRAMMES (NIEP)

In service education programs have been carried out through the year in order to upgrade the standard of nursing care and solving the practical issue. The following classes were conducted in MCC.

- CVAD care and management classes given to all nursing staffs.
- An overview of new insurance policy Karunya Arogya Suraksha Padhathi (KASP)

- National accreditation board hospital standard(NABH)
- Infection control measures during Covid 19.
- Best practices in iv cannulation: 24.01.2019
- Clinical Nursing Education unit was started with an aim to improve the professional competency of nurses. The topics were selected and planned for giving classes for nurses every week.
- Patient education cell started functioning in November 2019.
- Online classes started and staffs attended webinar related to Covid 19 and management.

ACTIVITIES AND ACHIEVEMENTS

- CNE on changing trends and perspective of emerging and re-emerging communicable diseases: 20 July 2019: 3 participants
- Bone marrow transplant unit conducted a family meeting of bone marrow transplant survivors as NAVAJEEVAN on 31august 2019.
- Paediatric oncology unit conducted a family get together of paediatric survivors on 09.2019.
- Workshop on safety measures in healthcare workers: Jan2020:3 participants.
- BLS training conducted for 20 nursing staffs.
- Online classes started for nurses.

PATIENT AWARENESS PROGRAMM

Health talk, painting competition, poster and demonstration are frequently organized in different clinical areas to avail public awareness.

INFECTION CONTROL NURSE ACTIVITIES

- Conducted various sessions for newly recruited nurses and housekeeping staffs on hospital infection control practices, biomedical waste management, spill management and needle stick injury.
- Individual area rounds conducted by ICN on daily basis and onsite training programme were conducted in clinical areas.
- Surveillance of environmental culture and sterility samples taken monthly basis and report distributed to all perspective areas and take action according to hospital policy.
- Special training to all hospital staffs regarding COVID19 management.

STAFF

SL NO	NAME	DESIGNATION
1	Sreelatha	Nursing superintendent
2	Liby George	Head Nurse
3	Shiny A F	Head Nurse
4	Abhina S S	Staff nurse Grade 1
5	Bijitha P	Staff nurse Grade 1
6	Jisha K	Staff nurse Grade 1
7	Kavitha C N	Staff nurse Grade 1
8	Ligy José	Staff nurse Grade 1
9	Maya P K	Staff nurse Grade 1
10	Navami T C	Staff nurse Grade 1
11	Sabitha K	Staff nurse Grade 1
12	Seena E	Staff nurse Grade 1
13	Shaija E	Staff nurse Grade 1
14	Sheeja Nellikka	Staff nurse Grade 1
15	Sindhu N R	Staff nurse Grade 1
16	Sindhu S	Staff nurse Grade 1
17	Smitha Grace	Staff nurse Grade 1
18	Srelatha T N	Staff nurse Grade 1
19	Sujatha K	Staff nurse Grade 1
20	Abhilash.K.K	Staff nurse Grade 2
21	Aiswarya K S	Staff nurse Grade 2
22	Ajaya kumar V D	Staff nurse Grade 2
23	Ajith.N	Staff nurse Grade 2
24	Akash Surendran	Staff nurse Grade 2
25	Ameer Sanchani o	Staff nurse Grade 2
26	Aneesha S	Staff nurse Grade 2
27	Anjana G N	Staff nurse Grade 2
28	Anjana.S.R	Staff nurse Grade 2
29	Anju Baby	Staff nurse Grade 2
30	Ansil.M	Staff nurse Grade 2
31	Anuthara R	Staff nurse Grade 2
32	Archana.V.Hari	Staff nurse Grade 2
33	Asha Gopi	Staff nurse Grade 2
34	Asha John B	Staff nurse Grade 2
35	AshaMol M A	Staff nurse Grade 2
36	Asmina.P.M	Staff nurse Grade 2
37	Athira K Chandran	Staff nurse Grade 2
38	Bhavadas	Staff nurse Grade 2
39	Bhavya.K.K	Staff nurse Grade 2
40	Bijeesh Mohan	Staff nurse Grade 2

41	Bindhu Raman	Staff nurse Grade 2
42	Blassy p	Staff nurse Grade 2
43	Chithira.B	Staff nurse Grade 2
44	Deepa Mathew	Staff nurse Grade 2
45	Depu Raj	Staff nurse Grade 2
46	Divya c m	Staff nurse Grade 2
47	Divya.I.V	Staff nurse Grade 2
48	Eana S	Staff nurse Grade 2
49	Fathimath Suhra	Staff nurse Grade 2
50	Gis Jose	Staff nurse Grade 2
51	Harikrishna P G	Staff nurse Grade 2
52	Haseenamol .K.A	Staff nurse Grade 2
53	Jaleema Lawarance	Staff nurse Grade 2
54	Jayakrishna Prabhu	Staff nurse Grade 2
55	Jayasree	Staff nurse Grade 2
56	Jemy Mathew	Staff nurse Grade 2
57	Jibin K V	Staff nurse Grade 2
58	Jincy Xavier	Staff nurse Grade 2
59	Jisha p	Staff nurse Grade 2
60	Jitha Joseph	Staff nurse Grade 2
61	Jithin t p	Staff nurse Grade 2
62	Jolly	Staff nurse Grade 2
63	Kastoori	Staff nurse Grade 2
64	Maneesh	Staff nurse Grade 2
65	Manjima.T	Staff nurse Grade 2
66	Meera.R.Nair	Staff nurse Grade 2
67	Naseema.P.P	Staff nurse Grade 2
68	Navya.T.K	Staff nurse Grade 2
69	Neha.S	Staff nurse Grade 2
70	Nidhina	Staff nurse Grade 2
71	Nimmy P V	Staff nurse Grade 2
72	Nirmala Nallacherry	Staff nurse Grade 2
73	Nisha A R	Staff nurse Grade 2
74	Prajina E	Staff nurse Grade 2
75	Prasanth C Das	Staff nurse Grade 2
76	Praseeda	Staff nurse Grade 2
77	Praseetha M	Staff nurse Grade 2
78	Rajalekshmi.V	Staff nurse Grade 2
79	Remya Raveendran	Staff nurse Grade 2
80	Reshma.B	Staff nurse Grade 2
81	Rinsha P K	Staff nurse Grade 2
82	Rishana.K	Staff nurse Grade 2

83	Roni Antiny	Staff nurse Grade 2
84	Sabeena Mathew	Staff nurse Grade 2
85	Sabitha.C.S	Staff nurse Grade 2
86	Sabitha.M.S	Staff nurse Grade 2
87	Sachithra E	Staff nurse Grade 2
88	Sajika	Staff nurse Grade 2
89	Sajina N	Staff nurse Grade 2
90	Sajitha P	Staff nurse Grade 2
91	Saritha K R	Staff nurse Grade 2
92	Saritha N	Staff nurse Grade 2
93	Satheesh .M	Staff nurse Grade 2
94	Seena Matew	Staff nurse Grade 2
95	Shabina Palliparavana	Staff nurse Grade 2
96	Shamseer	Staff nurse Grade 2
97	Sheeba.S	Staff nurse Grade 2
98	Sheena C	Staff nurse Grade 2
99	Sherjin a j	Staff nurse Grade 2
100	Shibimol Thomas	Staff nurse Grade 2
101	Shiji P	Staff nurse Grade 2
102	Shiji Poulose	Staff nurse Grade 2
103	Shijila v	Staff nurse Grade 2
104	Shimna Sebastian	Staff nurse Grade 2
105	Shiniraj R	Staff nurse Grade 2
106	Shiras	Staff nurse Grade 2
107	Sibi K Daniel	Staff nurse Grade 2
108	Sijo Augustine	Staff nurse Grade 2
109	Silja Kurian	Staff nurse Grade 2
110	Simimol	Staff nurse Grade 2
111	Sindhu.N	Staff nurse Grade 2
112	Sini S S	Staff nurse Grade 2
113	Sivakumar.G.S	Staff nurse Grade 2
114	Smithamol D	Staff nurse Grade 2
115	Soumya Jose	Staff nurse Grade 2
116	Soumya Mathew	Staff nurse Grade 2
117	Soumya p g	Staff nurse Grade 2
118	Sreeja Kumari G	Staff nurse Grade 2
119	Sreeja.K	Staff nurse Grade 2
120	Sreejisha P	Staff nurse Grade 2
121	Sreenivas	Staff nurse Grade 2
122	Srijil A	Staff nurse Grade 2
123	Suji.A.S	Staff nurse Grade 2
124	Suma Devi	Staff nurse Grade 2

125	Sumi	Staff nurse Grade 2
126	Sunera Rajan	Staff nurse Grade 2
127	Sunitha Kumari S	Staff nurse Grade 2
128	Tessy Jose	Staff nurse Grade 2
129	Vijina k	Staff nurse Grade 2
130	Vineeth Krishnan	Staff nurse Grade 2
131	Abitha.C.A	Nursing Assistants
132	Agimol Dominic	Nursing Assistants
133	Biju Prasad	Nursing Assistants
134	Bindhu K M	Nursing Assistants
135	Deepa Prabha O B	Nursing Assistants
136	Dhanya E	Nursing Assistants
137	Dhanya P M	Nursing Assistants
138	Jerry A	Nursing Assistants
139	Jinshi R S	Nursing Assistants
140	Jiji.P.S	Nursing Assistants
141	Kalamol A B	Nursing Assistants
142	Kavitha Prakash	Nursing Assistants
143	Lethiamma P R	Nursing Assistants
144	Mary I C	Nursing Assistants
145	Mercy John	Nursing Assistants
146	Midhun Gopalakrishnan	Nursing Assistants
147	Neethu B S	Nursing Assistants
148	Nisha T	Nursing Assistants
149	Prajina E K	Nursing Assistants
150	Ragi Sandhya	Nursing Assistants
151	Rehana T	Nursing Assistants
152	Rekha Muraleedharan	Nursing Assistants
153	Santhini Chandran	Nursing Assistants
154	Sajina.K.K	Nursing Assistants
155	Shamla N	Nursing Assistants
156	Shibila K	Nursing Assistants
157	Shibu S	Nursing Assistants
158	Shobitha L	Nursing Assistants
159	Silna.K.K	Nursing Assistants
160	Sreejith S	Nursing Assistants
161	Suma.S	Nursing Assistants
162	Surya C	Nursing Assistants
163	Zeenath Battantavida	Nursing Assistants
164	Indu.P	Nursing Assistants
165	Neena.A.P	Nursing Assistants

DEPARTMENT OF ENGINEERING AND MAINTENANCE



INTRODUCTION

Since the inception of Malabar Cancer Centre about two decades back, lots of developments happened in the institute from time to time. The Engineering Wing of MCC is instrumental in these developments by undertaking all major and minor building projects including its design & drawings, estimation, execution through call of tender, supervision, obtaining all regulatory approvals etc. Routine maintenance of all hospital building and its services along with machineries and equipment in the MCC is also taken care by the Engineering Wing.

Operation and maintenance of Electro-mechanical installations in MCC like 11 KV Electrical Substation consisting of 1600 KVA transformer & HT equipment, Diesel Generators, Lift, Telecommunication system, Pump sets & water supply system, sanitary installations, Effluent treatment plant etc and maintenance of Radioactive equipment, MRI, CT etc are part of regular works of the Engineering Wing. AMC of all Hospital equipment 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 etc are also handled by the Engineering Wing.

The following achievements/ activities were carried out/ projects executed in MCC

1. Construction of Pediatric Oncology Block almost 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, accordingly the furniture, wall, floor ceiling, exterior finishing etc were designed which is different from a traditional building design.
2. Construction of Nuclear Medicine Block works completed and intervention radiology (Cathlab) facility has started functioning. Also SECT CT installed and it has started functioning.
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 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 having a plinth area 2350.00sq.m is completed and started functioning.

5. Construction of 18nos General Staff quarters with plinth area 2351.38sq.m is nearing completion.
6. Construction of extension of Canteen with Plinth area: 366.08 sq.m has almost completed
7. Construction of Compound wall- near Chamakulam (RS. No: 46/7 & 44/12): is completed
8. Construction of waiting area and resting area for Bystanders [MLA ADS]: Plinth area 387.05 sqm is nearing completion.
9. SITC 1010KVA LT Diesel Generator, Main Panel Board (MSB) and Connected works completed and DG set commissioned & working satisfactorily.
10. Providing Centralized Medical Gas Line works in Paediatric Oncology Block are completed. Nuclear medicine block, New OT area are also completed.
11. Extension of two wheeler parking shed completed and opened for staff
12. The damaged interlocking pavers laid in the way in & way out road of our Hospital were relayed for smooth movement of vehicle and pedestrians.
13. An indoor badminton court has been constructed near Nurses hostel as per the request from Doctors and staff through M/s ULCCS as free of cost.
14. Calibration of medical equipments- As per NABH norms all the medical equipment in the hospital has been calibrated, to assure the quality and performance of equipments.

STAFF

SL NO	NAME	DESIGNATION
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

RESEARCH, PUBLICATION AND OTHER COMMITTEES

RESEARCH

Research in Malabar Cancer Centre is conducted as per the ICMR guidelines and academic research guidelines specific for the institution is prepared. Research being a major responsibility of the institution, all efforts are taken to maintain the highest ethical and scientific standards. Malabar Cancer Centre is involved in cutting edge clinical research in major Oncological disciplines and it emphasizes on 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

- α. The Scientific Review Committee (SRC)
- β. 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 (2nd and 4th Saturday) and / or as and when required. SRC is responsible for 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. Once studies are approved by the SRC, they are submitted to the IEC for ethical approval all academic staff are trained in Good clinical practices. It is a mandatory requirement for conducting clinical research in MCC.

INSTITUTIONAL REVIEW BOARD –SCIENTIFIC REVIEW COMMITTEE

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	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	Dr. Vineetha Raghavan	Associate Professor, Department of Clinical Hematology and & Medical Oncology
12	Dr. Mohandoss M	Associate Professor, Division of Transfusion medicine and Blood bank
13	Dr. Nizham M Parekutty	Associate Professor, Dept of Surgical Oncology
14	Dr. Manuprasad	Associate Professor, Department of Clinical Hematology and & Medical Oncology
15	Mrs. Maya Padmanabhan	Office bearers, Division of Clinical Research & Biostatistics
16	Mr. Riyas M	Office bearers, Division of Clinical Research & Biostatistics

RESEARCH PROPOSALS

SL. NO	TITLE OF THE STUDY	PI, Co-PI, CI
1.	The spectrum of histomorphologic changes and pathological response following bridge oral metronomic chemotherapy in oral cavity squamous cell carcinoma	Dr. Sithara Aravind
2	A comparative three arm Randomized Control Trial of Psychotherapy and Yoga on Distress and the Quality of life of Non Palliative Breast Cancer Patients	Dr. Satheesan B
3	EGFR mutations in Pulmonary Adenocarcinoma: an initial audit of two years	Dr Sangeetha K Nayunar
4	Flow cytometric enumeration of CD34+ hematopoietic stem cells: A comparison between single versus dual platform methodology using the International Society of Hematotherapy and Graft Engineering protocol	Dr Mohandoss Murugesan
5	Bridge oral Metronomic Chemotherapy in Resectable Oral cavity squamous cell carcinomas – A retrospective analysis of efficacy and toxicity	Dr Praveen Kumar Shenoy
6	Phenotypic and Genotypic Appraisal of Pulmonary Mucinous Adenocarcinoma	Dr Sangeetha K Nayunar
7	Tracheo esophageal prosthesis insertion under endoscopic guidance and local anaesthesia- Outcome analysis	Dr. Sajith Babu T .P
8	Flow cytometric enumeration of CD34+ hematopoietic stem cells: A comparison between single versus dual platform methodology using the International Society of Hematotherapy and Graft Engineering protocol	Dr Mohandoss Murugesan

9	Sexual dysfunction in women with gynecological malignancies treated at a Tertiary Cancer Centre in India-A prospective cross sectional study	Dr. M S Biji
10	A sequential explanatory study of patient and diagnostic intervals in the diagnostic journey of oral cancer patients at a tertiary care centre in northern Kerala.	Dr. Phinse M Philp
11	Dosimetric Study of Interstitial Brachytherapy for Gynecological Malignancies	Dr. Vinin
12	Multi state survival model with cured fraction for head and neck cancer	Mrs. Bindu T
13	Determination of Effective Point of Measurement in the dosimetry of High Energy Photon and Electron Beam	Mrs. Suja C
14	Outcome of laryngo pharyngeal cancer patients treated with induction chemotherapy followed by definitive radiation.	Dr Joneetha Jones
15	An audit of organ at risk (OARs) constraints achieved for carcinoma nasopharynx treated with intensity modulated radiotherapy (IMRT)	Dr. Greeshma
16	TPS Dose Verification Using an In-House Developed Heterogeneous Phantom.	Mrs. Silpa Ajaykumar
17	Assessment of Radiation Scatter Effects on Electrometer Dose	Mrs. Resmi K Bharathan
18	Modeling Pre-donation Testing Strategies in Apheresis- Cost Benefit Approach from Low Throughput Apheresis Blood Centre from India	Dr Mohandoss Murugesan
19	Comparison of ABO antibody levels in Apheresis Platelets Suspended in Platelet Additive Solution and Plasma	Dr Mohandoss Murugesan
20	Predictors for Blood Transfusion Requirement in Patients Undergoing Chemotherapy for Acute Myeloid Leukemia	Dr. Vineetha Raghavan
21	Assessment of treatment plan quality and surface dose with varying PTV to skin proximity in head and neck VMAT planning.	Mrs. Lisha Jose
22	Oral Metronomic Chemotherapy (OMCT) as neo adjuvant treatment in oral cancer patients – surgical complications and morbidity	Dr. Sajith Babu T .P
23	A randomized, double-blind, multicentre, multinational comparative clinical study to compare the efficacy and safety of INTP24 against Avastin® in patients with unresectable, locally advanced, recurrent or metastatic non-squamous non-small cell lung cancer	Dr. Manuprasad
24	An Evaluation of Early Cancer Screening Programs Organized by the Government and NGOs in Northern Kerala – A Comparison	Dr. Satheesan B
25	An online survey to assess changing trends in utility of mediastinoscopy in India	Dr Nizamudheen M P

26	A Study to Assess Levels of Fear of Cancer Recurrence Among Cervical Cancer Survivors From a Tertiary Cancer Centre	Dr. Praveen Kumar Shenoy
27	Role Of Risk Of Malignancy Index Four (RMI- 4) In Prediction Of Oncological Outcomes In Adnexal Masses: A Retrospective Analysis	Dr Adarsh D
28	Unplanned Excision in Soft Tissue Sarcoma – The Unkindest Cut of All	Dr Nizamudheen M P
29	Indications for contralateral neck node dissection in oral cavity squamous cell carcinoma.	Dr. Sajith Babu
30	Phase IIb/III study to determine efficacy of Curcumin and Metformin to reduce the incidence of second primary tumors of aero-digestive tract in patients with history of head and neck squamous cell carcinoma	Dr.Sajith Babu
31	Pattern of distress among cancer patients assessed during new patient counseling and its association with demographic factors and site of cancer: A retrospective cross sectional study	Mrs. Jisha Abraham
32	Retrospective Audit of Adverse Effect Profile of Weekly Paclitaxel Regimen Used in Carcinoma Breast.	Dr Praveen Kumar Shenoy
33	Retrospective Analysis of Breast cancer in younger women: An experience from tertiary care cancer center of south India	Mrs.Maya Padmanabhan
34	Accuracy of diffusion-weighted imaging in differentiating metastatic and benign cervical lymph nodes in head and neck squamous cell carcinoma: An ROC Curve Analysis	Dr.T.V Satheesh Babu
35	Incidence of postoperative complications in patients after head and neck squamous cell carcinoma surgery in Malabar cancer centre during the period 2014-2017	Dr. Sajith Babu T .P
36	Evaluation of swallowing outcomes in ca tongue Patients treated with total or near total Glossectomy	Dr. Sajith Babu T .P
37	Impact of extranodal spread in squamous cell carcinomas of oral cavity-a retrospective analysis	Dr Shoaib Nawaz. P.N
38	Factors Influencing the Survival of patients treated with surgery for oral squamous cell carcinoma: an Institutional Experience	Dr.Sajith Babu T P
39	Factors Influencing Stem Cell Mobilization In Patients With Hematologic Malignancies	Dr. Chandran K Nair
40	Effect Site Concentration of Entropy Targeted TCI Propofol Anaesthesia: A Retrospective Analysis	Dr. Nived K
41	Key factors influencing immune mechanisms in HPV associated oral & oropharyngeal squamous cell carcinomas Neck cancers	Dr Sangeetha K Nayanan
42	A prospective, multicenter, randomized, double blind, parallel group study to compare the	Dr Manuprasad
43	efficacy and safety of biosimilar cetuximab versus innovator cetuximab in combination with platinum-based chemotherapy in patients with recurrent locoregional or metastatic squamous cell carcinoma of the head and neck (SCCHN)	Dr Manuprasad

44	Maxillary Defects and Reconstruction Options of Ablative Surgery of Maxillary Carcinoma: An Experience from a Tertiary Cancer Care Centre in Kerala	Dr. Sajith Babu T .P
45	Neoadjuvant Paclitaxel and Carboplatin in Triple Negative Breast Cancer-Preliminary Experience from a Tertiary Cancer Centre	Dr Joneetha Jones
46	Determination of mononuclear cell count using peripheral smear and flowcytometry in enumeration of peripheral blood stem cells products	Dr Mohandoss Murugesan
47	Analysis on Packed Red Blood Cells Irradiation Practices from South India	Dr Mohandoss Murugesan
48	Spectrum of Pulmonary findings inHigh Resolution Computed Tomography inPatients Undergoing Chemotherapy for Hematological Malignancies -A Tertiary Cancer Centre Experience	Dr Satheesh Babu T V
49	Clinico-Pathologic Appraisal of Primary Small Cell Neuroendocrine Carcinoma of Urinary Bladder- A Single Centre Experience	Dr Noushad Aryadan
50	Classification and Regression Tree (CART) Analysis to Predict Donor Related Factors of High Platelet Yield in PLT Apheresis Donation	Mr.Riyas M
51	Role of Mammogram in Predicting the Molecular Subtype of Breast Cancer: A Retrospective Analysis	Dr.T.V Satheesh Babu
52	Comparison of prognostic scoring groups with focus on pathological prognostic indicators like bone marrow involvement and proliferation index marker in anaplastic large cell lymphoma – 8 years experience from a tertiary cancer centre.	Dr.Kandathil Joseph Philip
53	Microbial pathogens and their susceptibility pattern in surgical site infections among cancer patients – A Retrospective analysis.	Dr.Saravanan M
54	Predictive Factors For Recurrence in Epithelial Ovarian Cancer – A Retrospective Cohort Study	Dr. Appumathirogarajan M
55	Evaluation of quality of life in rectal cancer patients following curative intent of treatment- a cross sectional study	Dr.Aravind N
56	Recurrence After Colorectal Cancer Treatment-How Is It Detected?: A Retrospective Cohort Study	Dr.Prashanth P
57	Outcomes of first 100 transplants in a newly set up transplant centre located in rural part of southern India	Dr.Chandran K Nair
58	CT and MRI based Gross Tumor Volume Comparison in Laryngopharyngeal Cancer	Dr.Vinin N V
59	Impact of Transfusion Dependency at Presentation and Transfusion Intensity during Intensive Chemotherapy on Treatment Outcomes in Acute Myeloid Leukemia	Dr.Mohandoss M
60	Microbial trends and drug-resistance profile of isolates causing infections in febrile neutropenia patients with hematological malignancies - A Prospective study	Dr.Saravanan M

61	Effectiveness of a structured awareness program in improving knowledge about cancer among women in rural Kannur, Kerala, India	Dr.Neethu A P
62	Phenotypic and Molecular characterization of Fungal pathogens causing Respiratory infections in patients with Hematological Malignancy - Prospective study	Dr. Sajani Samuel
63	Breast Cancer In Young Women Less Than 35 Years Of Age: Initial Experience At A tertiary Cancer Centre	Dr.Geetha M
64	Comparison between radiological and pathological estimation of tumor size in invasive breast cancer patients from a tertiary cancer centre in South India	Dr.Satheesh Babu T V
65	Microbial Pathogens and their Susceptibility Pattern in Surgical Site Infections among Cancer Patients – A Retrospective Analysis	Dr.Saravanan M
66	Inter-fractional, Bladder and Rectal Volume Variation and Prostate Displacement in VMAT for Carcinoma Prostate	Dr Arun P Narendran
67	Preoperative Chemoradiotherapy in Elderly Patients with Locally Advanced Rectal Cancer	Dr. Nabeel Yahiya EK
68	Utility of Annual Surveillance Mammogram in Patients with Treated Breast Cancer- a Descriptive Study	Dr. Manuprasad
69	Surface Dose Perturbation Due to Air Gap Between Patient and Bolus for Electron Beams	Mrs. Resmi K Bharathan
70	Study of p16 & NF- κ B(p65) protein expression in oropharyngeal cancers as potential biomarkers for better treatment outcomes	Dr. Bhuvan Chandra Das
71	Dosimetric Comparison of Flattened and Flattening Filter Free Beams in VMAT Treatment Plans of Head & Neck Cancers	Mrs. Silpa Ajay Kumar
72	Treatment compliance in geriatric patients treated with radical radiation therapy in head and neck malignancy	Dr.Joneetha Jones
73	An audit of treatment package time in oral cavity cancer patients treated with adjuvant radiotherapy at Malabar Cancer Centre	Dr.Akhil P suresh
74	A study on pattern of loco-regional recurrence and its relation to the irradiated volume in patients with carcinoma breast receiving adjuvant radiotherapy	Dr.Greeshma
75	Association Between Mammographic Microcalcification and HER 2 Positivity in Breast Carcinoma-2 Year Retrospective Analysis From a Tertiary Cancer Centre	Dr.Satheesh Babu T V
76	Dosimetric Analysis Of Multiple Treatment Planning Techniques For Synchronous Bilateral Breast Carcinoma	Mrs.Lisha Jose
77	Outcomes of Different Treatment Modalities in Autoimmune Haemolytic Anaemia	Dr.Chandran K Nair
78	Dosimetric Study On Breathing Adapted Radiotherapy	Mrs. Suja C A
79	Utility of preoperative MRI in predicting chemotherapy induced necrosis in pediatric and adolescent Osteosarcoma	Dr.Satheesh Babu T V

80	Carcinoma endometrium-effect of delay in adjuvant RT on survival –a retrospective analysis	Dr.Geetha M
81	Synchronous metastasis in carcinoma rectum patients with extramural venous invasion	Dr.Satheesh Babu T V
82	Phase 2 going to phase 3randomized study for evaluation of docetaxel and triple metronomic as second line therapy in head and neck cancer.	Dr.Manuprasad M
83	Use of central venous access devices for chemotherapy-An experience from tertiary cancer center	Dr.Praveen kumar
84	Evaluation of Hemolysin test as a tool to screen high titre group O platelet aphaeresis donors	Dr.Mohandoss M
85	Clinical profile & outcome of leptomeningeal involvement in solid tumors. Retrospective study	Dr.Manuprasad M
86	Cancer related fatigue, perceived stress, and anxiety among	Mrs. Jisha Abraham
87	Prognostic factors of recurrence and/or death in colorectal cancer who underwent initial curative treatment at Malabar Cancer Centre-A progressive three state model study	Mrs.Bindhu T
88	Does delay in treatment due to chemotherapy toxicity influence outcome among adolescent and adult acute lymphoblastic leukemia patients treated with curative intent at Malabar Cancer Centre between 2011-2017?	Dr.Praveen Kumar
89	Identifying the interacting protein of b3a2 and b2a2 subtypes	Dr.Vipin Gopinath
90	Unusual bacterial isolates and its Antimicrobial Susceptibility Profile causing bloodstream infections in Cancer patients in a Tertiary Cancer Centre: - A Retrospective Study.	Dr. Sajani Samuel
91	Developing a histologic risk stratification score to predict survival in cervical squamous cell carcinoma- A cross sectional study at a tertiary cancer center in Kerala	Dr. Sithara Aravind
92	Impact of Derived Heamatological Parameters from Automated Analyser on Overall and Event Free Survival Among Colorectal Cancer Patients	Dr.Sindhu ER
93	Methicillin-Resistant Staphylococci prevalence in cancer patients at a tertiary care cancer centre – A Retrospective study	Dr. Saravanan
94	Extended Spectrum Beta-Lactamase Producing Gram Negative Bacilli in Urine Specimen of Cancer Patients at a Tertiary Care Cancer Center- A Prospective Study	Dr. Sajani Samuel

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

SL No.	NAME	POSITION	AFFILIATION	GENDER	EXPERTISE
1	Dr. T. N. Babu Ravindran	Chairman	Senior Medical Consultant Indira Gandhi Co-Operative Hospital, Manjodi, Thalassery, Kannur	Male	Medical consultant
2	Dr. Sangeetha K. Nayunar	Member	Professor & Head Department of Clinical service & Translational Research, Malabar Cancer Centre, Thalassery, Kerala	Female	Basic Medical Scientist
3	Dr. Balakrishnan Valliyot	Clinician	Professor of Medicine Head, Centre for Medical Research & Non-communicable diseases, Academy of Medical Sciences, Pariyaram, Kannur,	Male	Medicine
4	Dr. Jeeja M.C	Basic Medical Scientist	Additional Professor, Department of Pharmacology Govt, Medical College, Idukki, Kerala	Female	Pharmacologist
5	Dr. Biju George	Clinician	Additional Professor in Community Medicine, Govt. Medical College, Kozhikode, Kerala	Male	Community Medicine
6	Adv. Preethi Parambath	Legal expert	Addl Govt Pleader & Public Prosecutor, Kannur District Court, Thalassery, Kerala	Female	Legal expert
7	Adv. John Joseph	Legal Expert	Advocate, near District Court, Thalassery, "Thalackal" House Nangarath Peedika, Temple Gate P.O., Thalassery, Kerala PIN- 670 102	Male	Legal Expert
8	Dr. K. R. Vasudevan	Clinician	Consultant Physician "ARCHANA", Kovilakam Road, Nilambur (P.O), Malappuram, Kerala	Male	Medical consultant
9	Rev. Fr Thomas Thengumpally	Social Scientist	Chancellor Archdiocese, Arch Bishop House, Thalassery, PB No. 70 Kerala	Male	Social Scientist

10	Mr. G.V. Rakesh	Lay Person	Correspondent Mathrubhumi Daily, G.V. House, Ponniam P.O., Thalassery, Kannur, Kerala	Male	Lay Person
11	Mrs. Chinnammu Sivadas	Social Scientist	Managing Trustee, Salil Sivadas Foundation, Salil Bhavan", P.O. Sivapuram, Dist. Kannur, Kerala	Female	Social Scientist

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.

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, Malappuram 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
1.	Dr. Satheesan B Director, Malabar Cancer Centre, Thalassery, Kannur-670 103	Convener- Member

RESEARCH ADVISORY COMMITTEE (RAC)

The purpose of the Research Advisory Committee (RAC) is to provide strategic guidance and support to develop an innovative inter-disciplinary research in Malabar Cancer Centre with an objective of better understanding and management of cancer. The committee was established in 2017 with the aim of setting up the interdisciplinary research center, registering our center to National bodies like DSIR/SIRO. It assists in forming collaborations with different national and international research centers. The ultimate aim of developing MCC as a centre of excellence is one of the objective behind constituting the RAC.

S.No	Name & Address	Position
1	Dr.Bhudev Chandra Das, PhD, FNASC, FASc, FAMS, FNA J.C. Bose National Fellow. Hargobind Khorana Chair Professor Amity Institute of Molecular Medicine & Stem Cell Research (AIMMSCR) Dean, Health and Allied sciences, Amity University Uttar Pradesh, Sector-125, Noida, India-201313	Chairman
2	Prof KBR Varma Vice Chancellor, Sathya Sai University, Prasagni Nilayam, Anantapur Distict, Puttapatti, Andhra Pradesh 515134	External Member
3	Dr. Shantikumar Nair Dean of Research, Director, Nanosciences, Center for Nanosciences, Amrita Institute of Medical Science Kochi	External Member
4	Dr. Harikrishna Varma P. R. Head ,Biomedical Technology Wing, Sree Chitra Tirunal Institute for Medical Sciences & Technology, Satelmond Palace, Poojappura,Thiruvananthapuram, Kerala, India	External Member
5	Dr. N Raghu Director, Centre for Materials for Electronics, Technology (C-MET), Athani P.O., SH22, Kerala 680581	External Member
6	Dr. Rajendra Pilankatta Dean, School of Medicine and Public, Health(SMPH),Associate Professor, Department of Biochemistry and Molecular Biology, Central University of Kerala, Tejaswini Hills,Periy (PO), Kasaragod (DT),Kerala – 671316	External Member
7	Prof (Dr) Sangeetha K Nayanan Head of the Department, Department of Clinical Laboratory Service and Translational Research, Malabar Cancer Centre, Thalassery.	Internal Member
8	Dr Deepak Roshan VG Assistant Professor, Division of Genetics and Cytogenetics Department of Clinical Laboratory, Service and Translational Research, Malabar Cancer Centre, Thalassery.	Internal Member
9	Mrs Maya Padmanabhan Lecturer,Division of Clinical Research and Biostatistics Malabar Cancer Centre, Thalassery.	Internal Member
10	Prof (Dr) Satheeshan B Director, Malabar Cancer Centre, Thalassery	Convener & Member secretary

PUBLICATION

1. Clinical and equipment-related factors associated with the adequate peripheral blood stem cell collection in autologous transplant at a tertiary cancer center in Kerala - A retrospective cohort study. Murugesan M, Shringarpure K, Karthickeyan DSA, Nair CK, Nayanar SK, Venugopal V, et al. *Transfus Apher Sci.* 2019;58 (May):457–63
2. A Study on Influence of Donor Hematocrit on the Procedural Parameters of Concentrated Single Donor Platelets Collected by Two Apheresis Devices. Chellaiya GK, Murugesan M, Nayanar SK. *Indian J Hematol Blood Transfus.* 2019 (Online Version)
3. A comparison between single- versus dual-platform methodology using the International Society of Hematotherapy and Graft Engineering protocol. Murugesan M, Nair CK, Nayanar SK, Pentapati KC. Flow cytometric enumeration of CD34+ hematopoietic stem cells: *Asian J Transfus Sci.* 2019;13:43–6
4. Analysis of flow cytometric enumeration of CD34+ cells in leukapheresis product from South Indian cancer centre, Murugesan M, Nair CK, Nayanar SK, Pentapati KC.. *Online J Heal Allied Sci.* 2019;18(1):1–4
5. Health-related quality of life in patients with multiple myeloma on novel agents: Report from a tertiary cancer center in rural India. Raghavan V, Manuprasad A, Sajeev Kumar P B, Raj Z, Sheenoy PK, Nair CK. *Cancer Res Stat Treat [serial online]* 2018 [cited 2019 Oct 9];1:92–5
6. Retrospective Audit of Various Surgical Modalities Adopted for Giant Cell Tumor in a Rural Tertiary Cancer Center, Ankalkoti B, Satheesan B, Dipin J, Nizamudheen P, Sangeetha N, *Indian J Surg Oncol.* 2019 Sep;10(3):489–493
7. Sajani Samuel, Safeera A, Gufran Ahmed, Parthiban Rudrapathy, Saravanan Murugesan. Emergence of Non- Diphtheritic Corynebacterium as a Co-Pathogen in Various Clinical Specimens in Cancer Patients. *OJHAS* Vol. 18, Issue 1: (January–March 2019)
8. Sajani Samuel, Noyar T, Gufran Ahmed, Parthiban Rudrapathy and Saravanan Murugesan. Prevalence and Resistance Pattern of Moraxella catarrhalis causing Respiratory Tract Infections in Cancer Patients. *JHAS* Vol. 18, Issue 1: (January–March 2019)
9. Comparison of ICRU and GEC-ESTRO Organ at Risk Doses in Intracavitary Brachytherapy for Carcinoma Cervix, Vinin NV, Joneetha Jones , Shimjith Narayanan, Resmi K Bharathan, Nabeel Yahiya EK, Arun P Narendran, Greeshma KE, Shoaib Nawaz PN and Geetha Muttath, *J Nucl Med Radiat Ther* 2019, 10:3
10. Pain Management in Children With Cancer Using World Health Organization Guidelines at a Tertiary Cancer Center in Rural India, *Journal of Pain & Palliative Care Pharmacotherapy* ,M. S. Biji, V. Vinayagamoorthy, T. K. Jithin, Vineetha Raghavan, Kalaiselvi Selvaraj, Karthickeyan Duraisamy, Kalpita Shringarpure, S. S. Abhinaa, Vanitha Priya Deenathayalan, Kedar Mehta, Priya Rathi & Lulu Mathews (2019)
11. Osteonecrosis of the jaw among patients receiving antiresorptive medication: A 4-year retrospective study at a tertiary cancer center, Kerala, India, Pramod S Sankar, SA Thilak, P Nayak, JP Tripathy, B Satheesan, AV Rajitha, *Contemporary of clinical dentistry*, Year : 2018 ,Volume : 9, Issue : 1, Page : 35-40
12. Dosimetric Study Of Small Circular Cutouts For Electron Beam Therapy, Resmi K Bharathan, *International Journal Of Scientific Research* : Volume-8, Issue-1, January-2019
13. Accuracy of Out of Field Photon Dose Calculations by a Treatment Planning System” , Silpa Ajay-kumar, *Indian journal of public Health Research& Development*, July 2019, vol.10, No.7
14. Unplanned excision in soft-tissue sarcomas – Is it the unkindest cut of all? Nizamudheen M Pa-reekutty, Abhay K Kattepur, John J Alapatt, B Satheesan, *Cancer Research, Statistics and Treatment*, 2019, Volume : 2, Issue : 2, Page : 152-157

15. Acute Necrotizing Pancreatitis after Esophagectomy: A Nail in the Coffin? Abhay K. Kattepur, Nizamudheen M. Pareekutty, John J. Alapatt, Satheesan Balasubramanian, Journal of Current Oncology, Volume 2, Issue 2, July-December 201
16. En Bloc Resection with Partial Sacrectomy Helps to Achieve Ro Resection in Locally Advanced Rectal Cancer, Experience from a Tertiary Cancer Center, Nizamudheen Pareekutty, Balasubramanian Satheesan, Sachin Kadam, Dipin Jayaprakash, Indian Journal of Surgical Oncology 10(12) · January 2019
17. Dosimetric comparison of tandem and ovoids with tandem and ring for intracavitary brachytherapy for carcinoma cervix, Vinin NV, Adarsh Dharmarajan, Sahin PM, Joneetha Jones, Resmi K Bharathan, Nabeel Yahiya, Geetha Muttath, Oncology and Radiotherapy 1 (46) 2019: 039-042
18. Acute Necrotizing Pancreatitis after Esophagectomy: A Nail in the Coffin? Abhay K. Kattepur, Nizamudheen M. Pareekutty, John J. Alapatt, Satheesan Balasubramanian, Cancer Research, Statistics, and Treatment, Volume 2, Issue 2, July-December 2019
19. 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, Volume 56, Issue 3, July-September 2019
20. Life and limb after limb salvage surgery for osteosarcoma in an Indian tertiary cancer center, Ankalkoti B, Pareekutty NM, Kattepur AK, Kumbakara R, Vazhayil R, Balasubramanian S, Cancer Research, Statistics, and Treatment, Volume 2, Issue 2, July-December 2019

OTHER COMMITTEES

SL NO	NAME OF COMMITTEES
1	Academic Council
2	Admin Committee
3	NABH Committee
4	Building Committee
5	Canteen Core Committee
6	Internal Complaint Committee
7	CSR Committee
8	Patient Welfare Committee
9	Technical Committee
10	Stock Verification Committee
11	Pre-bid Committee
12	Waste Management Committee
13	Library Committee
14	Hospital Management Committee
15	Nursing Administration Committee

NABH RELATED COMMITTEES

SL NO	NAME OF COMMITTEES	8	Clinical Audit Committee
1	Quality Assurance Committee	9	Credentialing and Privileging Committee
2	Facility Management and Safety Committee	10	Grievance Handling Committee
3	Hospital Infection Control Committee	11	Medical Record Audit Committee
4	Blood transfusion Committee	12	Internal Complaint Committee
5	Code Blue/CPR Committee	13	Institutional Ethics Committee
6	Pharmaco-therapeutic Committee	14	Radiation Safety Committee
7	Internal Audit Committee		

COURSES AT MCC

SL No.	COURSE	DURATION	UNIVERSITY/ BOARD
1	B. Sc MRT, (Medical Radiology Technology)	4 Years	Kerala University of Health Sciences
2	B.Sc. Nursing	4 Years	Kerala University of Health Sciences
3	Basic Certificate Course in Community Palliative Nursing (BCCCPN)	6 weeks	Institute of Palliative Medicine, Kozhikode
4	Certificate Course in Community Palliative in Auxiliary Nursing Course(CCPAN)	3 Months	Institute of Palliative Medicine, Kozhikode
5	Fellowship in Head and neck oncology	1 Year	Institutional fellowship
6	Fellowship Programme in High Precision Radiotherapy	1 Year	Institutional fellowship
7	Fellowship in Gynec Oncology	2 Years	Institutional fellowship
8	Fellowship in Oncopathology	2 Year	Institutional fellowship
9	Fellowship in Head & Neck Pathology	1 Year	
10	Fellowship in Nutrition Oncology	1 Year	Institutional fellowship
11	Indian Association of Palliative Care Courses		
12	Distance education course in Cancer Pain and Palliative Medicine		
13	Post Basic Diploma in Oncology Nursing	1 Year	Kerala Nursing Midwifery Council

ACCOUNTS 2019-20



REJEESH & ASSOCIATES
CHARTERED ACCOUNTANTS

Phone : 0490 2327474, 2327575 (O)
: 0490 2320492, 2341402 (R)
Mobile : 9847175219
e-mail : tkrfca@rediffmail.com

S 2, Town Hall Complex, T.C. Road, Thalassery - 670 104

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 31st March 2020 and the Income and expenditure account for the period 01-04-2019 to 31-03-2020.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the entity as at 31st March 2020 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. 34(B)(2)(a) regarding balance in grant in aid under plan fund shown under the head 'Grant-in-Aid (Plan)' which includes Rs.31.43 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.34(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:

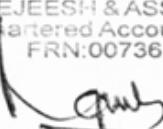
Further, we report that:

- 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
15-01-2021



For REJEESH & ASSOCIATES
Chartered Accountants
FRN:007361S


CA REJEESH T K, M/No: 203015
Proprietor

MALABAR CANCER CENTRE SOCIETY, THALASSERY, KANNUR
CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31-03-2020

PREVIOUS YEAR	EXPENDITURE	NOTE NO	CURRENT YEAR	PREVIOUS YEAR	INCOME	NOTE NO	CURRENT YEAR
17,05,09,740.00	to Pharmacy consumption	1.3	13,28,52,416.00	11,01,56,000.00	By Grant in aid -revenue grant	27	10,14,57,000.00
24,05,25,155.00	* Salary, stipend, wages and allowances	1.4	31,22,57,180.00	25,50,31,096.00	* Revenue from hospital operations	28	34,30,23,008.00
79,17,212.00	* Employer's contribution to provident fund		80,97,229.00	18,40,38,978.00	* Pharmacy collection		17,19,01,022.00
20,94,964.00	* Recruitment expenses		9,04,865.00	1,12,012.00	* Penal liquidation charges		11,71,630.00
5,64,98,693.00	* Consumables/other treatment expenses	1.5	10,46,52,979.00	13,72,996.00	* Rental income	29	23,59,980.00
2,12,04,170.00	* Energy charges	1.6	2,47,83,572.00	87,05,040.00	* Income from training and teaching	30	1,50,18,554.00
12,95,635.00	* Printing and stationery	1.7	10,15,139.00	59,18,788.00	* Donations and contributions	31	25,60,443.00
5,29,017.00	* Postage and telephone expenses		4,11,214.00	1,41,505.00	* Income from early cancer detection camp		
5,46,889.00	* Rates and taxes	1.8	10,87,232.00	56,390.00	* Income from ambulance service		60,210.00
10,04,158.00	* Travelling and conveyance expenses	1.9	10,91,134.00	73,28,546.00	* Interest income	32	1,87,90,557.00
14,13,955.00	* Vehicle running and maintenance expenses	20	15,21,420.00	39,69,229.00	* Other incomes	33	20,93,360.00
31,62,285.00	* Repairs and maintenance	21	23,32,178.00	11,332.00	* Canteen sales		2,19,55,822.00
1,12,41,838.00	* Security service charges		1,12,44,806.00	4,43,000.00	* Agricultural income		6,196.00
1,10,91,021.00	* Cleaning and launching charges		1,19,58,339.00	1,19,58,339.00	* Insurance claim		680.00
66,42,108.00	* Subscription	22	12,744.00	12,744.00	* Summer camp income		
29,85,005.00	* Free food to patients and bystanders	23	34,30,921.00	3,87,600.00	* Excess of expenditure over income transferred to balance sheet		17,500.00
3,10,500.00	* Auditor's fee		3,87,600.00	12,22,91,047.00			11,62,44,202.00
2,92,470.00	* Professional charges		6,66,858.00				
14,79,079.00	* Insurance charges		11,68,809.00				
10,44,214.00	* Advertisement charges		6,49,116.00				
2,43,73,554.00	* Annual maintenance contract charges	24	2,17,07,455.00				
1,56,630.00	* Community oncology expenses		50,447.00				
20,09,096.00	* Affiliation and registration fee		9,84,900.00				
5,19,972.00	* Programme expenses	25	3,49,116.00				
30,20,965.00	* Miscellaneous expenses	26	74,05,950.00				
4,20,000.00	* Rent		10,80,334.00				
12,72,87,634.00	" Canteen purchases	7	1,09,27,356.00				
	" Depreciation written off		13,36,28,855.00				
69,95,75,959.00			79,66,60,164.00	69,95,75,959.00			79,66,60,164.00

AUDITOR'S REPORT

Vide our separate report of even date attached

Place : Thalassery
 Date: 15-01-2021

AUDITOR'S REPORT

For REJEESH & ASSOCIATES
 Chartered Accountants
 FRN: 0073615

CA REJEESH. T. K, M No: 203015
 Proprietor

MALABAR CANCER CENTRE SOCIETY, THALASSERY, KANNUR
CONSOLIDATED BALANCE SHEET AS AT 31-03-2020

PREVIOUS YEAR	CAPITAL AND LIABILITIES	NOTE NO	CURRENT YEAR	PREVIOUS YEAR	ASSETS	NOTE NO	CURRENT YEAR
84,90,89,170.00	CAPITAL FUND	1	94,70,32,964.00	86,63,56,616.00	FIXED ASSETS	7	81,10,33,369.00
46,46,64,317.00	GRANT-IN-AID- CAPITAL GRANT (PENDING UTILISATION)	2	31,43,12,354.00	21,27,21,902.00	WORK IN PROGRESS UNDER PLAN FUND	8	34,35,43,250.00
11,11,80,107.00	ADVANCE AND DEPOSITS	3	12,91,40,817.00	1,07,41,039.00	DEPOSITS AND ADVANCES	9	1,70,84,919.00
10,88,75,795.00	TRADE CREDITORS	4	11,58,95,506.00	22,06,32,209.00	TRADE DEBTORS	10	21,84,28,707.00
35,21,159.00	PATIENTS' WELFARE FUND	5	43,86,726.00	5,98,88,197.00	CLOSING STOCK	11	5,46,57,521.00
16,82,683.00	SEMINAR EXPENSE FUND		18,89,623.00	20,74,85,800.00	CASH AND BANK BALANCES	12	9,33,25,107.00
3,88,12,532.00	OUTSTANDING LIABILITIES	6	2,54,14,883.00		SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS	34	
1,57,78,25,763.00			1,53,80,72,873.00	1,57,78,25,763.00			1,53,80,72,873.00

AUDITOR'S REPORT

Vide our separate report of even date attached

Place : Thalassery
 Date: 15-01-2021

For REJEESH & ASSOCIATES
 Chartered Accountants
 FRN: 0073615

CA REJEESH T. K. M No. 203015
 Proprietor

THE MALABAR CANCER CENTRE SOCIETY, THALASSERY, KANNUR

NOTE NO.34:

SIGNIFICANT ACCOUNTING POLICIES AND NOTES ON ACCOUNTS FORMING PART OF ACCOUNTS FOR THE YEAR ENDED 31ST MARCH 2020.

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 financial year 2018-'19 the society 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.

8) REVENUE RECOGNITION:

Revenue is recognized on accrual basis except revenue due from inpatients as on 31.03.2020 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.

9) 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.

B. 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.31.43 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.

c. The canteen at MCC was run by a canteen committee, formed among staff of MCC. The building was constructed utilising MLA's local development fund and MCC's own funds. The income generated by the canteen was used for the payments of salary and wages of staff employers by the canteen committee and for the betterment of the facilities of the canteen. As per the decision no.13 of the 10th governing body meeting held on 24-01-2019, the canteen has been taken out by the MCC and all assets and liabilities are accounted in the books of accounts of MCC w.e.f 01-04-2018.

d. 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 31-03-2020.

5. Advances received under patient welfare schemes represent amount received from Karunya Benevolent Fund, Sukrutham Anti-Cancer Treatment Scheme, Prime Minister National Relief Fund, Comprehensive Health Insurance Agency Kerala Scheme, Cancer Suraksha Fund for Children, Financial Aid for Endosulfan Victims 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.
6. The society is unable to reconcile receipts to the tune of Rs. 2,96,776/- 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.
7. 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 financial year 2018-'19 the society 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 2019-'20 which is shown under salary, stipend, wages and allowances.
8. 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.
9. Previous year's figures have been regrouped/reclassified wherever necessary in order to suit current year's disclosure.

C. EVENTS SUBSEQUENT TO THE DATE OF FINANCIAL STATEMENTS:

Covid 19 pandemic is rapidly spreading throughout the world. The society has evaluated the likely impact of Covid 19 on overall functions of the society. Though it is too early to estimate the same, in view of the volatility in the global economic conditions pursuant to the pandemic, the society as at the date of approval of the financials has used various available sources of information to analyses the carrying amount of its financial assets and its exposures. The society has used the principles to prudent in applying judgments, estimates and assumptions. The eventual outcome of the impact of the global health of pandemic may be different from those estimated as on the date of approval of the financial statement.



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 the welfare activities of the patients who are undergoing treatment at this Centre. It promotes to raise the fund 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	SBINoooo0926

For further details Contact:

Shri. Rajesh A.K,
Administrative Officer,
Malabar Cancer Centre, Thalassery
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E-mail: mcctly@gmail.com, aomcctly@gmail.com
Web: 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.

Public Information Officer

Sri. A.K. Rajesh
Administrative Officer
Malabar Cancer Centre Thalassery
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Phone:(+91)0490 2355881,
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Fax: (+91) 0490 2355880

Asst. Public Information Officer

Smt. Lasitha KV
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Appellate Authority

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