

# Chapter 11

## CERVIX (ICD-10: C53)

Cancer of the cervix was the most common cancer in women in HBCRs in Bangalore, Chennai, Guwahati and Chandigarh whereas it was the second most common cancer in Mumbai and Dibrugarh and the third leading site of cancer in Thiruvananthapuram. The relative proportion of cervix cancer varied from 9.3% in Thiruvananthapuram to 27.3% in Bangalore (Table 11.1).

The five year age distribution (Table 11.2 and Fig. 11.1) shows a peak relative proportion between 45-49 years in registries in Bangalore, Chennai Dibrugarh and Guwahati whereas the peak is seen in other registries in the later age group 50-59 years.

Table 11.3 gives the number and relative proportion of the basis of diagnosis, with over 93% of cancers in all registries recording a microscopic diagnosis except Chennai which showed 86.4%.

Table 11.4 gives the number and relative proportion according to the clinical extent of disease. The proportion with "Regional" spread varied from 20.1% in Chandigarh to 93.4% in Chennai. Chandigarh shows 77.0% of patients with localised cervix cancer.

Table 11.5 gives the number and relative proportion according to the broad groups of treatment. The percentage of cases treated only at RI varied from 37.2% in Chennai to 78.9% in Dibrugarh.

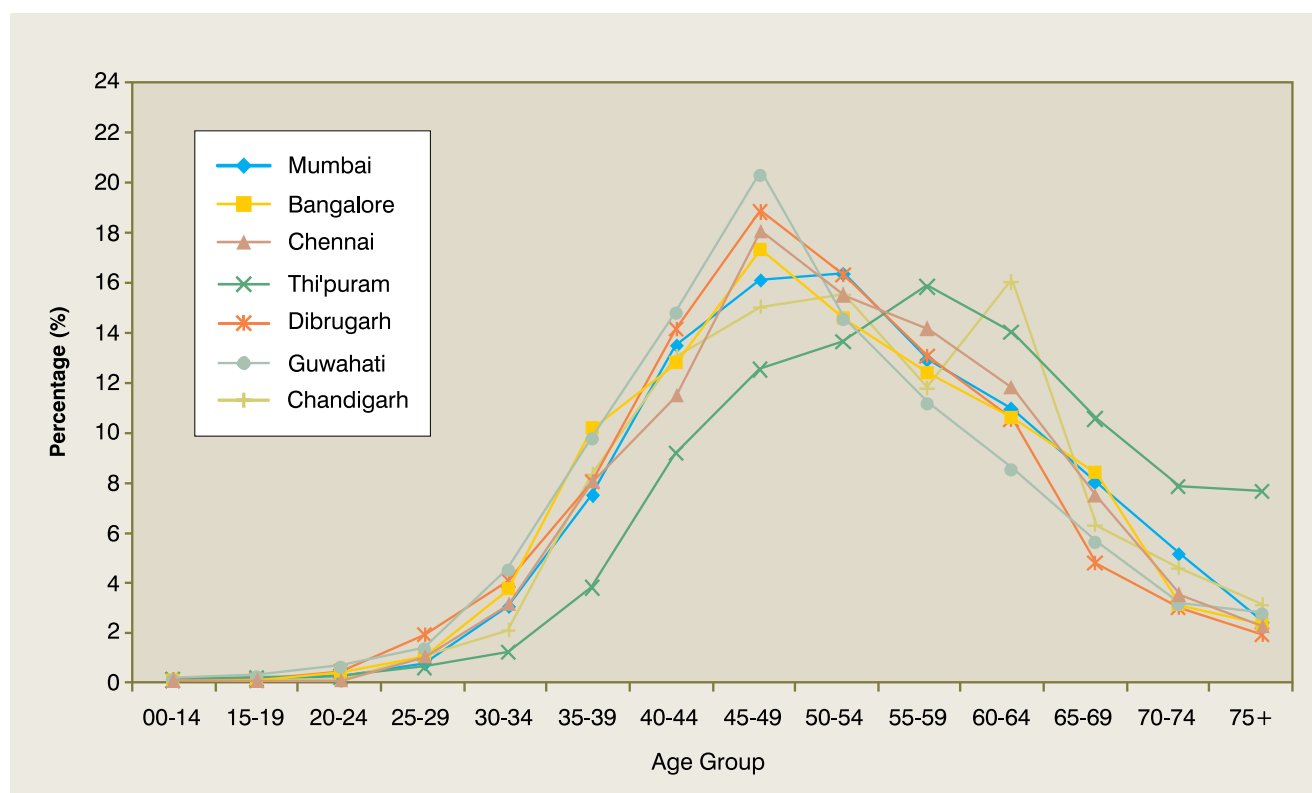
Tables 11.6 to 11.8 give the picture of the different types of treatment given to these patients.

**Table 11.1: Number (#), Relative Proportion (%) and Rank (R) (2007-2011)  
Cervix (ICD-10: C53)**

Registry	Total	#	%	R
Mumbai	18528	2480	13.4	2
Bangalore	13125	3585	27.3	1
Chennai	17499	4462	25.5	1
Thi'puram	18809	1743	9.3	3
Dibrugarh	2276	266	11.7	2
Guwahati	4679	764	16.3	1
Chandigarh	2092	385	18.4	1

**Table 11.2: Number (#) and Relative Proportion (%) according to Five-Year Age Group (2007-2011) - Cervix (ICD-10: C53)**

Age Group	Mumbai		Bangalore		Chennai		Thi'puram		Dibrugarh		Guwahati		Chandigarh	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
00-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05-09	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15-19	1	0.0	1	0.0	-	-	1	0.1	-	-	1	0.1	-	-
20-24	4	0.2	12	0.3	2	0.0	2	0.1	1	0.4	4	0.5	-	-
25-29	17	0.7	36	1.0	45	1.0	9	0.5	5	1.9	10	1.3	4	1.0
30-34	76	3.1	136	3.8	144	3.2	20	1.1	11	4.1	35	4.6	8	2.1
35-39	191	7.7	378	10.5	372	8.3	67	3.8	22	8.3	77	10.1	33	8.6
40-44	347	14.0	476	13.3	533	11.9	165	9.5	39	14.7	117	15.3	52	13.5
45-49	415	16.7	644	18.0	838	18.8	226	13.0	52	19.5	161	21.1	60	15.6
50-54	421	17.0	542	15.1	718	16.1	246	14.1	45	16.9	115	15.1	62	16.1
55-59	332	13.4	460	12.8	655	14.7	286	16.4	36	13.5	88	11.5	47	12.2
60-64	280	11.3	393	11.0	548	12.3	253	14.5	29	10.9	67	8.8	64	16.6
65-69	205	8.3	311	8.7	346	7.8	190	10.9	13	4.9	44	5.8	25	6.5
70-74	131	5.3	113	3.2	160	3.6	141	8.1	8	3.0	24	3.1	18	4.7
75+	60	2.4	83	2.3	101	2.3	137	7.9	5	1.9	21	2.7	12	3.1
<b>All Ages</b>	<b>2480</b>	<b>100.0</b>	<b>3585</b>	<b>100.0</b>	<b>4462</b>	<b>100.0</b>	<b>1743</b>	<b>100.0</b>	<b>266</b>	<b>100.0</b>	<b>764</b>	<b>100.0</b>	<b>385</b>	<b>100.0</b>

**Fig 11.1: Five-Year Age Group Distribution (2007-2011) - Cervix (ICD-10: C53)**

**Table 11.3: Number (#) and Relative Proportion (%) Based on Different Methods of Diagnosis (2007-2011) - Cervix (ICD-10: C53)**

Registry	Microscopic		Clinical		All Imaging Techniques		Others		Unknown		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Mumbai	2321	93.6	3	0.1	156	6.3	-	0.0	-	-	2480	100.0
Bangalore	3372	94.1	3	0.1	109	3.0	-	-	101	2.8	3585	100.0
Chennai	3857	86.4	113	2.5	491	11.0	1	0.0	-	-	4462	100.0
Thi'puram	1686	96.7	20	1.1	37	2.1	-	-	-	-	1743	100.0
Dibrugarh	255	95.9	8	3.0	3	1.1	-	-	-	-	266	100.0
Guwahati	726	95.0	4	0.5	34	4.5	-	-	-	-	764	100.0
Chandigarh	385	100.0	-	-	-	-	-	-	-	-	385	100.0

**Table 11.4: Number (#) and Relative Proportion (%) according to the Clinical Extent of Disease (Excludes Patients Previously Treated) (2007-2011) - Cervix (ICD-10: C53)**

Registry	Localised (L)		Regional (R)		L+R		Distant		Others		Unknown		All Stages	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Mumbai	244	12.1	1089	53.9	1333	66.0	99	4.9	-	-	589	29.1	2021	100.0
Bangalore	309	9.8	2707	86.2	3016	96.1	115	3.7	6	0.2	2	0.1	3139	100.0
Chennai	139	3.4	3767	93.4	3906	96.8	128	3.2	-	-	-	-	4034	100.0
Thi'puram	227	15.0	1196	78.8	1423	93.8	94	6.2	-	-	-	-	1517	100.0
Dibrugarh	2	0.8	239	93.0	241	93.8	16	6.2	-	-	-	-	257	100.0
Guwahati	27	4.4	504	81.6	531	85.9	87	14.1	-	-	-	-	618	100.0
Chandigarh	214	77.0	56	20.1	270	97.1	8	2.9	-	-	-	-	278	100.0

**Table 11.5: Number (#) and Relative Proportion (%) according to Broad Groups of Treatment (Tmt.) (2007-2011) - Cervix (ICD-10: C53)**

Treatment Group	Mumbai		Bangalore		Chennai		Thi'puram		Dibrugarh		Guwahati		Chandigarh	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Prior Tmt. Only	254	10.2	184	5.1	402	9.0	37	2.1	1	0.4	14	1.8	32	8.3
Prior & Tmt. at RI	205	8.3	262	7.3	26	0.6	189	10.8	8	3.0	132	17.3	75	19.5
Tmt. Only at RI	980	39.5	1950	54.4	1661	37.2	1360	78.0	210	78.9	453	59.3	223	57.9
No CDT*	1041	42.0	1189	33.2	2373	53.2	157	9.0	47	17.7	165	21.6	55	14.3
<b>Total Patients</b>	<b>2480</b>	<b>100.0</b>	<b>3585</b>	<b>100.0</b>	<b>4462</b>	<b>100.0</b>	<b>1743</b>	<b>100.0</b>	<b>266</b>	<b>100.0</b>	<b>764</b>	<b>100.0</b>	<b>385</b>	<b>100.0</b>

\*CDT=Cancer Directed Treatment

**Table 11.6: Number (#) and Relative Proportion (%) according to Type of Treatment Given at Reporting Institution (2007-2011) - Cervix (ICD-10: C53)**

Type of Treatment	Mumbai		Bangalore		Chennai		Thi'puram		Dibrugarh		Guwahati		Chandigarh	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Total Patients</b>	<b>980</b>	<b>100.0</b>	<b>1950</b>	<b>100.0</b>	<b>1661</b>	<b>100.0</b>	<b>1360</b>	<b>100.0</b>	<b>210</b>	<b>100.0</b>	<b>453</b>	<b>100.0</b>	<b>223</b>	<b>100.0</b>
<b>Specific Treatments</b>														
Surgery (S)	86	8.8	48	2.5	9	0.5	16	1.2	8	3.8	6	1.3	3	1.3
Radiotherapy (R)	364	37.1	859	44.1	526	31.7	539	39.6	154	73.3	296	65.3	83	37.2
Chemotherapy (C)	12	1.2	50	2.6	5	0.3	24	1.8	5	2.4	-	-	8	3.6
S + R	37	3.8	69	3.5	31	1.9	55	4.0	20	9.5	6	1.3	1	0.4
S + C	10	1.0	16	0.8	1	0.1	1	0.1	8	3.8	1	0.2	-	-
R + C	436	44.5	848	43.5	1061	63.9	695	51.1	11	5.2	142	31.3	123	55.2
S + R + C	35	3.6	59	3.0	26	1.6	25	1.8	4	1.9	2	0.4	3	1.3
Hormone Therapy (H)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S + H	-	-	1	0.1	1	0.1	-	-	-	-	-	-	1	0.4
R + H	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C + H	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S + R + H	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S + C + H	-	-	-	-	1	0.1	-	-	-	-	-	-	-	-
R + C + H	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S + R + C + H	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	5	0.4	-	-	-	-	1	0.4
<b>Modality of Therapy</b>														
Single	462	47.1	957	49.1	540	32.5	579	42.6	167	79.5	302	66.7	94	42.2
Combination	518	52.9	993	50.9	1121	67.5	776	57.1	43	20.5	151	33.3	128	57.4
<b>Type of Any Treatment</b>														
Any Surgery	168	17.2	193	9.9	69	4.3	97	7.1	40	19.0	15	3.2	8	3.4
Any R	872	89.0	1835	94.1	1644	99.1	1314	96.5	189	89.9	446	98.3	210	94.1
Any C	493	50.3	973	49.9	1094	66.0	745	54.8	28	13.3	145	31.9	134	60.1
Any H	-	-	1	0.1	2	0.1	-	-	-	-	-	-	1	0.4

**Table 11.7: Number (#) and Relative Proportion (%) of Type of Treatments according to Clinical Extent of Disease (2007-2011) - Cervix (ICD-10: C53)**

Clinical Extent	Mumbai		Bangalore		Chennai		Thi'puram		Dibrugarh		Guwahati		Chandigarh	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Localised</b>														
Surgery (S)	52	31.9	26	13.1	4	3.1	8	3.7	-	-	6	27.3	3	1.7
Radiotherapy (R)	13	8.0	68	34.3	26	20.3	82	38.0	1	50.0	7	31.8	59	34.3
Chemotherapy (C)	-	-	5	2.5	-	-	1	0.5	-	-	-	-	5	2.9
S + R	24	14.7	19	9.6	9	7.0	23	10.6	1	50.0	4	18.2	-	-
S + C	6	3.7	-	-	-	-	-	-	-	-	1	4.5	-	-
R + C	44	27.0	66	33.3	81	63.3	90	41.7	-	-	2	9.1	103	59.9
S + R + C	24	14.7	13	6.6	8	6.3	12	5.6	-	-	2	9.1	1	0.6
Others	-	-	1	0.5	-	-	-	-	-	-	-	-	1	0.6
<b>All Treatments</b>	<b>163</b>	<b>100.0</b>	<b>198</b>	<b>100.0</b>	<b>128</b>	<b>100.0</b>	<b>216</b>	<b>100.0</b>	<b>2</b>	<b>100.0</b>	<b>22</b>	<b>100.0</b>	<b>172</b>	<b>100.0</b>
<b>Regional</b>														
Surgery (S)	9	1.3	22	1.3	4	0.3	8	0.8	8	4.0	-	-	-	-
Radiotherapy (R)	290	41.6	766	44.7	496	32.7	427	40.1	146	73.0	263	65.6	21	47.7
Chemotherapy (C)	8	1.1	42	2.5	4	0.3	12	1.1	4	2.0	-	-	1	2.3
S + R	5	0.7	50	2.9	22	1.4	32	3.0	19	9.5	2	0.5	-	-
S + C	3	0.4	15	0.9	1	0.1	1	0.1	8	4.0	-	-	-	-
R + C	373	53.5	772	45.1	971	64.0	570	53.5	11	5.5	136	33.9	19	43.2
S + R + C	9	1.3	46	2.7	18	1.2	13	1.2	4	2.0	-	-	2	4.5
Others	-	-	-	-	2	0.1	3	0.3	-	-	-	-	1	2.3
<b>All Treatments</b>	<b>697</b>	<b>100.0</b>	<b>1713</b>	<b>100.0</b>	<b>1518</b>	<b>100.0</b>	<b>1066</b>	<b>100.0</b>	<b>200</b>	<b>100.0</b>	<b>401</b>	<b>100.0</b>	<b>44</b>	<b>100.0</b>
<b>Distant</b>														
Surgery (S)	-	-	-	-	1	6.7	-	-	-	-	-	-	-	-
Radiotherapy (R)	31	57.4	24	64.9	4	26.7	30	38.5	7	87.5	26	86.7	3	42.9
Chemotherapy (C)	4	7.4	3	8.1	1	6.7	11	14.1	1	12.5	-	-	2	28.6
S + R	-	-	-	-	-	-	-	-	-	-	-	-	1	14.3
S + C	1	1.9	1	2.7	-	-	-	-	-	-	-	-	-	-
R + C	18	33.3	9	24.3	9	60.0	35	44.9	-	-	4	13.3	1	14.3
S + R + C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	2	2.6	-	-	-	-	-	-
<b>All Treatments</b>	<b>54</b>	<b>100.0</b>	<b>37</b>	<b>100.0</b>	<b>15</b>	<b>100.0</b>	<b>78</b>	<b>100.0</b>	<b>8</b>	<b>100.0</b>	<b>30</b>	<b>100.0</b>	<b>7</b>	<b>100.0</b>

**Table 11.8: Number (#) and Proportion (%) of Any Specific Treatment Relative to All Treated Patients according to Clinical Extent of Disease (2007-2011) - Cervix (ICD-10: C53)**

	Mumbai		Bangalore		Chennai		Thi'puram		Dibrugarh		Guwahati		Chandigarh	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>Localised</b>														
Any Surgery	106	37.2	59	19.0	21	9.0	43	12.2	1	33.3	13	39.4	5	1.8
Any Radiotherapy	105	36.8	166	53.5	124	53.0	207	58.6	2	66.7	15	45.5	163	58.6
Any Chemotherapy	74	26.0	84	27.1	89	38.0	103	29.2	-	-	5	15.2	109	39.2
Any Hormone Therapy	-	-	1	0.3	-	-	-	-	-	-	-	-	1	0.4
Any Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Procedures</b>	<b>285</b>	<b>100.0</b>	<b>310</b>	<b>100.0</b>	<b>234</b>	<b>100.0</b>	<b>353</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>33</b>	<b>100.0</b>	<b>278</b>	<b>100.0</b>
<b>Regional</b>														
Any Surgery	26	2.4	133	5.0	47	1.8	54	3.2	39	15.9	2	0.4	2	3.0
Any Radiotherapy	677	61.8	1634	61.8	1507	59.1	1042	61.6	180	73.2	401	74.4	42	62.7
Any Chemotherapy	393	35.9	875	33.1	995	39.0	596	35.2	27	11.0	136	25.2	22	32.8
Any Hormone Therapy	-	-	-	-	2	0.1	-	-	-	-	-	-	-	-
Any Others	-	-	-	-	-	-	-	-	-	-	-	-	1	1.5
<b>Total Procedures</b>	<b>1096</b>	<b>100.0</b>	<b>2642</b>	<b>100.0</b>	<b>2551</b>	<b>100.0</b>	<b>1692</b>	<b>100.0</b>	<b>246</b>	<b>100.0</b>	<b>539</b>	<b>100.0</b>	<b>67</b>	<b>100.0</b>
<b>Distant</b>														
Any Surgery	1	1.4	1	2.1	1	4.2	-	-	-	-	-	-	1	11.1
Any Radiotherapy	49	67.1	33	70.2	13	54.2	65	58.6	7	87.5	30	88.2	5	55.6
Any Chemotherapy	23	31.5	13	27.7	10	41.7	46	41.4	1	12.5	4	11.8	3	33.3
Any Hormone Therapy	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Any Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Procedures</b>	<b>73</b>	<b>100.0</b>	<b>47</b>	<b>100.0</b>	<b>24</b>	<b>100.0</b>	<b>111</b>	<b>100.0</b>	<b>8</b>	<b>100.0</b>	<b>34</b>	<b>100.0</b>	<b>9</b>	<b>100.0</b>
<b>Others</b>														
Any Surgery	35	44.3	-	-	-	-	-	-	-	-	-	-	-	-
Any Radiotherapy	41	51.9	2	66.7	-	-	-	-	-	-	-	-	-	-
Any Chemotherapy	3	3.8	1	33.3	-	-	-	-	-	-	-	-	-	-
Any Hormone Therapy	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Any Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Procedures</b>	<b>79</b>	<b>100.0</b>	<b>3</b>	<b>100.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>