9

Head & Neck Cancers

Head & Neck Cancers

Chapter 9 analyses the sites that are classified under Head and Neck Cancers as per the International Classification of Diseases (ICD-10).

The data of the PBCR has been analysed for cancers of the tongue (C01-C02), mouth (C03-C06), tonsil (C09), other oropharynx (C10), nasopharynx (C11), hypopharynx (C12-C13), pharynx unspecified (C14) and larynx (C32) and all of these sites of cancer together as head & neck cancers.

In case of HBCRs, the ICD10s have been regrouped to accommodate complete data on head and neck cancers into six sub-groups (tongue (C02), mouth (C03-C04, C06), oropharynx (C01, C05, C09, C10, C14), nasopharynx (C11), hypopharynx (C12-C13) and larynx (C32)). For the following reasons;

1. Oropharynx has been regrouped for analysis of HBCR data as this data focusses more on the treatment patterns followed in hospitals.
2. Also, the regrouping follows embryological development pattern where cancers of anterior two thirds of tongue (2/3) are grouped as tongue(C02). Cancers of posterior one third (1/3) of tongue (C01) while anatomically being part of tongue, histologically resemble cancers of oropharynx and hence are grouped along with them.

Each chapter has figures on the Annual Percent Change (APC) in Age Adjusted Rates (AAR), Comparison of AAR among PBCRs under NCRP with Asian countries, comparison of AAR among PBCRs under NCRP with Non-Asian countries, tables on distribution of cases according to clinical extent of disease and cross tables of the clinical extent of disease and the type of treatment received.

In case, the number of cases or rates are very small for an anatomical site of cancer, analysis of such sites have not been included in figures and tables in this chapter.

Table 9.1 Number of cases (n) registered for Head & Neck Cancers and its Relative Proportion to All Sites of Cancer (%), Crude (CR), Age Adjusted (AAR) and Truncated (TR) Incidence Rates per 100,000 population and its Rank in 28 PBCRs under NCRP

Males

Sl No	Registry	n	%	CR	AAR	TR	RANK
	NORTH						
1	Delhi	7416	23.9	26.8	34.4	67.3	10
2	Patiala district	897	16.6	16.9	18.1	40.7	24
	SOUTH						
3	Hyderabad district	1389	27.0	22.8	25.3	55.8	15
4	Kollam district	1801	18.1	28.9	22.6	41.8	20
5	Thi'puram district	2397	17.8	30.2	23.9	43.4	17
6	Bangalore	2248	17.0	16.5	20.6	37.6	21
7	Chennai	3701	25.6	31.2	29.1	58.9	12
	EAST						
8	Kolkata	2060	20.2	22.2	18.1	34.9	25
	WEST						
9	Ahmedabad urban	6129	42.0	37.5	39.2	89.1	7
10	Aurangabad	702	36.5	20.7	25.0	51.3	16
11	Osmanabad & Beed	1050	28.9	11.3	11.6	24.3	30
12	Barshi rural	149	20.5	11.1	10.6	20.2	32
13	Mumbai	5952	22.7	21.9	23.5	45.9	19
14	Pune	2312	23.9	16.1	19.0	37.1	22
	CENTRAL						
15	Wardha district	633	26.5	18.7	16.8	34.9	27
16	Bhopal	1380	38.7	32.2	37.4	79.9	8
17	Nagpur	1959	32.9	29.3	28.4	59.1	14
	NORTH EAST						
18	Manipur state	650	17.6	8.2	11.1	19.7	31
	Imphal West district	179	15.7	13.4	15.2	24.6	29
19	Mizoram state	686	15.9	23.2	31.4	75.2	11
	Aizawl district	384	17.6	36.3	45.6	107.2	5
20	Sikkim state	247	21.1	14.7	18.2	32.0	23
21	Tripura state	1920	29.3	19.6	23.8	45.9	18
22	West Arunachal	183	15.0	8.5	15.4	33.1	28
	Papumpare district	89	18.9	17.9	36.0	92.1	9
23	Meghalaya	1574	33.6	31.1	58.4	134.8	3
	East Khasi Hills district	1011	35.1	45.9	78.5	178.7	1
24	Nagaland	553	39.4	29.3	46.3	103.0	4
25	Pasighat	50	15.6	14.1	17.9	35.7	26
26	Cachar district	1595	34.2	33.9	44.8	87.2	6
27	Dibrugarh district	785	31.0	22.5	29.1	50.2	13
28	Kamrup urban	1857	29.8	56.9	62.4	112.0	2

Total number of cases (N) registered and reporting year of data for all sites is mentioned in Table 1.2

Females

Sl No	Registry	n	%	CR	AAR	TR	RANK
	NORTH						
1	Delhi	1724	5.9	7.1	8.7	16.4	15
2	Patiala district	229	3.8	4.8	4.7	9.9	29
	SOUTH						
3	Hyderabad district	455	7.1	7.7	9.6	20.4	11
4	Kollam district	656	6.7	9.3	6.7	10.6	21
5	Thi'puram district	723	5.1	8.5	6.2	9.4	25
6	Bangalore	1032	6.5	8.2	9.9	17.9	9
7	Chennai	1226	7.3	10.3	9.7	19.1	10
	EAST						
8	Kolkata	621	6.8	7.2	6.0	11.4	26
	WEST						
9	Ahmedabad urban	1279	11.6	8.7	8.8	19.5	14
10	Aurangabad	168	8.4	5.3	6.3	13.0	24
11	Osmanabad & Beed	309	6.9	3.7	3.4	7.4	31
12	Barshi rural	45	5.5	3.7	3.3	7.4	32
13	Mumbai	1921	7.0	8.1	8.1	15.3	18
14	Pune	790	7.3	6.1	6.9	13.0	20
	CENTRAL						
15	Wardha district	249	9.8	7.7	6.7	13.4	22
16	Bhopal	369	10.3	9.3	11.2	23.6	6
17	Nagpur	627	10.4	9.7	9.4	19.7	12
	NORTH EAST						
18	Manipur state	282	6.3	3.6	4.5	8.8	30
	Imphal West district	80	5.3	5.8	5.9	12.7	27
19	Mizoram state	192	5.1	6.5	9.0	17.2	13
	Aizawl district	98	5.2	9.0	11.1	22.7	8
20	Sikkim state	96	8.5	6.4	8.2	13.7	17
21	Tripura state	575	11.7	6.1	7.1	15.9	19
22	West Arunachal	71	6.1	3.4	6.4	15.2	23
	Papumpare district	47	8.9	9.4	21.7	50.7	1
23	Meghalaya	462	16.3	9.1	16.6	31.7	4
	East Khasi Hills district	263	15.2	11.7	18.7	35.4	3
24	Nagaland	146	14.7	8.2	11.3	28.9	7
25	Pasighat	13	4.3	3.8	4.8	14.1	28
26	Cachar district	515	13.1	11.3	14.8	33.1	5
27	Dibrugarh district	235	10.5	6.9	8.6	19.7	16
28	Kamrup urban	505	10.5	15.9	19.2	32.0	2

Total number of cases (N) registered and reporting year of data for all sites is mentioned in Table 1.2

East Khasi Hills district (78.5 per 100,000) in males had the highest incidence rate of head and neck cancers followed by Kamrup urban (62.4 per 100,000).

Papumpare district (21.7 per 100,000) in females had the highest incidence rate of head and neck cancers followed by Kamrup urban (19.2 per 100,000).

Fig. 9.1 Age Specific Incidence Rates per 100,000 in 28 PBCRs under NCRP
Head & Neck Cancers

Males

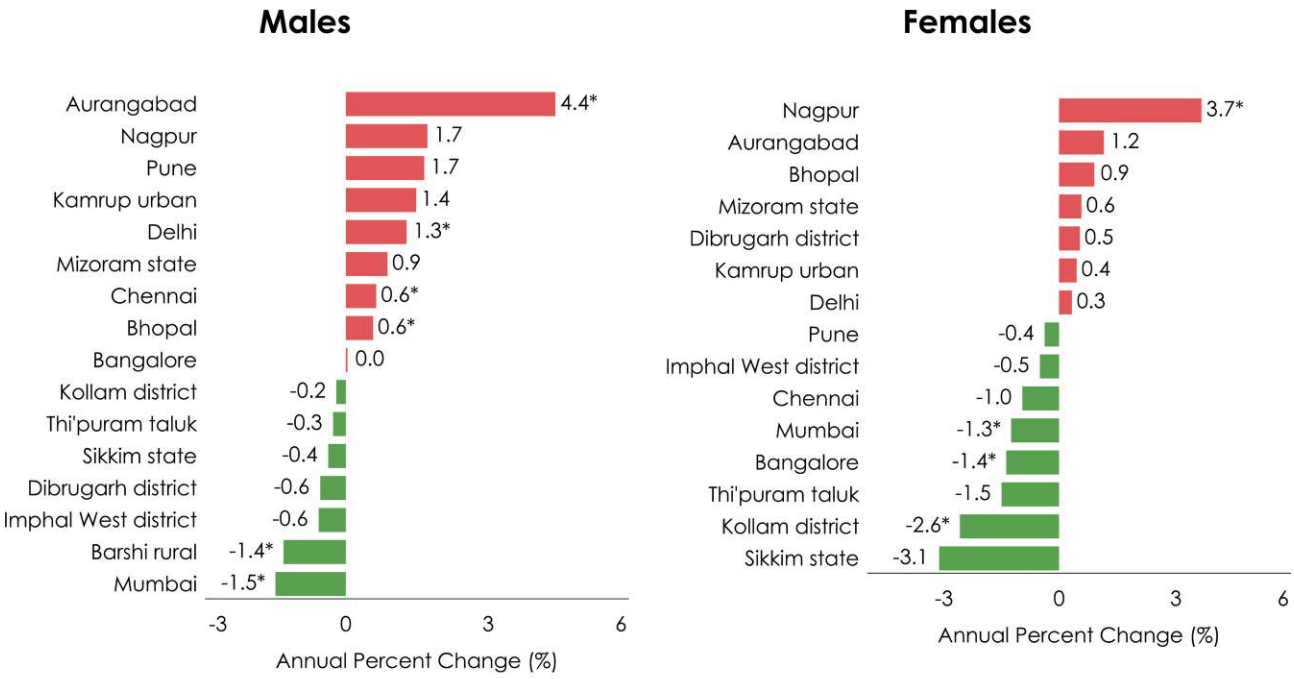
Region	Registry	Five Year Age Group															
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
NORTH	Delhi	0.0	0.3	0.1	0.2	1.9	4.7	12.1	21.4	36.0	47.0	75.9	113.9	156.0	184.4	183.9	151.5
	Patiala district	0.0	0.2	0.0	0.2	0.7	1.8	6.3	9.3	15.9	32.9	52.3	74.2	89.1	74.2	64.5	68.4
SOUTH	Hyderabad district	0.2	0.0	0.0	0.5	2.1	6.7	20.3	29.7	44.8	60.7	55.7	73.2	86.7	87.8	106.3	62.9
	Kollam district	0.0	0.0	0.2	0.4	0.0	1.0	3.8	8.8	18.0	31.4	52.4	67.3	103.5	141.0	128.5	122.1
	Thi'puram district	0.0	0.0	0.5	0.6	1.3	1.7	3.6	9.4	17.8	29.4	54.6	67.3	116.1	143.5	135.2	142.7
	Bangalore	0.1	0.4	0.3	0.7	1.0	1.8	3.9	7.4	15.4	23.2	47.4	72.9	90.3	128.7	111.6	111.8
	Chennai	0.1	0.2	0.4	0.9	1.1	4.2	10.9	24.0	37.6	50.3	71.6	85.8	113.4	138.3	129.5	144.0
EAST	Kolkata	0.0	0.0	0.1	0.3	1.3	3.9	9.5	12.1	21.3	29.1	47.1	53.1	64.5	89.9	86.9	91.7
WEST	Ahmedabad urban	0.1	0.1	0.1	0.6	2.7	6.3	24.2	52.1	64.5	87.1	102.2	110.0	147.2	145.4	141.3	105.3
	Aurangabad	0.0	0.3	0.6	0.6	0.9	4.4	18.7	23.9	38.0	51.1	62.8	63.7	85.9	124.4	105.3	76.9
	Osamanabad & Beed	0.0	0.1	0.0	0.0	0.8	3.4	9.5	15.4	24.2	21.1	21.9	32.0	37.9	51.0	34.6	48.0
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.9	5.7	9.5	13.6	12.0	20.8	34.1	43.6	59.6	63.9	41.0
	Mumbai	0.2	0.2	0.4	0.5	0.9	2.3	7.1	16.9	27.0	35.5	53.5	73.9	95.3	115.0	123.7	129.4
	Pune	0.0	0.0	0.1	0.4	0.6	1.5	4.8	14.1	22.9	35.1	39.0	58.9	72.1	95.2	108.0	100.5
CENTRAL	Wardha district	0.0	0.0	0.0	0.3	0.9	3.0	14.4	15.9	26.9	34.7	33.0	50.3	62.5	65.7	88.8	49.6
	Bhopal	0.0	0.0	0.0	0.2	3.8	9.0	26.8	44.4	45.3	60.6	100.0	121.1	147.5	134.4	175.9	123.8
	Nagpur	0.4	0.4	0.4	0.5	1.8	8.7	26.4	32.2	48.5	49.3	64.3	81.1	101.2	122.1	110.3	83.2
NORTH EAST	Manipur state	0.0	0.0	0.2	0.3	0.4	0.9	2.0	4.3	9.1	12.9	24.5	35.6	47.1	71.7	70.0	57.5
	Imphal West district	0.0	0.0	0.0	0.9	0.0	0.8	1.8	6.7	11.0	18.5	25.7	35.6	68.2	105.2	99.2	107.3
	Mizoram state	0.0	0.0	0.3	0.7	1.0	2.5	4.9	10.3	43.1	50.0	124.0	129.8	144.4	115.7	105.7	88.7
	Aizawl district	0.0	0.0	1.0	0.9	2.7	4.8	8.6	13.3	57.6	62.6	198.4	179.2	203.4	151.8	185.2	139.7
	Sikkim state	0.0	0.0	0.0	0.0	1.6	1.6	4.5	12.2	12.0	20.8	39.9	49.2	81.7	81.6	97.0	169.0
	Tripura state	0.1	0.2	0.2	0.5	0.3	0.8	3.6	7.2	13.3	33.0	56.1	87.1	118.0	131.6	134.5	127.1
	West Arunachal	0.0	0.0	0.7	0.8	2.3	1.0	3.1	7.0	13.3	20.6	42.5	64.9	76.8	100.2	55.0	21.0
	Papumpare district	0.0	0.0	0.0	3.2	3.4	0.0	2.7	21.3	28.0	35.4	127.0	177.7	250.4	146.1	119.0	0.0
	Meghalaya	0.0	0.0	0.5	0.7	0.8	4.6	14.8	40.4	74.5	136.4	177.6	206.1	239.5	229.3	232.3	182.9
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.9	4.8	21.7	55.8	91.5	180.2	248.2	265.9	317.6	329.2	356.2	215.2
	Nagaland	0.0	0.0	0.0	0.0	0.5	8.2	17.4	24.0	50.3	106.4	139.8	175.3	176.6	210.1	230.5	88.1
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	22.6	12.5	0.0	60.1	38.3	35.4	84.6	64.3	112.0	66.8
	Cachar district	0.0	0.0	0.0	0.0	1.6	2.5	6.3	17.5	30.4	75.2	101.5	162.0	202.3	255.2	243.7	226.0
	Dibrugarh district	0.0	0.0	0.0	0.0	0.6	0.9	2.1	12.9	15.5	42.0	66.5	74.3	126.0	176.1	207.1	192.1
	Kamrup urban	0.0	0.0	0.4	0.7	1.6	3.6	9.5	20.9	46.9	82.8	127.6	222.9	260.0	327.7	408.0	427.7

Females

Region	Registry	Five Year Age Group															
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
NORTH	Delhi	0.1	0.0	0.1	0.2	0.8	1.4	2.5	5.0	6.5	10.4	21.5	28.2	39.2	37.0	42.6	62.6
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.4	1.3	3.1	4.2	12.9	12.4	8.9	22.4	22.5	19.9	22.1
SOUTH	Hyderabad district	0.0	0.2	0.0	0.4	0.6	1.5	2.8	5.8	12.0	20.3	20.9	35.2	39.9	44.8	48.5	29.3
	Kollam district	0.0	0.0	0.2	0.2	0.8	0.8	0.4	2.0	4.4	6.5	11.5	18.3	30.0	38.3	41.6	62.2
	Thi'puram district	0.0	0.0	0.3	0.2	0.1	0.9	0.9	1.9	3.3	6.8	9.4	19.4	23.8	43.9	43.5	44.7
	Bangalore	0.0	0.3	0.2	0.3	0.6	0.8	2.3	3.6	6.8	15.7	23.0	28.2	42.7	49.1	69.2	59.2
	Chennai	0.5	0.0	0.5	0.0	0.3	0.9	1.9	4.7	12.1	17.0	21.2	29.7	40.9	44.6	50.3	54.9
EAST	Kolkata	0.0	0.0	0.2	0.1	0.6	2.1	1.3	3.8	5.1	10.1	17.0	19.9	18.8	30.5	28.7	32.1
WEST	Ahmedabad urban	0.0	0.1	0.1	0.2	0.5	2.0	3.6	8.5	13.3	18.9	24.5	25.4	33.9	37.1	30.4	27.6
	Aurangabad	0.0	0.0	0.0	0.3	0.8	0.3	3.8	6.4	4.9	16.5	19.2	16.5	18.4	35.6	26.8	15.7
	Osamanabad & Beed	0.0	0.0	0.0	0.1	0.1	0.0	1.5	2.7	5.5	7.1	9.1	8.5	14.8	14.6	17.9	7.5
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	5.3	6.4	9.5	11.2	14.8	20.0	11.4	10.6
	Mumbai	0.3	0.1	0.1	0.3	0.4	1.1	2.1	4.5	9.1	14.7	16.8	22.4	32.3	40.6	43.9	49.4
	Pune	0.0	0.0	0.2	0.0	0.3	0.8	1.7	2.6	6.2	10.7	17.8	21.6	27.3	38.6	41.1	36.1
CENTRAL	Wardha district	0.0	0.0	0.0	1.1	1.0	1.1	3.5	6.2	8.8	9.9	17.3	18.7	26.2	37.7	27.7	19.7
	Bhopal	0.0	0.0	0.0	0.2	0.2	1.5	5.1	6.2	13.0	24.9	32.4	33.0	43.1	50.1	62.3	32.7
	Nagpur	0.0	0.2	0.0	0.7	1.2	1.7	3.7	6.6	16.0	19.5	26.2	26.8	30.0	41.0	37.2	36.5
NORTH EAST	Manipur state	0.0	0.0	0.0	0.4	0.3	0.5	2.4	2.9	3.5	6.7	14.2	12.9	18.0	20.2	25.5	21.3
	Imphal West district	0.0	0.0	0.0	1.9	0.8	0.7	1.6	1.7	8.3	9.6	16.4	16.1	32.2	17.4	23.7	31.4
	Mizoram state	0.0	0.0	0.0	0.0	1.3	1.1	0.4	6.7	9.8	12.8	24.4	27.8	30.6	58.6	30.9	56.4
	Aizawl district	0.0	0.0	0.0	0.0	0.0	0.9	0.0	10.1	14.2	21.9	25.9	22.8	51.6	50.6	29.7	91.6
	Sikkim state	0.0	0.0	0.0	0.6	1.7	1.2	3.1	7.3	5.5	10.8	19.7	27.8	18.0	29.1	60.2	68.5
	Tripura state	0.0	0.1	0.1	0.3	0.2	0.8	1.9	5.6	6.1	10.4	17.9	29.5	38.0	25.0	34.3	24.0
	West Arunachal	0.0	0.0	0.0	0.0	0.9	1.1	1.3	5.4	3.4	15.0	13.6	21.7	43.0	11.1	24.5	34.7
	Papumpare district	0.0	0.0	0.0	0.0	3.2	0.0	5.1	16.8	13.6	35.3	43.8	93.7	145.6	36.8	51.5	164.0
	Meghalaya	0.0	0.0	0.2	0.0	0.4	1.2	0.9	6.4	15.2	25.4	50.9	45.9	65.3	85.6	112.2	88.9
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.4	0.5	1.2	6.7	18.9	25.2	54.5	50.1	80.3	101.3	117.0	109.5
	Nagaland	0.0	0.0	0.0	0.5	1.9	6.0	9.1	18.6	21.6	32.0	38.1	32.4	35.2	21.3	16.0	5.3
	Pasighat	0.0	0.0	0.0	0.0	2.8	0.0	3.7	3.9	9.7	17.6	0.0	28.0	34.2	0.0	0.0	0.0
	Cachar district	0.0	0.0	0.0	0.2	0.7	1.2	7.0	9.6	17.7	27.1	43.8	54.7	66.3	62.8	62.8	37.5
	Dibrugarh district	0.0	0.0	0.3	0.3	0.3	0.0	1.1	6.3	9.0	16.7	23.8	30.5	44.7	40.8	33.7	22.7
	Kamrup urban	0.0	0.5	0.0	0.7	0.6	3.5	3.3	6.9	11.3	26.4	40.6	58.8	71.9	106.0	150.4	123.5

In males, the cancer incidence rates for head and neck cancer increased from the age of 30 to 75+ whereas in females it started to increase from the age of 35.

Fig. 9.2 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period - Head & Neck Cancers



*Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level*

Among males significant increase in incidence rates for head & neck cancers was observed in Aurangabad, Delhi, Chennai and Bhopal PBCRs, and among females it was observed in Nagpur PBCR.

Among males, there was a significant decrease in incidence rates in Barshi rural and Mumbai. Among females, the significant decrease was observed in Bangalore, Mumbai and Kollam district PBCRs.

Table 9.2 Number (n) and Relative Proportion (%) of Cases Registered by Five Year Age Group - Head & Neck Cancers

Males

Age Group	Tongue (C02)		Mouth (C03-C04,C06)		Oropharynx (C01, C05, C09, C10, C14)		Nasopharynx (C11)		Hypopharynx (C12-C13)		Larynx (C32)		Total
	n	%	n	%	n	%	n	%	n	%	n	%	n
00-04	2	<0.1	4	<0.1	2	<0.1	3	0.2	1	<0.1	1	<0.1	13
05-09	4	<0.1	4	<0.1	1	<0.1	19	1.4	1	<0.1	3	<0.1	32
10-14	1	<0.1	2	<0.1	2	<0.1	75	5.6	-	-	2	<0.1	82
15-19	11	0.1	15	0.1	10	0.1	108	8.0	2	<0.1	2	<0.1	148
20-24	70	0.8	90	0.5	26	0.2	79	5.9	10	0.1	11	0.1	286
25-29	320	3.7	406	2.5	48	0.4	53	3.9	27	0.4	18	0.2	872
30-34	686	7.9	1071	6.5	138	1.3	58	4.3	60	0.9	49	0.6	2062
35-39	1042	11.9	1714	10.4	362	3.3	71	5.3	180	2.6	122	1.6	3491
40-44	1087	12.5	2078	12.7	667	6.1	131	9.7	340	4.9	332	4.3	4635
45-49	1163	13.3	2235	13.6	1145	10.5	133	9.9	613	8.9	624	8.1	5913
50-54	1107	12.7	2244	13.7	1644	15.1	167	12.4	959	13.9	1058	13.8	7179
55-59	989	11.3	1997	12.2	1839	16.9	135	10.0	1171	17.0	1361	17.7	7492
60-64	909	10.4	1870	11.4	1961	18.0	124	9.2	1223	17.7	1511	19.7	7598
65-69	646	7.4	1269	7.7	1424	13.1	82	6.1	990	14.3	1152	15.0	5563
70-74	364	4.2	754	4.6	918	8.4	65	4.8	724	10.5	789	10.3	3614
75+	325	3.7	665	4.0	676	6.2	43	3.2	602	8.7	645	8.4	2956
Unknown	-	-	2	<0.1	3	<0.1	-	-	1	<0.1	-	-	6
Total	**8726**	**100.0**	**16420**	**100.0**	**10866**	**100.0**	**1346**	**100.0**	**6904**	**100.0**	**7680**	**100.0**	**51942**

Females

Age Group	Tongue (C02)		Mouth (C03-C04, C06)		Oropharynx (C01, C05, C09, C10, C14)		Nasopharynx (C11)		Hypopharynx (C12-C13)		Larynx (C32)		Total
	n	%	n	%	n	%	n	%	n	%	n	%	n
00-04	-	-	2	<0.1	-	-	3	0.5	-	-	-	-	5
05-09	2	0.1	2	<0.1	-	-	3	0.5	-	-	1	0.1	8
10-14	-	-	1	<0.1	1	0.1	16	2.8	-	-	1	0.1	19
15-19	8	0.3	12	0.2	5	0.3	34	6.0	4	0.3	1	0.1	64
20-24	20	0.7	28	0.4	11	0.6	49	8.7	13	0.8	12	1.5	133
25-29	63	2.1	70	1.1	23	1.3	28	5.0	35	2.2	12	1.5	231
30-34	113	3.7	170	2.7	43	2.4	32	5.7	67	4.3	20	2.4	445
35-39	215	7.1	373	5.9	92	5.2	45	8.0	113	7.2	36	4.4	874
40-44	273	9.1	516	8.2	136	7.6	54	9.6	173	11.1	53	6.5	1205
45-49	428	14.2	799	12.7	213	12.0	68	12.1	231	14.8	76	9.3	1815
50-54	443	14.7	803	12.7	223	12.5	77	13.7	243	15.6	105	12.9	1894
55-59	390	12.9	816	13.0	248	13.9	50	8.9	207	13.3	127	15.5	1838
60-64	404	13.4	942	15.0	311	17.5	45	8.0	192	12.3	148	18.1	2042
65-69	314	10.4	734	11.6	204	11.4	28	5.0	137	8.8	106	13.0	1523
70-74	166	5.5	498	7.9	150	8.4	11	2.0	74	4.7	61	7.5	960
75+	176	5.8	533	8.5	122	6.8	20	3.6	73	4.7	58	7.1	982
Unknown	-	-	2	<0.1	-	-	-	-	-	-	-	-	2
Total	**3015**	**100.0**	**6301**	**100.0**	**1782**	**100.0**	**563**	**100.0**	**1562**	**100.0**	**817**	**100.0**	**14040**

Among the cancers of head and neck reported, the highest numbers were that of mouth cancer followed by oropharynx in males. Mouth contributed 1/3rd of the total head and neck cancers.

Among females, cancer of the mouth was the highest contributor followed by tongue.

Table 9.3 Number (n) and Relative Proportion (%) of Cases registered According to Types of Treatment for Head and Neck Cancers

Males

Treatment	Tongue (C02)		Mouth (C03-C04,C06)		Oropharynx (C01, C05, C09, C10, C14)		Nasopharynx (C11)		Hypopharynx (C12-C13)		Larynx (C32)	
	n	%	n	%	n	%	n	%	n	%	n	%
Surgery	1999	22.9	3119	19.0	273	2.5	15	1.1	193	2.8	574	7.5
Radiotherapy	929	10.7	2194	13.4	4138	38.1	177	13.2	2547	37.0	3232	42.1
Systemic Therapy	1116	12.8	2301	14.0	988	9.1	162	12.1	423	6.1	464	6.0
Multi-modality*	4613	52.9	8641	52.7	5385	49.6	980	72.9	3712	53.9	3370	43.9
Palliative Care	59	0.7	138	0.8	63	0.6	10	0.7	18	0.3	35	0.5
Total	**8716**	**100.0**	**16393**	**100.0**	**10847**	**100.0**	**1344**	**100.0**	**6893**	**100.0**	**7675**	**100.0**

Females

Treatment	Tongue (C02)		Mouth (C03-C04, C06)		Oropharynx (C01, C05, C09, C10, C14)		Nasopharynx (C11)		Hypopharynx (C12-C13)		Larynx (C32)	
	n	%	n	%	n	%	n	%	n	%	n	%
Surgery	831	27.6	1185	18.8	121	6.8	5	0.9	48	3.1	56	6.9
Radiotherapy	332	11.0	1115	17.7	654	36.8	79	14.1	571	36.6	372	45.6
Systemic Therapy	403	13.4	1008	16.0	167	9.4	82	14.6	100	6.4	67	8.2
Multi-modality*	1432	47.5	2918	46.4	829	46.6	394	70.1	836	53.6	317	38.9
Palliative Care	14	0.5	66	1.0	8	0.4	2	0.4	6	0.4	3	0.4
Total	**3012**	**100.0**	**6292**	**100.0**	**1779**	**100.0**	**562**	**100.0**	**1561**	**100.0**	**815**	**100.0**

*Multi-modality includes the combination of Surgery and/or Radiotherapy and/or Systemic Therapy

Multi-modality was the commonest type of treatment for all the cancers in both genders except for cancer larynx in females.

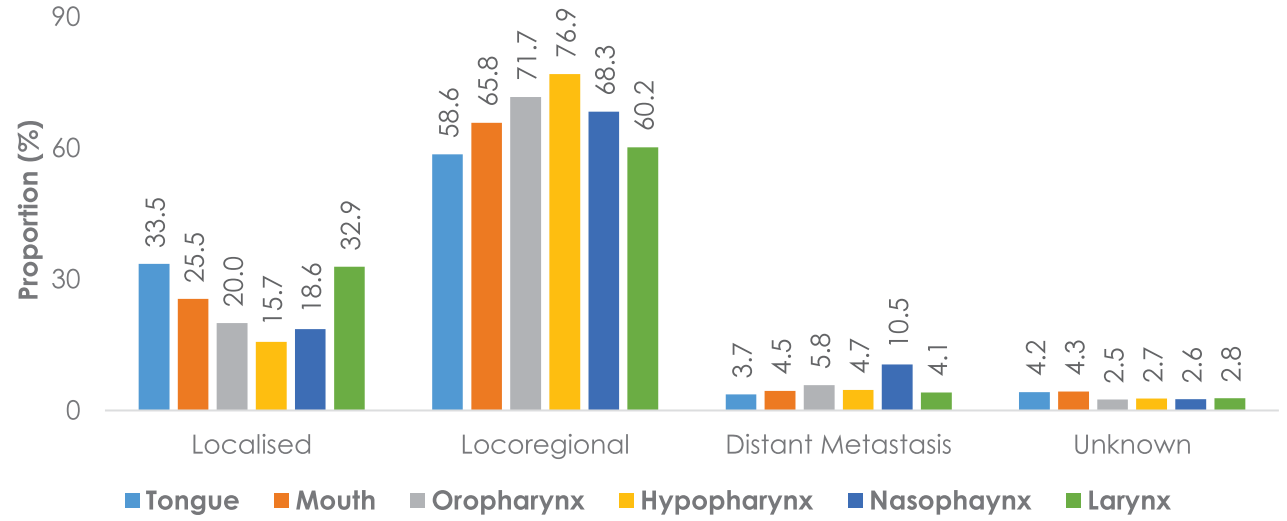
Table 9.4 Number (n) and Relative Proportion (%) by Educational Status - Head & Neck Cancers

Educational Status	Males		Females	
	n	%	n	%
Illiterate	9739	18.7	5367	38.2
Literate	4538	8.7	1366	9.7
Primary	8245	15.9	1948	13.9
Secondary	14752	28.4	2087	14.9
Higher Education	3538	6.8	527	3.8
Unknown	11122	21.4	2743	19.5
Not Applicable (for children below 5 Years)	8	<0.1	2	<0.1
Total	**51942**	**100.0**	**14040**	**100.0**

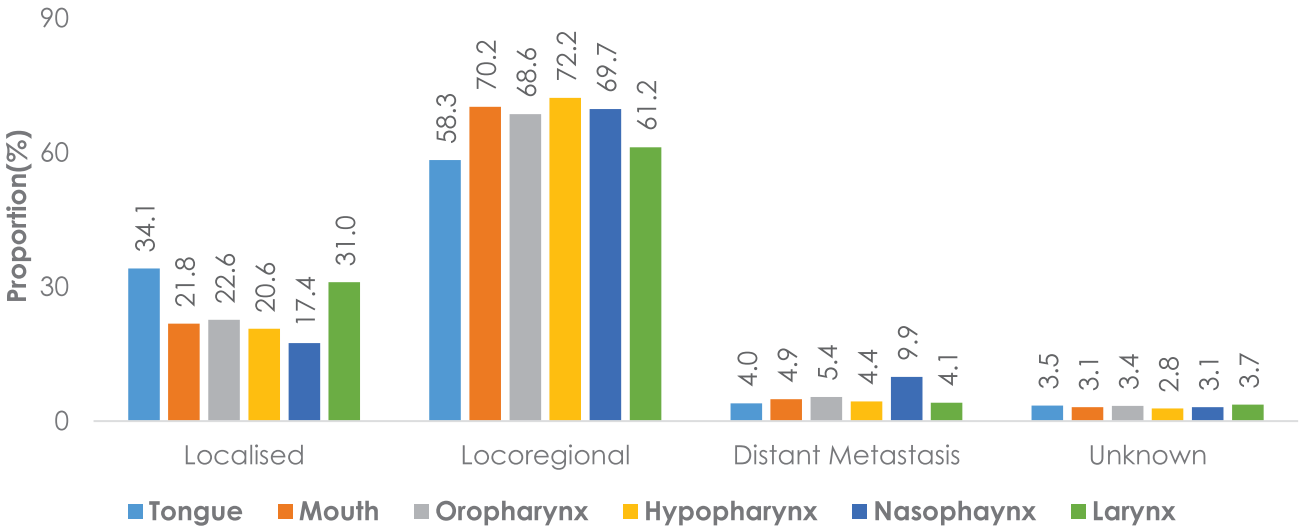
Educational status indicated that higher proportion of females (38.2%) were illiterate compared to males (18.7%). 28.4% and 14.9% of males and females got secondary level of education, respectively.

Fig. 9.3 Relative Proportion (%) of Clinical Extent of Disease - Head & Neck Cancers

Males



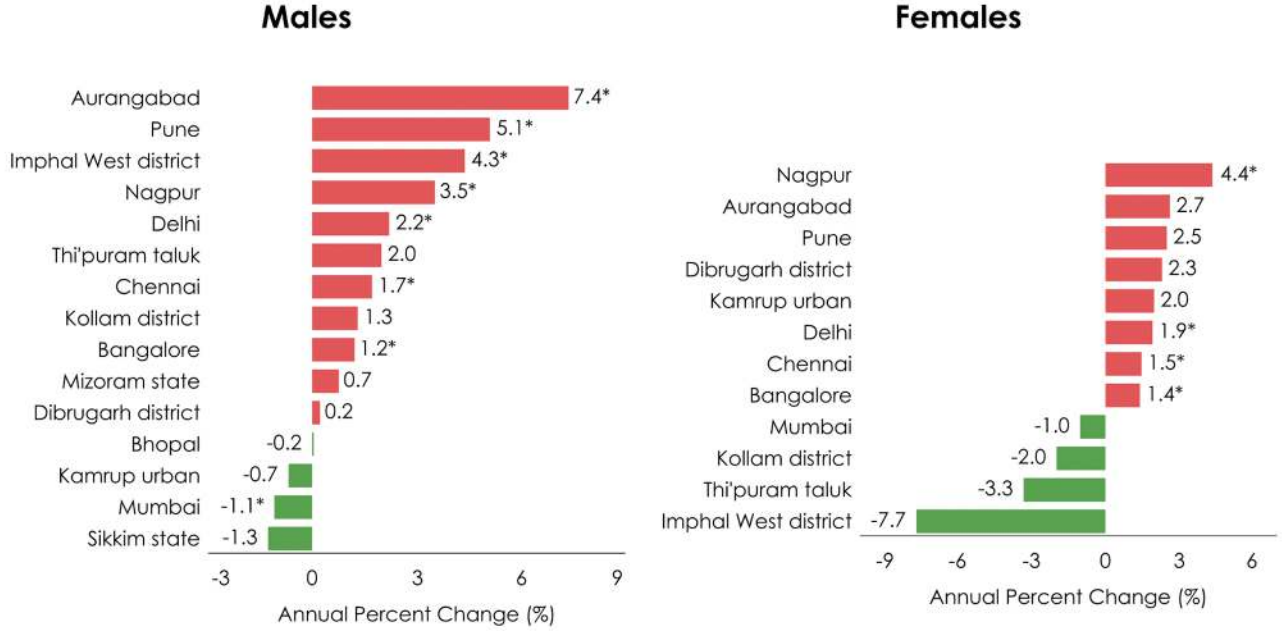
Females



Among the cancers of head and neck reported, "locoregional" was the commonest presentation of clinical extent of disease for all the cancer sites. The highest proportion was for hypopharynx cancer (males 76.9% and females 72.2%).

9.1 Cancer Tongue (ICD-10: C01-C02)

Fig. 9.1.1 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period - Cancer Tongue

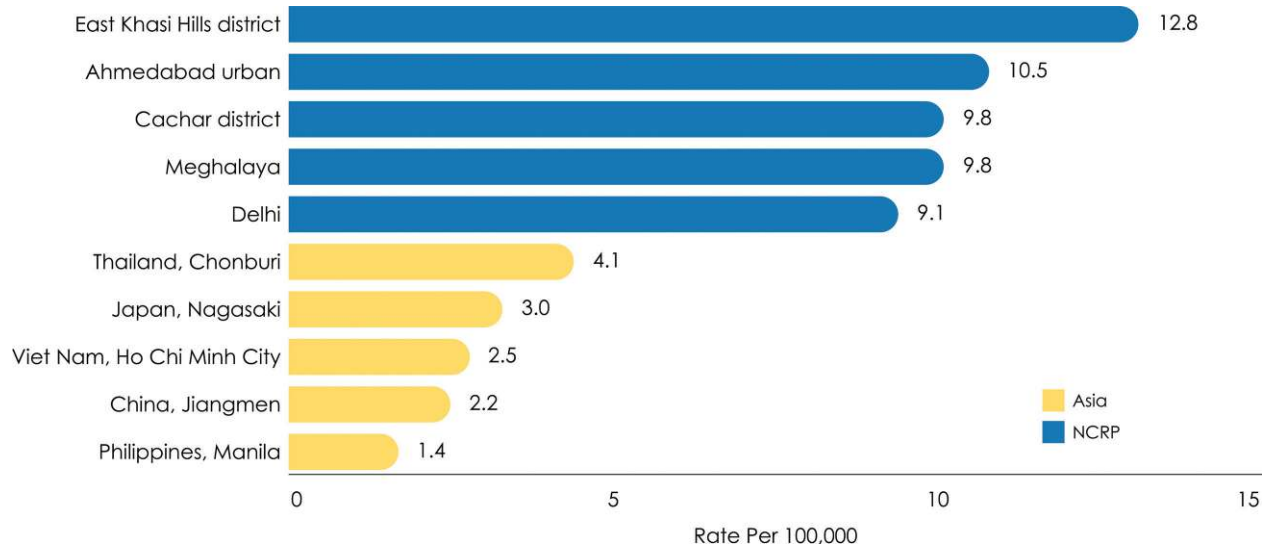


*Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level*

There was a significant increase in cancer incidence of tongue in Nagpur, Delhi, Chennai and Bangalore both in males and females.

Fig. 9.1.2 Comparison of Age Adjusted Incidence Rates (AAR) of Asian Countries with PBCRs under NCRP- Cancer Tongue

Males



Females

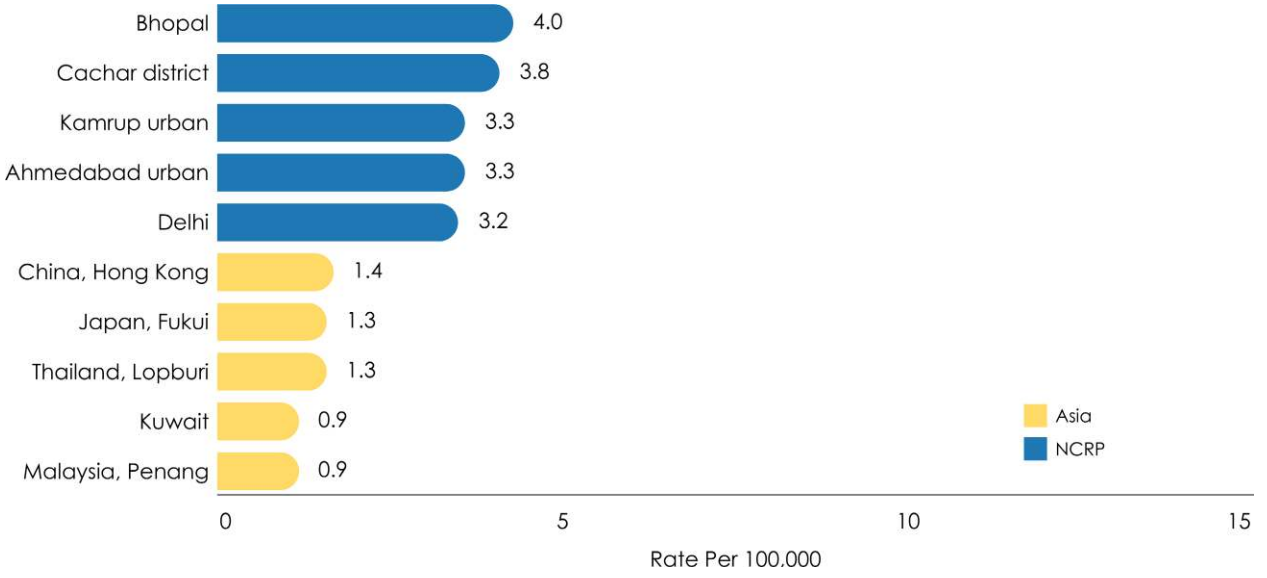
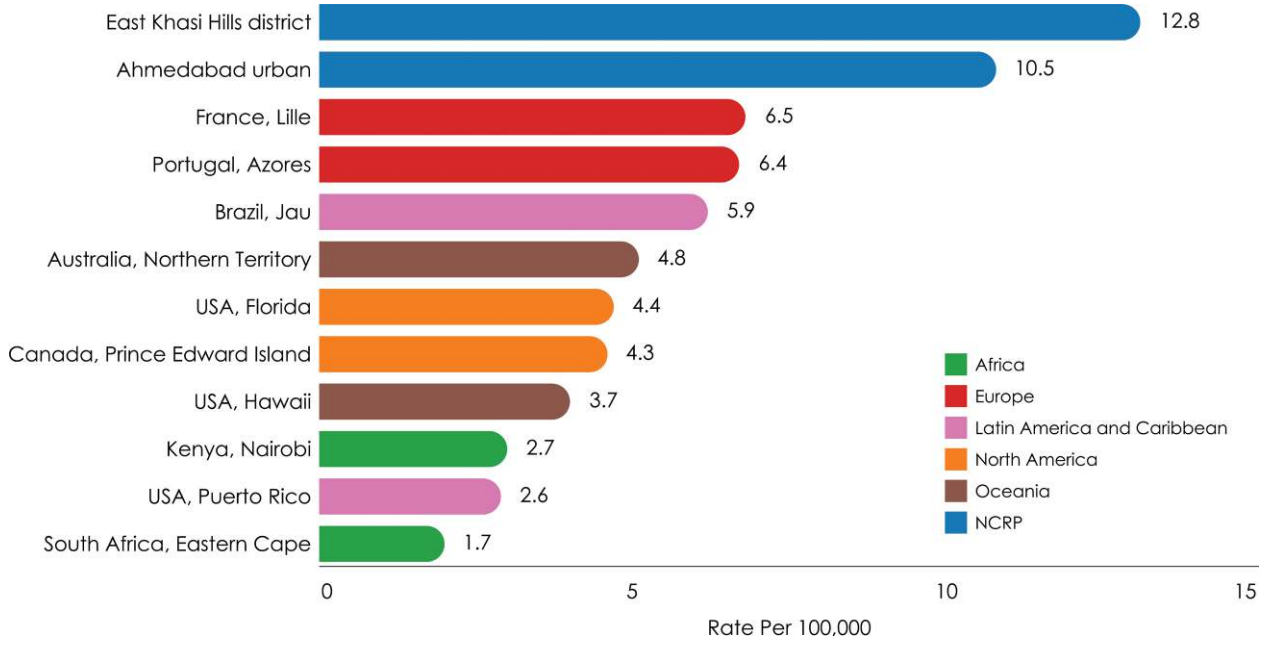
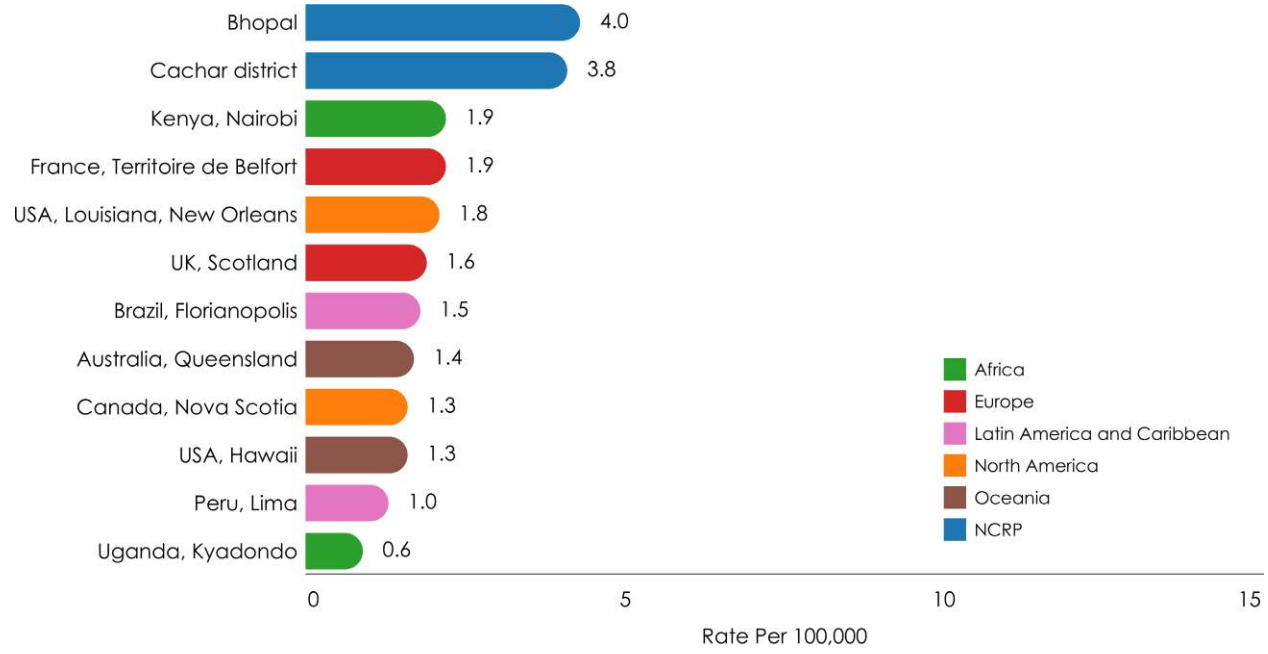


Fig. 9.1.3 Comparison of Age Adjusted Incidence Rates (AAR) of Non-Asian Countries with PBCRs under NCRP- Cancer Tongue

Males



Females



East Khasi Hills district (12.8 per 100,000) followed by Ahmedabad urban (10.5 per 100,000) had the highest incidence rate in the world among males for tongue cancer. Among females, Bhopal (4.0 per 100,000) followed by Cachar district (3.8 per 100,000) had the highest incidence rate in the world.

Table 9.1.1 Number (n) and Relative Proportion (%) according to Clinical Extent of Disease - Cancer Tongue

Clinical Extent of Disease	Males		Females		Both Sexes	
	n	%	n	%	n	%
Localised only	2910	33.5	1024	34.1	3934	33.7
Locoregional	5088	58.6	1750	58.3	6838	58.5
Distant Metastasis	325	3.7	120	4.0	445	3.8
Unknown	366	4.2	106	3.5	472	4.0
Total	**8689**	**100.0**	**3000**	**100.0**	**11689**	**100.0**

Locoregional was the commonest presentation for cancer tongue (males 58.6% and females 58.3%). Males and females showed similar clinical extent of disease for cancer tongue.

Table 9.1.2 Number (n) and Relative Proportion (%) of Types of Treatment according to Clinical Extent of Disease - Cancer Tongue

Males

Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	1165	40.1	718	14.1	13	4.0	95	26.0
Radiotherapy	201	6.9	614	12.1	59	18.2	51	13.9
Systemic Therapy	245	8.4	721	14.2	84	25.8	60	16.4
Multi-modality*	1287	44.3	2985	58.8	166	51.1	157	42.9
Palliative Care	10	0.3	42	0.8	3	0.9	3	0.8
Total	**2908**	**100.0**	**5080**	**100.0**	**325**	**100.0**	**366**	**100.0**

Females

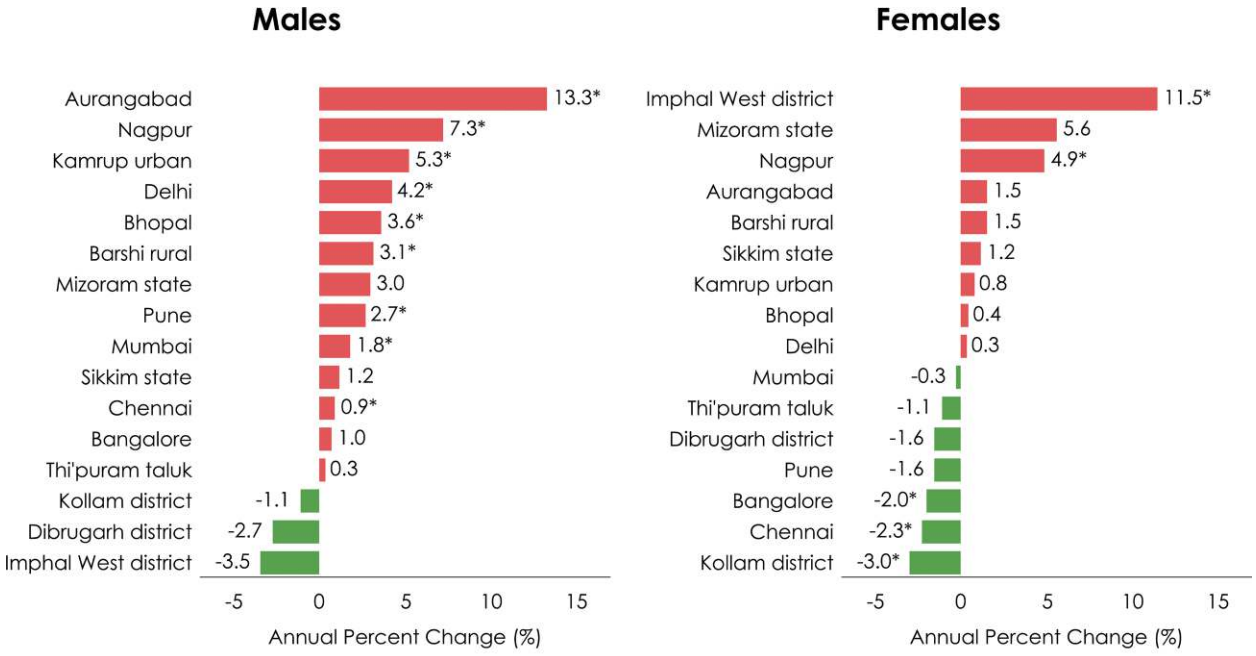
Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	497	48.6	286	16.4	8	6.7	39	36.8
Radiotherapy	62	6.1	233	13.3	22	18.3	12	11.3
Systemic Therapy	70	6.8	280	16.0	33	27.5	18	17.0
Multi-modality*	388	37.9	942	53.9	57	47.5	37	34.9
Palliative Care	6	0.6	7	0.4	-	-	-	-
Total	**1023**	**100.0**	**1748**	**100.0**	**120**	**100.0**	**106**	**100.0**

**Multi-modality includes the combination of Surgery and/or Radiotherapy and/or Systemic Therapy*

On the basis of extent of disease, multi-modality was the treatment of choice for cancer tongue among both males and females for locoregional and distant metastatic spread. Surgery was the preferred among females where the clinical extent of cancer was localised.

9.2 Cancer Mouth (ICD-10: C03-C06)

Fig. 9.2.1 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period - Cancer Mouth

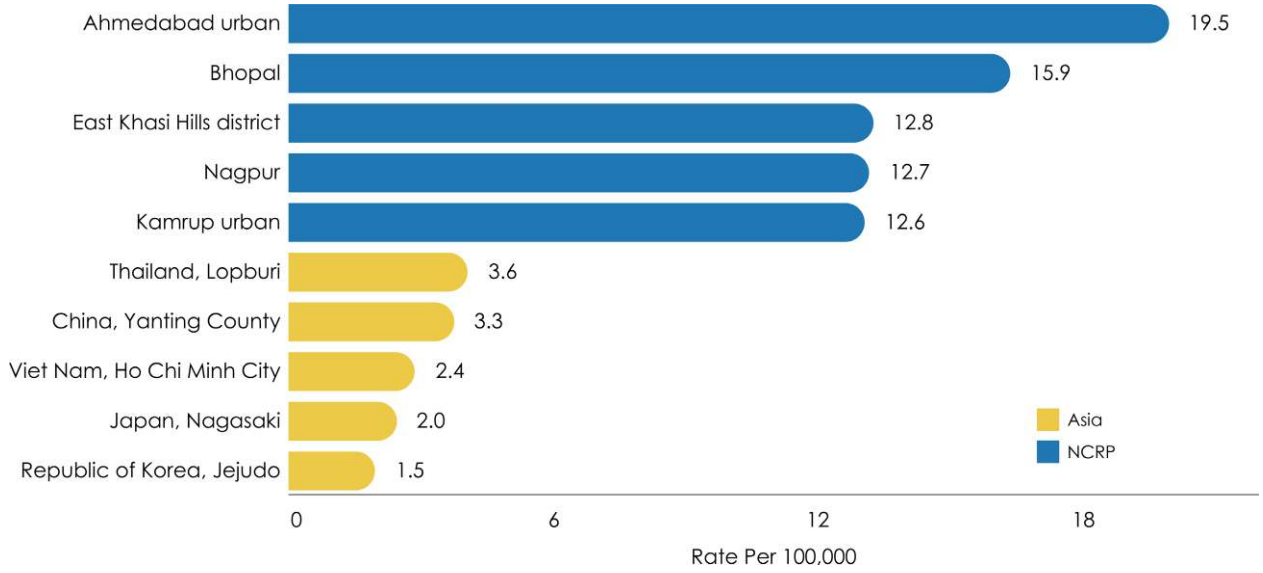


*Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level*

There was a significant increase in the incidence rates for mouth cancer in 9 PBCRs in males and in 2 PBCRs in females. There was a significant decrease in rates in Bangalore, Chennai and Kollam district among females.

Fig. 9.2.2 Comparison of Age Adjusted Incidence Rates (AAR) of Asian countries with PBCRs under NCRP- Cancer Mouth

Males



Females

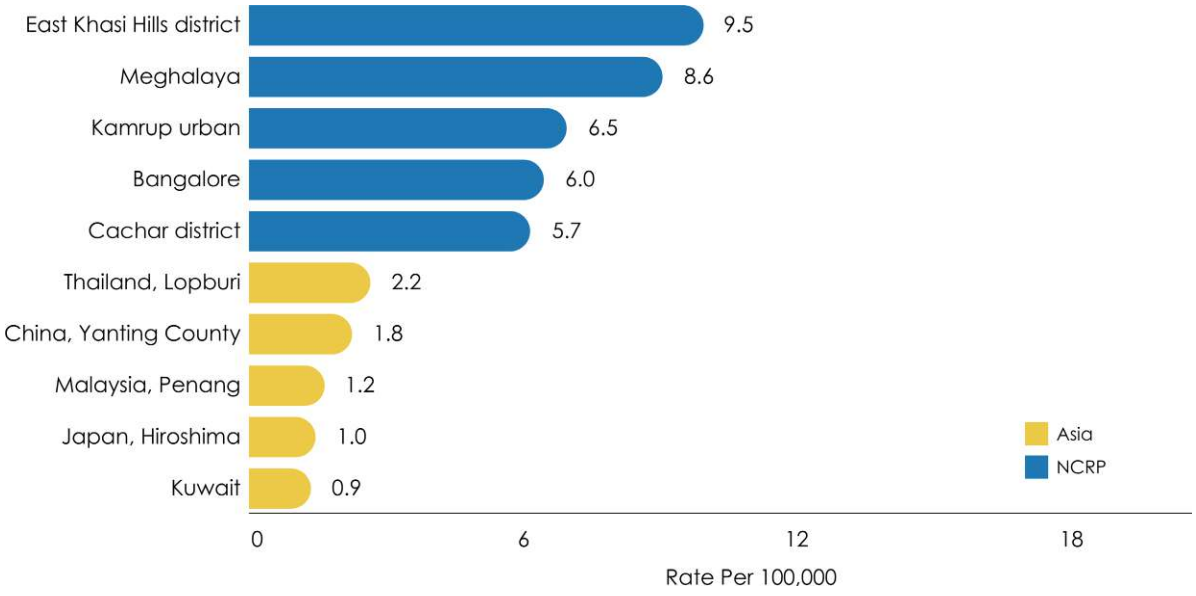
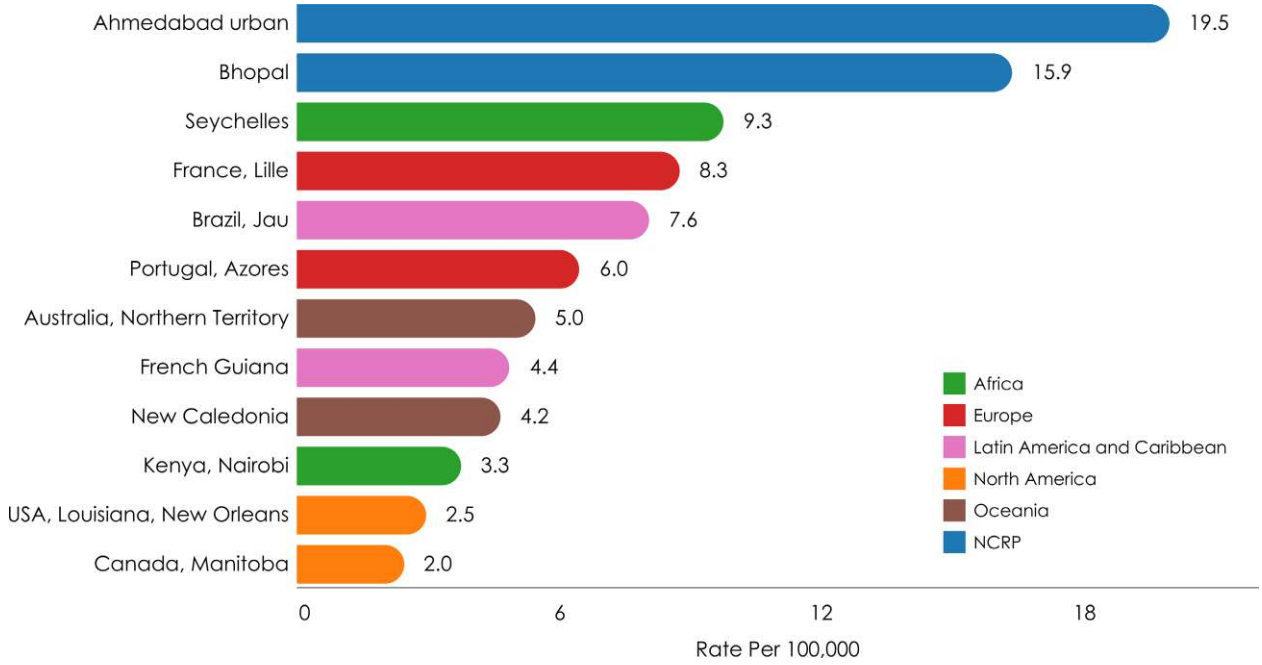
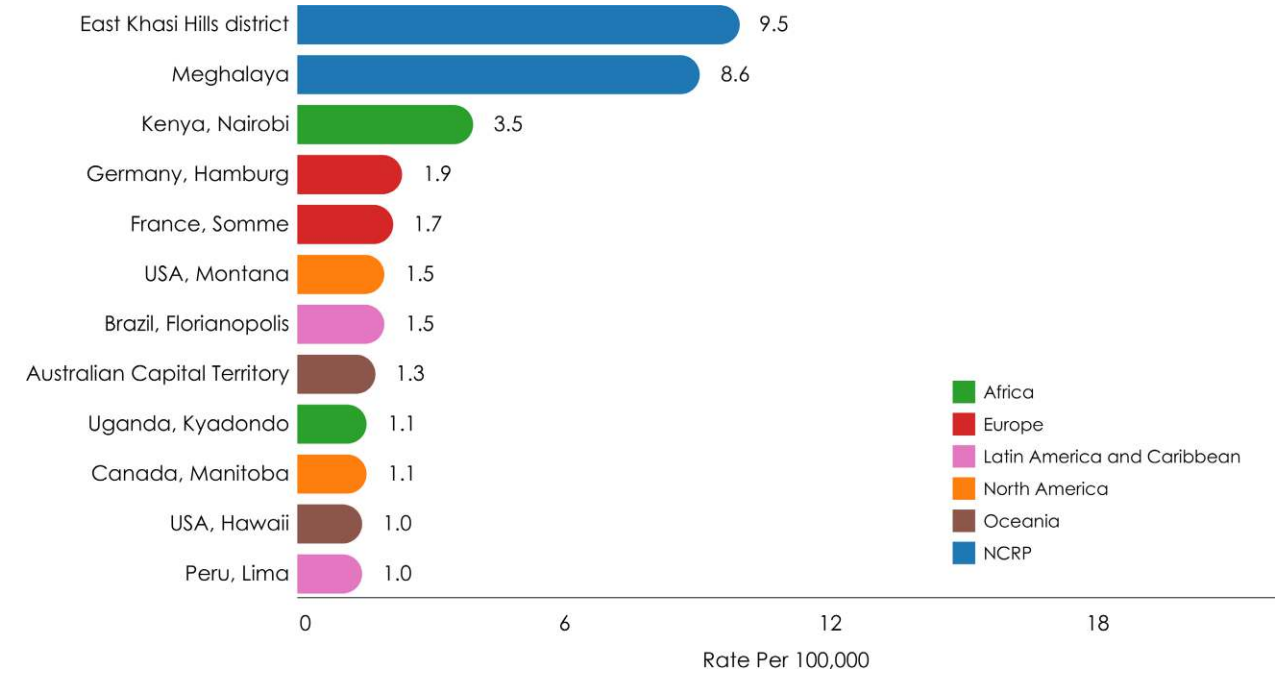


Fig. 9.2.3 Comparison of Age Adjusted Incidence Rates (AAR) of Non-Asian countries with PBCRs under NCRP - Cancer Mouth

Males



Females



Ahmedabad urban (19.5 per 100,000) followed by Bhopal (15.9 per 100,000) had the highest incidence rate in the world among males for mouth cancer. Among females, East Khasi Hills district (9.5 per 100,000) had the highest incidence rate of mouth cancer in the world.

Table 9.2.1 Number (n) and Relative Proportion (%) according to Clinical Extent of Disease - Cancer Mouth

Clinical Extent of Disease	Males		Females		Both Sexes	
	n	%	n	%	n	%
Localised only	4169	25.5	1366	21.8	5535	24.5
Locoregional	10750	65.8	4396	70.2	15146	67.0
Distant Metastasis	734	4.5	309	4.9	1043	4.6
Unknown	695	4.3	193	3.1	888	3.9
Total	**16348**	**100.0**	**6264**	**100.0**	**22612**	**100.0**

Locoregional was the commonest presentation for cancer mouth (males 65.8% and females 70.2%). Males and females showed similar clinical extent of disease for cancer mouth.

Table 9.2.2 Number (n) and Relative Proportion (%) of Types of Treatment according to Clinical Extent of Disease - Cancer Mouth

Males

Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	1340	32.2	1485	13.8	68	9.3	218	31.6
Radiotherapy	424	10.2	1552	14.5	127	17.3	79	11.4
Systemic Therapy	411	9.9	1594	14.9	175	23.9	108	15.7
Multi-modality*	1965	47.2	5997	55.9	360	49.1	281	40.7
Palliative Care	26	0.6	104	1.0	3	0.4	4	0.6
Total	**4166**	**100.0**	**10732**	**100.0**	**733**	**100.0**	**690**	**100.0**

Females

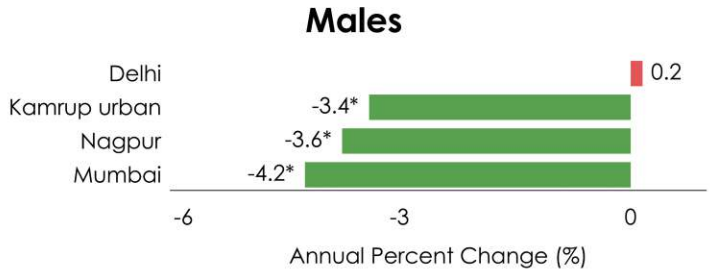
Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	399	29.3	666	15.2	19	6.2	93	48.4
Radiotherapy	199	14.6	818	18.6	74	24.0	23	12.0
Systemic Therapy	142	10.4	759	17.3	75	24.4	21	10.9
Multi-modality*	611	44.9	2104	47.9	137	44.5	49	25.5
Palliative Care	10	0.7	47	1.1	3	1.0	6	3.1
Total	**1361**	**100.0**	**4394**	**100.0**	**308**	**100.0**	**192**	**100.0**

**Multi-modality includes the combination of Surgery and/or Radiotherapy and/or Systemic Therapy*

On the basis of extent of disease, multi-modality was the treatment of choice for cancer mouth among both males (locoregional: 55.9%, distant metastasis: 49.1% and localized: 47.2%) and females (locoregional: 47.9%, localized: 44.9% and distant metastasis: 44.5%). Surgery and radiotherapy were the second choice of treatment depending upon the clinical extent of disease.

9.3 Cancer Tonsil, Other Oropharynx and Pharynx Unspecified (ICD: C09, C10, C14)

Fig. 9.3.1 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period - Cancer Tonsil

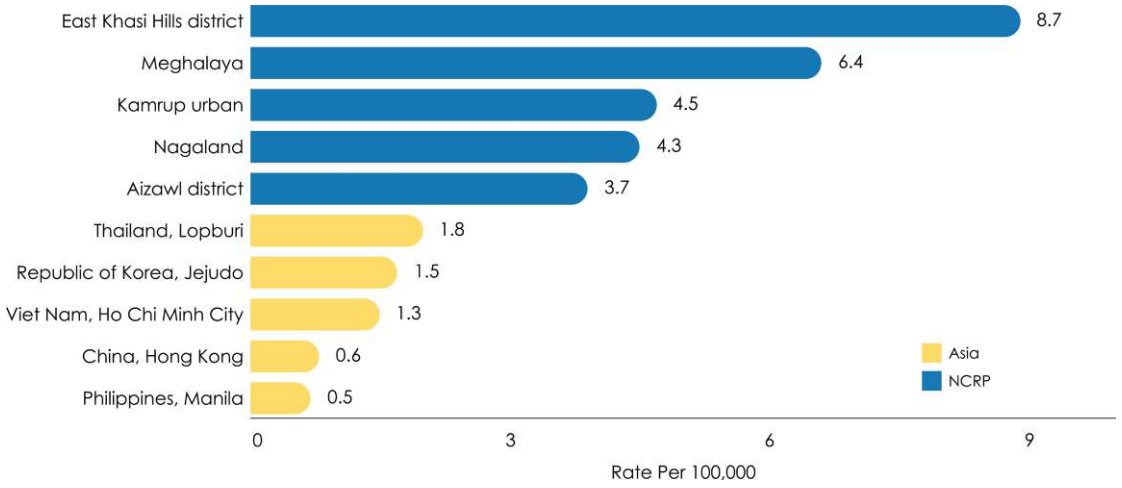


Increase in APC, *Decrease in APC* ; **Significant increase or decrease in APC at 95% confidence level*

There was a significant decrease in the incidence rates for cancer tonsil in Kamrup urban, Nagpur and Mumbai in males.

Fig. 9.3.2 Comparison of Age Adjusted Incidence Rates (AAR) of Asian countries with PBCRs under NCRP- Cancer Tonsil

Males



Females

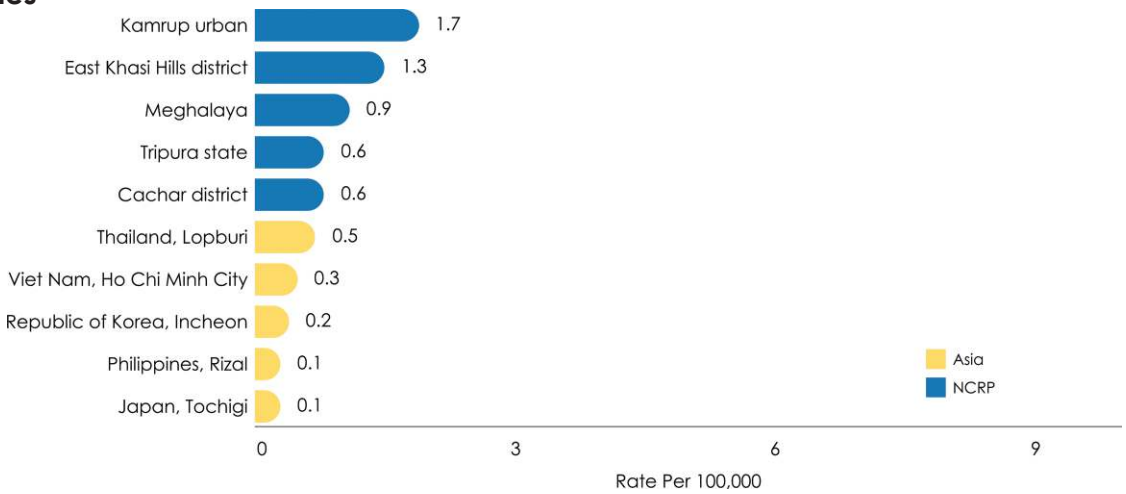
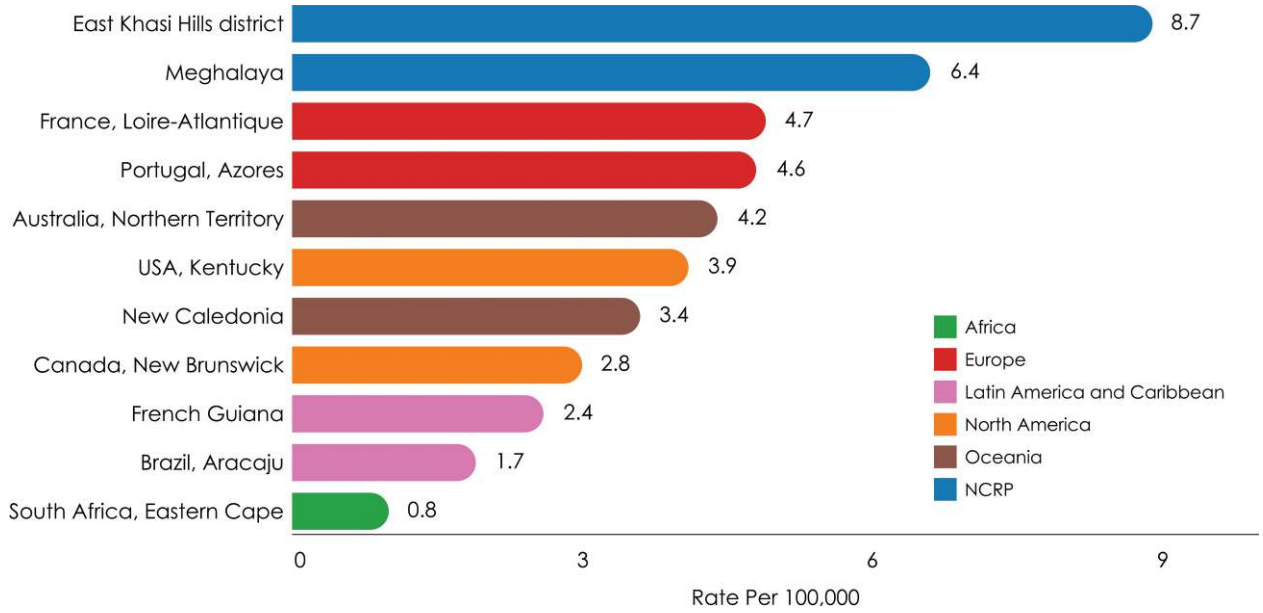
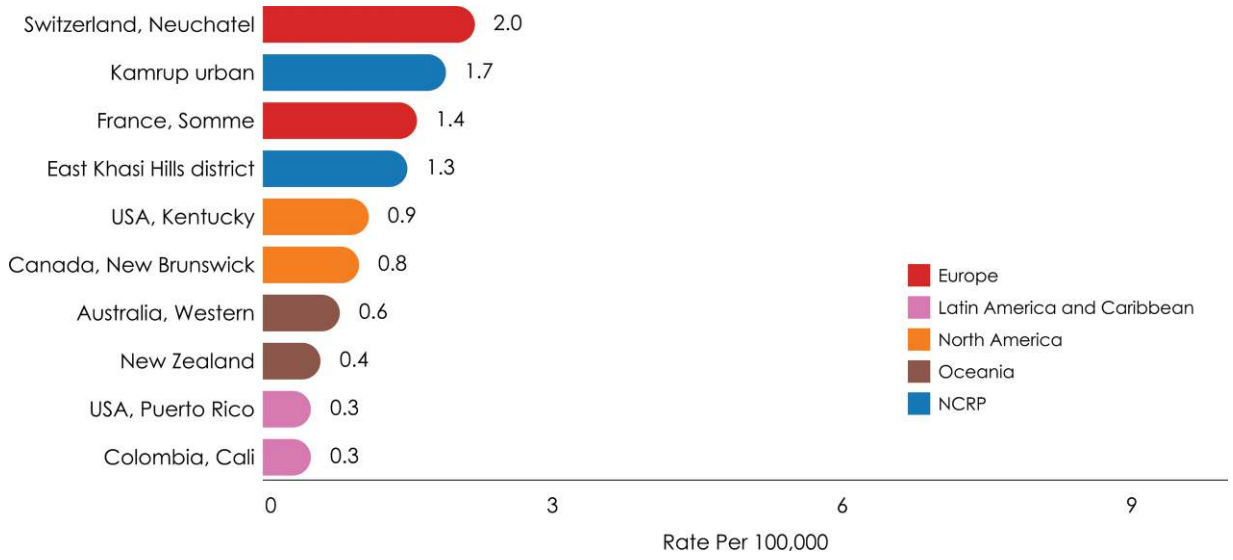


Fig. 9.3.3 Comparison of Age Adjusted Incidence Rates (AAR) of Non-Asian countries with PBCRs under NCRP - Cancer Tonsil

Males



Females



East Khasi Hills district (8.7 per 100,000) and Meghalaya (6.4 per 100,000) had the highest incidence rate of cancer tonsil among males in the world and Kamrup urban (1.7 per 100,000) had the highest incidence rate among females in Asia.

Fig. 9.3.4 Comparison of Age Adjusted Incidence Rates (AAR) of Asian countries with PBCRs under NCRP- Cancer Other Oropharynx

Males

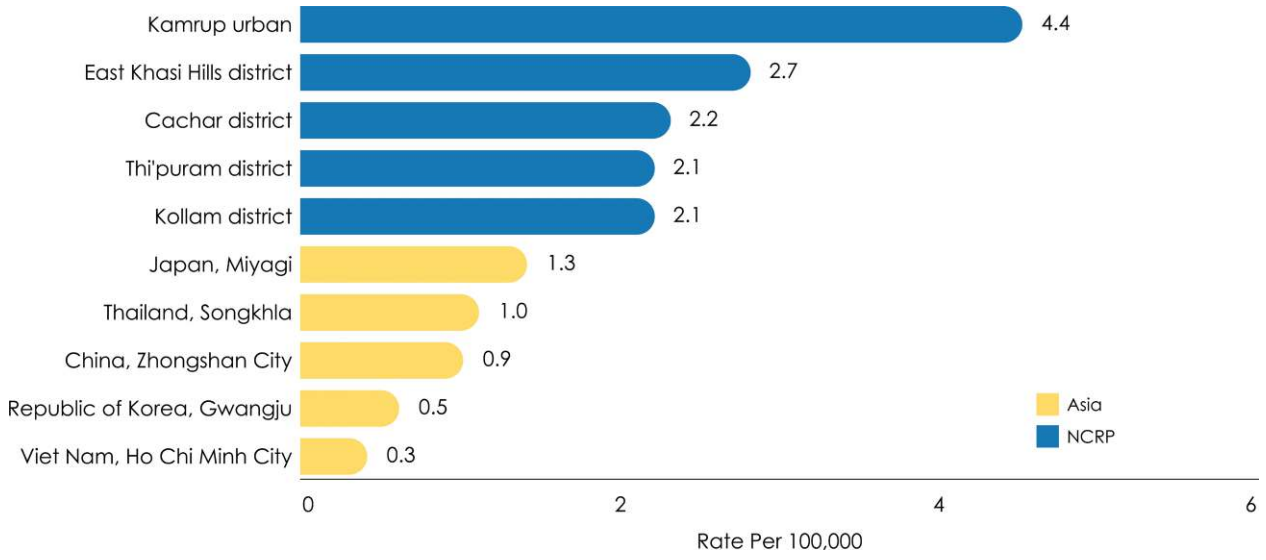
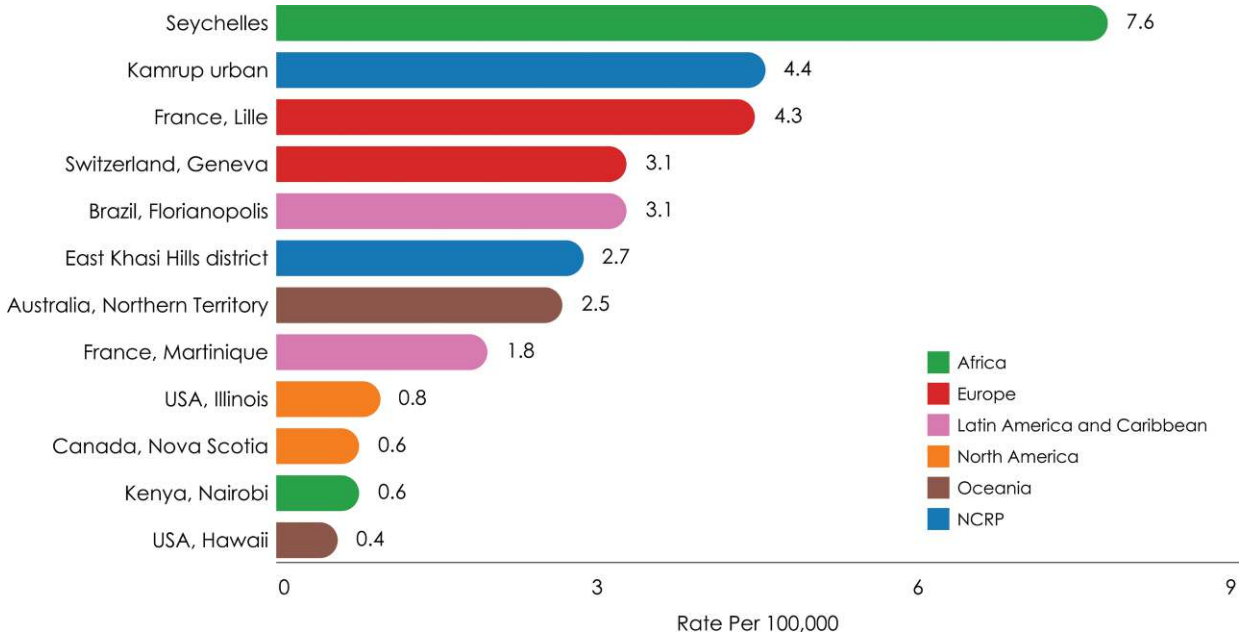
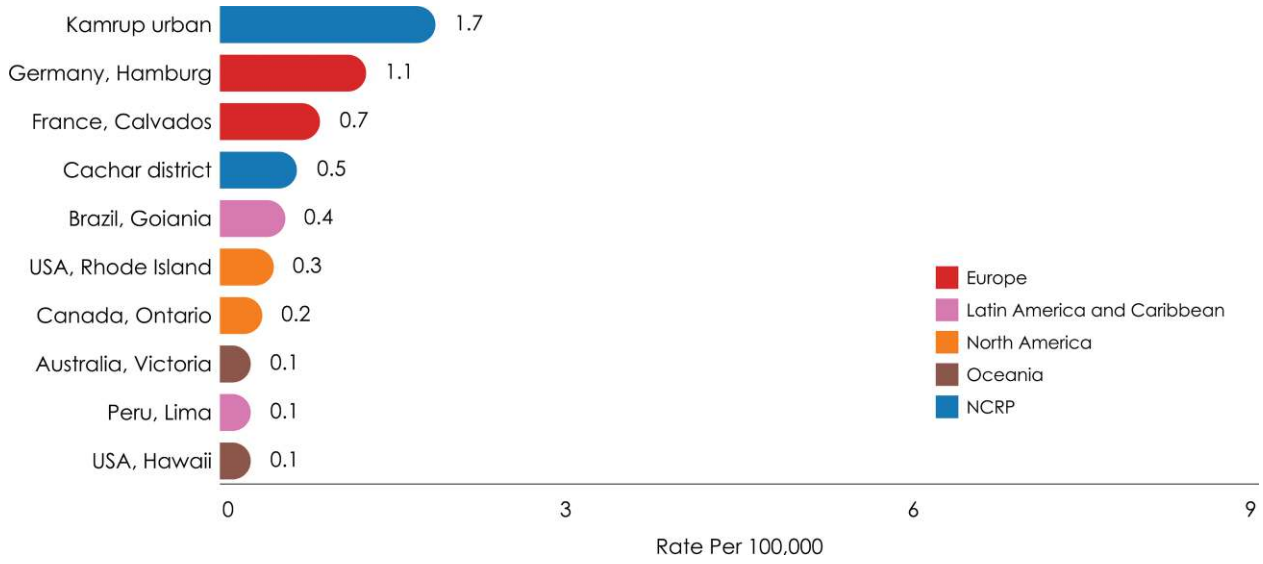


Fig. 9.3.5 Comparison of Age Adjusted Incidence Rates (AAR) of Non-Asian countries with PBCRs under NCRP - Cancer Other Oropharynx

Males



Females



Kamrup urban had the highest incidence rate of cancer other oropharynx in Asia among males (4.4 per 100,000) as well as females (1.7 per 100,000).

Fig. 9.3.6 Comparison of Age Adjusted Incidence Rates (AAR) of Asian countries with PBCRs under NCRP - Cancer Pharynx Unspecified

Males

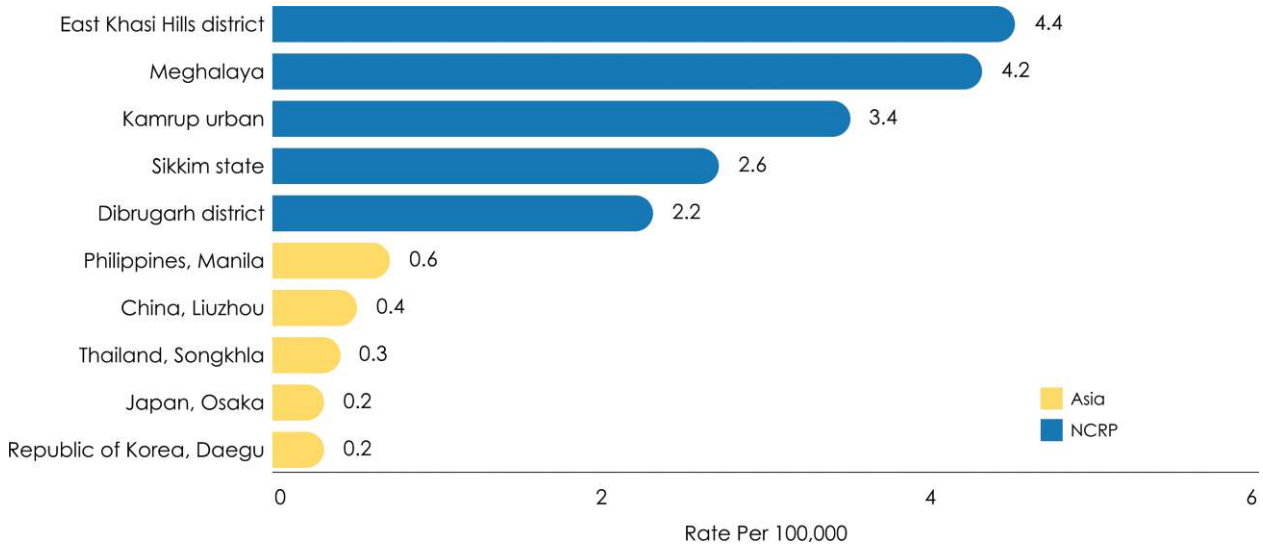
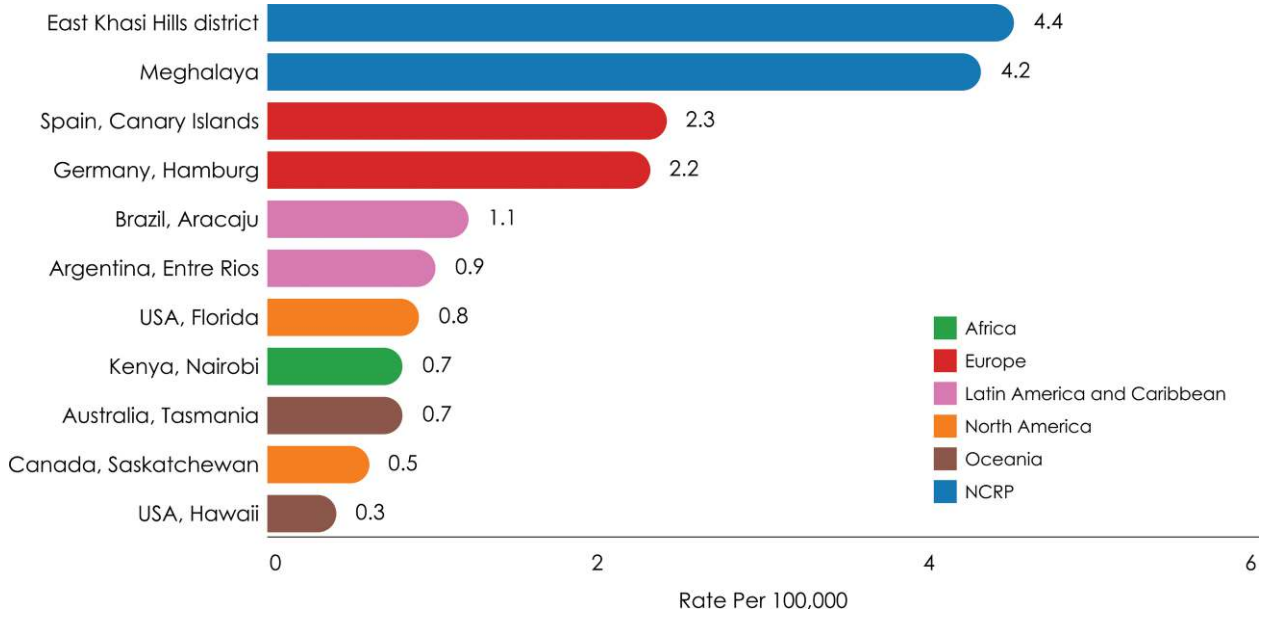
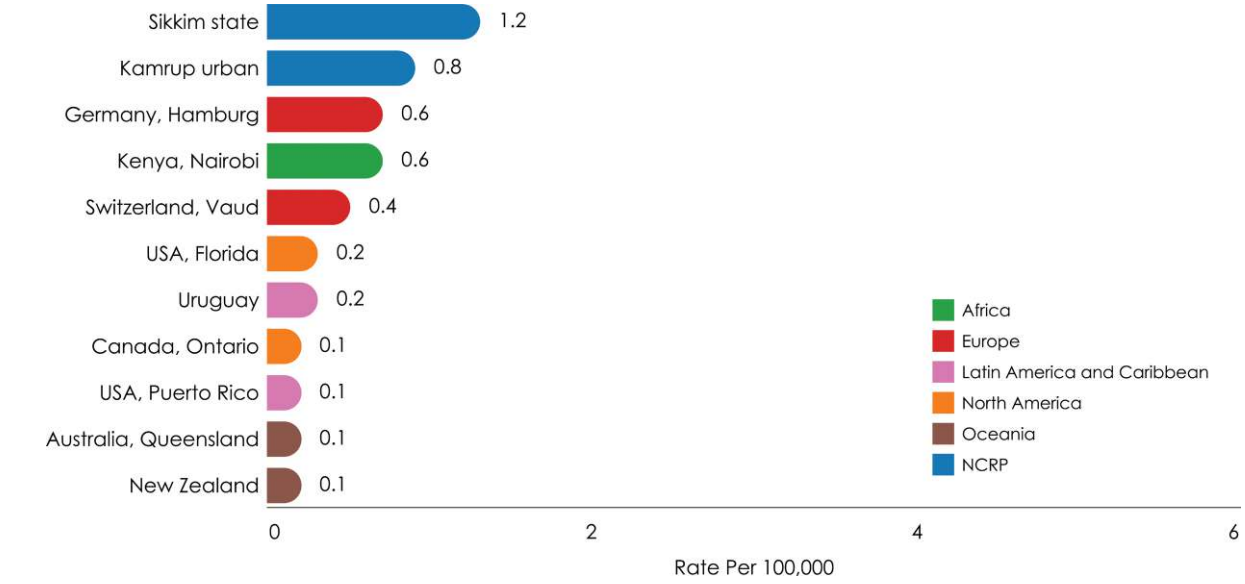


Fig. 9.3.7 Comparison of Age Adjusted Incidence Rates (AAR) of Non-Asian countries with PBCRs under NCRP - Cancer Pharynx Unspecified

Males



Females



East Khasi Hills district (4.4 per 100,000) had the highest incidence rate of cancer pharynx unspecified in the world among males and Sikkim state (1.2 per 100,000) had the highest incidence rate in the world among females.

Table 9.3.1 Number (n) and Relative Proportion (%) according to Clinical Extent of Disease - Cancer Oropharynx

Clinical Extent of Disease	Males		Females		Both Sexes	
	n	%	n	%	n	%
Localised only	2161	20.0	399	22.6	2560	20.3
Locoregional	7757	71.7	1212	68.6	8969	71.2
Distant metastasis	633	5.8	95	5.4	728	5.8
Unknown	273	2.5	60	3.4	333	2.6
Total	**10824**	**100.0**	**1766**	**100.0**	**12590**	**100.0**

Locoregional was the commonest presentation for cancer of oropharynx (males 71.7% and females 68.6%). The relative proportion of clinical extent of disease for cancer oropharynx was similar among males and females.

Table 9.3.2 Number (n) and Relative Proportion (%) of Types of Treatment according to Clinical Extent of Disease for Cancer Oropharynx

Males

Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	141	6.5	112	1.4	3	0.5	12	4.5
Radiotherapy	731	33.9	3140	40.5	206	32.5	51	19.0
Systemic Therapy	242	11.2	561	7.2	114	18.0	62	23.0
Multi-modality	1037	48.1	3879	50.1	309	48.8	144	53.5
Palliative Care	7	0.3	55	0.7	1	0.2	-	-
Total	**2158**	**100.0**	**7747**	**100.0**	**633**	**100.0**	**269**	**100.0**

Females

Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	61	15.3	45	3.7	5	5.3	9	15.3
Radiotherapy	122	30.7	494	40.8	23	24.2	11	18.6
Systemic Therapy	26	6.5	114	9.4	14	14.7	10	16.9
Multi-modality	188	47.2	551	45.5	53	55.8	29	49.2
Palliative Care	1	0.3	7	0.6	-	-	-	-
Total	**398**	**100.0**	**1211**	**100.0**	**95**	**100.0**	**59**	**100.0**

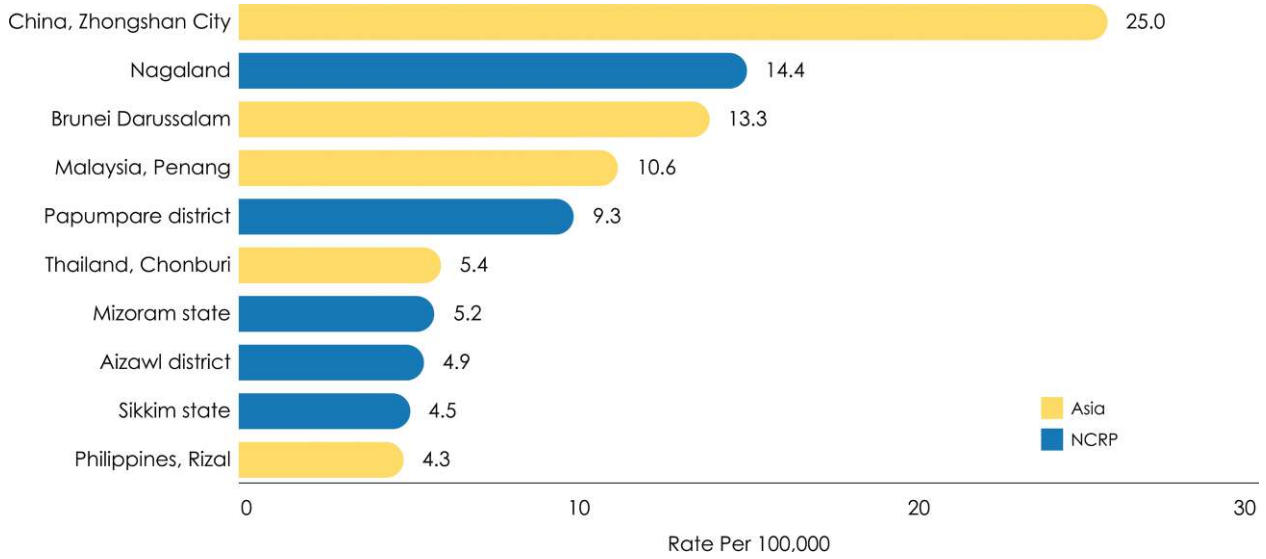
**Multi-modality includes the combination of Surgery and/or Radiotherapy and/or Systemic Therapy*

On the basis of extent disease, multi-modality was the treatment of choice for cancer oropharynx among both males (locoregional: 50.1%, localized: 48.1% and distant metastasis: 48.8%) and females (distant metastasis: 55.8%, localized: 47.2%, and locoregional: 45.5%). Radiotherapy was the second choice of treatment in both genders.

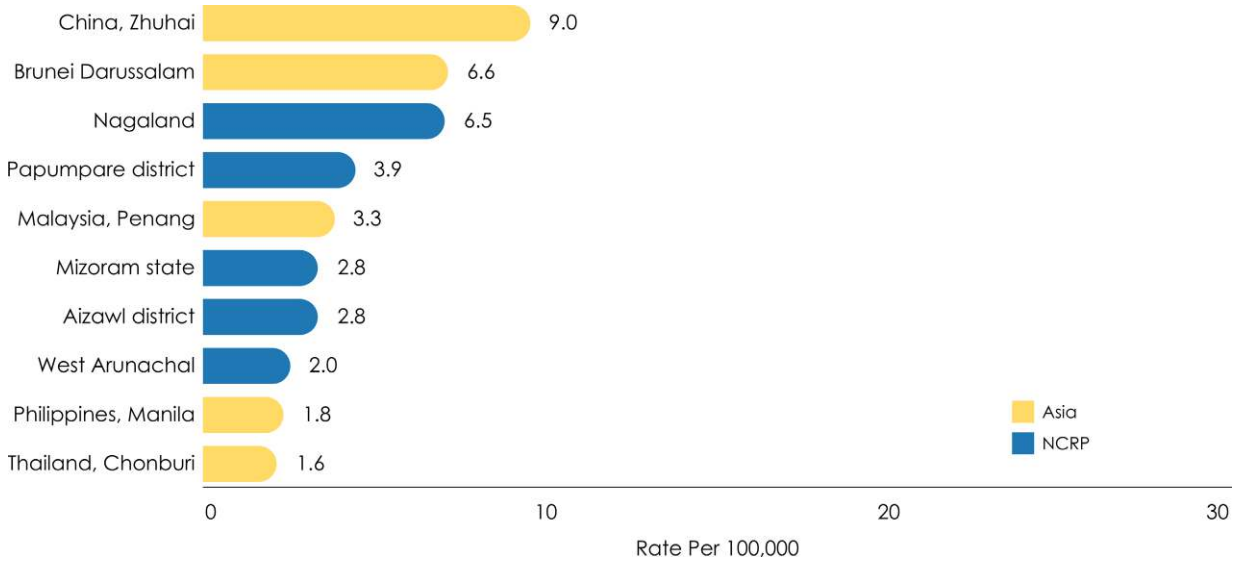
9.4 Cancer Nasopharynx (ICD-10: C11)

Fig. 9.4.1 Comparison of Age Adjusted Incidence Rates (AAR) of Asian countries with PBCRs under NCRP - Cancer Nasopharynx

Males



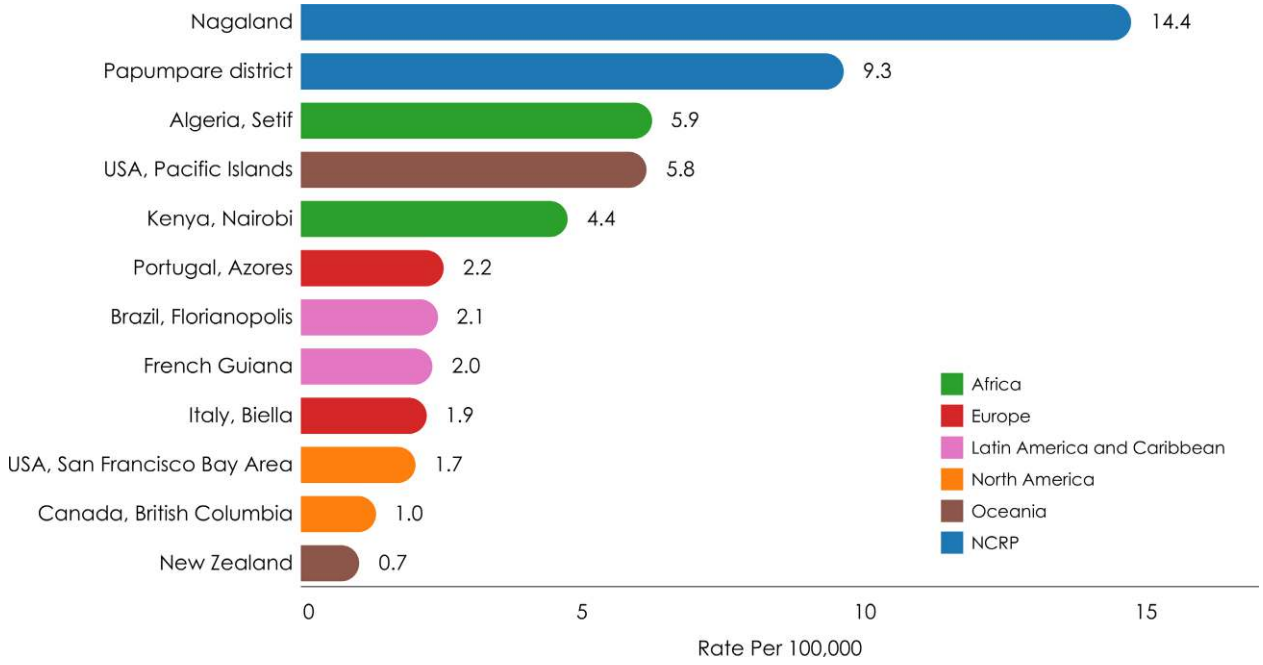
Females



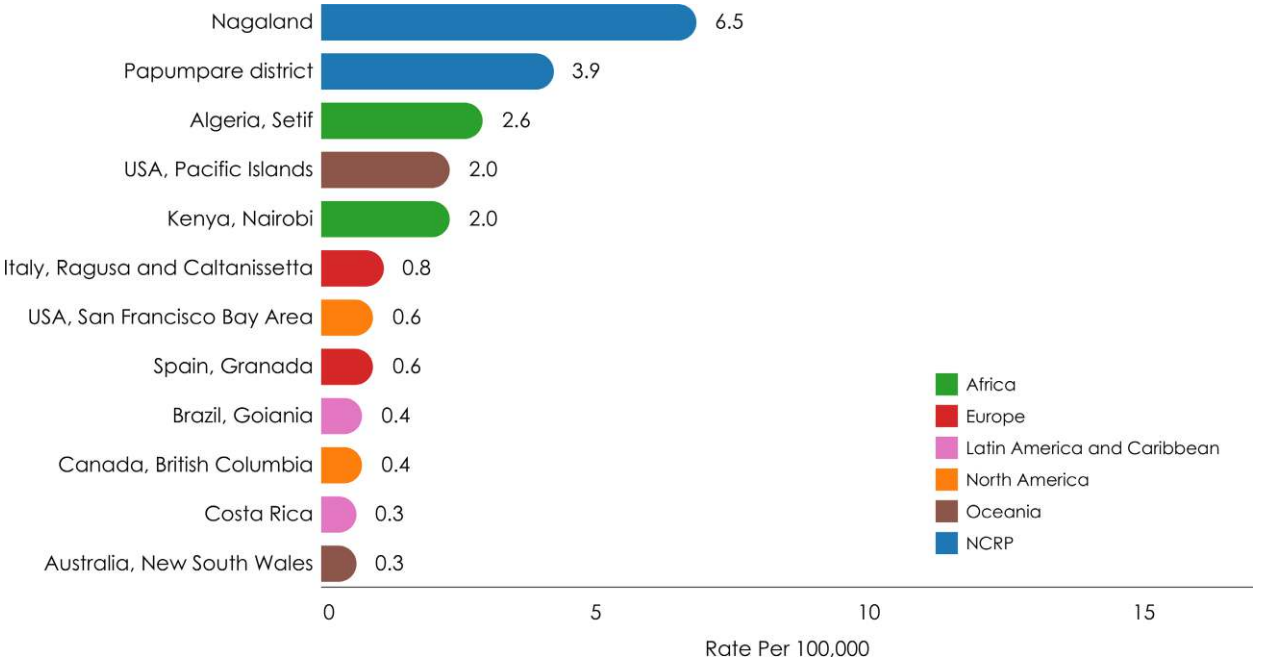
In Asia, Zhongshan City (25.0 per 100,000) in China had the highest incidence of cancer nasopharynx among males and Zhuhai in China (9.0 per 100,000) had the highest AAR in females.

Fig. 9.4.2 Comparison of Age Adjusted Incidence Rates (AAR) of Non-Asian countries with PBCRs under NCRP - Cancer Nasopharynx

Males



Females



Nagaland had the highest AAR of cancer nasopharynx when compared with Non-Asian countries both in males (14.4 per 100,000) and females (6.5 per 100,000).

Table 9.4.1 Number (n) and Relative Proportion (%) according to Clinical Extent of Disease - Cancer Nasopharynx

Clinical Extent of Disease	Males		Females		Both sexes	
	n	%	n	%	n	%
Localised only	248	18.6	97	17.4	345	18.2
Locoregional	911	68.3	388	69.7	1299	68.7
Distant Metastasis	140	10.5	55	9.9	195	10.3
Unknown	35	2.6	17	3.1	52	2.7
Total	**1334**	**100.0**	**557**	**100.0**	**1891**	**100.0**

Locoregional was the commonest presentation for Cancer nasopharynx (males 68.3% and females 69.7%). The relative proportions of clinical extent of disease for cancer nasopharynx were similar among males and females.

Table 9.4.2 Number (n) and Relative Proportion (%) of Types of Treatment according to Clinical Extent of Disease - Cancer Nasopharynx

Males

Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	4	1.6	9	1.0	1	0.7	1	2.9
Radiotherapy	33	13.4	108	11.9	30	21.4	5	14.3
Systemic Therapy	48	19.4	77	8.5	27	19.3	7	20.0
Multi-modality*	161	65.2	707	77.7	82	58.6	22	62.9
Palliative Care	1	0.4	9	1.0	-	-	-	-
Total	**247**	**100.0**	**910**	**100.0**	**140**	**100.0**	**35**	**100.0**

Females

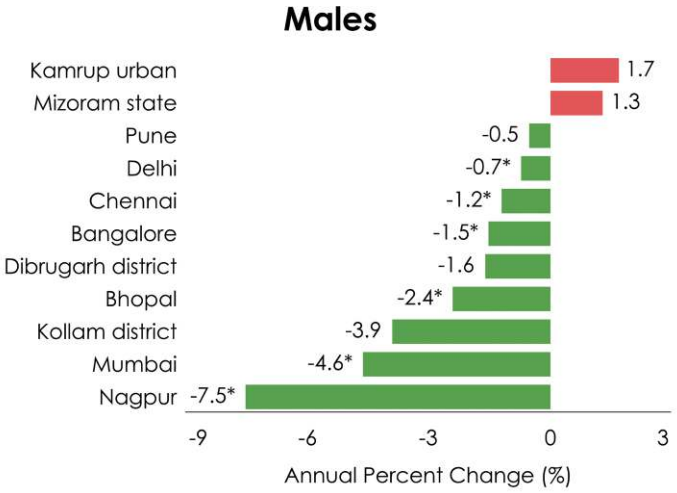
Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	2	2.1	1	0.3	1	1.8	1	5.9
Radiotherapy	5	5.2	59	15.2	9	16.4	4	23.5
Systemic Therapy	17	17.5	52	13.4	9	16.4	2	11.8
Multi-modality*	73	75.3	273	70.5	36	65.5	10	58.8
Palliative Care	-	-	2	0.5	-	-	-	-
Total	**97**	**100.0**	**387**	**100.0**	**55**	**100.0**	**17**	**100.0**

**Multi-modality includes the combination of Surgery and/or Radiotherapy and/or Systemic Therapy*

On the basis of clinical extent of disease, multi-modality was the treatment of choice for cancer nasopharynx among both males (localized: 65.2%, locoregional: 77.7%, and distant metastasis: 58.6%) and females (localized: 75.3%, locoregional: 70.5% and distant metastasis: 65.5%). Systemic therapy was the second choice of treatment among both genders for localised extent of cancer.

9.5 Cancer Hypopharynx (ICD-10: C12-C13)

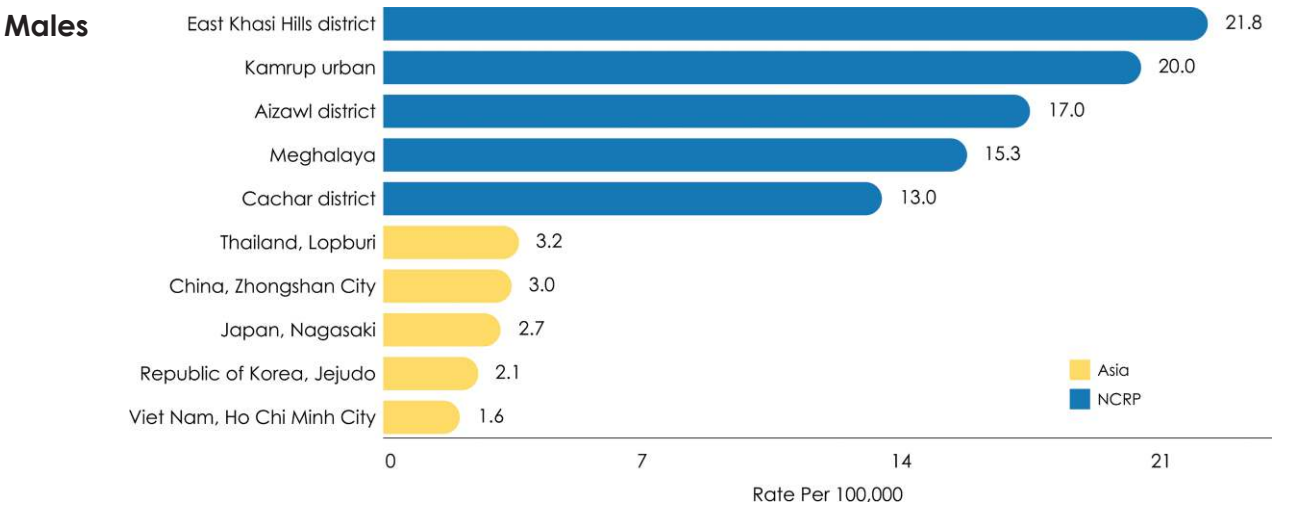
Fig. 9.5.1 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period - Cancer Hypopharynx



Increase in APC, *Decrease in APC* ; **Significant increase or decrease in APC at 95% confidence level*

There was a significant decrease in the incidence rate of cancer hypopharynx in Delhi, Chennai, Bangalore, Bhopal, Mumbai and Nagpur in males.

Fig. 9.5.2 Comparison of Age Adjusted Incidence Rates (AAR) of Asian countries with PBCRs under NCRP - Cancer Hypopharynx



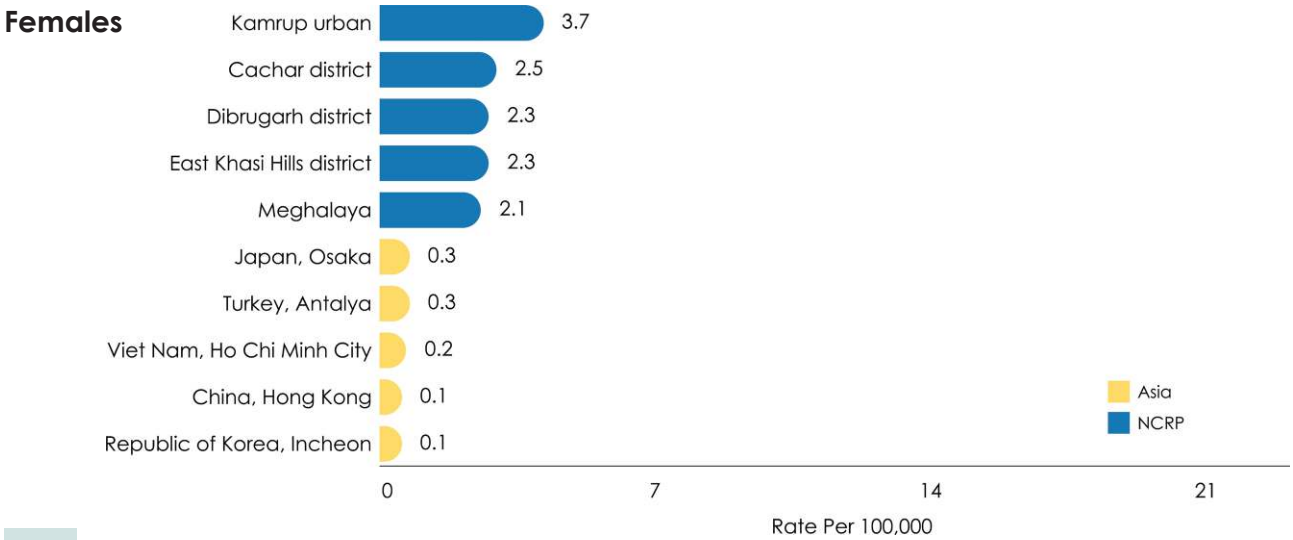
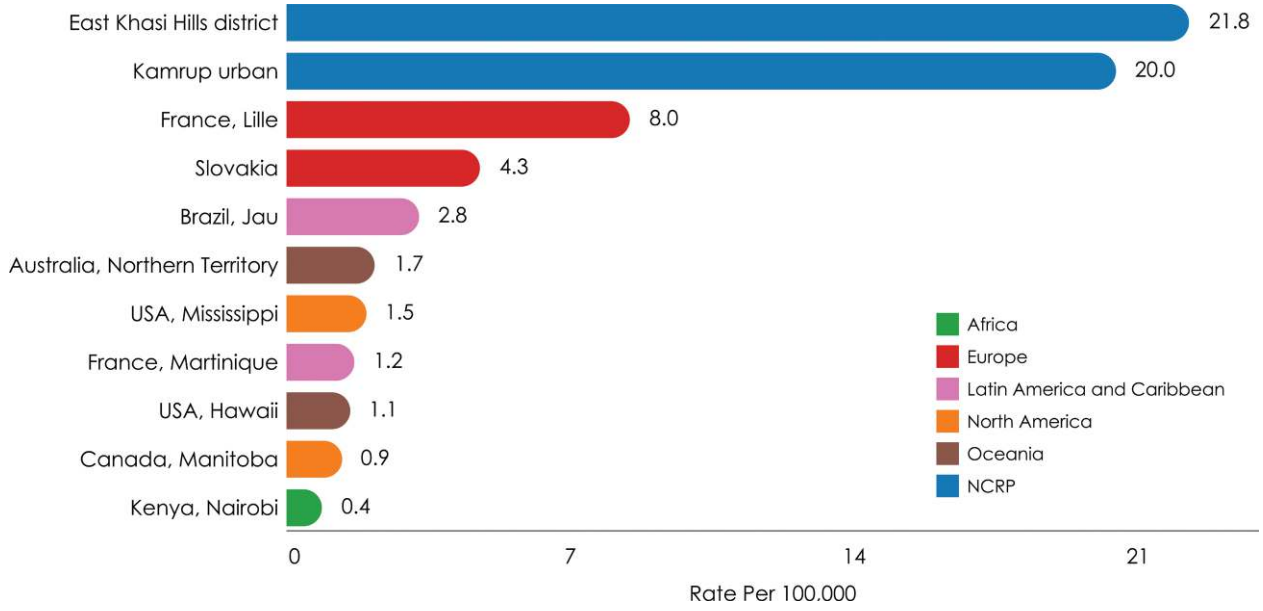
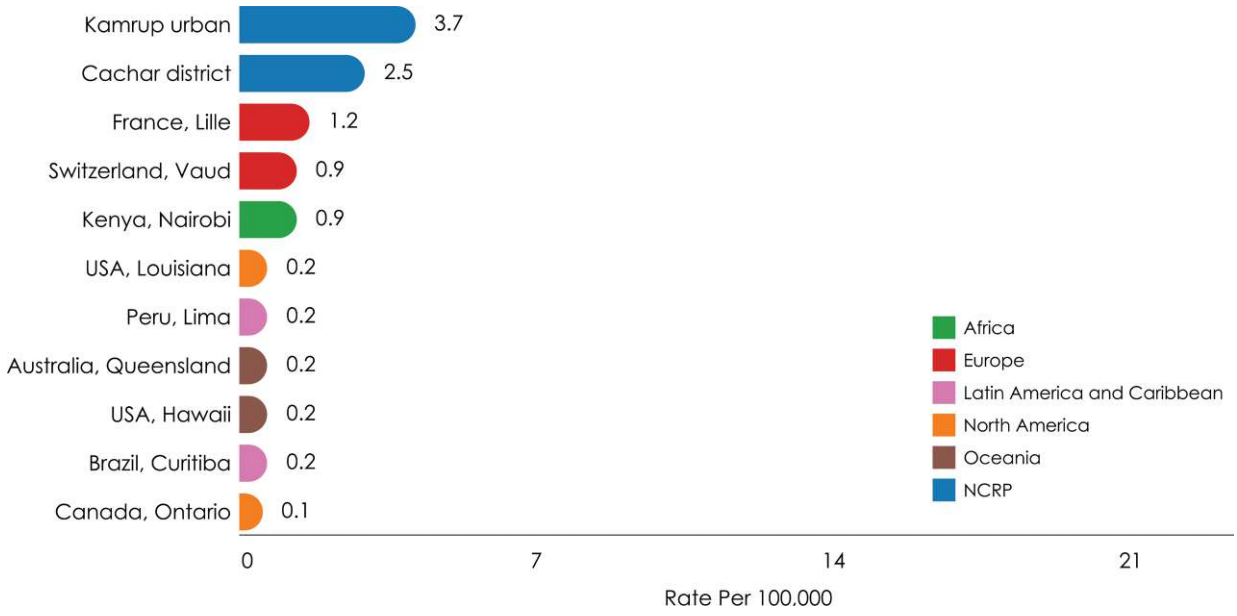


Fig. 9.5.3 Comparison of Age Adjusted Incidence Rates (AAR) of Non-Asian countries with PBCRs under NCRP - Cancer Hypopharynx

Males



Females



East Khasi Hills district (21.8 per 100,000) and Kamrup urban (3.7 per 100,000) had the highest incidence of cancer hypopharynx in the world among males and females, respectively.

Table 9.5.1 Number (n) and Relative Proportion (%) according to Clinical Extent of Disease - Cancer Hypopharynx

Clinical Extent of Disease	Males		Females		Both sexes	
	n	%	n	%	n	%
Localised only	1081	15.7	320	20.6	1401	16.6
Locoregional	5295	76.9	1120	72.2	6415	76.0
Distant Metastasis	325	4.7	68	4.4	393	4.7
Unknown	184	2.7	43	2.8	227	2.7
Total	**6885**	**100.0**	**1551**	**100.0**	**8436**	**100.0**

Locoregional was the commonest presentation for cancer hypopharynx (males 76.9% and females 72.2%). The relative proportion of localised cancers of hypopharynx was 15.7% in males and 20.6 % for females.

Table 9.5.2 Number (n) and Relative Proportion (%) of Types of Treatment according to Clinical Extent of Disease - Cancer Hypopharynx

Males

Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	48	4.4	110	2.1	9	2.8	24	13.3
Radiotherapy	351	32.5	2042	38.6	109	33.7	41	22.7
Systemic Therapy	69	6.4	269	5.1	52	16.1	31	17.1
Multi-modality*	610	56.5	2855	54.0	153	47.4	83	45.9
Palliative Care	2	0.2	14	0.3	-	-	2	1.1
Total	**1080**	**100.0**	**5290**	**100.0**	**323**	**100.0**	**181**	**100.0**

Females

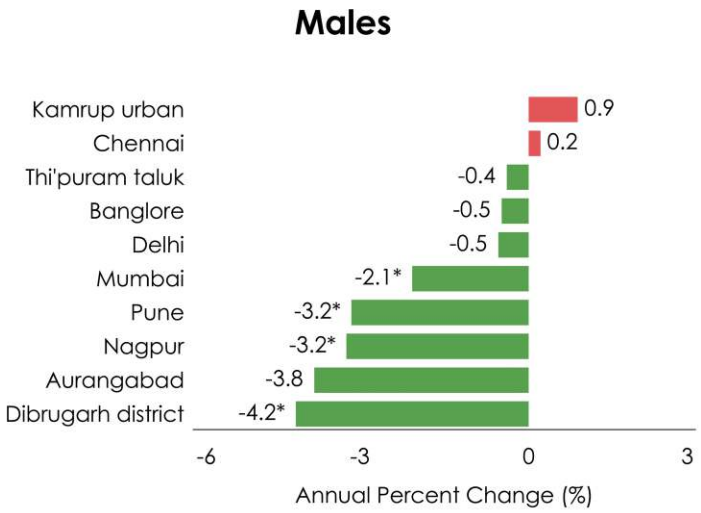
Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	12	3.8	23	2.1	4	5.9	9	20.9
Radiotherapy	105	32.8	434	38.8	22	32.4	8	18.6
Systemic Therapy	25	7.8	57	5.1	10	14.7	5	11.6
Multi-modality*	178	55.6	599	53.5	32	47.1	21	48.8
Palliative Care	-	-	6	0.5	-	-	-	-
Total	**320**	**100.0**	**1119**	**100.0**	**68**	**100.0**	**43**	**100.0**

**Multi-modality includes the combination of Surgery and/or Radiotherapy and/or Systemic Therapy*

On the basis of extent disease, multi-modality was the treatment of choice for cancer hypopharynx among both males (localized: 56.5%, locoregional: 54.0% and distant metastasis: 47.4%) and females (localized: 55.6%, locoregional: 53.5% and distant metastasis: 47.1%). Radiotherapy was the second choice of treatment in both genders.

9.6 Cancer Larynx (ICD-10: C32)

Fig. 9.6.1 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period - Cancer Larynx

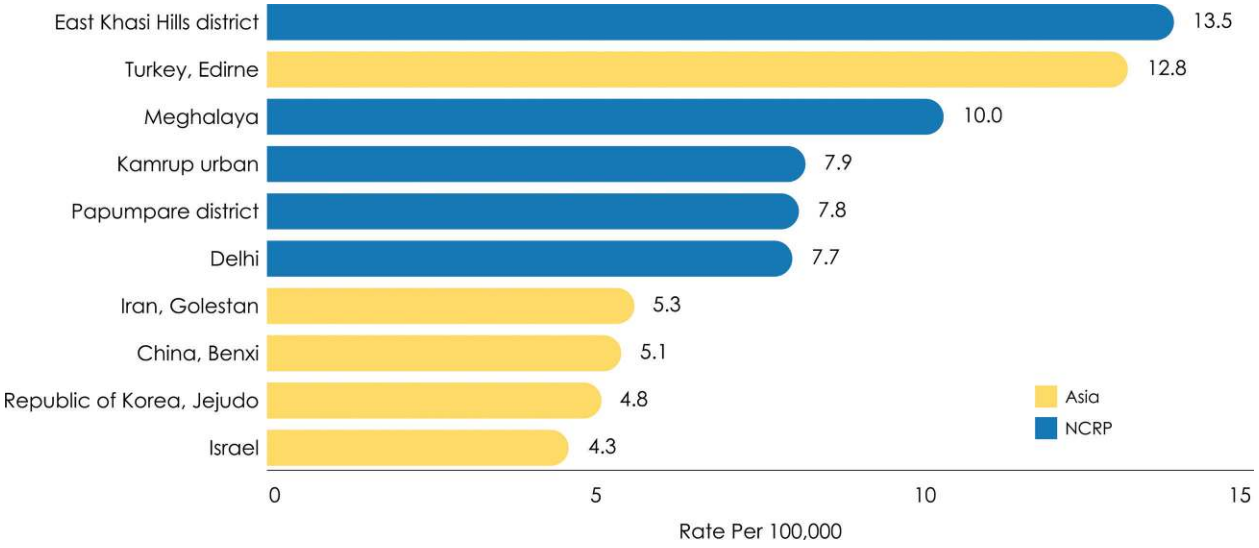


*Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level*

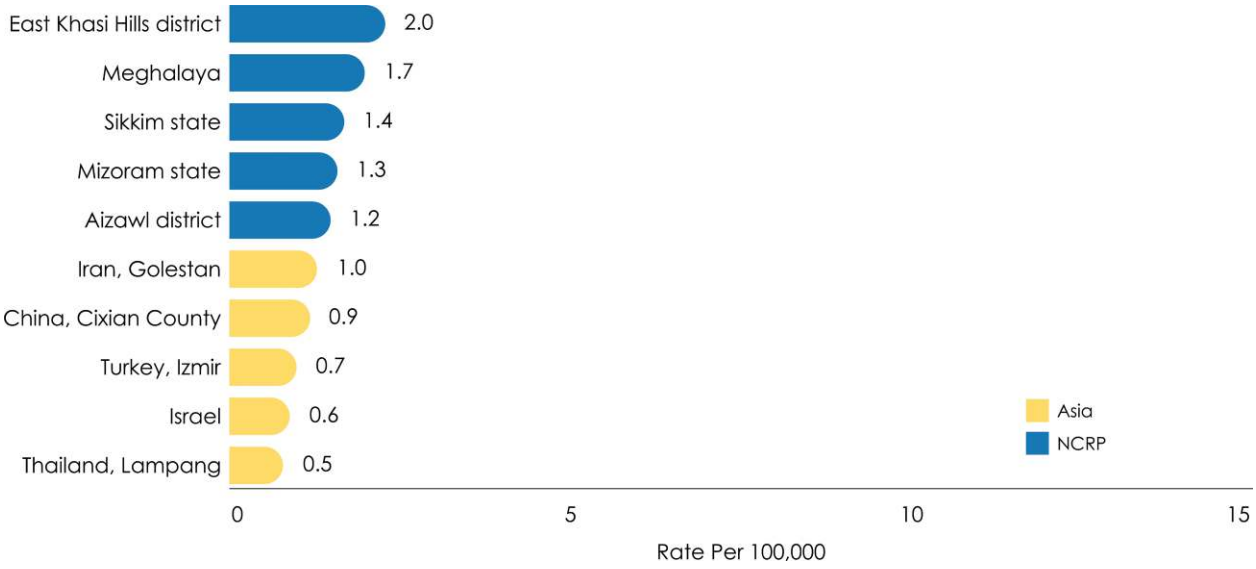
There was a significant decrease in the incidence of cancer larynx in Mumbai, Pune, Nagpur and Dibrugarh district in males.

Fig. 9.6.2 Comparison of Age Adjusted Incidence Rates (AAR) of Asian countries with PBCRs under NCRP - Cancer Larynx

Males



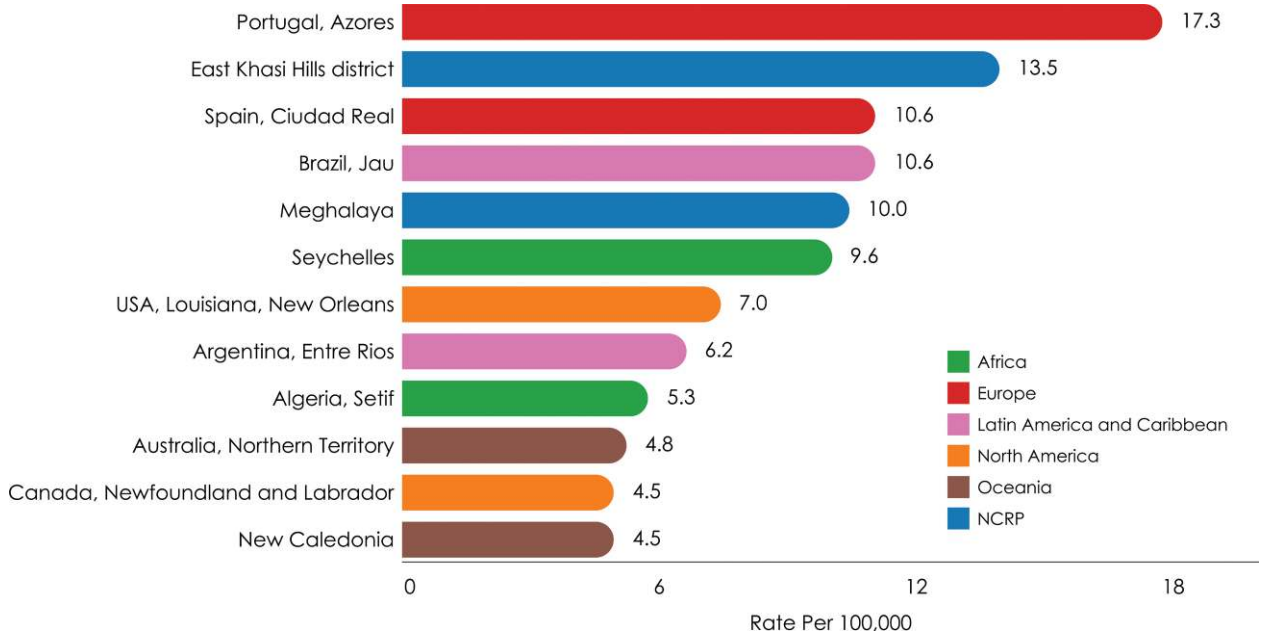
Females



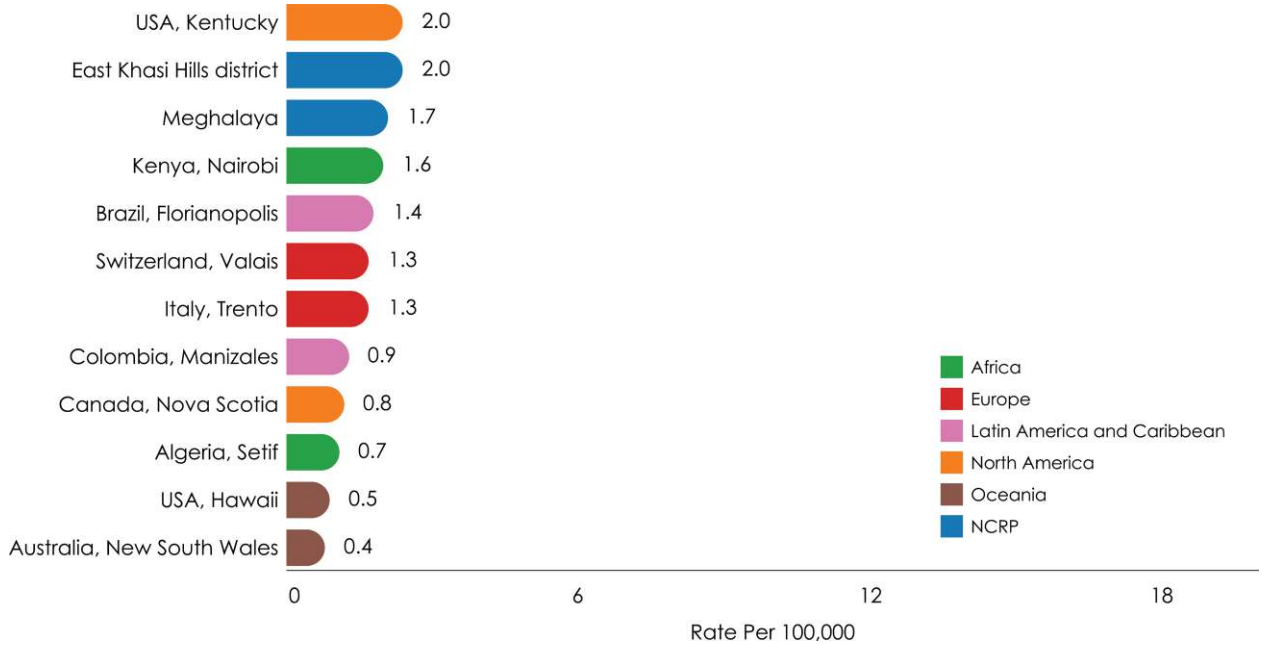
East Khasi Hills district had the highest incidence rate of cancer larynx in Asia in both males (13.5 per 100,000) and females (2.0 per 100,000).

Fig. 9.6.3 Comparison of Age Adjusted Incidence Rates (AAR) of Non-Asian countries with PBCRs under NCRP – Cancer Larynx

Males



Females



Azores in Portugal (17.3 per 100,000) and Kentucky in USA (2.0 per 100,000) had the highest incidence rate of cancer larynx among Non-Asian countries in males and females, respectively.

Table 9.6.1 Number (n) and Relative Proportion (%) according to Clinical Extent of Disease - Cancer Larynx

Clinical Extent of Disease	Males		Females		Both Sexes	
	n	%	n	%	n	%
Localised only	2517	32.9	252	31.0	2769	32.7
Locoregional	4612	60.2	497	61.2	5109	60.3
Distant Metastasis	313	4.1	33	4.1	346	4.1
Unknown	217	2.8	30	3.7	247	2.9
Total	**7659**	**100.0**	**812**	**100.0**	**8471**	**100.0**

Locoregional was the commonest presentation for cancer larynx (males 60.2% and females 61.2%). The relative proportions of clinical extent of disease for cancer larynx were similar in males and females.

Table 9.6.2 Number (n) and Relative Proportion (%) of Types of Treatment according to Clinical Extent of Disease - Cancer Larynx

Males

Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	242	9.6	259	5.6	13	4.2	57	26.3
Radiotherapy	1287	51.1	1783	38.7	99	31.8	59	27.2
Systemic Therapy	128	5.1	277	6.0	39	12.5	20	9.2
Multi-modality*	846	33.6	2271	49.3	159	51.1	81	37.3
Palliative Care	14	0.6	20	0.4	1	0.3	-	-
Total	**2517**	**100.0**	**4610**	**100.0**	**311**	**100.0**	**217**	**100.0**

Females

Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	23	9.2	26	5.2	1	3.0	6	20.0
Radiotherapy	118	47.0	240	48.4	4	12.1	8	26.7
Systemic Therapy	23	9.2	34	6.9	7	21.2	3	10.0
Multi-modality*	85	33.9	196	39.5	20	60.6	13	43.3
Palliative Care	2	0.8	-	-	1	3.0	-	-
Total	**251**	**100.0**	**496**	**100.0**	**33**	**100.0**	**30**	**100.0**

**Multi-modality includes the combination of Surgery and/or Radiotherapy and/or Systemic Therapy*

On the basis of extent of disease, radiotherapy was the treatment of choice for cancer larynx among both males (51.1%) and females (47.0%) in localised cancer. Multi-modality was the preferred treatment among both genders in distant metastasis cases (males: 51.1% and females: 60.6%).