

# Chapter 16

## HEAD AND NECK CANCERS (ICD-10: C00-14, C30-31, C32, C33)

Chapter 16 gives the comprehensive picture of head and neck cancers. These include cancer of lip, Tongue, Mouth, Salivary glands, Oropharynx, Nasopharynx, Hypopharynx, Pharynx, Nose and Sinus, Larynx and Trachea.

Table 16.1 gives the number and relative proportion of Head and Neck cancers relative to all sites of cancers. Overall, Head and Neck cancers accounted for around 30% of all cancers in all registries in males except Dibrugarh (49.6%). In females head and neck cancers ranged from 11-16% of all sites of cancers in all registries.

Table 16.2 and Figure 16.2 depicts the relative proportion of specific sites that constitute Head & Neck cancer. Table 16.3 gives the number and relative proportion of specific sites of Head and Neck cancers relative to all Head and Neck cancers. In males tongue and mouth contributed to more than one third of the total cases except in Dibrugarh where hypopharynx (34.5%) was the major contributor. Among females mouth cancer was the leading contributor to head and neck cancers in all registries. Table 16.4 and Figure 16.4 give the five year age distribution of this group of cancers.

Table 16.5 gives the number and relative proportion based on different methods of diagnosis.

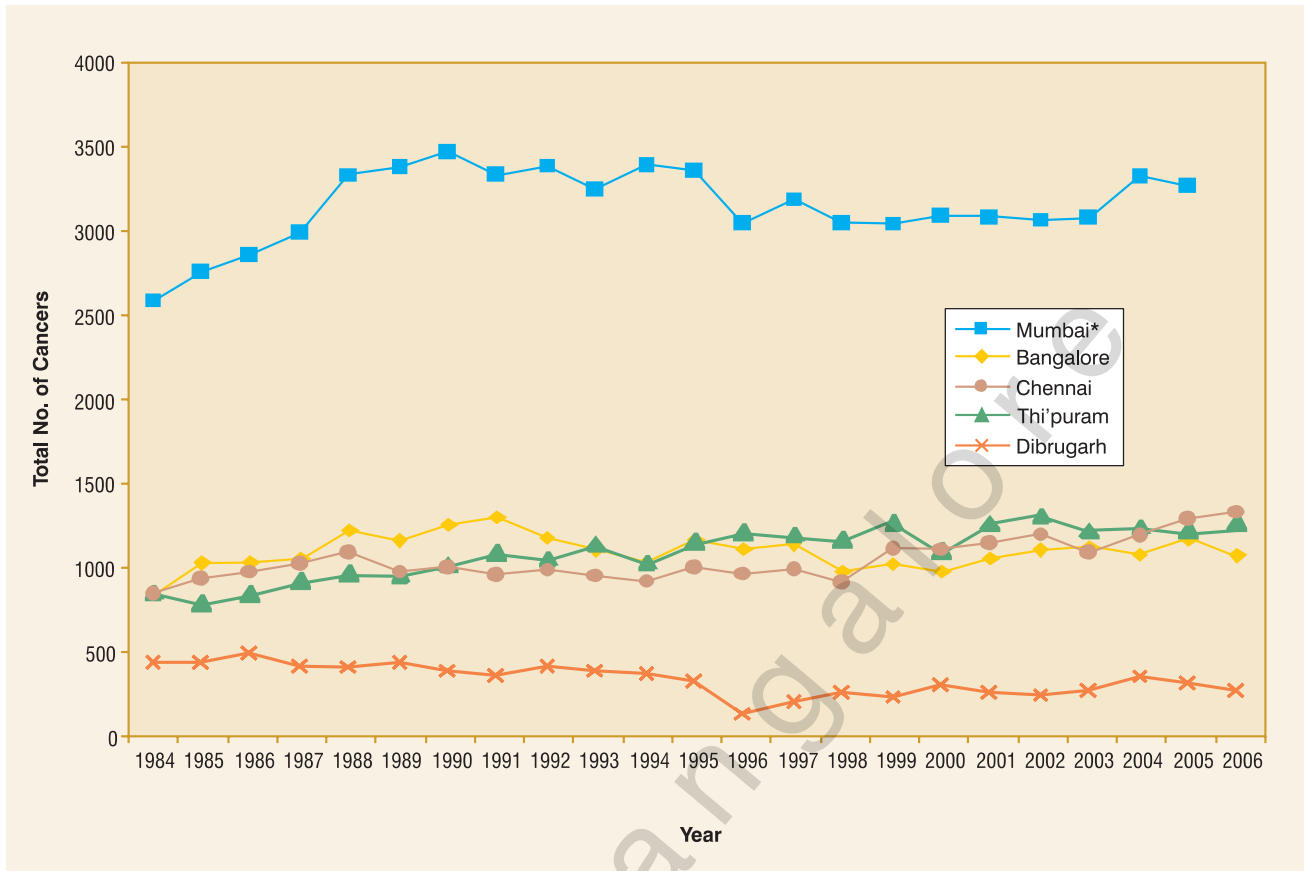
**Table 16.1 : Number(#) & Proportion(%) of Head and Neck Cancers relative to all sites of cancer (2004-2006)**

Registry	Males			Females		
	All sites	#	%	All sites	#	%
Mumbai*	19399	6576	33.9	15313	1726	11.3
Bangalore	10293	3286	31.9	11842	1807	15.3
Chennai	12523	3767	30.1	13589	1533	11.3
Thi'puram	12563	3692	29.4	11394	1331	11.7
Dibrugarh	1782	884	49.6	1063	173	16.3
<b>Total</b>	<b>56560</b>	<b>18205</b>	<b>32.2</b>	<b>53201</b>	<b>6570</b>	<b>12.3</b>

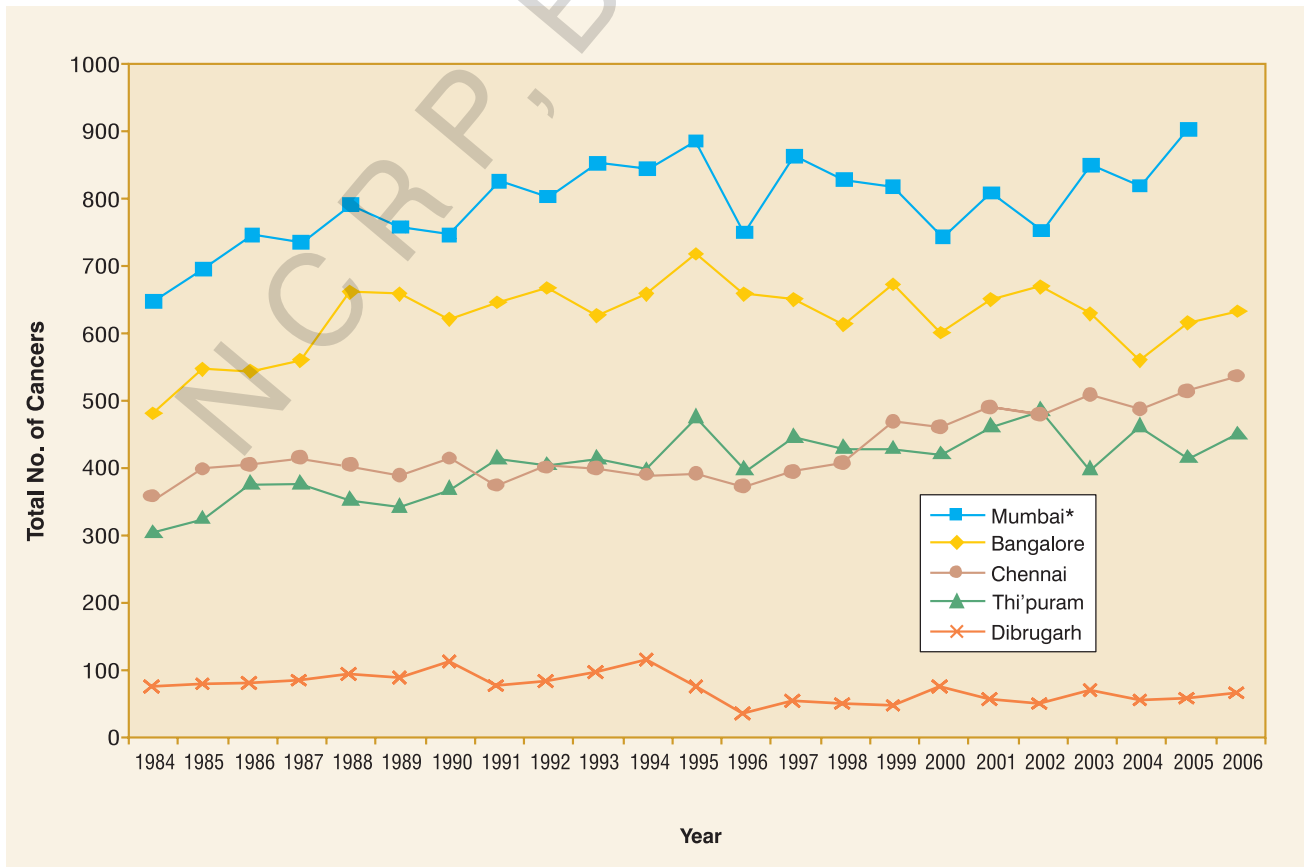
\* Only 2004-05 data.

**Fig. 16.1 : Trends in Actual Numbers - Head and Neck Cancers (2004-2006)**

**Males**



**Females**



**Table 16.2: Number(#) and Relative Proportion(%) of specific Head and Neck sites relative to all sites of cancer (2004-2006)****Males**

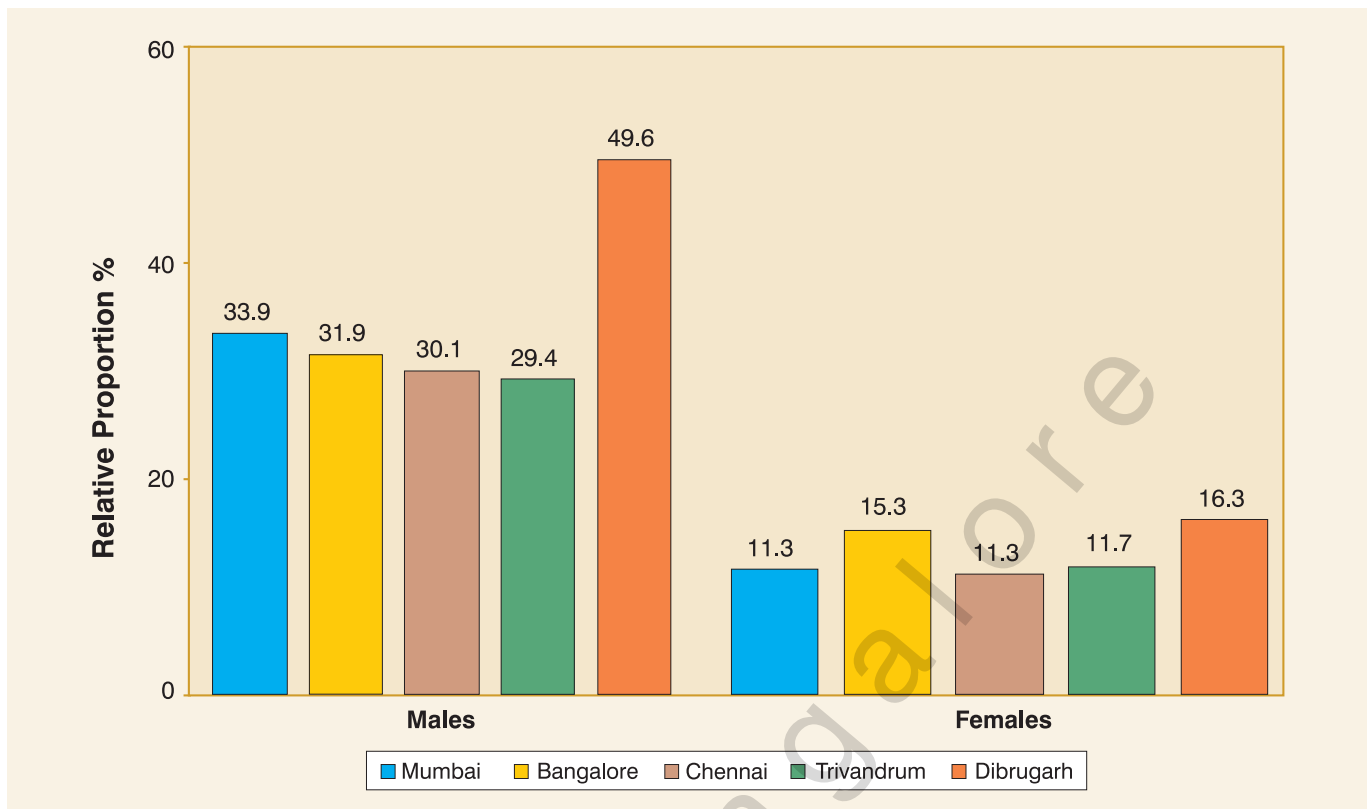
Sites of cancer	Mumbai*		Bangalore		Chennai		Thi'puram		Dibrugarh	
	#	%	#	%	#	%	#	%	#	%
Lip	103	1.1	16	0.2	29	0.2	38	0.3	31	1.7
Tongue	1347	14.0	585	5.7	868	6.9	865	6.9	96	5.4
Mouth	2488	25.9	578	5.6	1031	8.2	1182	9.4	136	7.6
SalivaryGland	87	0.9	53	0.5	74	0.6	69	0.5	13	0.7
Oropharynx	476	5.0	413	4.0	369	2.9	374	3.0	123	6.9
Nasopharynx	148	1.5	63	0.6	98	0.8	76	0.6	22	1.2
Hypopharynx	988	10.3	953	9.3	685	5.5	387	3.1	305	17.1
Pharynx uns	21	0.2	135	1.3	25	0.2	18	0.1	48	2.7
Nose, Sinuses	169	1.8	75	0.7	98	0.8	84	0.7	19	1.1
Larynx	742	7.7	415	4.0	488	3.9	597	4.8	91	5.1
Trachea	7	0.1	0	0.0	2	0.0	2	0.0	0	0.0
Head & Neck	6576	33.9	3286	31.9	3767	30.1	3692	29.4	884	49.6
<b>All Sites</b>	<b>19399</b>	<b>100.0</b>	<b>10293</b>	<b>100.0</b>	<b>12523</b>	<b>100.0</b>	<b>12563</b>	<b>100.0</b>	<b>1782</b>	<b>100.0</b>

**Females**

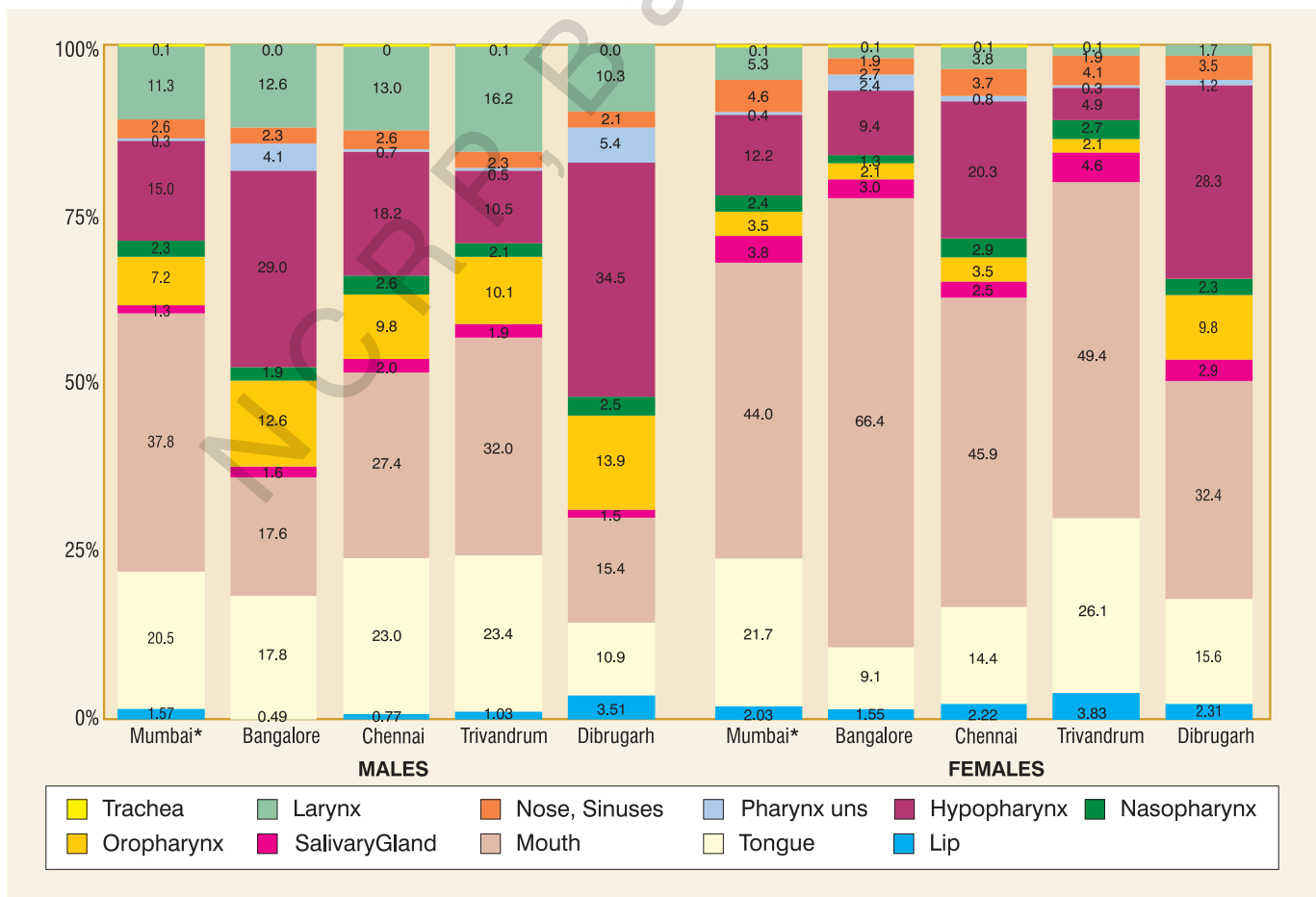
Sites of cancer	Mumbai*		Bangalore		Chennai		Thi'puram		Dibrugarh	
	#	%	#	%	#	%	#	%	#	%
Lip	35	0.5	28	0.2	34	0.3	51	0.4	4	0.4
Tongue	374	5.0	165	1.4	220	1.6	347	3.0	27	2.5
Mouth	759	10.1	1200	10.1	703	5.2	658	5.8	56	5.3
SalivaryGland	66	0.9	54	0.5	38	0.3	61	0.5	5	0.5
Oropharynx	61	0.8	38	0.3	54	0.4	28	0.2	17	1.6
Nasopharynx	42	0.6	24	0.2	44	0.3	36	0.3	4	0.4
Hypopharynx	210	2.8	169	1.4	311	2.3	65	0.6	49	4.6
Pharynx uns	7	0.1	44	0.4	13	0.1	4	0.0	2	0.2
Nose, Sinuses	79	1.0	48	0.4	57	0.4	55	0.5	6	0.6
Larynx	91	1.2	35	0.3	58	0.4	25	0.2	3	0.3
Trachea	2	0.0	2	0.0	1	0.0	1	0.0	0	0.0
Head & Neck	1726	11.3	1807	15.3	1533	11.3	1331	11.7	173	16.3
<b>All Sites</b>	<b>15313</b>	<b>100.0</b>	<b>11842</b>	<b>100.0</b>	<b>13589</b>	<b>100.0</b>	<b>11394</b>	<b>100.0</b>	<b>1063</b>	<b>100.0</b>

\* Only 2004-05 data.

**Fig 16.2 : Proportion (%) of Head and Neck Cancers Relative to All Sites (2004-2006)**



**Fig.14.3 : Stack (100%) diagram showing Proportion of Specific Head and Neck Cancer Sites Relative to All Head and Neck Cancers (2004-2006)**



**Table 16.3: Number (#) and Relative Proportion(%) of specific Head and Neck sites relative to all Head & Neck cancers (2004-2006)****Males**

Sites of cancer	Mumbai*		Bangalore		Chennai		Thi'puram		Dibrugarh	
	#	%	#	%	#	%	#	%	#	%
Lip	103	1.6	16	0.5	29	0.8	38	1.0	31	3.5
Tongue	1347	20.5	585	17.8	868	23.0	865	23.4	96	10.9
Mouth	2488	37.8	578	17.6	1031	27.4	1182	32.0	136	15.4
SalivaryGland	87	1.3	53	1.6	74	2.0	69	1.9	13	1.5
Oropharynx	476	7.2	413	12.6	369	9.8	374	10.1	123	13.9
Nasopharynx	148	2.3	63	1.9	98	2.6	76	2.1	22	2.5
Hypopharynx	988	15.0	953	29.0	685	18.2	387	10.5	305	34.5
Pharynx uns	21	0.3	135	4.1	25	0.7	18	0.5	48	5.4
Nose, Sinuses	169	2.6	75	2.3	98	2.6	84	2.3	19	2.1
Larynx	742	11.3	415	12.6	488	13.0	597	16.2	91	10.3
Trachea	7	0.1	0	0.0	2	0.1	2	0.1	0	0.0
<b>Head &amp; Neck</b>	<b>6576</b>	<b>100.0</b>	<b>3286</b>	<b>100.0</b>	<b>3767</b>	<b>100.0</b>	<b>3692</b>	<b>100.0</b>	<b>884</b>	<b>100.0</b>

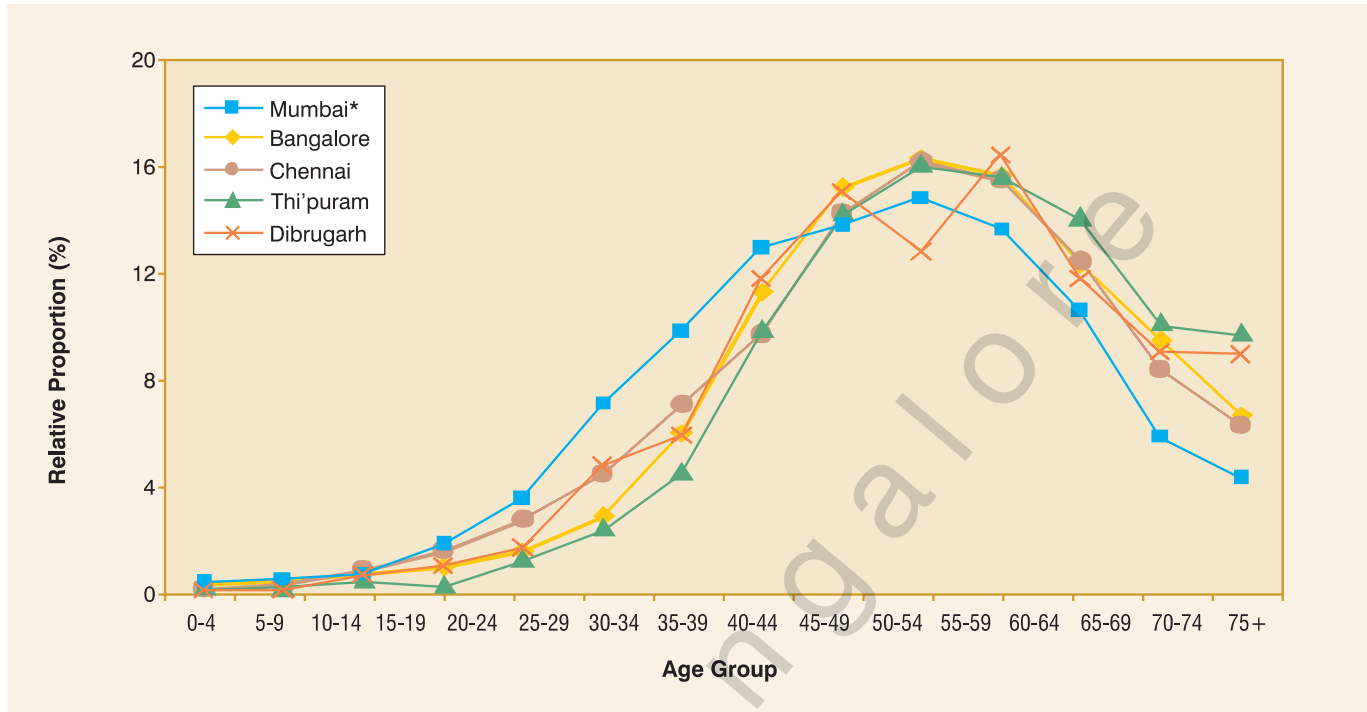
**Females**

Sites of cancer	Mumbai*		Bangalore		Chennai		Thi'puram		Dibrugarh	
	#	%	#	%	#	%	#	%	#	%
Lip	35	2.0	28	1.5	34	2.2	51	3.8	4	2.3
Tongue	374	21.7	165	9.1	220	14.4	347	26.1	27	15.6
Mouth	759	44.0	1200	66.4	703	45.9	658	49.4	56	32.4
SalivaryGland	66	3.8	54	3.0	38	2.5	61	4.6	5	2.9
Oropharynx	61	3.5	38	2.1	54	3.5	28	2.1	17	9.8
Nasopharynx	42	2.4	24	1.3	44	2.9	36	2.7	4	2.3
Hypopharynx	210	12.2	169	9.4	311	20.3	65	4.9	49	28.3
Pharynx uns	7	0.4	44	2.4	13	0.8	4	0.3	2	1.2
Nose, Sinuses	79	4.6	48	2.7	57	3.7	55	4.1	6	3.5
Larynx	91	5.3	35	1.9	58	3.8	25	1.9	3	1.7
Trachea	2	0.1	2	0.1	1	0.1	1	0.1	0	0.0
<b>Head &amp; Neck</b>	<b>1726</b>	<b>100.0</b>	<b>1807</b>	<b>100.0</b>	<b>1533</b>	<b>100.0</b>	<b>1331</b>	<b>100.0</b>	<b>173</b>	<b>100.0</b>

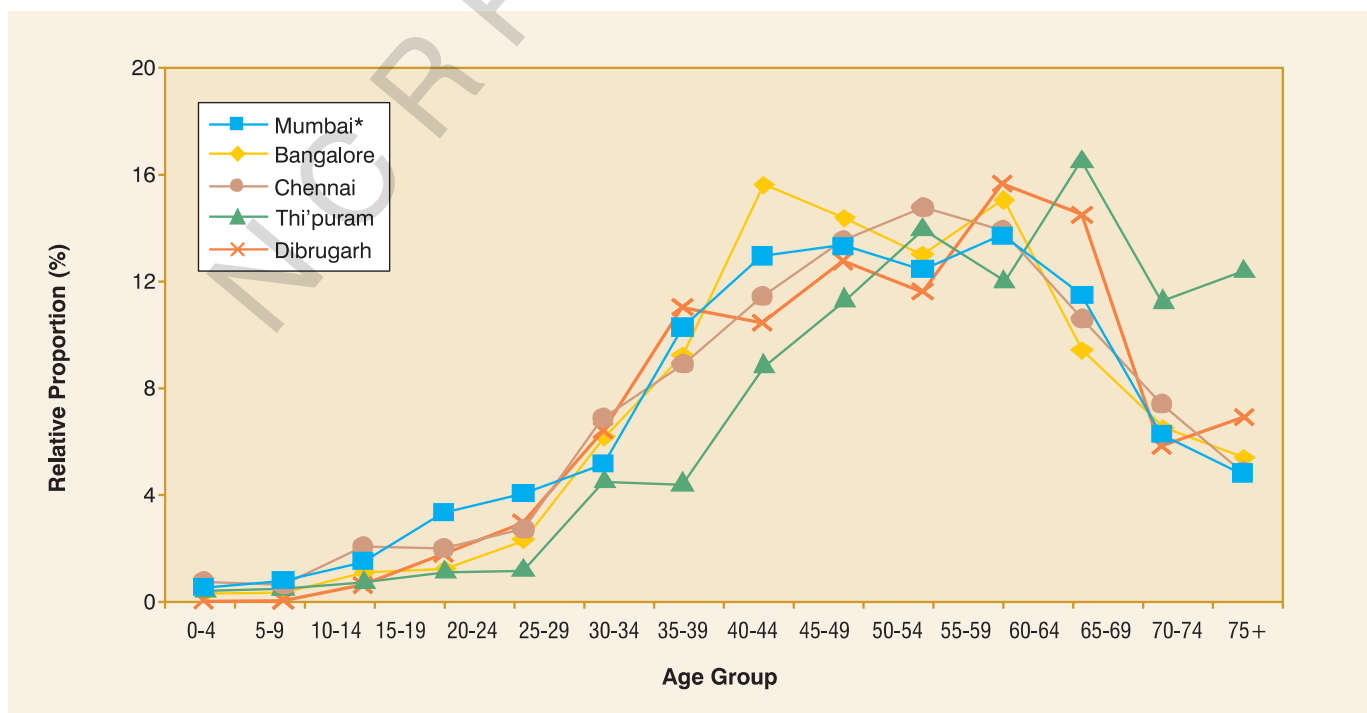
\* Only 2004-05 data.

**Fig. 16.4: Relative Proportion(%) of Head and Neck Cancers by Five Year Age Group (2004-2006)**

**Males**



**Females**



**Table 16.4: Number(#) and Relative Proportion(%) of Head and Neck Cancers by Five-Year Age Group (2004-2006)****Males**

Age Group	Mumbai*		Bangalore		Chennai		Thi'puram		Dibrugarh	
	#	%	#	%	#	%	#	%	#	%
00-14	21	0.4	11	0.3	6	0.2	10	0.3	1	0.1
15-19	35	0.6	16	0.5	12	0.3	8	0.2	1	0.1
20-24	43	0.8	24	0.7	33	0.9	19	0.5	6	0.7
25-29	122	1.8	32	1.0	60	1.6	14	0.4	9	1.0
30-34	243	3.5	53	1.6	104	2.8	49	1.3	15	1.7
35-39	468	7.1	94	2.9	169	4.5	93	2.5	42	4.8
40-44	645	9.8	198	6.0	266	7.1	170	4.6	52	5.9
45-49	868	12.9	371	11.3	366	9.7	367	9.9	104	11.8
50-54	953	13.8	499	15.2	537	14.3	528	14.3	133	15.0
55-59	935	14.8	537	16.3	609	16.2	595	16.1	113	12.8
60-64	871	13.7	515	15.7	583	15.5	579	15.7	145	16.4
65-69	692	10.6	406	12.4	469	12.5	520	14.1	104	11.8
70-74	395	5.9	311	9.5	316	8.4	377	10.2	80	9.0
75+	285	4.3	219	6.7	237	6.3	363	9.8	79	8.9
<b>All Ages</b>	<b>6576</b>	<b>100.0</b>	<b>3286</b>	<b>100.0</b>	<b>3767</b>	<b>100.0</b>	<b>3692</b>	<b>100.0</b>	<b>884</b>	<b>100.0</b>
<b>Mean</b>		53.4		57.0		56.2		58.9		57.3
<b>SD</b>		12.7		12.1		12.5		11.7		12.3

**Females**

Age Group	Mumbai*		Bangalore		Chennai		Thi'puram		Dibrugarh	
	#	%	#	%	#	%	#	%	#	%
00-14	13	0.5	5	0.3	11	0.7	6	0.5	0	0.0
15-19	16	0.7	9	0.5	9	0.6	7	0.5	0	0.0
20-24	23	1.5	19	1.1	31	2.0	11	0.8	1	0.6
25-29	45	3.3	22	1.2	30	2.0	16	1.2	3	1.7
30-34	71	4.0	42	2.3	41	2.7	17	1.3	5	2.9
35-39	97	5.1	111	6.1	105	6.8	61	4.6	11	6.4
40-44	169	10.2	167	9.2	136	8.9	59	4.4	19	11.0
45-49	240	12.9	282	15.6	175	11.4	118	8.9	18	10.4
50-54	210	13.3	260	14.4	207	13.5	151	11.3	22	12.7
55-59	210	12.4	235	13.0	226	14.7	187	14.0	20	11.6
60-64	240	13.6	271	15.0	213	13.9	161	12.1	27	15.6
65-69	209	11.4	170	9.4	162	10.6	221	16.6	25	14.5
70-74	108	6.2	117	6.5	113	7.4	150	11.3	10	5.8
75+	75	4.8	97	5.4	74	4.8	166	12.5	12	6.9
<b>All Ages</b>	<b>1726</b>	<b>100.0</b>	<b>1807</b>	<b>100.0</b>	<b>1533</b>	<b>100.0</b>	<b>1331</b>	<b>100.0</b>	<b>173</b>	<b>100.0</b>
<b>Mean</b>		53.1		54.1		53.7		59.0		55.4
<b>SD</b>		13.8		12.6		13.6		13.3		12.6

\* Only 2004-05 data

**Table 16.5(a): Number(#) and Relative Proportion(%) of Head and Neck Cancers based on different Methods of Diagnosis (2004-2006) - Males**

Registry	Microscopic		Clinical		All imaging techniques		Others		Total	
	#	%	#	%	#	%	#	%	#	%
Mumbai*	6294	95.7	6	0.1	4	0.1	272	4.1	6576	100.0
Bangalore	3128	95.2	111	3.4	7	0.2	40	1.2	3286	100.0
Chennai	3084	81.9	633	16.8	19	0.5	31	0.8	3767	100.0
Thi'puram	3536	95.8	138	3.7	13	0.4	5	0.1	3692	100.0
Dibrugarh	876	99.1	6	0.7	1	0.1	1	0.1	884	100.0

**Table 16.5(b): Number(#) and Relative Proportion(%) of Head and Neck Cancers based on different Methods of Diagnosis (2004-2006) - Females**

Registry	Microscopic		Clinical		All imaging techniques		Others		Total	
	#	%	#	%	#	%	#	%	#	%
Mumbai*	1663	96.0	0	0.0	2	0.1	61	3.9	1726	100.0
Bangalore	1741	96.3	46	2.5	2	0.1	18	1.0	1807	100.0
Chennai	1248	81.4	278	18.1	4	0.3	3	0.2	1533	100.0
Thi'puram	1271	95.5	57	4.3	1	0.1	2	0.2	1331	100.0
Dibrugarh	169	97.7	3	1.7	1	0.6	0	0.0	173	100.0

**Table. 16.6: Number (#) and Relative Proportion (%) of Head and Neck cancers based on Broad Groups of Treatment (2004-2006)**

	Mumbai		Bangalore		Chennai		Thi'puram		Dibrugarh	
	#	%	#	%	#	%	#	%	#	%
<b>MALES</b>										
Prior Tmt. Only	582	8.9	141	4.3	429	11.4	129	3.5	0	0.0
Prior & Tmt. at RI	350	5.3	50	1.5	31	0.8	253	6.9	21	2.4
Tmt. Only at RI	2386	36.3	1607	48.9	1386	36.8	2833	76.7	827	93.6
No CDT	3258	49.6	1488	45.3	1921	51.0	477	12.9	36	4.1
<b>Total Patients<sup>#</sup></b>	<b>6576</b>	<b>100.0</b>	<b>3286</b>	<b>100.0</b>	<b>3767</b>	<b>100.0</b>	<b>3692</b>	<b>100.0</b>	<b>884</b>	<b>100.0</b>
<b>FEMALES</b>										
Prior Tmt. Only	143	8.3	75	4.2	173	11.3	54	4.1		0.0
Prior & Tmt. at RI	79	4.6	43	2.4	19	1.2	109	8.2	1	0.6
Tmt. Only at RI	611	35.4	941	52.1	609	39.7	995	74.8	153	88.4
No CDT	893	51.7	748	41.4	732	47.7	173	13.0	19	11.0
<b>Total Patients<sup>#</sup></b>	<b>1726</b>	<b>100.0</b>	<b>1807</b>	<b>100.0</b>	<b>1533</b>	<b>100.0</b>	<b>1331</b>	<b>100.0</b>	<b>173</b>	<b>100.0</b>

\*Only 2004-05 data; <sup>#</sup>Total Number of patients excluding Trachea cancer.



**Table.16.7 (a) : Number (#) and Relative Proportion (%) of Head and Neck cancer patients according to Clinical Extent of Disease (Excludes Patients Previously Treated) (2004-2006)****Males**

Registry	Localised (L)		Regional (R)		L + R		Distant		Others		All Stages	
	#	%	#	%	#	%	#	%	#	%	#	%
<b>Mumbai*</b>	665	17.1	3020	77.8	1823	47.0	143	3.7	54	1.4	3882	100.0
<b>Bangalore</b>	225	7.3	2618	84.9	2843	92.2	240	7.8	0	0.0	3083	100.0
<b>Chennai</b>	542	16.4	2731	82.6	3273	99.0	34	1.0	0	0.0	3307	100.0
<b>Thi'puram</b>	402	12.1	2878	86.9	3280	99.0	30	0.9	2	0.1	3312	100.0
<b>Dibrugarh</b>	16	1.9	813	94.2	829	96.1	8	0.9	26	3.0	863	100.0

**Table.16.7 (b): Number (#) and Relative Proportion (%) of Head and Neck cancer patients according to Clinical Extent of Disease (Excludes Patients Previously Treated) (2004-2006)****Females**

Registry	Localised (L)		Regional (R)		L + R		Distant		Others		All Stages	
	#	%	#	%	#	%	#	%	#	%	#	%
<b>Mumbai*</b>	216	20.4	768	72.4	984	92.7	63	5.9	14	1.3	1061	100.0
<b>Bangalore</b>	147	8.7	1391	82.7	1538	91.4	144	8.6	0	0.0	1682	100.0
<b>Chennai</b>	191	14.2	1143	85.2	1334	99.5	7	0.5	0	0.0	1341	100.0
<b>Thi'puram</b>	172	14.7	979	83.8	1151	98.5	17	1.5	0	0.0	1168	100.0
<b>Dibrugarh</b>	4	2.3	158	91.9	162	94.2	2	1.2	8	4.7	172	100.0

\* Only 2004-05 data

Table 16.6 gives the idea of the broad treatment groups. Among males “treatment only at RI” ranged from 36.3% in Mumbai to 93.6% in Dibrugarh and in females it ranged from 35.4% in Mumbai to 88.4% in Dibrugarh. Over 80% of cancers in males and females had regional spread of the disease at the time of diagnosis except Mumbai where 77.8 % and 72.4% in males and females respectively had regional spread (Table 16.7).

Table 16.8 gives the number and relative proportion according to the type of treatment.

**Table 16.8(a): Number(#) & Relative proportion (%) of Head and Neck cancer patients according to Type of Treatment given (2004-2006) - Males**

Type of Treatment	Mumbai*		Bangalore		Chennai		Thi'pura		Dibrugarh	
	#	%	#	%	#	%	#	%	#	%
<b>Total Patients</b>	<b>1232</b>	<b>100.0</b>	<b>1607</b>	<b>100.0</b>	<b>1386</b>	<b>100.0</b>	<b>2831</b>	<b>100.0</b>	<b>827</b>	<b>100.0</b>
<b>Specific Treatments</b>										
Surgery (S)	472	19.7	176	11.0	58	4.2	204	7.2	27	3.3
Radiotherapy (R)	462	18.8	880	54.8	619	44.7	1263	44.6	710	85.9
Chemotherapy (C)	159	6.1	84	5.2	16	1.2	154	5.4	19	2.3
S+R	807	36.9	257	16.0	248	17.9	281	9.9	36	4.4
S+C	14	0.8	13	0.8	0	0.0	23	0.8	2	0.2
R+C	368	15.5	170	10.6	391	28.2	743	26.2	28	3.4
S+R+C	104	2.2	24	1.5	54	3.9	155	5.5	5	0.6
Others	0	0.0	3	0.2	0	0.0	10	0.3	0	0.0
<b>Modality of Therapy</b>										
Single	549	44.6	1140	70.9	693	50.0	1621	57.3	756	91.4
Combination	683	55.4	464	28.9	693	50.0	1202	42.5	71	8.6
<b>Type of Treatment</b>										
Any S	735	59.7	470	29.2	360	26.0	663	23.4	70	8.5
Any R	904	73.4	1331	82.8	1312	94.7	2442	86.3	779	94.2
Any C	303	24.6	291	18.1	461	33.3	1075	38.0	54	6.5

**Table 16.8(b): Number(#) & Relative proportion (%) of Head and Neck cancer patients according to Type of Treatment given (2004-2006) - Females**

Type of Treatment	Mumbai*		Bangalore		Chennai		Thi'pura		Dibrugarh	
	#	%	#	%	#	%	#	%	#	%
<b>Total Patients</b>	<b>611</b>	<b>100.0</b>	<b>941</b>	<b>100.0</b>	<b>609</b>	<b>100.0</b>	<b>995</b>	<b>100.0</b>	<b>153</b>	<b>100.0</b>
<b>Specific Treatments</b>										
Surgery (S)	181	29.6	150	15.9	29	4.8	107	10.8	3	2.0
Radiotherapy (R)	105	17.2	355	37.7	265	43.5	430	43.2	139	90.8
Chemotherapy (C)	26	4.3	158	16.8	5	0.8	47	4.7	2	1.3
S+R	228	37.3	157	16.7	110	18.1	163	16.4	9	5.9
S+C	1	0.2	16	1.7	1	0.2	8	0.8	0	0.0
R+C	49	8.0	70	7.4	174	28.6	171	17.2	0	0.0
S+R+C	20	3.3	33	3.5	23	3.8	66	6.6	0	0.0
Others	1	0.2	2	0.2	2	0.3	3	0.3	0	0.0
<b>Modality of Therapy</b>										
Single	312	51.1	663	70.5	299	49.1	584	58.7	144	94.1
Combination	298	48.8	276	29.3	308	50.6	408	41.0	9	5.9
<b>Type of Treatment</b>										
Any S	430	70.4	356	37.8	163	26.8	344	34.6	12	7.8
Any R	402	65.8	615	65.4	572	93.9	830	83.4	148	96.7
Any C	96	15.7	277	29.4	203	33.3	292	29.3	2	1.3

\*Only 2004-05 data