HOSPITAL BASED CANCER REGISTRY Malabar Cancer Centre, Thalassery, Kannur, Kerala

Dr Satheesan Balasubramanian, Director & Principal Investigator Dr Saina Sunilkumar, Co-Investigator & HOD In-charge

Malabar Cancer Centre is an autonomous institution under Health & Family Welfare Department of Govt. of Kerala. It has started with an aim to establish a much required comprehensive cancer centre for the population of northern region of Kerala and neighbouring parts Karnataka and Tamil Nadu and Union Territory of Puducherry (Mahe). It is the second largest cancer centre in Kerala with 200 beds and has been recognised as 'Tertiary Cancer Centre' by Government of India in 2012. 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. The main modalities of treatment offered by MCC presently include Radiotherapy, Chemotherapy, Onco-Surgery and Palliative Care. The centre also carries out Community Oncology activities including cancer awareness and early detection programmes. Currently it has 15 departments and 23 divisions to provide state-of-art cancer treatment including Bone Marrow Transplantation, Endoscopic Skull Base Surgery, Laser cancer surgery etc. It has research and academic collaboration with School of Health Sciences, Kannur University, Centre for Electronic Materials Technology, Thrissur, P.S. Vaidhyarathnam Ayurveda College, Kottakkal, HTIC-Chennai, which are expected to bring in revolutionary changes in the management of cancer. Malabar Cancer Centre has been recognized as a Research Institute by Kerala University of Health Science.

Department of Cancer Registry and Epidemiology was established in the year 2011 with just two staff. Dr Saina Sunilkumar took charge of the department along with a data entry operator and started Hospital Based Cancer Registry partially supported by National Cancer Registry Programme (ICMR), Bangalore. Now, it has already published four HBCR annual reports for the years 2010, 2011, 2012 and 2013. Agreement with NCRP/ICMR has been done & grant of Rupees 1,10,000 has been sanctioned to MCC for the functioning of the project Patterns of Care & Survival Studies in Breast, Cervix and Head & Neck cancers.

Staff of Registry

Lecturer in Biostatistics	:	Bindu T.
Lecturer in Biostatistics	:	Ratheesan K.
Coding Clerk	:	Nithya C. V.
Data Entry Operators	:	Rincy K.
	:	Sheena E.

Table C.1 gives the total number of new cancers registered in hospital during the period of three years from 1st January 2012 to 31st December 2014. Accordingly, there were 7444 new cancers registered (3934 males and 3510 females).

Table C.2 indicates the number and proportion of specific sites of cancer associated with use of tobacco relative to all cancers.

The basis of diagnosis of cancers registered is shown in Table C.3. The proportion of microscopic confirmation was around 86% in males and 91% in females.

Table C.4 shows the details of microscopically verified cancers. The proportion of patients who were diagnosed by primary histology was around 85% in males and around 94% in females.

Table C.5 gives the number and relative proportion of cancer patients in diverse clinical extent of disease before treatment at the time of registering at the RI.

Table C.6 gives the number and relative proportion of cancer patients according to different treatment modality.

Table	C.1: Number	(#`	and Proportion	1 (%) according to	Sex and	Sex Ratio	o Perc	ent
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Males		Fem	ales	Sax Datio	Total Casaa	
#	%	#	%	שלא המווט	10101 60363	
3934	52.8	3510	47.2	112	7444	

Table C.2: Number (#) and Proportion (%) of Tobacco Related Cancers(TRC) Relative to All Sites of Cancer

Sites of Cancer	Ma	les	Females		
	#	%	#	%	
Lip	8	0.2	15	0.4	
Tongue	203	5.2	105	3.0	
Mouth	286	7.3	220	6.3	
Oropharynx	116	2.9	6	0.2	
Hypopharynx	119	3.0	33	0.9	
Pharynx	3	0.1	-	-	
Oesophagus	172	4.4	92	2.6	
Larynx	190	4.8	10	0.3	
Lung	900	22.9	154	4.4	
Urinary Bladder	101	2.6	21	0.6	
TRC	2098	53.3	656	18.7	
All Sites	3934	100.0	3510	100.0	

Table C.3: Number (#) and Relative Proportion (%) of CancersBased on Different Methods of Diagnosis

Mothod of Diagnosia	Ма	les	Females		
INICITION OF DIAGITOSIS	#	%	#	%	
Microscopic	3392	86.2	3190	90.9	
All Imaging Techniques	411	10.4	202	5.8	
Clinical	29	0.7	32	0.9	
Others	99	2.5	85	2.4	
Unknown	3	0.1	1	0.0	
Total	3934	100.0	3510	100.0	

Types of Microscopic	Ma	les	Females		
Diagnosis	#	%	#	%	
Primary Histology	2891	85.2	2988	93.7	
Secondary Histology	485	14.3	188	5.9	
Primary Cytology	5	0.1	5	0.2	
Secondary Cytology	11	0.3	8	0.3	
Blood Film	-	-	-	-	
Bone Marrow	-	-	-	-	
All Microscopic*	3392	100.0	3189	100.0	

Table C.4: Number(#) and Relative Proportion (%) of CancersBased on Different Types of Microscopic Diagnosis

* Excludes few cases diagnosed by autopsy

Table C.5: Number (#) and Relative Proportion (%) of CancerPatients according to Clinical Extent of Disease(Excluding Patients Previously Treated)

Clinical Extant	Ма	les	Females		
	#	%	#	%	
Localised (L)	85	2.7	106	4.1	
Regional (R)	1259	40.4	1328	51.5	
L+R	1344	43.1	1434	55.6	
Distant	1275	40.9	743	28.8	
Others	497	15.9	400	15.5	
Unknown	2	0.1	4	0.2	
All Stages	3118	100.0	2581	100.0	

Table C.6: Number (#) and Relative Proportion (%) of CancerPatients according to Any Specific Treatment relative to allTreatment Procedures (Treatment Only at RI)

Trootmonto	Ма	les	Females		
Irealineins	#	%	#	%	
Any Surgery	468	18.1	938	27.4	
Any Radiotherapy	1219	47.0	1038	30.4	
Any Chemotherapy	841	32.4	1122	32.8	
Any Hormone Therapy	58	2.2	321	9.4	
Any Others	4	0.2	1	0.0	
Unknown	2	0.1	-	-	
Total	2592	100.0	3420	100.0	