

8

Cancer
Cervix
Uteri

Cancer Cervix Uteri (ICD-10: C53)

Table 8.1 Number of cases (n) registered for Cancer Cervix Uteri 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

Sl No	Registry	n	%	CR	AAR	TR	Rank
NORTH							
1	Delhi	2913	10.0	12.0	14.0	32.8	11
2	Patiala district	670	11.0	14.1	13.7	33.4	12
SOUTH							
3	Hyderabad district	563	8.7	9.6	11.7	27.2	16
4	Kollam district	630	6.4	9.0	6.6	13.8	31
5	Thi'puram district	793	5.5	9.1	6.8	14.2	29
6	Bangalore	1903	12.0	15.0	17.7	39.5	5
7	Chennai	1865	11.1	15.7	14.8	32.4	8
EAST							
8	Kolkata	902	9.9	10.4	8.7	20.6	25
WEST							
9	Ahmedabad urban	1023	9.3	6.9	6.9	16.7	28
10	Aurangabad	375	18.7	11.8	14.2	31.3	9
11	Osmanabad & Beed	1167	26.1	13.8	13.1	31.1	14
12	Barshi rural	206	25.3	17.0	15.3	34.7	6
13	Mumbai	1985	7.2	8.5	8.3	18.3	26
14	Pune	1146	10.6	8.8	10.0	22.3	18
CENTRAL							
15	Wardha district	299	11.8	9.3	8.2	18.8	27
16	Bhopal	424	11.8	10.7	12.8	29.1	15
17	Nagpur	765	12.7	11.8	11.3	27.0	17
NORTH EAST							
18	Manipur state	427	9.5	5.5	6.7	15.0	30
	Imphal West district	127	8.5	9.1	9.4	20.7	22
19	Mizoram state	577	15.4	19.7	23.2	62.8	3
	Aizawl district	281	14.8	25.8	27.4	78.5	2
20	Sikkim state	116	10.3	7.7	9.9	25.3	20
21	Tripura state	809	16.5	8.6	9.5	23.7	21
22	West Arunachal	136	11.6	6.5	10.0	26.2	19
	Papumpare district	67	12.7	13.3	27.7	66.0	1
23	Meghalaya	283	10.0	5.6	8.8	21.8	24
	East Khasi Hills district	150	8.7	6.7	9.4	22.4	23
24	Nagaland	163	16.4	9.3	13.3	35.2	13
25	Pasighat	56	18.5	16.3	20.3	56.2	4
26	Cachar district	607	15.4	13.4	15.3	41.0	7
27	Dibrugarh district	139	6.2	4.1	4.8	12.1	32
28	Kamrup urban	412	8.6	13.0	14.2	32.2	10

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

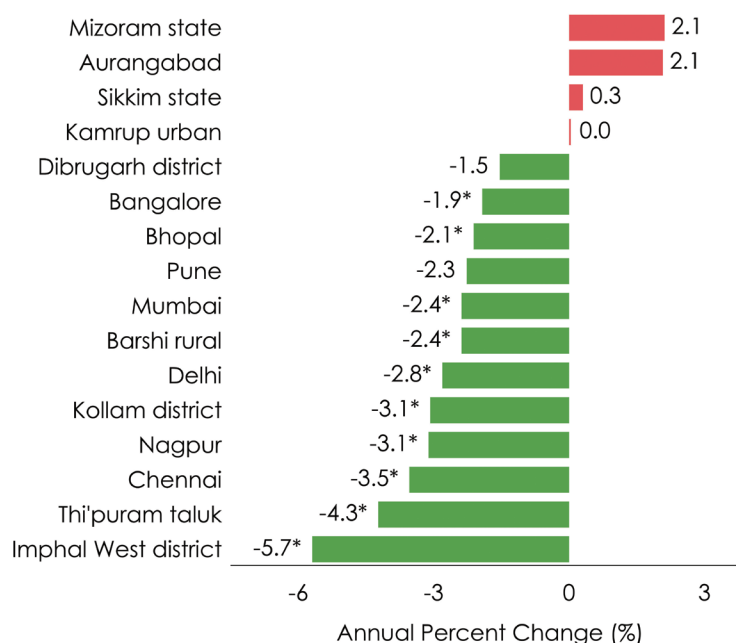
Cancer cervix uteri is one of the leading sites of cancer. Papumpare district (27.7 per 100,000) in West Arunachal had the highest incidence of cervical cancer.

Fig. 8.1 Age Specific Incidence Rates per 100,000 in 28 PBCRs under NCRP - Cancer Cervix Uteri

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	0.0	0.0	0.0	0.0	0.5	1.2	4.4	11.3	21.9	32.4	45.4	62.3	57.1	51.5	32.0
	Patiala district	0.0	0.0	0.0	0.0	0.2	2.2	2.9	13.0	23.8	32.2	47.3	47.8	48.8	53.0	35.1	33.1
SOUTH	Hyderabad district	0.0	0.0	0.0	0.0	0.1	1.5	3.7	11.2	15.8	20.3	35.2	44.7	51.1	43.8	55.8	25.6
	Kollam district	0.0	0.0	0.0	0.0	0.2	0.0	0.4	3.0	6.3	12.0	18.1	24.1	28.4	37.0	30.1	30.0
	Thirupuram district	0.0	0.0	0.0	0.0	0.0	0.1	0.8	1.3	7.0	12.6	17.3	24.4	32.7	31.9	33.2	34.3
	Bangalore	0.0	0.0	0.1	0.0	0.6	0.9	4.2	9.3	25.0	39.5	54.2	60.8	66.6	76.8	77.3	62.4
EAST	Chennai	0.0	0.0	0.0	0.0	0.0	0.4	2.3	8.4	16.7	31.5	39.2	54.6	62.4	76.7	67.8	46.9
	Kolkata	0.0	0.0	0.0	0.0	0.3	0.5	3.4	6.3	16.0	23.8	27.5	26.8	29.0	35.0	31.7	21.3
WEST	Ahmedabad urban	0.0	0.0	0.0	0.0	0.1	0.6	2.5	7.0	15.1	16.2	20.5	20.6	25.4	25.2	25.2	16.0
	Aurangabad	0.0	0.0	0.0	0.0	0.8	1.9	4.1	13.3	24.5	33.6	28.9	47.3	51.8	77.2	51.4	34.9
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.4	1.8	4.5	11.5	19.7	29.1	42.7	41.1	56.4	52.2	41.4	28.7
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	2.4	7.1	21.0	38.3	37.9	51.6	70.2	73.9	54.1	55.8
	Mumbai	0.0	0.0	0.0	0.0	0.2	0.4	2.4	5.0	12.8	18.5	24.9	27.5	28.8	38.0	37.3	28.1
	Pune	0.0	0.0	0.0	0.0	0.1	0.6	1.0	4.8	13.5	23.9	27.3	29.4	46.1	49.1	39.0	35.7
CENTRAL	Wardha district	0.0	0.0	0.0	0.0	0.3	0.7	1.6	5.0	13.0	24.2	24.2	24.3	27.8	36.9	23.3	31.3
	Bhopal	0.0	0.0	0.0	0.0	0.5	1.2	3.3	7.2	21.4	25.3	47.0	39.8	45.7	39.8	80.1	32.7
	Nagpur	0.0	0.0	0.4	0.0	0.9	1.6	4.3	11.8	20.5	26.8	30.7	34.9	47.5	44.2	32.1	24.8
NORTH EAST	Manipur state	0.0	0.0	0.0	0.0	0.3	0.3	3.4	6.8	10.0	13.0	17.7	23.1	26.4	27.2	31.9	17.7
	Imphal West district	0.0	0.0	0.0	0.0	0.8	0.0	4.9	7.9	14.5	16.7	24.6	26.9	43.7	38.3	47.5	28.5
	Mizoram state	0.0	0.0	0.0	0.0	1.7	3.2	17.5	44.4	82.5	58.5	74.0	64.8	51.0	38.3	34.0	21.7
	Aizawl district	0.0	0.0	0.0	0.0	0.9	2.7	18.6	48.0	102.3	73.5	101.6	68.4	77.4	22.5	29.7	20.4
	Sikkim state	0.0	0.0	0.0	0.0	0.0	1.2	1.5	11.9	13.3	31.0	32.8	23.1	47.9	36.4	27.4	12.9
	Tripura state	0.0	0.0	0.0	0.0	0.1	1.9	4.4	9.2	15.2	27.3	27.4	33.1	39.2	31.7	25.0	14.0
	West Arunachal	0.0	0.0	0.0	0.0	0.5	2.1	8.5	13.5	21.2	21.9	39.1	32.6	36.8	11.1	40.9	0.0
	Papumpare district	0.0	0.0	0.0	0.0	1.6	2.0	10.2	22.4	44.3	55.5	87.7	109.4	109.2	73.5	205.9	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.4	1.8	6.7	8.5	18.5	28.4	26.5	30.9	21.8	28.5	12.7	16.6
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.8	1.0	6.1	6.0	18.0	29.2	35.9	30.9	18.3	34.8	16.7	28.1
	Nagaland	0.0	0.0	0.0	0.0	1.0	3.3	7.2	17.1	30.9	47.9	43.9	35.4	39.1	37.3	16.0	10.5
	Pasighat	0.0	0.0	0.0	0.0	2.8	0.0	11.2	19.4	67.9	88.0	45.5	70.1	45.6	16.9	25.5	50.0
	Cachar district	0.0	0.0	0.0	0.0	0.7	1.5	9.1	33.5	41.6	49.1	45.5	43.9	30.7	33.3	33.1	12.5
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.3	2.9	1.1	9.9	14.3	16.8	13.8	20.8	13.6	12.0	9.1
	Kamrup urban	0.0	0.0	0.0	0.0	0.6	1.5	3.6	7.2	21.8	26.8	47.6	49.9	56.7	65.4	48.4	46.9

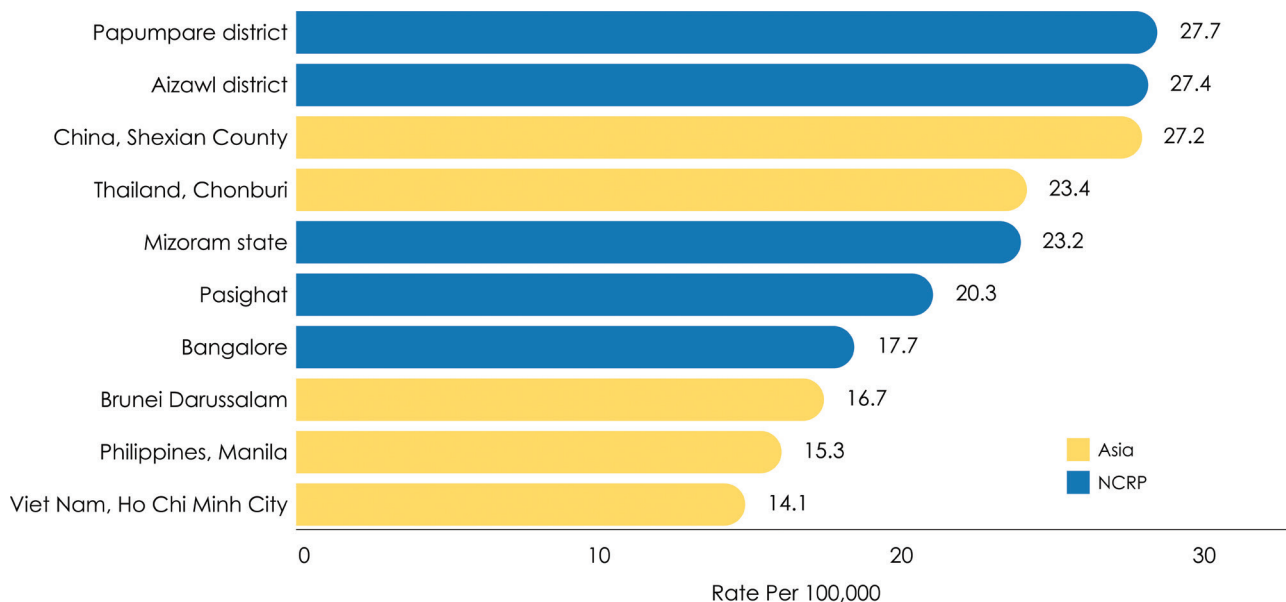
0.0  205.9

The incidence rate of cervical cancer increased with age and the rate was high in the 50-75+ age group

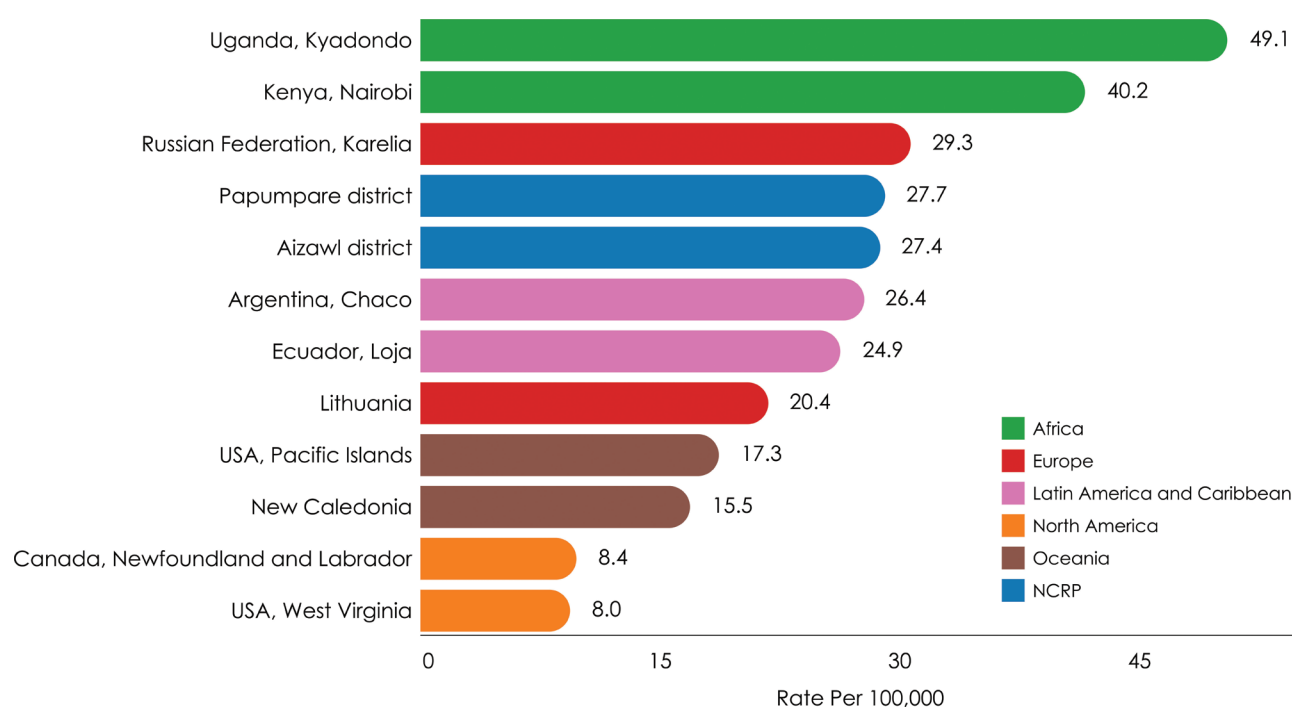
Fig. 8.2 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period - Cancer Cervix Uteri

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 cervical cancer in 10 PBCRs except in Dibrugarh district and Pune where there was a decline but not significant.

Fig. 8.3 Comparison of Age Adjusted Incidence Rates (AAR) of Asian countries with PBCRs under NCRP - Cancer Cervix Uteri

Papumpare district, India has the highest incidence rate of cervical cancer (27.7 per 100,000) in Asia.

Fig. 8.4 Comparison of Age Adjusted Incidence Rates (AAR) of Non-Asian countries with PBCRs under NCRP - Cancer Cervix Uteri

Kyadondo in Uganda had the highest incidence rate of cervical cancer (49.1 per 100,000) in the world.

Table 8.2 Number (n) and Relative Proportion (%) according to Clinical Extent of Disease - Cancer Cervix Uteri

Clinical Extent of Disease	n	%
Localised only	7738	32.8
Locoregional	14162	60.0
Distant Metastasis	1196	5.1
Unknown	523	2.2
Total	23619	100.0

In 60.0% of the cancer cervix uteri patients, the clinical extent of disease was locoregional. It was localized in 32.8% of the cases. The distant metastasis of cancer cervix uteri was observed only in 5.1% of the patients.

Table 8.3 Number (n) and Relative Proportion (%) of Types of Treatment according to Clinical Extent of Disease - Cancer Cervix Uteri

Treatment	Clinical Extent of Disease							
	Localised only		Locoregional		Distant Metastasis		Unknown	
	n	%	n	%	n	%	n	%
Surgery	592	7.7	318	2.3	10	0.8	41	7.9
Radiotherapy	1935	25.1	4356	30.8	442	37.1	172	33.1
Radiotherapy + Chemotherapy	3842	49.8	8005	56.6	556	46.7	199	38.3
Systemic Therapy	340	4.4	689	4.9	133	11.2	57	11.0
Multi-modality*	995	12.9	682	4.8	42	3.5	46	8.9
Palliative Care	18	0.2	83	0.6	7	0.6	4	0.8
Total	7722	100.0	14133	100.0	1190	100.0	519	100.0

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

Higher proportion of patients with cancer cervix uteri underwent Radiotherapy plus Chemotherapy. Radiotherapy was the second most preferred treatment for cervical cancer (localized: 25.1%, locoregional: 30.8%, distant metastasis: 37.1% and unknown: 33.1%). Around 7.7% patients with clinically localized cancer cervix uteri were treated with surgery.

Table 8.4 Number (n) and Relative Proportion (%) by Educational Status - Cancer Cervix Uteri

Educational Status	n	%
Illiterate	9207	38.8
Literate	2337	9.8
Primary	3012	12.7
Secondary	3549	15.0
Higher Education	479	2.0
Unknown	5153	21.7
Total	23737	100.0

Educational status of Cancer cervix uteri patients indicated that 38.8% of the women were illiterate and only 9.8% were literate. 12.7% and 15.0% had primary and secondary school level of education, respectively.

Table 8.5 Number (n) and Relative Proportion (%) by Broad Histological Classification - Cancer Cervix Uteri

Broad Histological Classification	n	%
Epithelial Tumours	23373	99.5
Melanocytic tumours	16	0.5
Mesenchymal tumours and tumour-like lesions	8	
Mixed epithelial and mesenchymal tumours	22	
Malignant Lymphoma	3	
Others	71	
All Microscopic	23493	100.0

99.5% of cancer cervix uteri were histologically diagnosed as epithelial tumours.