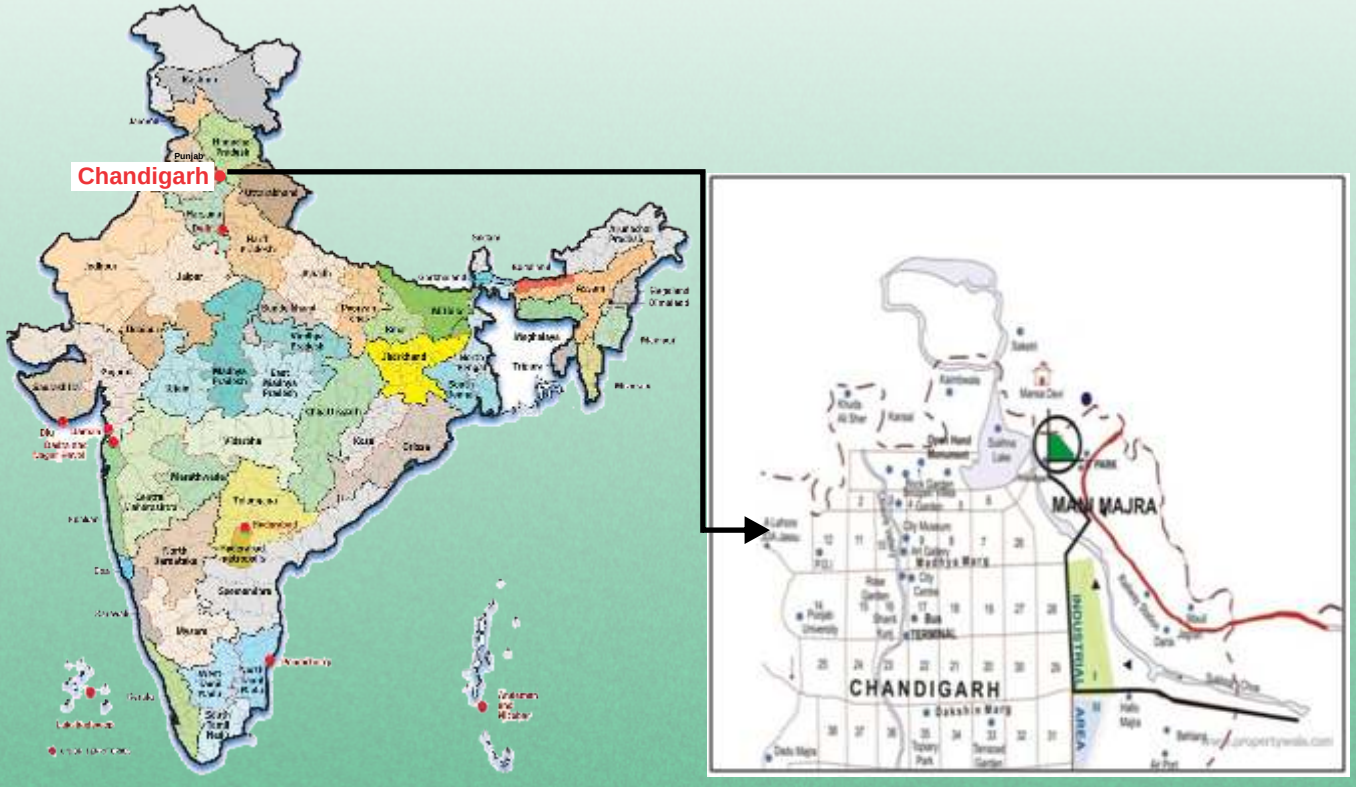
Cancer Incidence and Mortality in Chandigarh Union Territory, India: 2013

First Annual Report of the Population Based Cancer Registry



Chandigarh, Union Territory

Post Graduate Institute of Medical Education and Research, Chandigarh, India
Tata Memorial Centre, Mumbai, India
Health Department, Chandigarh Administration, India

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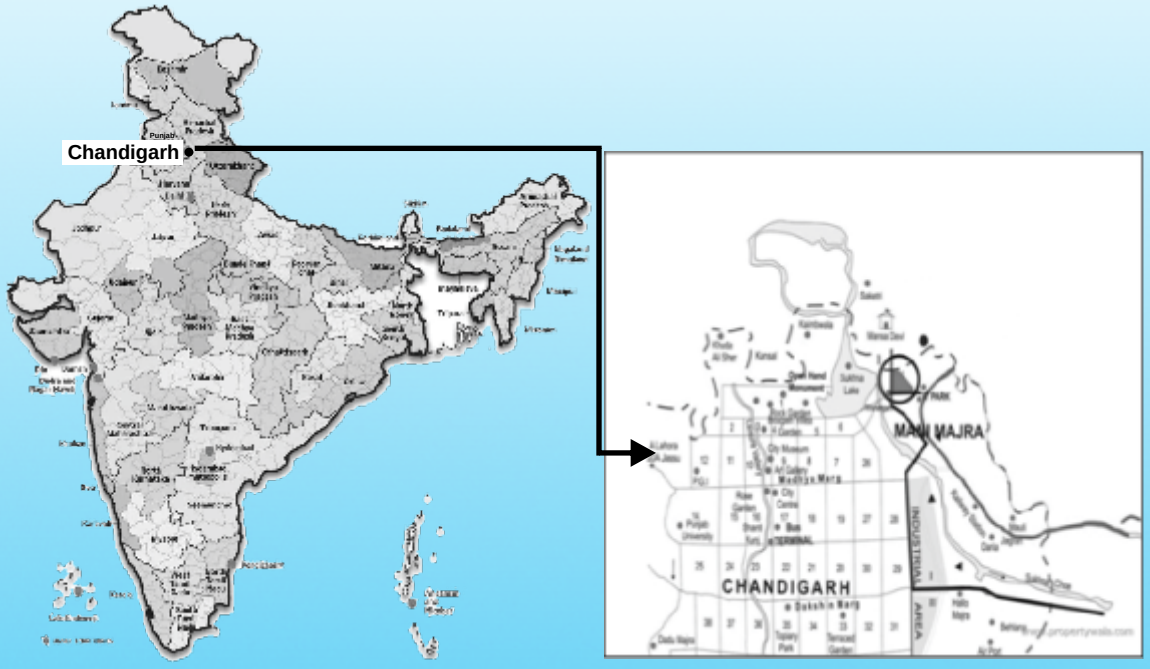

Chandigarh, Union Territory

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Health Department, Chandigarh Administration, India

Registry Principal Investigator, Co-Principal Investigator and Co-investigators

Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh

Name	Role	Designation
Dr. Yogesh Chawla	Chairman Steering Committee	Director
Dr. J S Thakur	Principal Investigator	Professor
Dr. Rakesh Kapoor	Co- Investigator	Professor
Dr. Pankaj Malhotra	Co- Investigator	Professor
Dr. S P S Bhatia	Co- Investigator	Lecturer
Dr. Ravneet Kaur	Co- Investigator (till June, 2014)	Assistant Professor
Dr. Pankaj Arora	Co-Investigator	Assistant Professor

Tata Memorial Centre, Mumbai (TMC)

Name	Role	Designation
Dr. R A Badwe	Principal Investigator	Director
Dr. Rajesh Dikshit	Co - Investigator	Professor
Dr. Atul Budukh	Co - Principal Investigator	Assistant Professor
Mr. T. Anbumani	Project Consultant	Administrator

Directorate of Health Services, Chandigarh Administration

Name	Designation
Dr. V K Gagneja	Director of Health Services, Chandigarh

Population Based Cancer Registry- Chandigarh Staff

Name	Designation
Ms. Balkiran Kaur	Medical Social Worker
Mrs. Pratibha Saxena	Medical Social Worker
Mr. Manoj Kumar	Data Entry Operator

Steering Committee of PBCR, Chandigarh

Name	Designation
Dr. Yogesh Chawla Director, PGIMER, Chandigarh	Chairman
Dr. R A Badwe Director, TMC, Mumbai	Member
Dr. Subhash C. Varma Professor and Head of Internal Medicine, PGIMER, Chandigarh	Member
Dr. Arvind Rajwanshi Professor and Head of Cytology and Gynecological Pathology, PGIMER, Chandigarh	Member
Dr. Sushmita Ghoshal Professor and Head of Radiotherapy, PGIMER, Chandigarh	Member
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Executive Summary

Background

Tata Memorial Centre (TMC), Mumbai and Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh with cooperation from Directorate of Health Services, Chandigarh established Population Based Cancer Registry (PBCR) in Chandigarh UT on 1st January 2013. The registry is located at School of Public Health, PGIMER, Chandigarh. Population Based Cancer Registry was set up with a vision to establish baseline data to assess the burden and pattern of cancer cases of the area. The data hence collected would be used to assess information on causes of cancers and would therefore, guide in planning measures for prevention of cancer control activities in the city of Chandigarh.

Population Covered

The cancer registry covers both urban (98%) and rural (2%) population of Chandigarh. It collects incidence and mortality data on cancer patients from government and private facilities present in and around Chandigarh.

Registration Method

There are total 23 data sources comprising cancer hospitals, general and private hospitals, pathology laboratories and birth and death registrar office. The registry staff regularly visits the sources and scrutinizes the medical records from various departments dealing with cancer including pathology laboratories which assist in cancer diagnosis. The registrar abstracts the information from the cases of the residents of the registry area (minimum duration of residence being one year). The registry uses CanReg5 software for data entry, analysis and quality control.

PGIMER is a tertiary care teaching cum research institute of national importance which provides comprehensive cancer treatment to patients belonging to nearby states. Around 66% of the registered cancer cases of Chandigarh PBCR were from PGIMER, Chandigarh. Majority of the cancer cases were registered from the department of Radiotherapy.

Results

In the year 2013, PBCR registered 833 incidence cancer cases (406 males and 427 females). The age adjusted incidence rate for males was 93.4 per 100,000 population and for females 105 per 100,000 population. The registry has reported 287 cancer death cases (males-164 and females-123). The age adjusted mortality rate was 37.97 and 32.73 per 100,000 population for males and females respectively. The cumulative risk for the age group 0-74 years in males was 11% (1 in 9 men were at risk of getting cancer) and in females it was 12.6% i.e. (1 in 8 female was at risk of getting cancer).

Since this is the first year of the registry, the results should be interpreted carefully. The results of this report have provided a lead to set priorities for cancer research and to identify the target sites for monitoring existing cancer control activities in U.T Chandigarh.

Leading Cancer Sites

The most common primary site of cancer among male was Lung which was followed by Prostate Non-Hodgkin Lymphoma, Oesophagus and Mouth. Similarly in female, Breast is the most common cancer followed by Cervix uteri, Ovary, Gall bladder and Corpus uteri.

Leading cancer sites are presented in Table I and II.

Table I : Leading Cancer Sites in Male

ICD 10	Sites	Number	CR	AAR	TR
C33-34	Trachea, Bronchus &Lung	53	8.7	12.4	21.7
C61	Prostate	32	5.3	8.8	4.3
C82-85, C96	Non Hodgkin Lymphoma	30	4.9	7.3	7.6
C15	Oesophagus	26	4.3	5.6	12.4
C03-06	Mouth	20	3.3	4.3	8.7

CR-Crude incidence rate per 100,000 population; AAR-Age adjusted incidence rate per 100,000 population; TR-Truncated rate per 100,000 population

Table II: Leading Cancer Sites in Female

ICD 10	Sites	Number	CR	AAR	TR
C50	Breast	154	30.8	37.5	82.6
C53	Cervix Uteri	43	8.6	10.3	19.9
C56	Ovary	30	6.0	7.2	17.9
C23-24	Gall Bladder	25	5	5.8	12.1
C54	Corpus Uteri	20	4	5.1	11

CR-Crude incidence rate per 100000 population; AAR-Age adjusted incidence rate per 100000 population; TR-Truncated rate per 100000 population

Under Registration

In the first year we noted 3.6% other and unspecified cases in males and 1.4 % in females. There may be some under registration of the cancer mortality cases as it was the first year of the registry. We may have missed the clinically diagnosed cases and paediatric cancer cases. Quality control exercises were carried out, the results of which are satisfactory.

Comparison of Cancer Registry Rate with other Registries in India

As compared to other parts of the India, Cancer Incidence rates are higher and are in comparison with other parts of urban India. The comparison is shown in Figure I and Figure II.

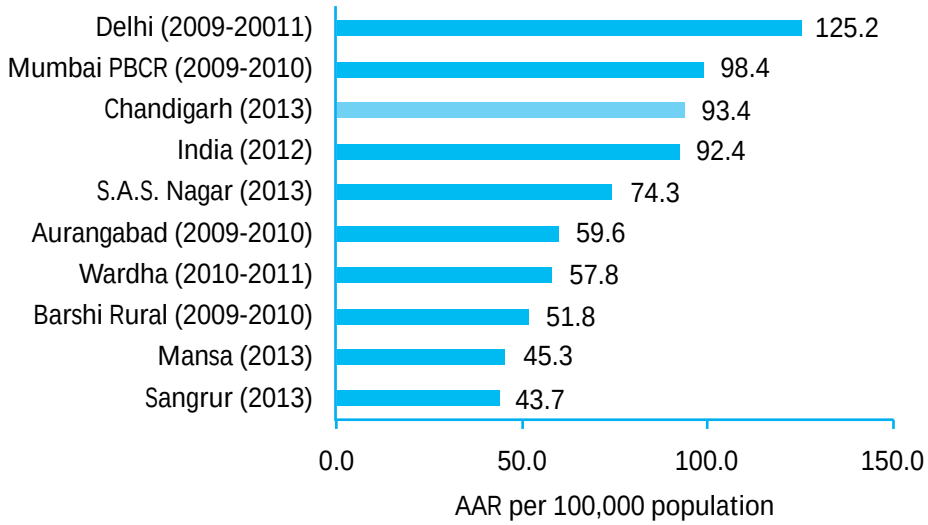


Figure I : All Site Cancer Incidence Rate - Male

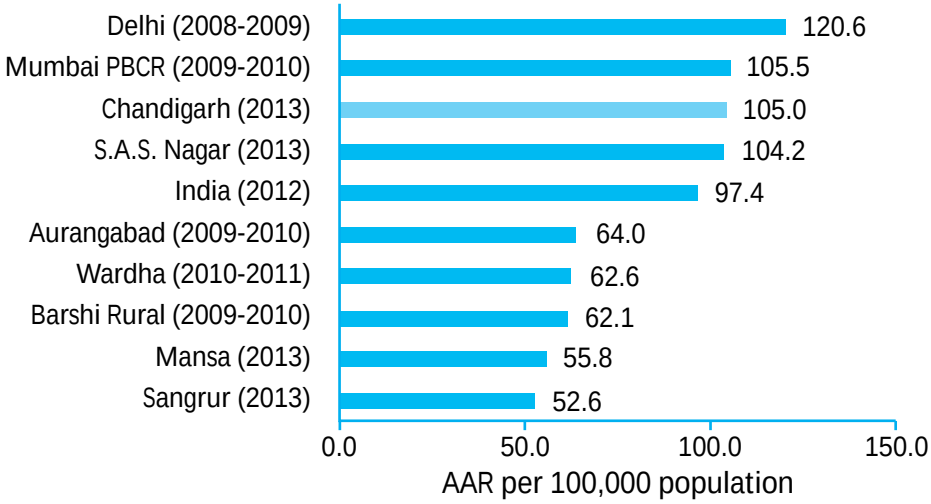


Figure II : All site cancer incidence rate - Female

Cancer Control in UT Chandigarh

Setting up of the Cancer registries is the first step in cancer control. The registry data has estimated the risk of getting cancer in males as 11% and in females 12.6%. We recommend to start a cancer awareness programme on Breast, Cervix, Lung and Prostate Cancer. Health System strengthening is required for organised screening, early detection, prevention and control of cancer in Chandigarh. State Project Implementation Plan under National Health Mission should initiate breast cancer screening and further strengthen cancer control and research activities based on PBCR reports. State should take initiative to make cancer a notifiable disease in UT Chandigarh as it is already in neighboring states of Punjab and Haryana. The registries will be useful to monitor cancer trends and to evaluate the effects of prevention and treatment in future.

1. Profile of Chandigarh

Chandigarh, "The City Beautiful" is a Union Territory (UT) in India which serves as the capital of the two states of Punjab and Haryana. The city is popular for being the first planned city in India after independence, was designed by the French architect Le Corbusier and is well known for its urban design. Chandigarh derives its name from the famous goddess temple "Chandi Mandir" located in the vicinity of the site selected for the city. The deity 'Chandi', the goddess of power and a fort 'garh' lying beyond the temple gave the city its name "Chandigarh". The longitude and latitude of Chandigarh is 76^0 47' 14 E and 30^0 44' 14 N and is 304-365meters above sea level.

Population Growth

The UT of Chandigarh is a uni-district territory which came into existence on 1st of November, 1966 with an area of 114 sq. kms. Birth and death rate of Chandigarh is 14.7 and 4 per 1000 population as compared to national average of 21.4 and 7 as per recent sample registration system report. During the last 6 decades (1951-2011), Chandigarh has witnessed a population increase of more than 44 times with the absolute population increase from 24,261 in 1951 to 10,54,686 in 2011.The total population was 900,635 (men: 506,938,women: 393,697) as per 2001 census. As per 2011 census, the total population is 1,055,450 (580,663 men and 474,787 women).The population of Chandigarh UT has crossed the one million mark with its population placed very close to that of the state of Mizoram (10,91,014). Chandigarh has recorded a sex ratio of 818 girls for every 1000 boys (vs. India: 940/1000). The decadal growth rate of merely 17.10% for 2001-2011 is the lowest since its inception. The population density of Chandigarh is 9258/sq.km. This is perhaps due to the rapid pace of urbanization taking place in the neighbouring towns of SAS Nagar, Panchkula, Zirakpur, Kharar, etc. falling within 16 km of its periphery. Per capita annual income in Chandigarh is more than INR.150,000/- which ranks third after Delhi and Goa. The civil registration system here covers more than 95.5% of births and deaths of Chandigarh.

Rural –Urban Composition

The area under Chandigarh is predominantly urban with negligible rural population. As per 2011 census, 10,25,682 (97.25%) of its population resides in urban area and 29,004 (2.75%) in rural area as compared to 82.80% urban and 17.20% rural in the year 1961. The Chandigarh Union Territory (UT) profile is presented in Table 1 (Reference: Chandigarh Administration Website)

Table 1: Profile of Chandigarh

Sr.No.	Characteristics	Value
1.	Area	114 Sq.Km
2.	Total Population (Census 2011) (i) Urban Population (ii) Rural Population	1,055,450 1,026,459 28,991
3.	% of Urban to Total Population	97.25%
4.	% of Rural to Total Population	2.75%
5.	Population Density	9258 Per Sq.km
6.	Sex ratio (Female per 1000 Male)	818
7.	Literacy Rate	86.43%

Health Infrastructure of UT Chandigarh

Chandigarh is easily accessible by road, rail and air ways. In view of better health facilities available in the city especially due to PGIMER, Chandigarh, it attracts a large number of sick persons from neighbouring states like Punjab, Haryana, Himachal, Jammu & Kashmir, Rajasthan, Uttar Pradesh and Uttarakhand. Chandigarh has all three levels in healthcare delivery- Primary, Secondary as well as Tertiary. There are sub centres, civil dispensaries, rural dispensaries, ayurvedic dispensaries, homeopathic dispensaries, and alternative medical units offering allopathic, ayurvedic and homeopathic OPD medical services. There are 3 secondary health care hospitals (2 community health centres, and 1 Govt. Multi-Speciality Hospital (GMSH-16)) and 2 tertiary care hospitals (1 Govt. Medical College and Hospital (GMCH 32) and PGIMER). The detailed information is presented in Table 2.

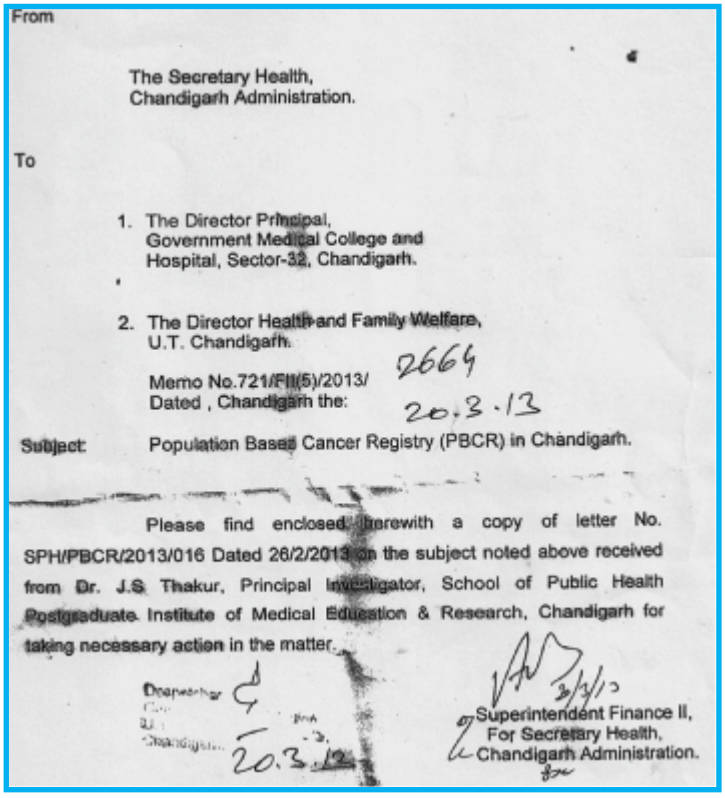
The OPD burden of the city in the year 2012-2013 amounts to 20,42,525 whereas IPD load is 57166. Other than the routine health problems, the burden of Non Communicable Diseases is also high in Chandigarh.

Table 2 : Number of Government Hospitals/ Health Centres in U T Chandigarh

Sr.No.	Characteristics	Value
1.	Tertiary Care Hospital-PGIMER, Sector 12	1
2.	Govt; Medical College and Hospital-GMCH, Sector 32	1
3.	District Hospital (GMSH-16)	1
4.	Community Health Centres including Polyclinic, Sector 45	3
5.	ESI Hospital-Ramdarbar	1
6.	Civil dispensaries (including rural)	34
7.	AYUSH centres	16
8.	Sub-Health Centres	23

2. Administrative Order by Health Department-Chandigarh Administration

The Secretary Health-Chandigarh Administration has issued an administrative order to all the Government Hospitals and its allied departments to provide the data of cancer patients including demographic data to Chandigarh Population Based Cancer Registry for better cancer reporting and registration (Figure 1 & 2). The registry received very good cooperation from all the government & private facilities due to administrative support from Health Department, Chandigarh.



From

The Secretary Health,
Chandigarh Administration.

To

1. The Director Principal,
Government Medical College and
Hospital, Sector-32, Chandigarh.

2. The Director Health and Family Welfare,
U.T. Chandigarh.

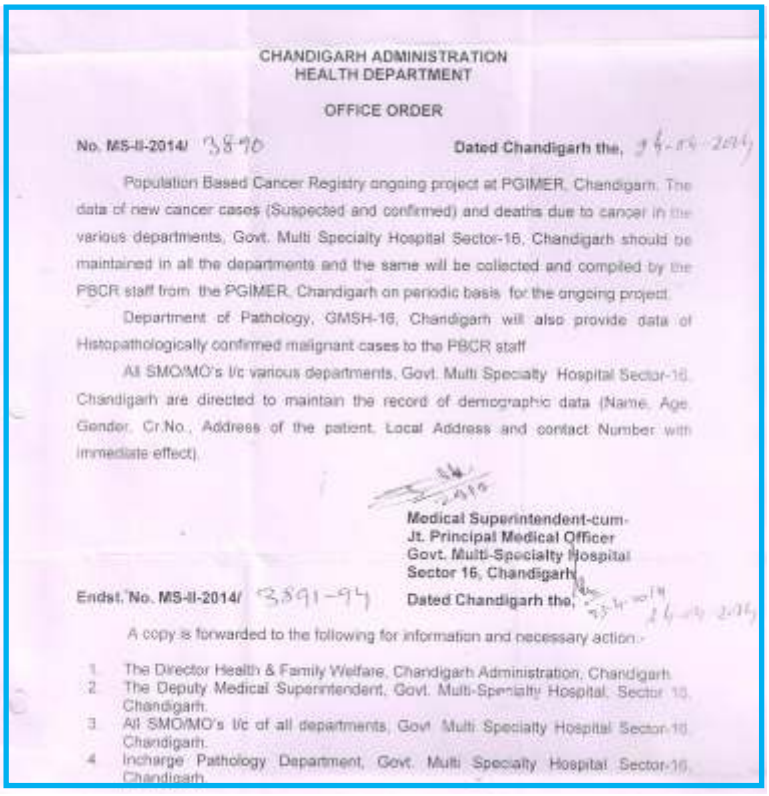
Memo No.721/FII(5)/2013/2664
Dated , Chandigarh the: 20.3.13

Subject: Population Based Cancer Registry (PBCR) in Chandigarh.

Please find enclosed herewith a copy of letter No. SPH/PBCR/2013/016 Dated 26/2/2013 on the subject noted above received from Dr. J.S. Thakur, Principal Investigator, School of Public Health Postgraduate Institute of Medical Education & Research, Chandigarh for taking necessary action in the matter.

Superintendent Finance II,
For Secretary Health,
Chandigarh Administration.

Figure 1:
Office order from Secretary (Health), Chandigarh.



CHANDIGARH ADMINISTRATION
HEALTH DEPARTMENT

OFFICE ORDER

No. MS-II-2014/ 3890 Dated Chandigarh the, 24-03-2014

Population Based Cancer Registry ongoing project at PGIMER, Chandigarh. The data of new cancer cases (Suspected and confirmed) and deaths due to cancer in the various departments, Govt. Multi Specialty Hospital Sector-16, Chandigarh should be maintained in all the departments and the same will be collected and compiled by the PBCR staff from the PGIMER, Chandigarh on periodic basis for the ongoing project.

Department of Pathology, GMSH-16, Chandigarh will also provide data of Histopathologically confirmed malignant cases to the PBCR staff.

All SMO/MO's I/c various departments, Govt. Multi Specialty Hospital Sector-16, Chandigarh are directed to maintain the record of demographic data (Name, Age, Gender, Cr.No., Address of the patient, Local Address and contact Number with immediate effect).

Medical Superintendent-cum-
Jt. Principal Medical Officer
Govt. Multi-Specialty Hospital
Sector 16, Chandigarh.

Endst. No. MS-II-2014/ 3891-94 Dated Chandigarh the, 24-03-2014

A copy is forwarded to the following for information and necessary action:-

1. The Director Health & Family Welfare, Chandigarh Administration, Chandigarh.
2. The Deputy Medical Superintendent, Govt. Multi-Specialty Hospital, Sector 16, Chandigarh.
3. All SMO/MO's I/c of all departments, Govt. Multi Specialty Hospital Sector-16, Chandigarh.
4. Incharge Pathology Department, Govt. Multi Specialty Hospital Sector-16, Chandigarh.

Figure 2:
Office order of Health Department, Chandigarh.

3. Population Covered by PBCR, Chandigarh

PBCR, Chandigarh covered the whole population of Chandigarh i.e., ~ 1.1 million for the year 2013. It was estimated from the 2011 census (Table 3) population based on the annual growth rate.

Table 3: Population of Chandigarh (Census 2011).

Sr.No.	Total	Male	Female
Urban	10, 26,459 (97.25%)	5,63,513	4,62,946
Rural	28,991(2.75%)	17,150	11,841
Total	10,55,450	5,80,663	4,74,787

Estimated population of UT Chandigarh-2013

The estimated population as calculated by the registry using the exponential growth rate for 2001 to 2011 census population as on 1st July 2013 was 11,07,427 with 6,06,811 being the male population and 5,00,616 the female population (Table 4).

Table 4: Estimated Resident population by age and sex, UT Chandigarh 2013

CHANDIGARH POPULATION 2013

Age group	Male		Female		Total	
	Number	%	Number	%	Number	%
0-4	43961	7.24	39475	7.89	83435	7.53
5-9	49837	8.21	42489	8.49	92327	8.34
10-14	53129	8.76	41471	8.28	94600	8.54
15-19	62619	10.32	45547	9.10	108167	9.77
20-24	71638	11.81	55830	11.15	127468	11.51
25-29	63691	10.50	52499	10.49	116190	10.49
30-34	52239	8.61	43765	8.74	96005	8.67
35-39	47869	7.89	40215	8.03	88084	7.95
40-44	39106	6.44	33854	6.76	72960	6.59
45-49	34762	5.73	29521	5.90	64283	5.80
50-54	27771	4.58	22968	4.59	50739	4.58
55-59	21800	3.59	17202	3.44	39002	3.52
60-64	15192	2.50	14015	2.80	29207	2.64
65-69	9059	1.49	8196	1.64	17255	1.56
70-74	6485	1.07	5855	1.17	12340	1.11
75+	7651	1.26	7715	1.54	15366	1.39
Total	606811	100.00	500616	100.00	1107427	100.00
		54.79		45.21		

Estimated total urban population is 10,85,282 and rural population 22,145. Occupations in the registration area include government service, private employment, light industry, commerce, business and other forms of manual labour. Rapid urbanization is going on in Chandigarh and now it has considerable migration from neighbouring states in search of jobs. Table 6 shows estimated population of 2013. The population pyramid of Chandigarh is shown in Figure 3.

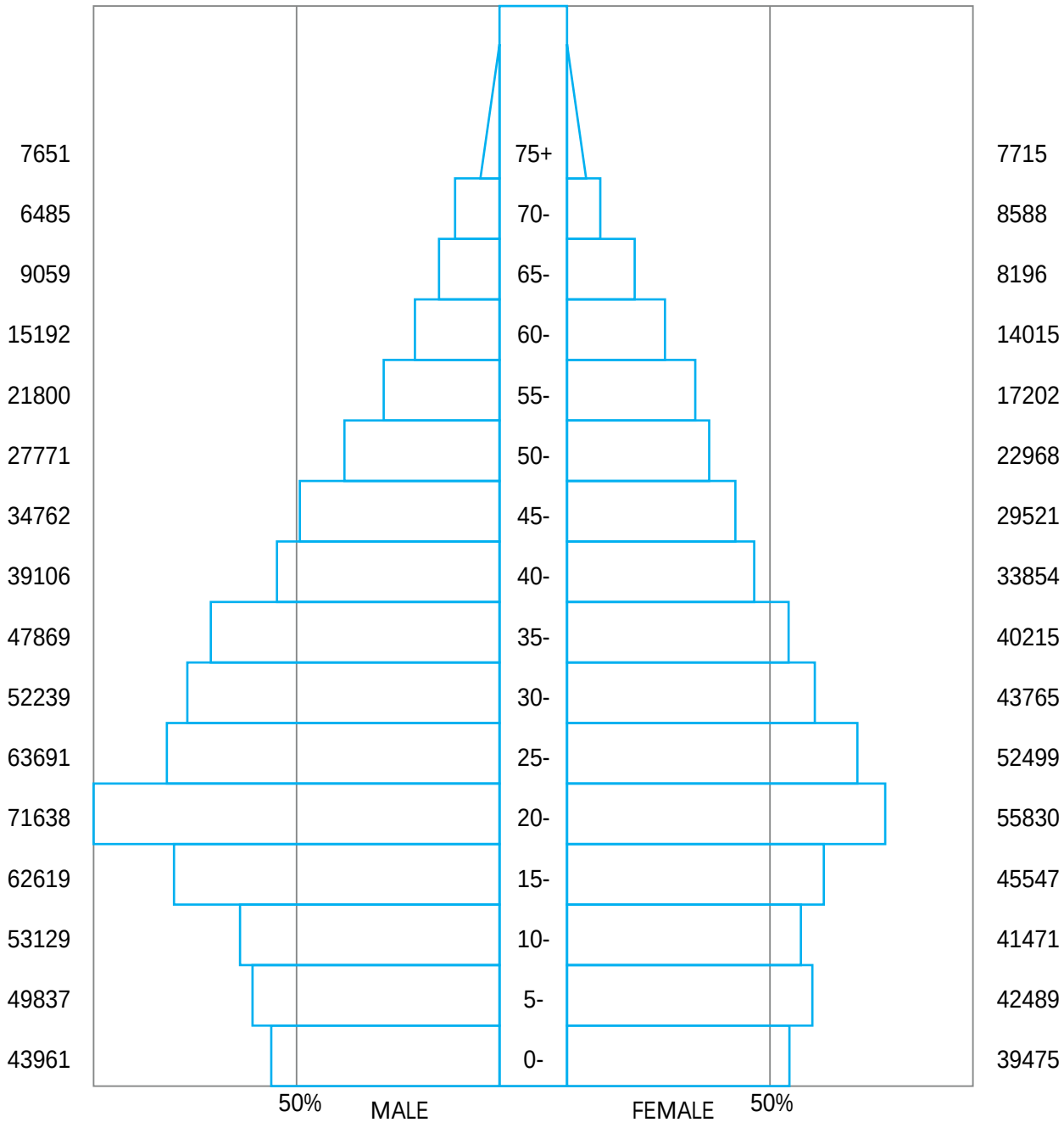


Figure 3 : Population Pyramid of Chandigarh as on 1st July 2013

4. Cancer Registration Method

Cancer Incidence Cases

Cancer is not a notifiable disease in Chandigarh. Information about cancer patients is hence obtained actively from various government and private hospitals, laboratories and diagnostic centres in the registry area. The social workers visit all the registration sources for collection of data according to their work plan. They abstract the hospital records and enter the data into a semi structured data extraction proforma. After duplicity check by data entry operator, the proforma is filed separately for home visit to fill the missing variables. As several sources of information are accessed, all duplicate forms for a case are used for completing the information in one form. All duplicate forms are separately filed for future quality checks. In case of same year cancer diagnosis and death, two separate forms are filled i.e., for incidence and mortality separately. All completed forms are separately filed for data entry in Canreg5.

Additionally, the cancer cases which were diagnosed before 2013 were also registered with the exact date of diagnosis, for future follow-up, to study the course of disease among them. Though these cases will not appear in the incidence of 2013, it can present as source of data in case of mortality. All these forms are kept for follow-up, which is done either telephonically or in person at periodic intervals.

Cancer Death Cases

Registry staff routinely collects information on cancer mortality from the government and private health facilities, office of Registrar of Birth and Death, cremation grounds and other religious places. During the data collection from death registers, the registry staff completes a standard proforma for all cases where cancer is mentioned as a cause of death. The proforma includes identifying information, registration number, place of registration, death registry number, place of death (whether medical institution, residence or elsewhere or unknown) cause of death, histology report, date of death and wherever available the name and address of the institution or medical practitioner certifying the death. It also includes residential address and contact number of the family of the deceased. Details on cancer deaths of persons not residing in the registry area are excluded after investigation.

The information on deaths so collected is compiled and matched with available incident cancer case data. This constitutes the matched deaths for that particular year. The unmatched deaths are further investigated for collection and filling of missing variables through interviewing the relatives of the deceased during home visit. Verbal autopsies are done for all cases where no hospital records are available on cancer.

Cases notified from death certificates only, for which the registry staff has not been able to obtain further information either from the records available with the deceased's family or from hospital records (after matching or tracking back with hospital information system (HIS)) are registered as “Death Certificates Only (DCO)”. Verbal autopsy (VA) is done for all DC cases and cause of death coding is done by a medical doctor.

Data Checking

Cancer cases residing outside the registry area are excluded after thorough scrutiny either telephonically or in person verification. All these forms are filed and stored separately.

Data Entry

CanReg5 software which is developed by International Agency Research on Cancer (IARC), Lyon, France is used for data entry, storage and analysis. It is an open source, offline software program and has following modules to do:

a) Data Entry
b) Quality Control
c) Consistency Checks
d) Basic analysis of the data (Predefined)

The data is split across 3 tables:

- Patient record
- Tumor record
- Source record

The software allows entry of multiple tumours per patient and multiple sources per tumour. As the data entry starts, the software allocates a unique ID to each case. At different level, duplicity checks are done and the duplicates hence found are eliminated. Consistency checks are also performed between different variables. All staff of the registry are trained on CanReg5 for entering and analysing the data. At the start and end of the day, back up of the data is done. All the data is kept confidential using a username and password for the registry.

The process of registration of cancer cases follows the given steps (Figure 4).

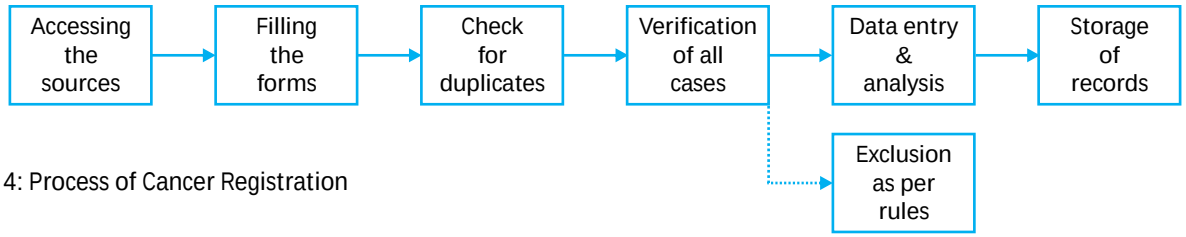


Figure 4: Process of Cancer Registration

Sources for Data Collection

The registry staff regularly visits all the registration sources and collects the relevant and available information from various government and private hospitals, laboratories and diagnostic centres in the registry area. The different sources of data collection are mentioned in Table 5 and Figure 5

Table5: Sources for Cancer Registration

Sr.No.	Institution Name	Place
Hospitals		
1.	PGIMER, Sector-12	Chandigarh
2.	Government Medical College and Hospital, Sector-32 (GMCH-32)	Chandigarh
3.	Government Multi Speciality Hospital, Sector-16 (GMSH-16)	Chandigarh
4.	Kidney And Urology Centre-Sector-46	Chandigarh
5.	Chuttani Medical Centre, Sector-17	Chandigarh
6.	Fortis Hospital	SAS Nagar
7.	Max Super Speciality Hospital	SAS Nagar
8.	Indus Super Speciality Hospital	SAS Nagar
9.	Ivy Hospital	SAS Nagar
10.	Behgal Hospital	SAS Nagar
11.	Civil Hospital	SAS Nagar
12.	Harmony Hospital	SAS Nagar
13.	Shri Guru Harkrishan Hospital, Sohana	SAS Nagar
14.	Gracian Hospital	SAS Nagar
15.	Gian Sagar Hospital, Banur	SAS Nagar
Pathology Laboratories		
1.	Indira Holiday Home, Sector-24	Chandigarh
2.	Malhotra Path Lab	Chandigarh
3.	Medicos Path Lab	Chandigarh
4.	Mujoo's Path Lab, Sector-15	Chandigarh
5.	Helix Path Lab	SAS Nagar
Other sources		
1.	Birth And Death Registrar Office, Sector-17	Chandigarh
2.	Birth And Death Registrar Office, Sector-69	SAS Nagar
3.	Cancer Cell	SAS Nagar

Figure 5: Pictorial Representation of Distribution of Source of Registration by PBCR, Chandigarh.

5. Community Involvement in the Cancer Registration Process

In Chandigarh, the involvement of local groups and health centres such as community health centres was ensured. Support was also provided by NGO's working in the registry area to supplement information on cancer patients.

Cancer awareness sessions were held for school students and community women groups that imparted information on the common cancers, their effects and the importance of early detection and treatment as shown in figure 6.

Figure 6 : Cancer Awareness session for Community Involvement.

6. Quality Control

Mortality to Incidence ratio

The mortality-incidence ratio or MI ratio is an indicator of the completeness and accuracy of cancer mortality data. In the year 2013, 833 incident cancer cases (males-406 and female-427) were registered by PBCR Chandigarh. For the same period, 287 cancer deaths were registered (164 males and 123 females). The overall MI ratio is 34.5% (males-40.4% and females-28.8%) which is good and is comparable to other established urban PBCRs in India.

Re-abstraction of the Cases

We had taken 830 cases till 31 December, 2013. Quality control exercise was carried to issues in the registry that could be improved upon. A medical person from PGIMER had selected 83 cases (randomly 10% cases) from the registered cases of year 2013 for re-abstraction. The overall agreement level was found to be 96.8%. The agreement level for demographic details i.e. name, age, sex and address was found to be 99.6% whereas that for tumour details i.e. date of diagnosis, primary site, histology and behavior was found to be 94.5%. During the quality control exercise it was observed that the staff required retraining in abstraction of cases of unknown primary sites, metastatic cases and lymphoma-leukemia cases. Based on this finding the staff was retrained at TMC/PGI Chandigarh. The errors observed were corrected and data was modified.

Microscopic Verification of the Cases

The proportion of microscopically verified cases is an internationally accepted indicator of data quality. The higher the proportion of microscopically verified cases, the more valid and accurate is the information as microscopic verification is considered the most valid basis of diagnosis. Still, a very high proportion (>95%) suggests the likelihood that some cancers with a diagnosis based solely on imaging techniques and clinical grounds may be missed.

In the year 2013, out of 406 male cases we had 389 (95.8%) cases diagnosed on the basis of microscopic verification and 1.7% cases diagnosed on the basis of radiological findings. Most of the other and unspecified cases were diagnosed on radiology (e.g., Lymph Node, Primary site unknown cases). In Females, out of 427 cases, 419 (98.3%) cases were diagnosed on the basis of microscopic verification. Around 1% cases were diagnosed on radiological findings. Overall, microscopic confirmation was available for 97% of all the incident cases.

Death Certificate Only (DCO) Cases

The proportion of Death certificate only registrations (DCOs) is another assessor of data quality. DCO cases represent the residuum of cases- after all trace back manoeuvres have been completed, for which no information other than a death certificate could be obtained. The relative proportion of DCOs should ideally be 2-3% or at least, less than 5%. We registered 8 incident cases in males (1.9%) and 4 cases in females (1%) under DCO category which reflects effective tracing of cancer cases registered first through death certificates, the so called Death Certificate notified(DCNs) cases, by the registry.

Average Number of Sources Per Case Registered

The rationale of using multiple sources for data collection is to reduce the possibility of cancer cases going unreported, thus increasing the completeness of the registry data. The higher the number of sources , the higher the degree of completeness of the registry. At PBCR Chandigarh, there were total 833 incident cases and average number of sources per case was 2.2 which show good completeness of the registry.

Incidence Rates of Childhood Cancers

In the year 2013, we had registered ten cases of childhood cancers among boys and nine among girls. The age specific rates reported for the paediatric cancer was low. We might have missed some paediatric cancer cases. The age specific incidence rate by sex is mentioned below in table 6.

Table 6 : Incidence Rate of Paediatric Cancer Cases in UT Chandigarh : 2013

Age Group	Boys		Girls	
	Number of Cases	Age specific incidence rate per 100,000	Number of cases	Age specific Incidence rate per 100,000
0-4	3	6.8	2	5.1
5-9	5	10	5	11.8
10-14	2	3.8	2	4.8

7. Cancer Cases Registered by Source of Registration – First Source of Information

Chandigarh being an urban area has better diagnostic and treatment facilities, more than 94% cases here were captured from hospital records. Hospitals with special cancer facilities (medical, surgical oncology, radiotherapy), had essential contribution to the registry. Main source of information for PBCR was PGIMER, Chandigarh contributing 66.6% of registered cases.

The cancer incidence and death cases registered by first source of registration are mentioned in Table 7 and Table 8.

Table 7 : Cancer Incidence Cases 2013-Source wise Distribution

Sr. No.	Name of the Institution	Male	%	Female	%	Total	%
1.	PGIMER, Chandigarh	272	66.9	283	66.2	555	66.6
2.	GMCH 32, Chandigarh	37	9.1	50	11.7	87	10.4
3.	Max Super Speciality Hospital, SAS Nagar	31	7.6	29	6.79	60	7.2
4.	Fortis Hospital, SAS Nagar	20	4.9	18	4.2	38	4.5
5.	Birth and Death Registrar, Chandigarh	13	3.2	6	1.4	19	2.2
6.	IVY Hospital, SAS Nagar	12	2.9	18	4.2	30	3.6
7.	Malhotra Lab, Chandigarh	4	0.9	10	2.3	14	1.6
8.	GMSH 16, Chandigarh	3	0.7	7	1.6	10	1.2
9.	Kidney and Urology Centre, Chandigarh	3	0.7	0	0	3	0.3
10.	Indus Hospital, SAS Nagar	3	0.7	1	0.2	4	0.4
11.	Behgal Hospital, SAS Nagar	3	0.7	2	0.4	5	0.6
12.	Civil Hospital, SAS Nagar	2	0.4	0	0	2	0.2
13.	Gracian Hospital, SAS Nagar	1	0.2	0	0	1	0.1
14.	Gian Sagar, Banur	1	0.2	0	0	1	0.1
15.	Mujoo's Lab, Chandigarh	1	0.2	0	0	1	0.1
16.	Harmony Hospital, SAS Nagar	0	0	1	0.2	1	0.1
17.	Medicos Lab, Chandigarh	0	0	2	0.4	2	0.2
	Total	406	100	427	100	833	100

Table 8 : Cancer Mortality Cases 2013-Source wise Distribution

Sr. No.	Name of the Institution	Male	%	Female	%	Total	%
1.	PGIMER, Chandigarh	95	57.9	73	59.3	168	58.5
2.	Birth and Death Registrar, Chandigarh	16	9.7	22	17.8	38	13.2
3.	Fortis Hospital, SAS Nagar	13	7.9	8	6.5	21	7.3
4.	IVY Hospital, SAS Nagar	12	7.3	3	2.4	15	5.2
5.	GMCH 32, Chandigarh	9	5.4	8	6.5	17	5.9
6.	Max Super-Speciality Hospital, SAS Nagar	7	4.2	0	0	7	2.4
7.	Gracian Hospital, SAS Nagar	3	1.8	2	2.4	5	1.7
8.	GMSH 16, Chandigarh	2	1.2	1	0.8	3	1.0
9.	Behgal Hospital, SAS Nagar	2	1.2	2	2.4	4	1.3
10.	Municipal Corporation, SAS Nagar	2	1.2	0	0	2	0.6
11.	Malhotra Lab, Chandigarh	1	0.6	1	0.8	2	0.6
12.	Mujoo's Lab, Chandigarh	1	0.6	0	0	1	0.3
13.	Civil Hospital, SAS Nagar	1	0.6	0	0	1	0.3
14.	Harmony Hospital, SAS Nagar	0	0	1	0.8	1	0.3
15.	Indus Hospital, SAS Nagar	0	0	1	0.8	1	0.3
16.	Chuttani Medical College, Chandigarh	0	0	1	0.8	1	0.3
	Total	164	100	123	100	287	100

8. Cancer Incidence and mortality- all sites

In the year 2013, the cancer registry had registered 833 cancer cases. Out of which 406 cases were male and 427 female. The age adjusted incidence rate for male is 93.4 per 100,000 population and for females 105 per 100,000 population.

Similarly, 287 cancer mortality cases were registered for the year 2013. Among these, 164 were male cases and 123 female cases. The age adjusted mortality rate for male was 37.97 per 100,000 population and for females was 32.73 per 100,000 population. The age adjusted cancer incidence and mortality rate for all sites for males and females are presented in Figure 7.

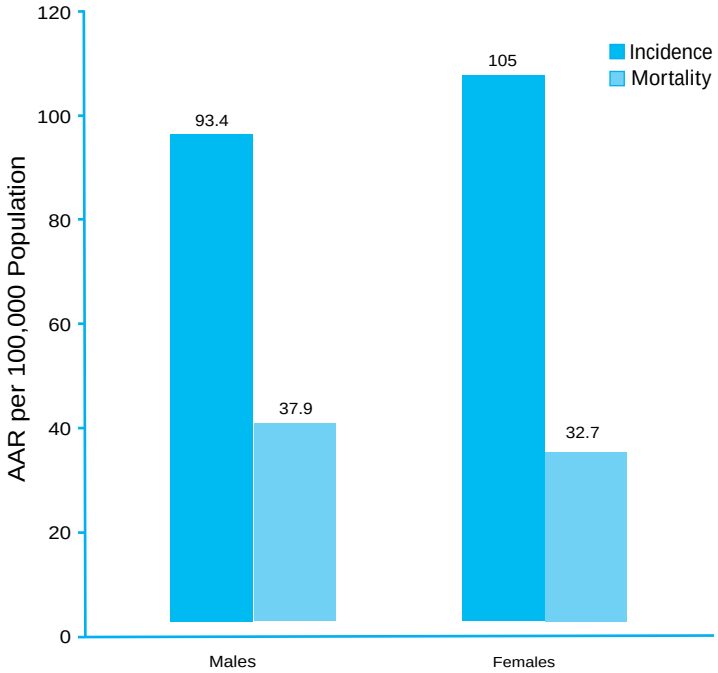


Figure 7: All Sites Cancer Incidence and Mortality Rate by Sex, Chandigarh, 2013

9. Leading Cancer Sites by Sex

The most common primary site of cancer among male are Lung (n=53), Prostate (n=32), Non-Hodgkin lymphoma (n=30) followed by Oesophagus (n=26) and Mouth (n=20). Similarly in females, Breast is the most common cancer (n=154) followed by cervix uteri (n=43), ovary (n=30), gall bladder (n=25) and corpus uteri (n=20). The graphical presentation of top 10 leading cancer sites is presented in Figure 8 and Figure 9.

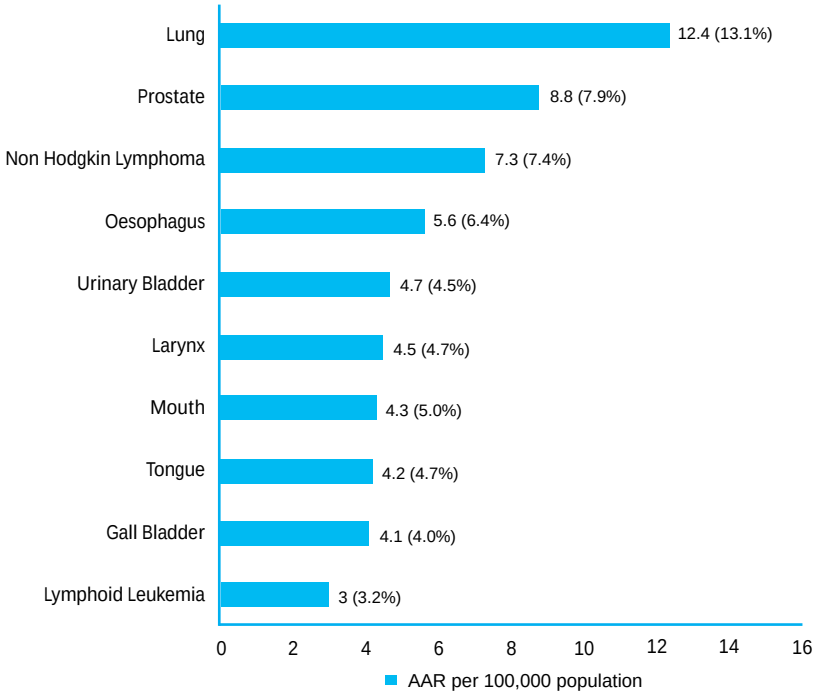


Figure 8: Leading Cancer Sites - Male (Figures in parenthesis indicate the percentage)

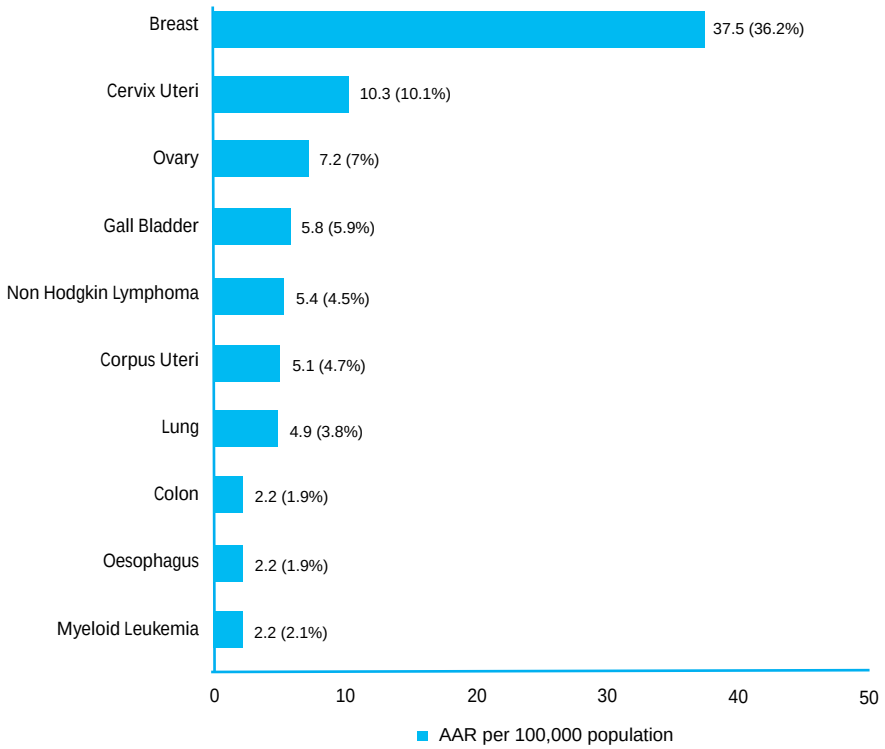


Figure 9 : Leading Cancer Sites - Female (Figures in parenthesis indicate the percentage)

Cancer of Lung (C33 – C34)

	Male	Female
Number of cases	53	16
% to total cases	13.1	3.8
Crude incidence rate per 100,000	8.7	3.2
Age adjusted incidence rate per 100,000 population	12.4	4.9
Truncated rate per 100,000	4.5	3.8

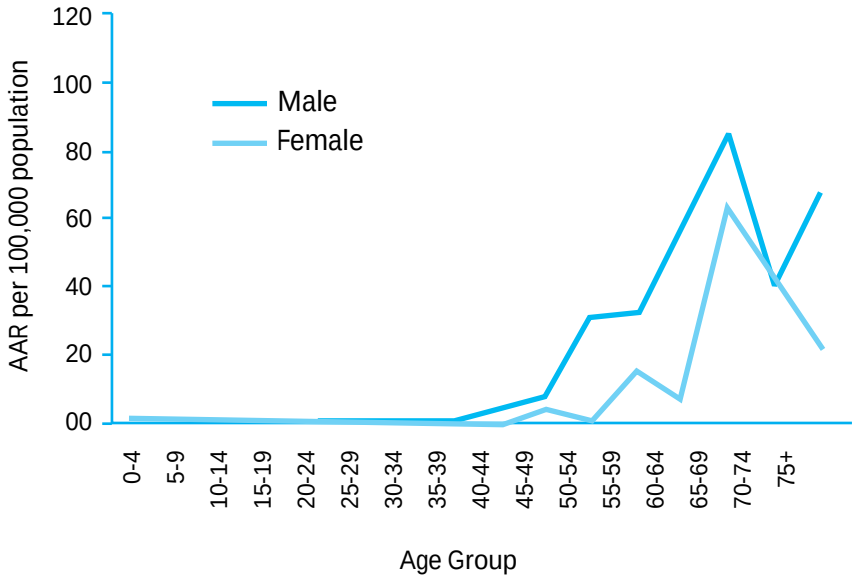


Figure 10 : Age Specific Incidence Rate of Cancer Lung (C33-C34)

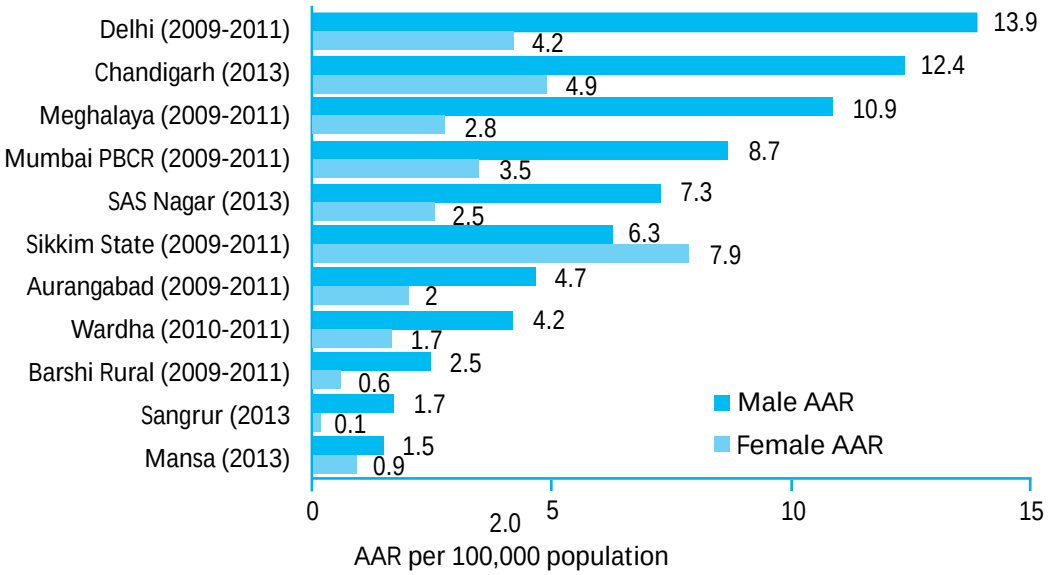


Figure 11 : Comparison of Lung Cancer Incidence Rate with other Indian Registries

Cancer of Prostate (C61)

Number of cases	32
% to total cases	7.9
Crude incidence rate per 100,000	5.3
Age adjusted incidence rate per 100,000 population	8.8
Truncated rate per 100,000	4.3

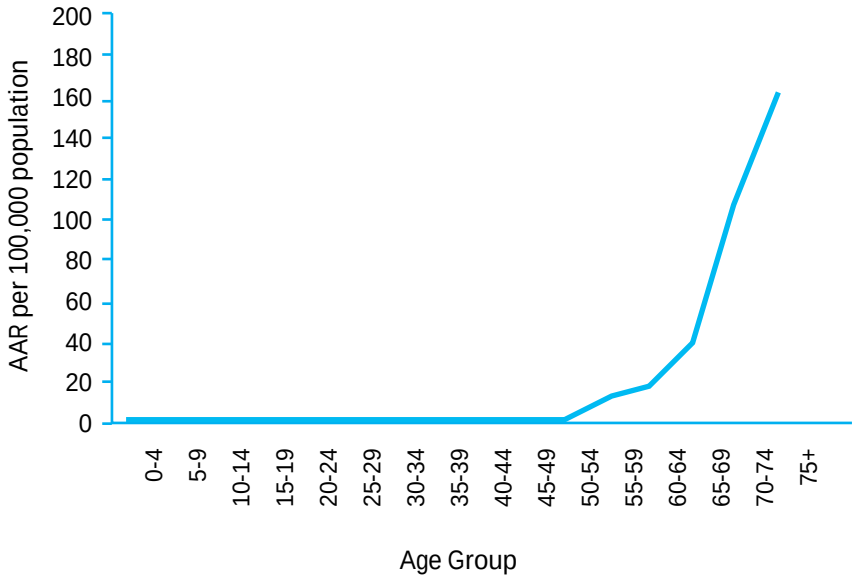


Figure 12: Age Specific Incidence Rate of Cancer Prostate (C61)

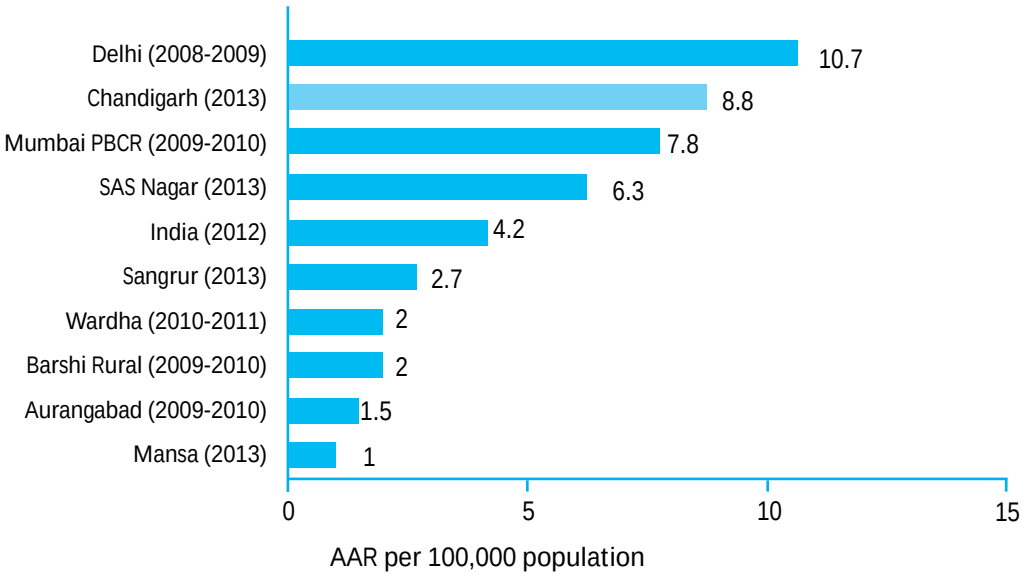


Figure 13: Comparison of Prostate Cancer Incidence Rate with other Indian Registries

Cancer of Non Hodgkin Lymphoma (C82-C85, C96)

	Male	Female
Number of cases	30	19
% to total cases	7.4	4.5
Crude incidence rate per 100,000	4.9	3.8
Age adjusted incidence rate per 100,000 population	7.3	5.4
Truncated rate per 100,000	7.6	6.0

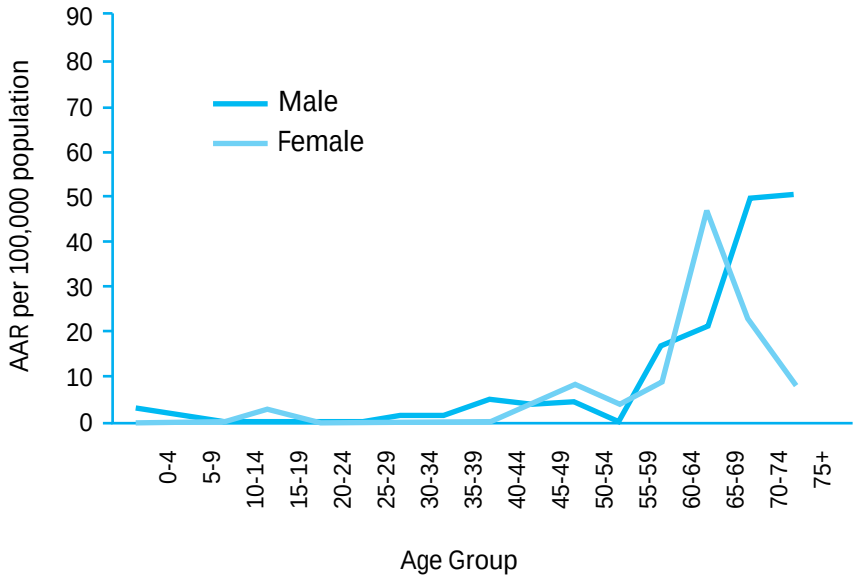


Figure 14: Age Specific Incidence Rate of Non Hodgkin Lymphoma (C82 - C85, C96)

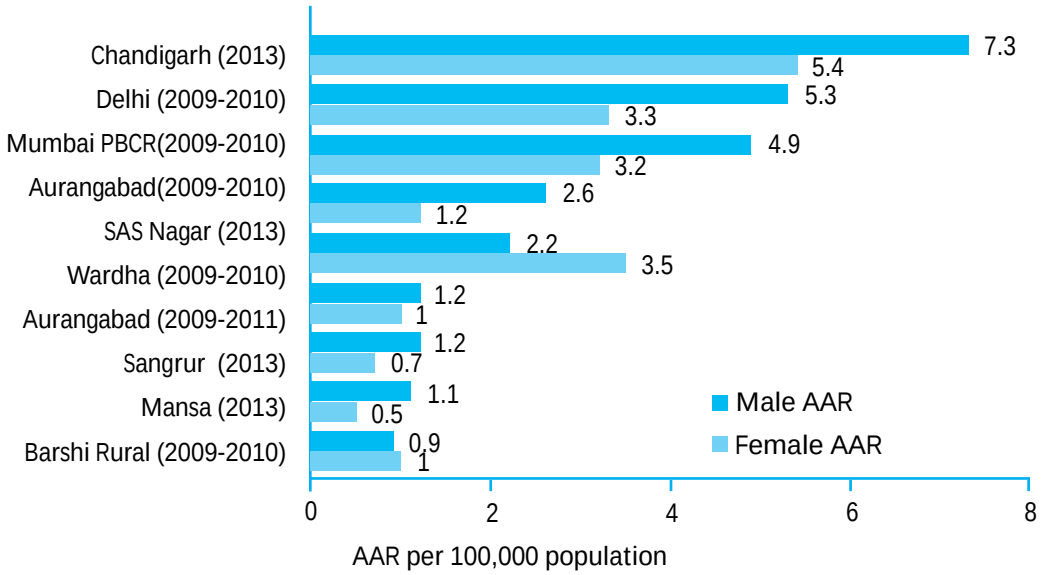


Figure 15: Comparison of NHL Cancer Incidence Rate with other Indian Registries

Cancer of Oesophagus (C15)

	Male	Female
Number of cases	26	8
% to total cases	6.4	1.9
Crude incidence rate per 100,000	4.3	1.6
Age adjusted incidence rate per 100,000 population	5.6	2.2
Truncated rate per 100,000	12.4	2.4

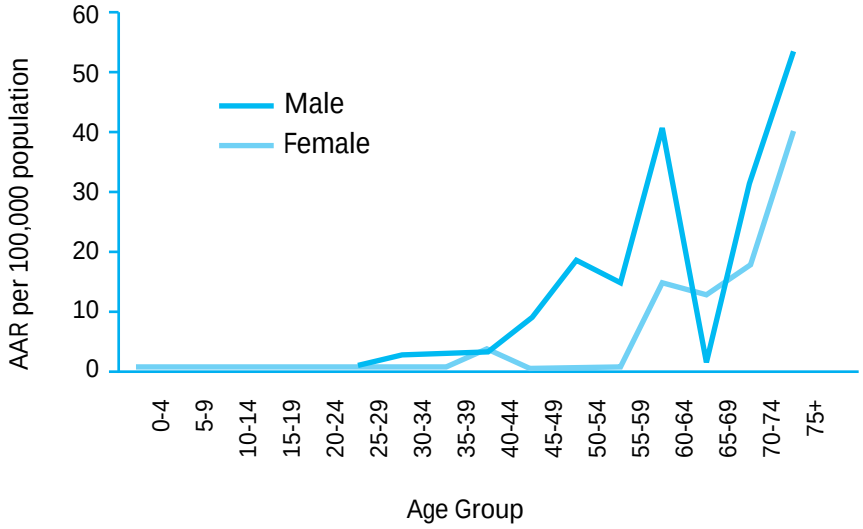


Figure 16: Age Specific Incidence Rate of Cancer Oesophagus (C15)

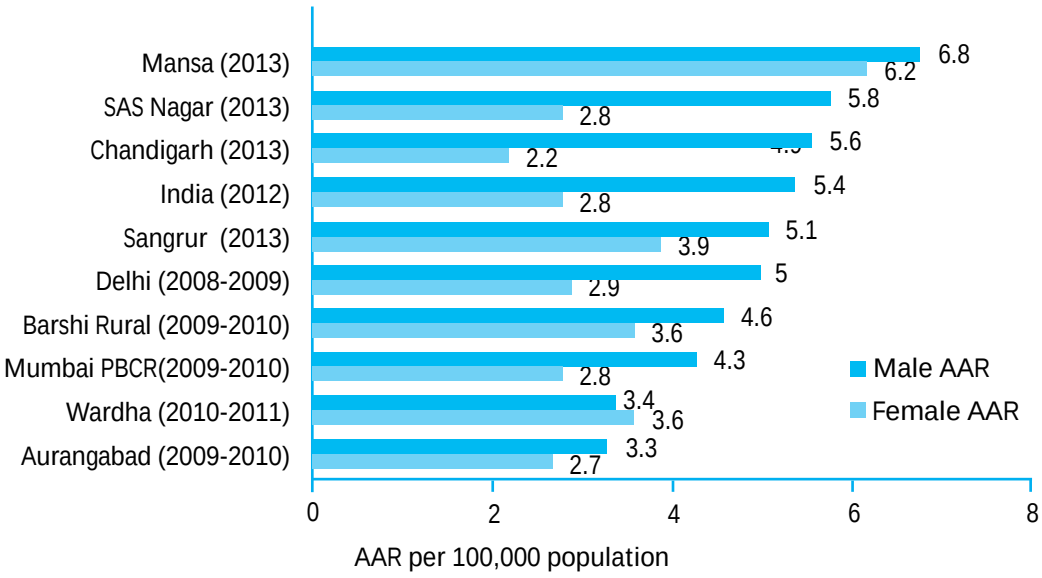


Figure 17: Comparison of Oesophagus Cancer Incidence Rate with other Indian Registries

Cancer of Urinary Bladder (C67)

	Male	Female
Number of cases	18	6
% to total cases	4.5	1.4
Crude incidence rate per 100,000	3	1.2
Age adjusted incidence rate per 100,000 population	4.7	1.3
Truncated rate per 100,000	5.3	2.4

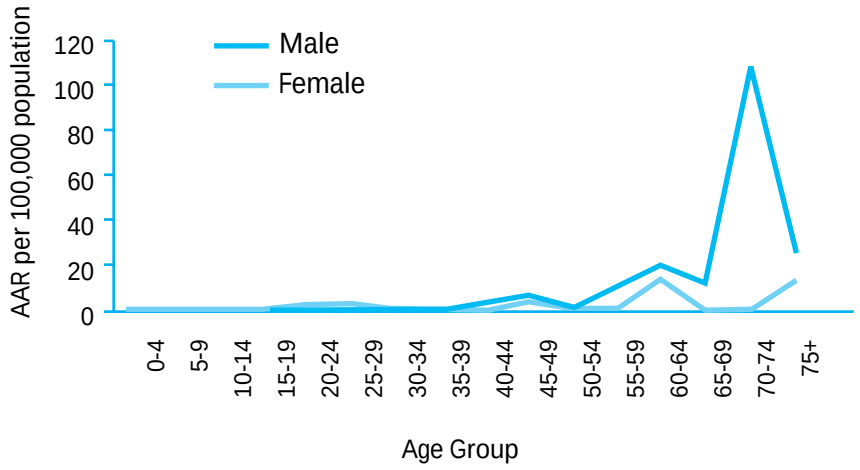


Figure 18: Age Specific Incidence Rate of Cancer Urinary Bladder (C67)

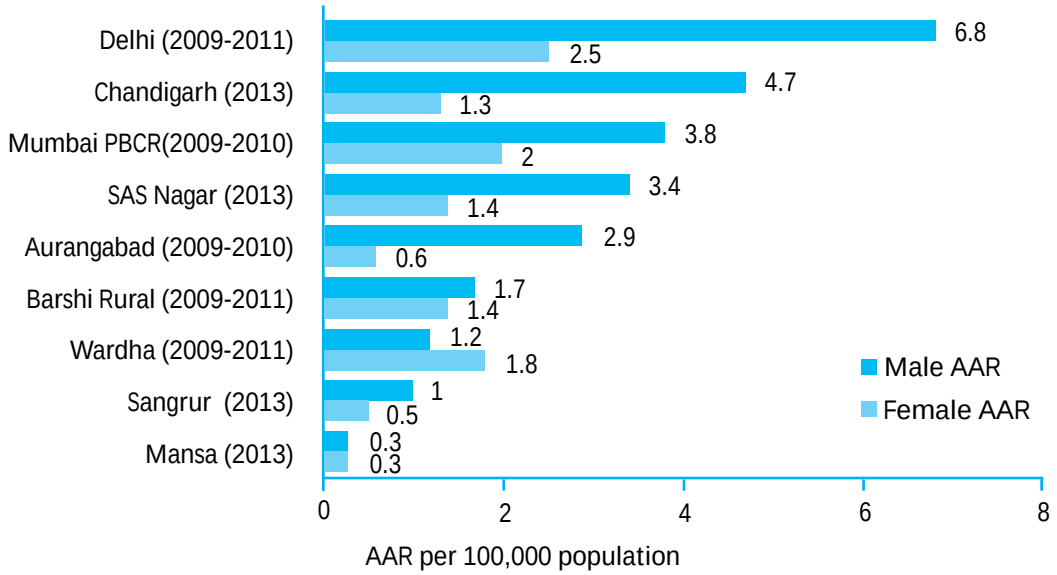


Figure 19: Comparison of Urinary Bladder Cancer Incidence Rate with other Indian Registries

Cancer of Breast (C50)

Number of cases	154
% to total cases	36.2
Crude incidence rate per 100,000	30.8
Age adjusted incidence rate per 100,000 population	37.5
Truncated rate per 100,000	82.6

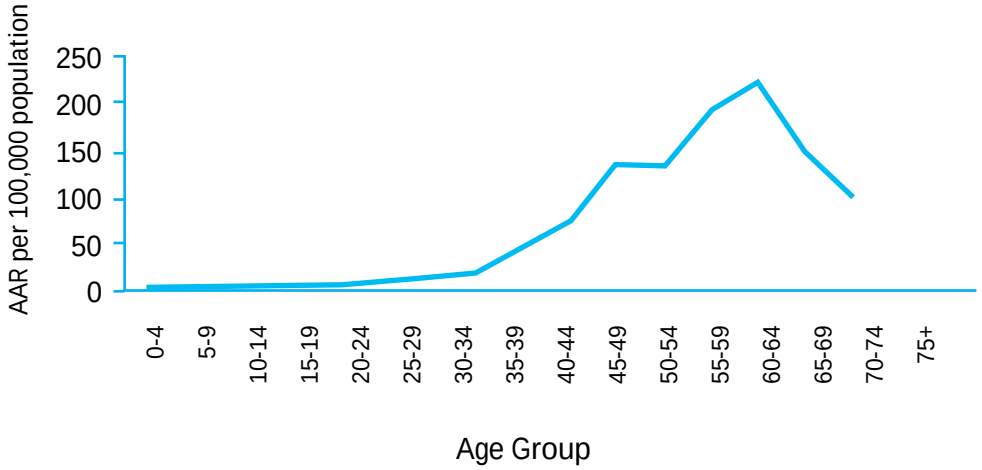


Figure 20: Age Specific Incidence Rate of Cancer Breast (C50)

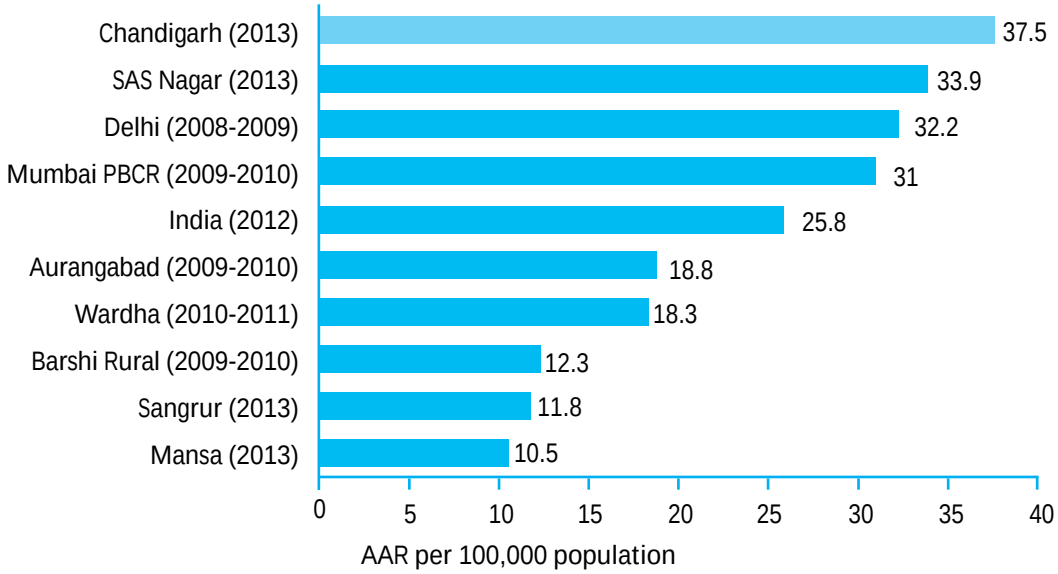


Figure 21: Comparison of Breast Cancer Incidence Rate with other Indian Registries

Cancer of Cervix Uteri (C53)

Number of cases	43
% to total cases	10.1
Crude incidence rate per 100,000	8.6
Age adjusted incidence rate per 100,000 population	10.3
Truncated rate per 100,000	19.9

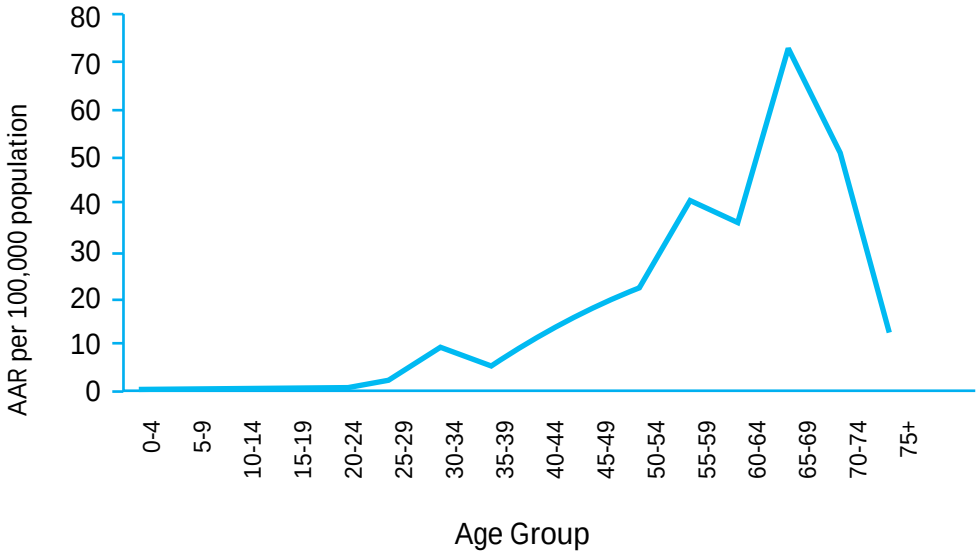


Figure 22: Age Specific Incidence Rate of Cancer Cervix Uteri (C53)

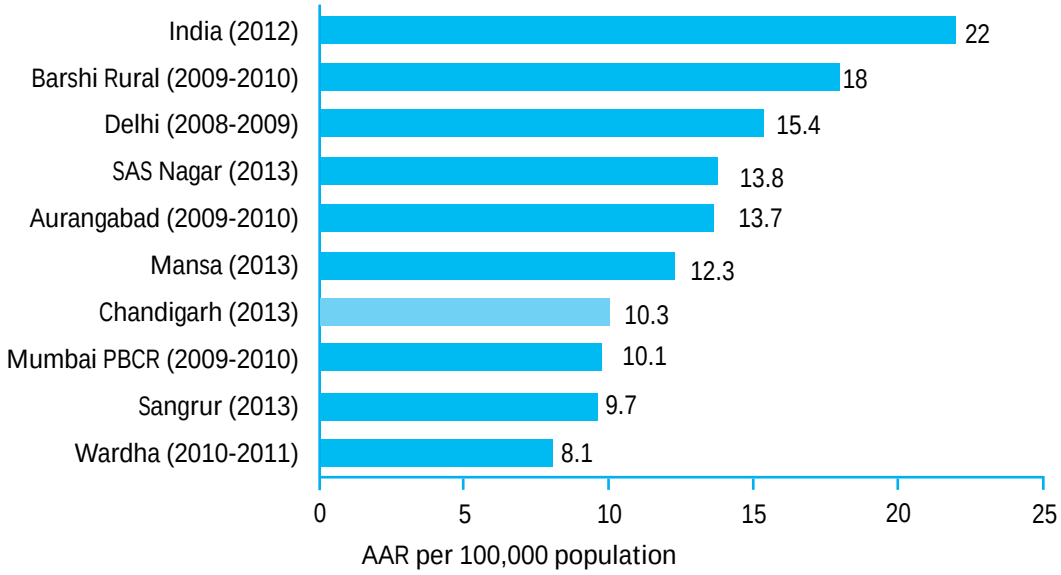


Figure 23: Comparison of Cervix Uteri Cancer Incidence Rate with other Indian Registries

Cancer of Ovary (C56)

Number of cases	30
% to total cases	7
Crude incidence rate per 100,000	6.0
Age adjusted incidence rate per 100,000 population	7.2
Truncated rate per 100,000	17.9

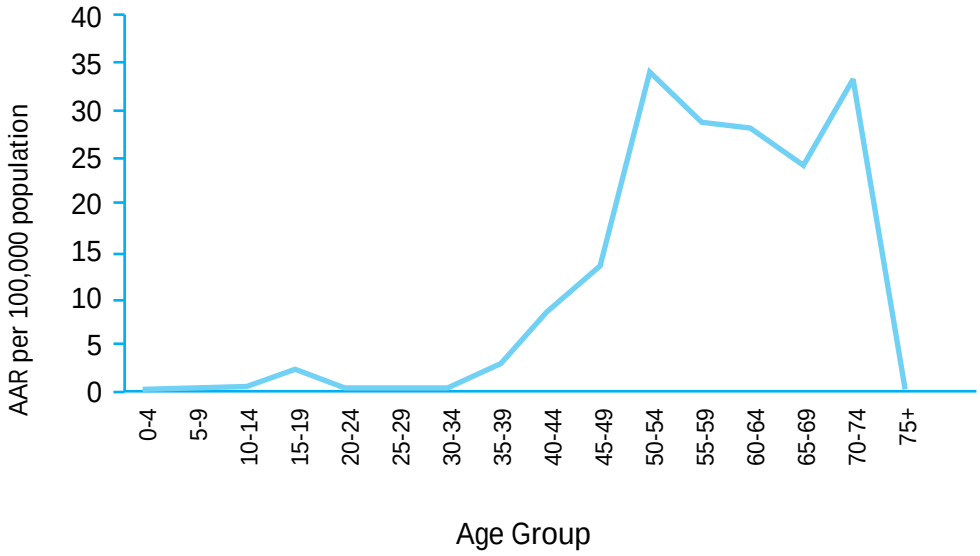


Figure 24: Age Specific Incidence Rate of Cancer Ovary (C56)

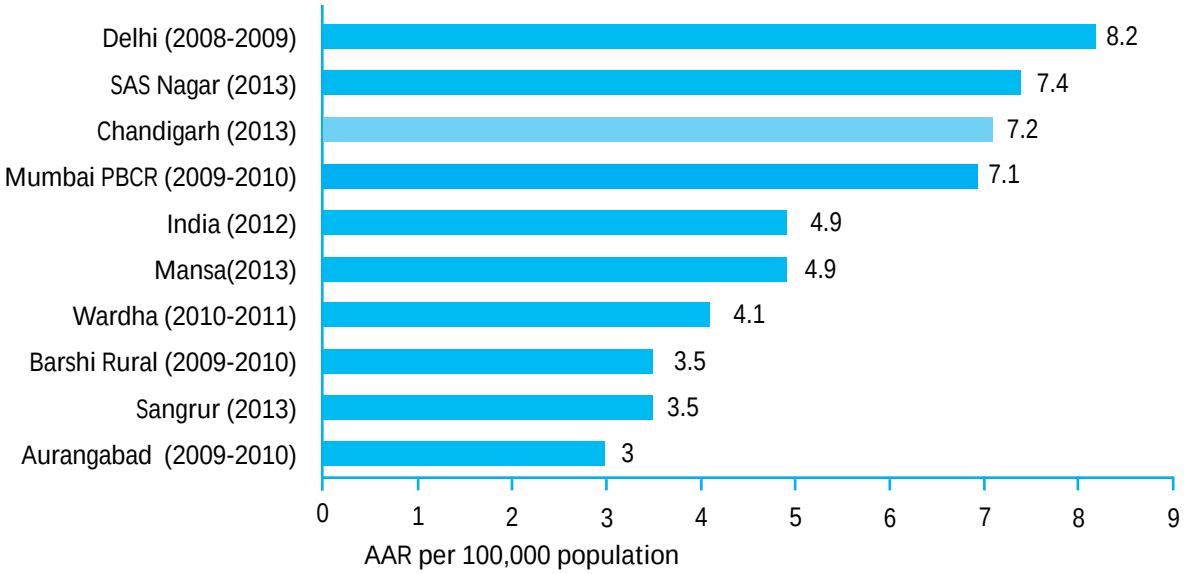


Figure 25: Comparison of Ovary Cancer Incidence Rate with other Indian Registries

Cancer of Gall Bladder (C23-24)

	Male	Female
Number of cases	16	25
% to total cases	4.0	5.9
Crude incidence rate per 100,000	2.6	5.0
Age adjusted incidence rate per 100,000 population	4.1	5.8
Truncated rate per 100,000	5.3	12.1

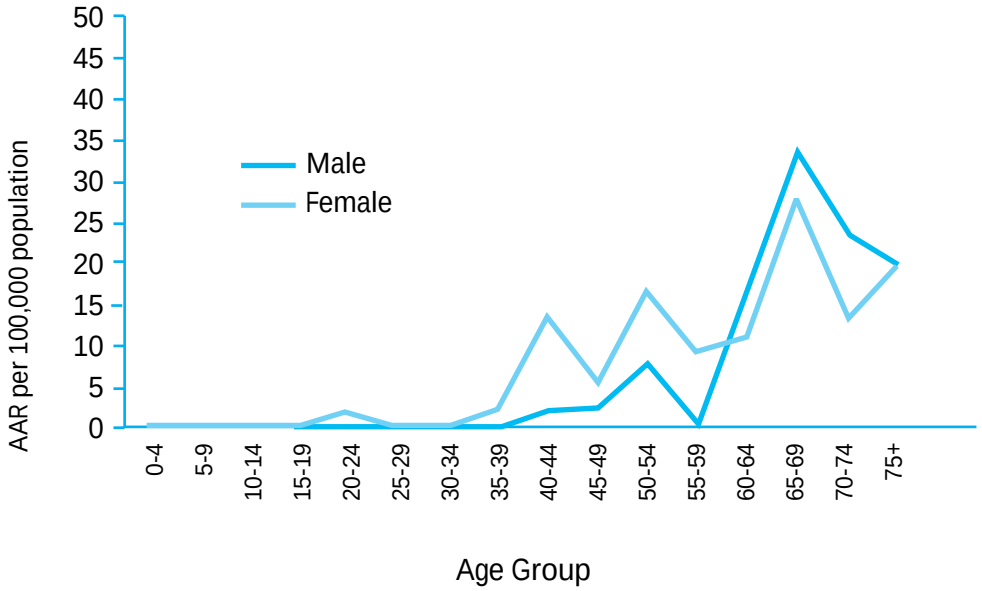


Figure 26: Age Specific Incidence Rate of Cancer Gall Bladder (C23-24)

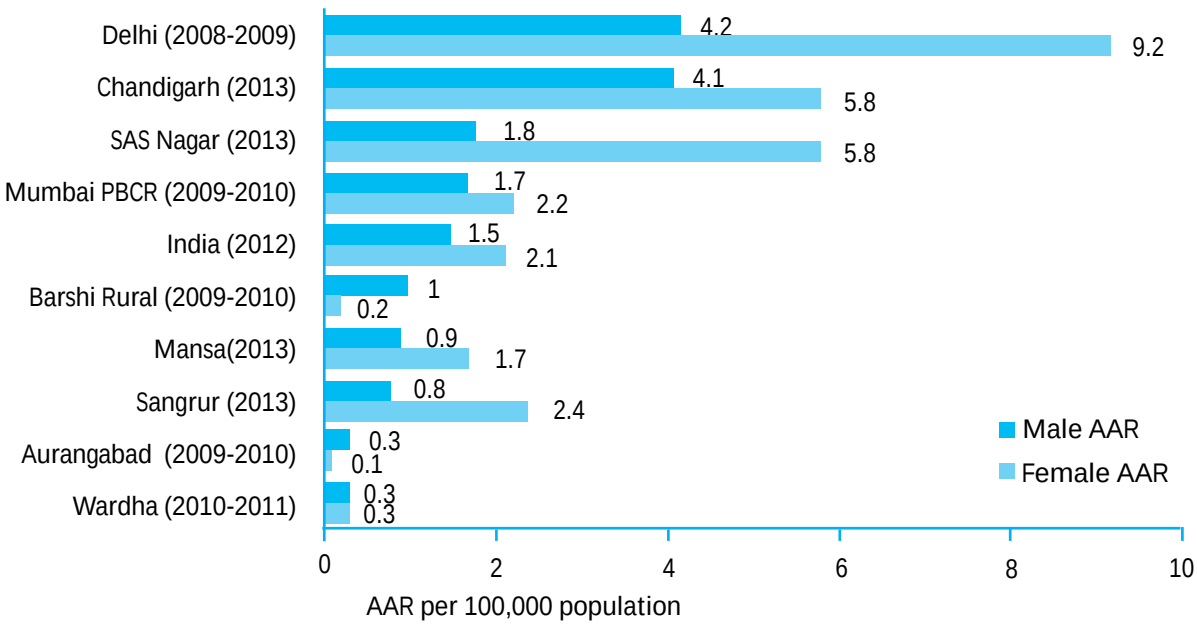


Figure 27: Comparison of Gall Bladder Cancer Incidence Rate with other Indian Registries

Cancer of Corpus Uteri (C54)

Number of cases	20
% to total cases	4.7
Crude incidence rate per 100,000	4.0
Age adjusted incidence rate per 100,000 population	5.1
Truncated rate per 100,000	11

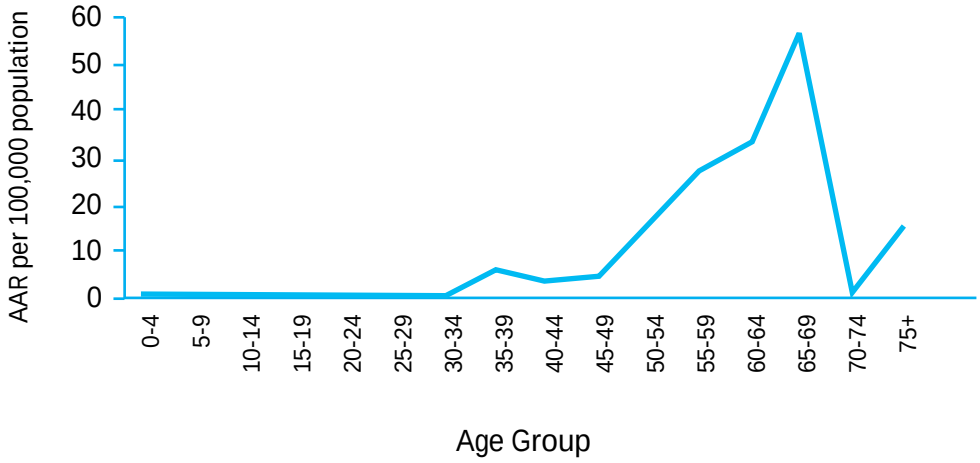


Figure 28: Age Specific Incidence Rate of Cancer Corpus Uteri (C54)

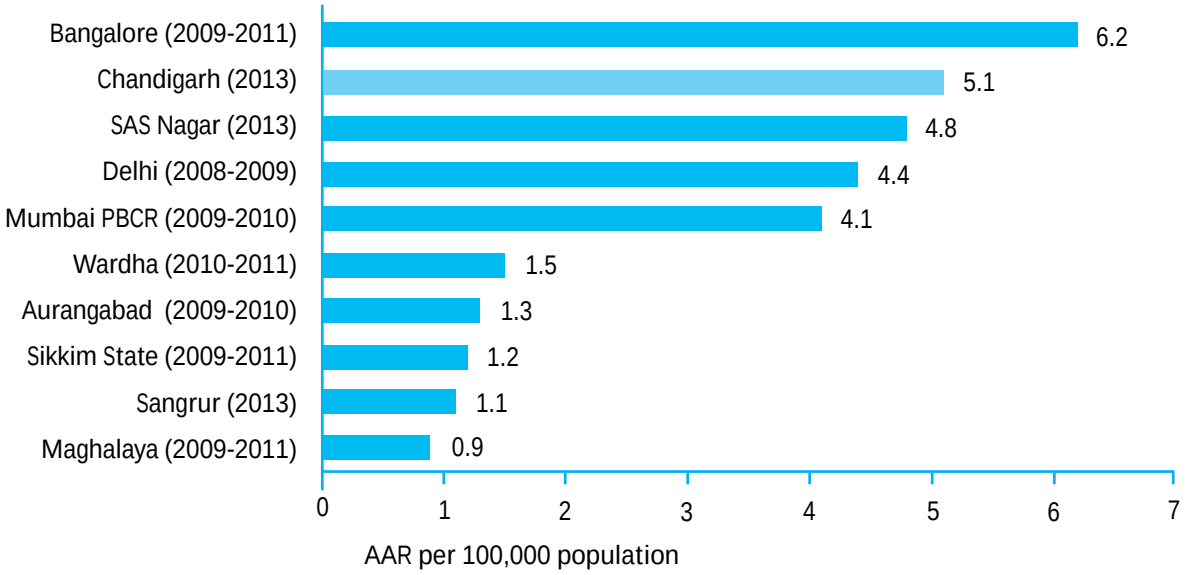


Figure 29: Comparison of Corpus Uteri Cancer Incidence Rate with other Indian Registries

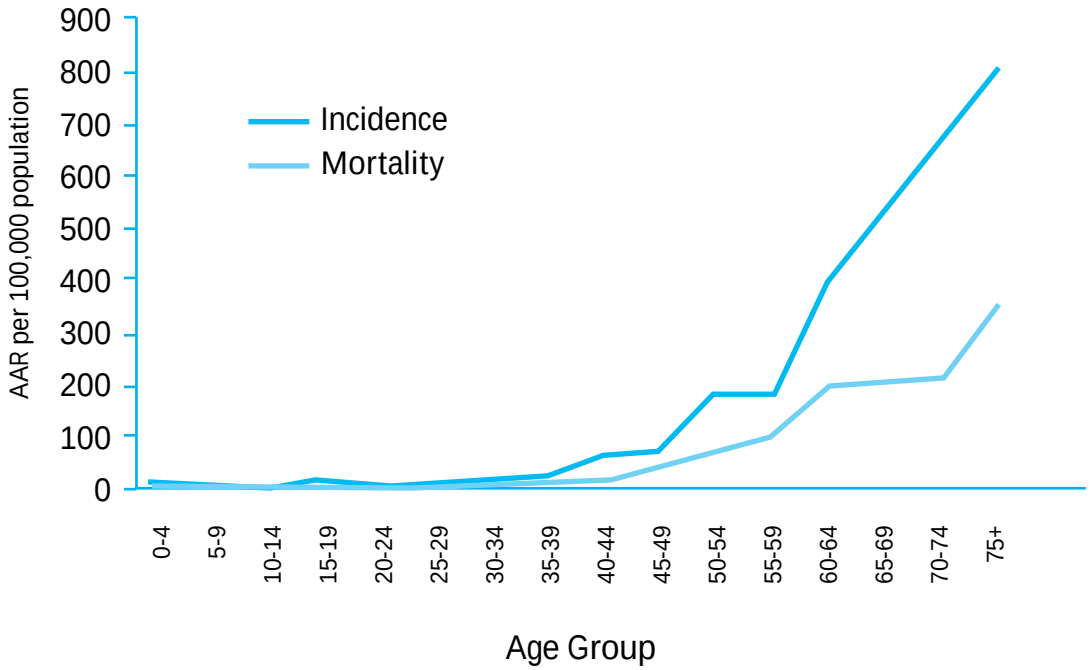


Figure 30: Age Specific Incidence and Mortality Rate for all Sites & Cases by Age Group – Male

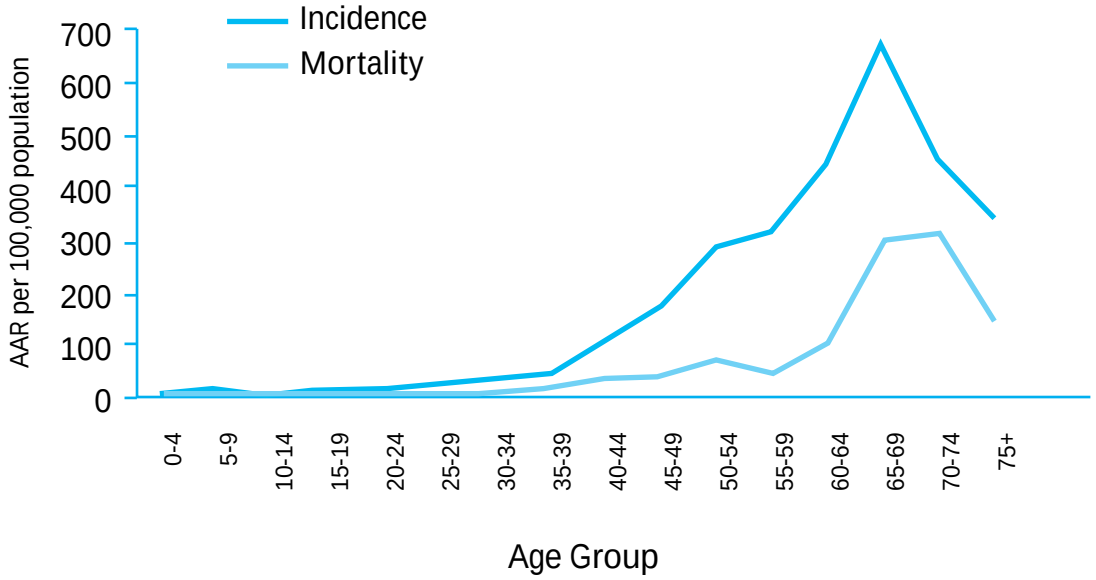


Figure 31: Age Specific Incidence and Mortality Rate for all Sites & Cases by Age Group – Female

Other and Unspecified Sites

The registry also recorded other and unspecified sites which includes

C26- Other and ill-defined digestive organ,

C39- Other and ill-defined sites within respiratory systems and interthoracic intrathoracic organ,

C48- Retroperitoneum and peritoneum,

C75- Other endocrine glands and related structures,

C76- Other and ill defined, secondary and unspecified sites,

C77- Secondary and unspecified malignant neoplasm of lymph node,

C78-Secondary malignant neoplasm of respiratory and digestive organs,

C79- Secondary malignant neoplasm of other and unspecified sites,

C80-Malignant neoplasm without specification of site and

C97-Malignant neoplasm of independent (primary)multiple.

17 cases (4.18%) are of others and unspecified sites in male. The distribution is,

C80-Primary unknown (2.96%),

Other and ill-defined sites i.e. C26, C48, and C76 (0.25% , 0.49 and 0.49%) respectively.

6 cases (1.4%) are of others and unspecified sites in female. The distribution is,

C80-Primary unknown (0.7%),

Other and ill-defined sites i.e. C26 and C76 (0.47% and 0.23%) respectively

Due to availability of comprehensive and advanced cancer diagnostic and treatment facility present in and around the city, and due to reasonably well documented hospital records, the registry recorded very few other and unspecified cancer cases which is a good indicator of an ideal cancer registry (Table 9).

Table 9: Other and unspecified cases by sex

ICD	Male		Female	
	Number	%	Number	%
C 26	1	0.25	2	0.47
C48	2	0.49	0	0
C76	2	0.49	1	0.23
C80	12	2.96	3	0.70
Total	17/406	4.18	6/427	1.4

Table 10 : Cancer of Other and Unspecified (C26, C39, C48, C75, C76, C77, C78, C79, C80, C97) Primary Site

	Male	Female
Number of cases	17	06
% to total cases	4.2	1.4
Crude incidence rate per 100,000	2.8	1.2
Age adjusted incidence rate per 100,000 population	3.6	1.4
Truncated rate per 100,000	4.1	2

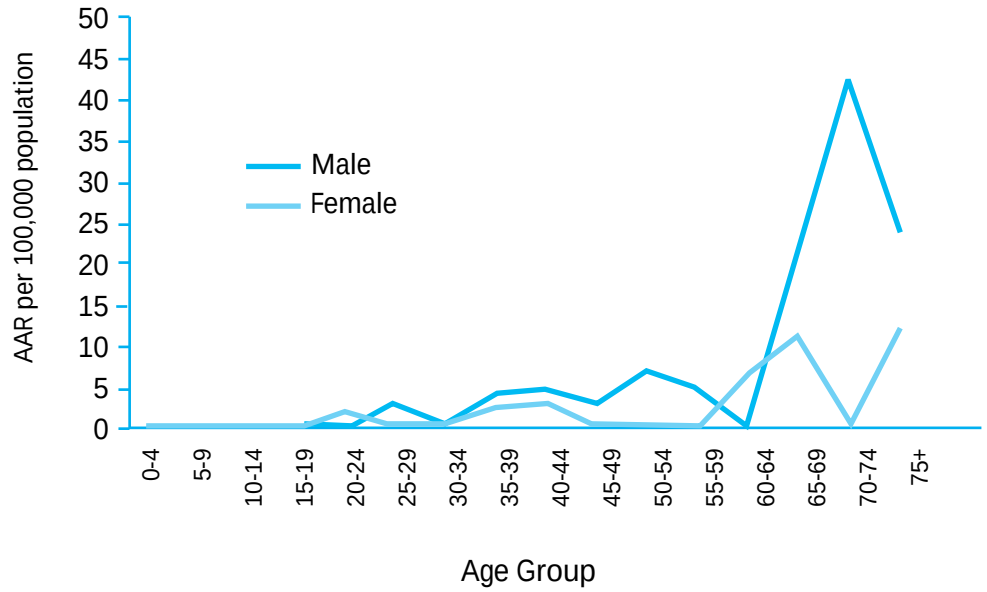


Figure 32: Age Specific Incidence Rate of Other and Unspecified

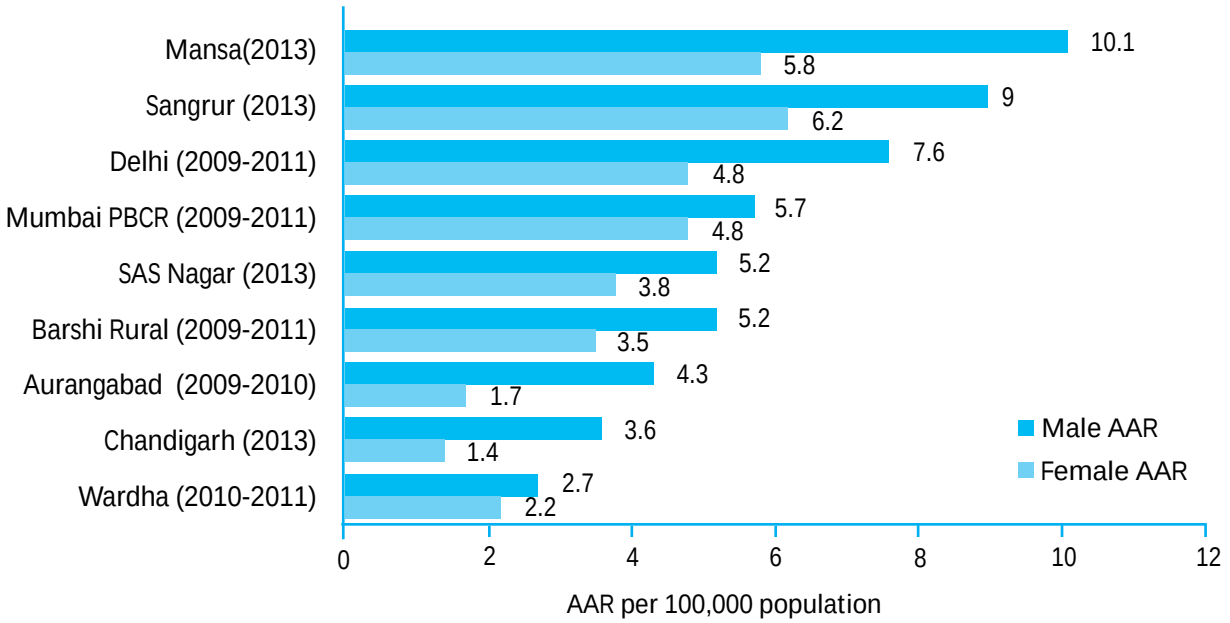
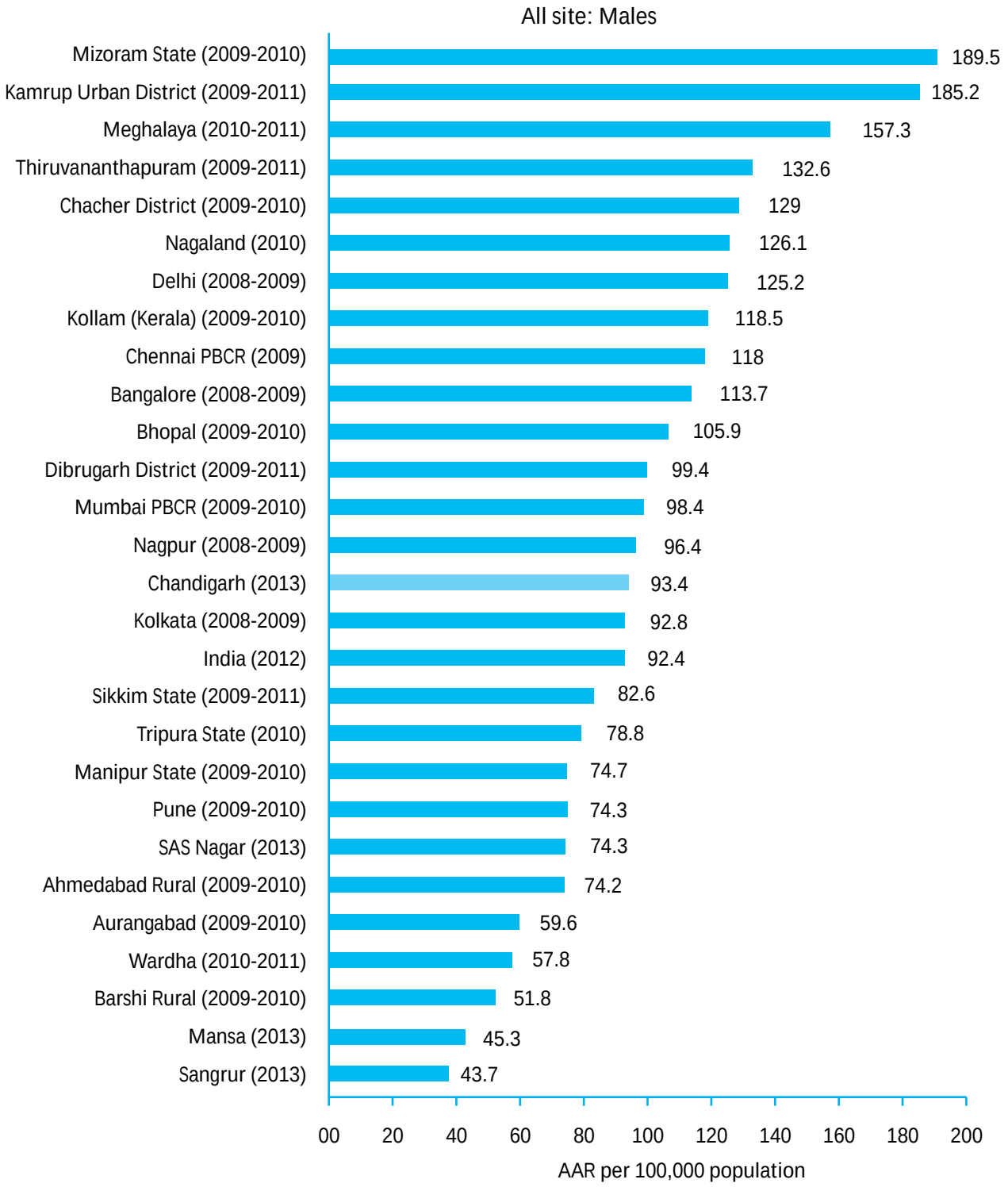


Figure 33: Comparison of Other and Unspecified Cancer Incidence Rate with other Indian Registries

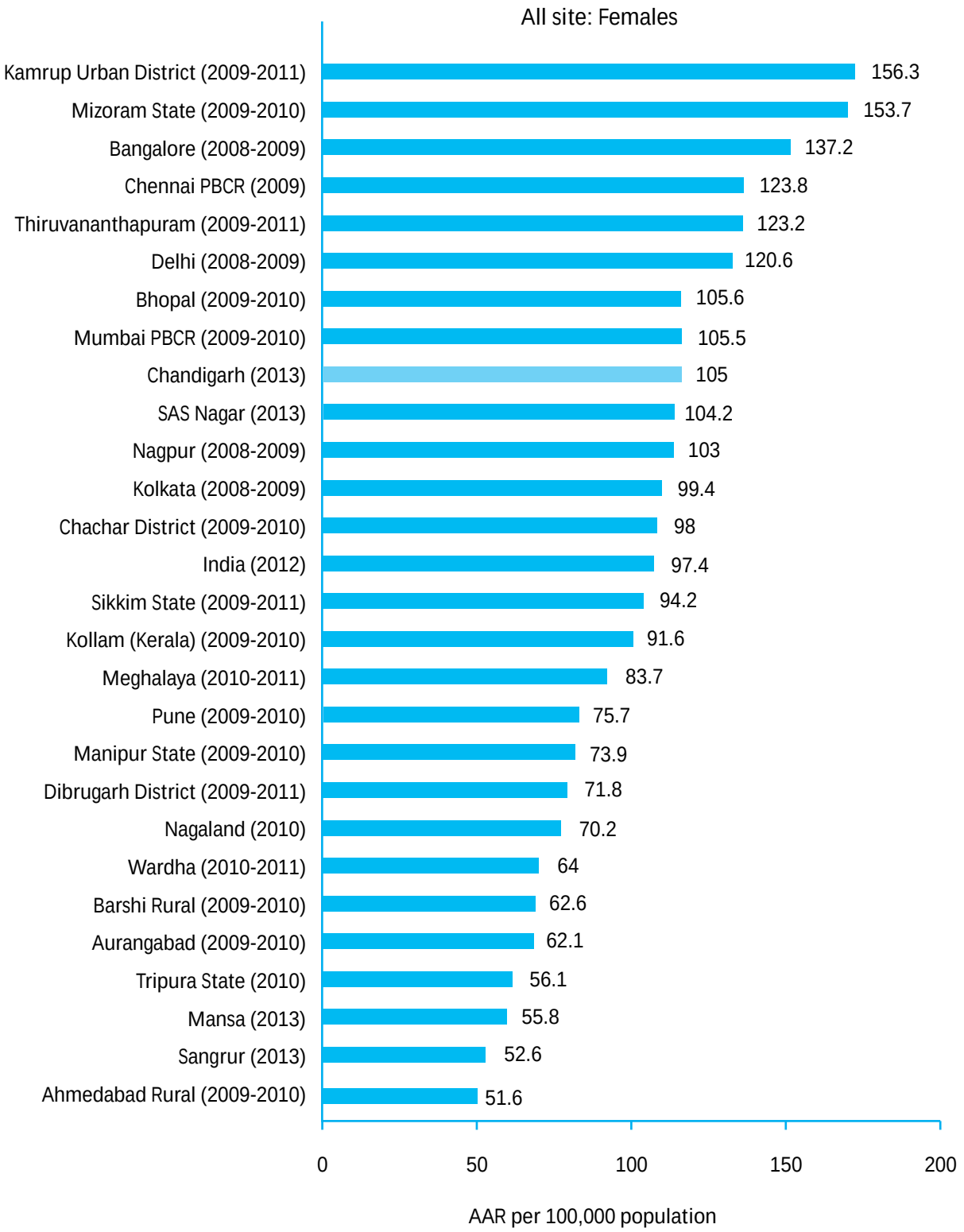
10. Comparison of cancer incidence rate with other Indian registries

Age adjusted rate for all cancer sites for both sexes of Chandigarh for the year 2013 are compared with the rates of other PBCRs of India (Figure 36 & 37). The AAR for male in Chandigarh is little higher than national average and is very well lower than Delhi and Bangalore. Among female, the estimates for Chandigarh is very well above the national average and presents nearly an equal rate with Mumbai.



Source: NCRP-ICMR- Three year report of PBCR 2009-2011, Bangalore: 2013, Globocan 2012.

Figure 34: Comparison of all Cancer Sites AAR of Chandigarh with other Registries of India-Male



Source: NCRP-ICMR- Three year report of PBCR 2009-2011, Bangalore: 2013, Globocan 2012.

Figure 35: Comparison of all Cancer Sites AAR of Chandigarh with other Registries of India-Female

11. Hurdles in Establishing the Urbaan PBCR

Permission letters were given to all the government and private hospitals and pathology laboratories at the very outset to allow the staff to access the data related to cancer patients. Registry staff received good cooperation from almost all the treatment facilities except two pathology labs and one hospital which refused to provide the data.

Due to rapid urbanization going on in Chandigarh, migration of considerable proportion of persons from neighbouring states is predominantly seen. The principal criterion for the inclusion of cases in the registry was that the patient should have been residing in Chandigarh for at least a year at the time of first diagnosis of cancer. During home visits, if the case was found to be of other state then that case was not included. Therefore, the registry staff had to ensure that they include 'residents 'and exclude 'non-residents' and migrants from the registry data. Incomplete addresses and phone numbers on the hospital files or in pathology lab reports made it difficult for the staff to trace the cases during home visits.

There was attrition of trained staff i.e., in the initial period few of the staff members left the job in search of better job opportunities. So new staff was appointed and was given training both at TMC, Mumbai and PGIMER, Chandigarh on various aspects of cancer registration. Lack of manpower made it difficult to cover the complete geographical area.

Cancer is still not a notifiable disease in Chandigarh, information on cancer patients was obtained actively from various treatment facilities in the registry area. Home visits were done extensively to confirm all the captured cases for better cancer reporting and registration.

A total of 1771 forms were filled for the year 2013 out of which 833 cases (47%) were finally registered. There were around 15% duplicate forms derived from different sources . Around 13% belonged to other year and 18% of patients were resident of other states who gave registry area address while admission (Table 11).

Table 11: Total work done by PBCR, Chandigarh.

Sr.No.	Name	Number of Cases
1	Total number of cancer cases registered	833 (47%)
2	Other Year	235 (13.3%)
3	Other State	323 (18.3%)
4	Duplicates	260 (14.7%)
5	Fibroadenoma, lipoma and other benign tumors	46 (2.6%)
6	Refused to share the information	14 (0.8%)
7	Wrong Address	60 (3.4%)
Total number of forms filled		1771

12. Conclusion and Recommendations

Despite peculiar challenges of establishing urban PBCRs, the first year of PBCR in Chandigarh could achieve most of the quality parameters and may be considered for inclusion of data into Cancer Incidence in Five Continents. Based on the cancer profile of the city, organized cancer screening, early detection, prevention and cancer control activities should be initiated. The exploration of causes for leading cancers, especially lung and breast cancer needs further research. Cancer should be made notifiable by administrative order as it has been done in neighboring states of Punjab and Haryana.

13. Glossary of Statistical Terms Used

Incidence: Cancer incidence denotes new cases diagnosed in a defined population in a specified time period. For this report, all cancer cases diagnosed from 1st January 2013 to 31st December 2013 in the Chandigarh area have been included.

Mortality: Cancer mortality is defined as the number of cancer deaths occurring in a defined population, in a defined geographic area during a particular year(s) per 100,000 population.

Rates: Rates for cancer are always expressed per 100,000 population.

Crude Incidence Rate: The crude incidence is the rate at which new cases occur in a population during a specific period.

$$CR = \frac{\text{Number of new cancer cases observed in 2013}}{\text{Estimated population of the same year}} \times 100{,}000$$

This rate is called crude because it relates to each population as a whole and is influenced by the age structure of each population.

Age Specific Rate: This refers to the rate obtained by division of the total number of cancer cases by the corresponding estimated population in that age group and sex/site/geographic area/time period and multiplying by 100,000

Age Adjusted or Age Standardized Rate (AAR): Age adjustment is a statistical method that corrects for the changing age distribution of the population and allows comparisons to be made in the adjusted rates between different population across the geographical area.

Truncated Rates: This is similar to the age adjusted rate except that it is calculated to the truncated age group 35-64 years of age.

14. Standard Registry Tables

Table 12: Number of Incidence Cancers by Five Year Age Group and Site (ICD 10): 2013 – Males Chandigarh

% = Relative Proportion of Cancers of All Sites

ICD 10	Sites	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	Total	%
C00	Lip	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	0.2
C01-02	Tongue	-	-	-	-	-	-	-	1	2	2	3	3	4	2	2	-	19	4.7
C03-06	Mouth	-	-	-	-	-	1	-	-	3	1	3	4	3	3	-	2	20	5.0
C07-08	Salivary glands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.2
C09	Tonsil	-	-	-	-	-	-	1	-	1	2	1	-	2	-	-	-	7	1.7
C10	Other oropharynx	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	0.5
C11	Nasopharynx	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	0.2
C12-13	Hypopharynx	-	-	-	-	-	-	-	-	-	-	3	-	3	2	1	-	9	2.2
C14	Pharynx unspecified	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	0.2
C15	Oesophagus	-	-	-	-	-	-	1	1	1	3	5	3	6	-	2	4	26	6.4
C16	Stomach	-	-	-	-	-	1	-	-	-	2	2	1	2	2	1	2	13	3.2
C17	Small intestine	-	-	-	-	-	1	1	1	-	-	-	-	1	-	-	-	4	1.0
C18	Colon	-	-	-	-	-	-	1	-	2	-	2	2	1	-	1	-	9	2.2
C19-20	Rectum	-	-	-	-	-	1	1	-	-	-	1	1	-	2	1	1	8	2.0
C21	Anus	-	-	-	-	-	-	-	-	1	-	-	1	-	-	1	-	3	0.7
C22	Liver	-	-	-	-	1	-	-	-	-	-	1	1	2	3	1	1	10	2.5
C23-24	Gallbladder etc.	-	-	-	-	-	-	-	-	1	1	3	-	3	4	2	2	16	4.0
C25	Pancreas	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	3	6	1.5
C30-31	Nose, sinuses etc.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	0.2
C32	Larynx	-	-	-	-	-	-	-	-	2	2	2	4	3	5	-	1	19	4.7
C33-34	Trachea, bronchus and lung	-	-	-	-	-	1	1	-	2	3	10	8	10	9	3	6	53	13.1
C37-38	Other thoracic organs	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	0.2
C40-41	Bone	-	-	-	2	-	-	1	-	-	-	-	-	-	-	-	1	4	1.0
C43	Melanoma of skin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C44	Other skin	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	2	0.5
C45	Mesothelioma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C46	Kaposi sarcoma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C47,C49	Connective and soft tissue	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	2	0.5
C50	Breast	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	-	4	1.0
C60	Penis	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	1	3	0.7
C61	Prostate	-	-	-	-	-	-	-	-	-	-	-	3	3	4	8	14	32	7.9
C62	Testis	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	2	0.5
C63	Other male genital organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C64	Kidney	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	3	5	1.2
C65	Renal pelvis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C66	Ureter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C67	Bladder	-	-	-	-	-	-	-	-	1	2	-	2	3	1	7	2	18	4.5
C68	Other urinary organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C69	Eye	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C70-72	Brain, nervous system	-	2	-	-	-	1	-	1	2	-	2	-	2	1	2	-	13	3.2
C73	Thyroid	-	-	-	-	-	-	-	1	-	-	2	-	-	-	-	-	3	0.7
C74	Adrenal gland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C75	Other endocrine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C81	Hodgkin disease	-	1	1	1	1	-	1	-	1	-	-	1	-	-	-	-	7	1.7
C82-85,C96	Non-Hodgkin lymphoma	2	1	-	-	-	-	1	1	3	2	2	-	4	3	5	6	30	7.4
C88	Immunoproliferative diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C90	Multiple myeloma	-	-	-	-	-	-	-	-	1	-	2	-	2	1	-	6	12	3.0
C91	Lymphoid leukaemia	1	1	1	1	-	-	1	-	1	-	-	-	2	1	1	3	13	3.2
C92-94	Myeloid leukaemia	-	-	-	-	1	-	1	2	-	-	2	-	2	-	1	-	9	2.2
C95	Leukaemia unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
O&U	Other and unspecified*	-	-	-	-	-	2	-	2	2	1	2	1	-	2	3	2	17	4.2
	Total	3	5	2	5	3	10	11	11	26	26	51	39	60	48	44	62	406	100

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)

Table 13: Number of Incidence Cancers by Five Year Age Group and Site (ICD 10): 2013 – Females Chandigarh

% = Relative Proportion of Cancers of All Sites

ICD 10	Sites	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	Total	%
C00	Lip	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C01-02	Tongue	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	2	0.5
C03-06	Mouth	-	-	-	-	-	-	-	-	1	1	1	-	2	-	1	1	7	1.6
C07-08	Salivary glands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C09	Tonsil	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	0.2
C10	Other oropharynx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C11	Nasopharynx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C12-13	Hypopharynx	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	2	0.5
C14	Pharynx unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C15	Oesophagus	-	-	-	-	-	-	-	-	1	-	-	-	2	1	1	3	8	1.9
C16	Stomach	-	-	-	-	-	-	1	-	2	-	-	-	1	-	-	-	4	0.9
C17	Small intestine	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	0.2
C18	Colon	-	-	-	-	-	-	-	1	-	-	1	2	1	2	1	-	8	1.9
C19-20	Rectum	-	-	-	-	-	-	-	1	-	-	1	2	-	-	-	2	6	1.4
C21	Anus	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	1	3	0.7
C22	Liver	-	-	-	-	-	-	-	-	-	-	-	1	1	2	1	-	5	1.2
C23-24	Gallbladder etc.	-	-	-	-	1	-	-	1	6	2	5	2	2	3	1	2	25	5.9
C25	Pancreas	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	0.2
C30-31	Nose, sinuses etc.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C32	Larynx	-	-	-	-	-	-	-	-	-	-	2	-	2	-	-	-	4	0.9
C33-34	Trachea, bronchus and lung	-	-	-	-	-	-	-	-	-	1	-	3	1	6	3	2	16	3.8
C37-38	Other thoracic organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C40-41	Bone	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	3	0.7
C43	Melanoma of skin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C44	Other skin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	0.2
C45	Mesothelioma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C46	Kaposi sarcoma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C47,C49	Connective and soft tissue	-	-	1	-	-	-	-	-	-	1	-	-	1	-	-	-	3	0.7
C50	Breast	-	-	-	-	1	4	3	6	13	20	29	21	25	17	8	7	154	36.2
C51	Vulva	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	0.2
C52	Vagina	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	0.2
C53	Cervix uteri	-	-	-	-	-	1	4	2	4	5	5	7	5	6	3	1	43	10.1
C54	Corpus uteri	-	-	-	-	-	-	-	2	1	1	3	4	4	4	-	1	20	4.7
C55	Uterus unspecified	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	2	0.5
C56	Ovary	-	-	-	1	-	-	-	1	3	4	8	5	4	2	2	-	30	7.0
C57	Other female genital organs	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	2	0.5
C58	Placenta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C64	Kidney	-	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	3	0.7
C65	Renal pelvis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C66	Ureter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C67	Bladder	-	-	-	-	1	1	-	-	-	1	-	-	2	-	-	1	6	1.4
C68	Other urinary organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C69	Eye	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C70-72	Brain, nervous system	2	1	-	-	1	-	-	-	-	2	1	-	-	-	-	-	7	1.6
C73	Thyroid	-	-	-	-	-	4	2	-	1	-	-	-	-	-	-	1	8	1.9
C74	Adrenal gland	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	0.2
C75	Other endocrine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C81	Hodgkin disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.2
C82-85,C96	Non-Hodgkin lymphoma	-	-	-	2	-	-	-	-	-	2	3	1	2	6	2	1	19	4.5
C88	Immunoproliferative diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
C90	Multiple myeloma	-	-	-	-	-	-	-	-	-	1	2	1	2	1	1	-	8	1.9
C91	Lymphoid leukaemia	-	1	-	-	-	-	-	-	-	1	1	-	1	1	-	1	6	1.4
C92-94	Myeloid leukaemia	-	1	-	1	-	-	1	-	1	1	-	1	1	1	1	-	9	2.1
C95	Leukaemia unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
MPD	Myeloproliferative disorders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
MDS	Myelodysplastic syndromes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0
O&U	Other and unspecified*	-	-	-	-	1	-	-	1	1	-	-	-	1	1	-	1	6	1.4
	Total	2	5	2	5	5	11	12	17	36	48	64	53	61	54	26	26	427	100

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)

Table 14: Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) and Truncated (35-64 years) (TR) Incidence Rate per 100,000 population in 2013, Chandigarh-Male.

ICD 10	ALL Ages	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+	Crude Rate	AAR	TR
C00	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.4	-	0.2	0.3	0
C01-02	19	-	-	-	-	-	-	-	2.1	5.1	5.8	10.8	13.8	26.3	22.1	30.8	-	3.1	4.2	9.4
C03-06	20	-	-	-	-	-	1.6	-	-	7.7	2.9	10.8	18.3	19.7	33.1	-	26.1	3.3	4.3	8.7
C07-08	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.1	0.2	0.3	0
C09	7	-	-	-	-	-	-	1.9	-	2.6	5.8	3.6	-	13.2	-	-	-	1.2	1.3	3.9
C10	2	-	-	-	-	-	-	-	-	-	-	-	-	13.2	-	-	-	0.3	0.5	1.7
C11	1	-	-	-	-	-	-	-	-	-	-	-	4.6	-	-	-	-	0.2	0.2	0.6
C12-13	9	-	-	-	-	-	-	-	-	-	-	10.8	-	19.7	22.1	15.4	-	1.5	2.3	4.3
C14	1	-	-	-	-	-	-	-	-	-	-	-	4.6	-	-	-	-	0.2	0.2	0.6
C15	26	-	-	-	-	-	-	1.9	2.1	2.6	8.6	18.0	13.8	39.5	-	30.8	52.3	4.3	5.6	12.4
C16	13	-	-	-	-	-	1.6	-	-	-	5.8	7.2	4.6	13.2	22.1	15.4	26.1	2.1	3.0	4.6
C17	4	-	-	-	-	-	1.6	1.9	2.1	-	-	-	-	6.6	-	-	-	0.7	0.6	1.3
C18	9	-	-	-	-	-	-	1.9	-	5.1	-	7.2	9.2	6.6	-	15.4	-	1.5	1.7	4.2
C19-20	8	-	-	-	-	-	1.6	1.9	-	-	-	3.6	4.6	-	22.1	15.4	13.1	1.3	1.8	1.2
C21	3	-	-	-	-	-	-	-	-	2.6	-	-	4.6	-	-	15.4	-	0.5	0.6	1.1
C22	10	-	-	-	-	1.4	-	-	-	-	-	3.6	4.6	13.2	33.1	15.4	13.1	1.6	2.6	2.9
C23-24	16	-	-	-	-	-	-	-	-	2.6	2.9	10.8	-	19.7	44.2	30.8	26.1	2.6	4.1	5.3
C25	6	-	-	-	-	-	-	-	-	-	2.9	3.6	-	-	11.0	-	39.2	1.0	1.5	1.1
C30-31	1	-	-	-	-	-	-	-	-	-	-	-	4.6	-	-	-	-	0.2	0.2	0.6
C32	19	-	-	-	-	-	-	-	-	5.1	5.8	7.2	18.3	19.7	55.2	-	13.1	3.1	4.5	8.2
C33-34	53	-	-	-	-	-	1.6	1.9	-	5.1	8.6	36.0	36.7	65.8	99.3	46.3	78.4	8.7	12.4	21.7
C37-38	1	-	-	-	-	-	-	-	-	-	2.9	-	-	-	-	-	-	0.2	0.2	0.6
C40-41	4	-	-	-	3.2	-	-	1.9	-	-	-	-	-	-	-	-	13.1	0.7	0.7	0
C43	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C44	2	-	-	-	1.6	-	1.6	-	-	-	-	-	-	-	-	-	-	0.3	0.3	0.3
C45	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C46	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C47,C49	2	-	-	-	-	-	-	-	-	-	-	3.6	-	-	-	-	13.1	0.3	0.4	0.6
C50	4	-	-	-	-	-	-	-	-	-	2.9	3.6	-	-	11.0	15.4	-	0.7	1.0	1.1
C60	3	-	-	-	-	-	-	-	2.1	-	2.9	-	-	-	-	-	13.1	0.5	0.6	0.9
C61	32	-	-	-	-	-	-	-	-	-	-	-	13.8	19.7	44.2	123	183.0	5.3	8.8	4.3
C62	2	-	-	-	-	-	1.6	-	-	-	2.9	-	-	-	-	-	-	0.3	0.3	0.6
C63	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C64	5	-	-	-	-	-	-	-	-	-	-	-	4.6	-	11.0	-	39.2	0.8	1.3	0.6
C65	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C66	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C67	18	-	-	-	-	-	-	-	-	2.6	5.8	-	9.2	19.7	11.0	107.9	26.1	3.0	4.7	5.3
C68	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C69	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C70-72	13	-	4.0	-	-	-	1.6	-	2.1	5.1	-	7.2	-	13.2	11.0	30.8	-	2.1	2.8	4.3
C73	3	-	-	-	-	-	-	-	2.1	-	-	7.2	-	-	-	-	-	0.5	0.5	1.6
C74	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C75	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C81	7	-	2.0	1.9	1.6	1.4	-	1.9	-	2.6	-	-	4.6	-	-	-	-	1.2	1.1	1.1
C82-85 C96	30	4.5	2.0	-	-	-	-	1.9	2.1	7.7	5.8	7.2	-	26.3	33.1	77.1	78.4	4.9	7.3	7.6
C88	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C90	12	-	-	-	-	-	-	-	-	2.6	-	7.2	-	13.2	11.0	-	78.4	2.0	2.9	3.4
C91	13	2.3	2.0	1.9	1.6	-	-	1.9	-	2.6	-	-	-	13.2	11.0	15.4	39.2	2.1	3.0	3.4
C92-94	9	-	-	-	-	1.4	-	1.9	4.2	-	-	7.2	-	13.2	-	15.4	-	1.5	1.7	3.7
C95	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
O&U*	17	-	-	-	-	-	3.1	-	4.2	5.1	2.9	7.2	4.6		22.1	46.3	26.1	2.8	3.6	4.1
Total	406	6.8	10.0	3.8	8.0	4.2	15.7	21.1	23.0	66.5	74.8	183.6	178.9	394.9	529.9	678.5	810.4	66.9	93.4	135.5

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)

Table 15: Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) and Truncated (35-64 years) (TR) Incidence Rate per 100,000 population in 2013, Chandigarh- Female.

ICD 10	ALL Ages	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+	Crude Rate	AAR	TR
C00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0
C01-02	2	-	-	-	-	-	-	-	2.5	-	-	-	5.8	-	-	-	-	0.4	0.4	0.1
C03-06	7	-	-	-	-	-	-	-	-	3.0	3.4	4.4	-	14.3	-	17.1	13.0	1.4	1.8	3.8
C07-08	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0	0
C09	1	-	-	-	-	-	-	-	-	-	-	-	-	-	12.2	-	-	0.2	0.4	0
C10	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0	0
C11	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0	0
C12-13	2	-	-	-	-	-	-	-	-	3.0	-	-	5.8	-	-	-	-	0.4	0.4	1.3
C14	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.0	0
C15	8	-	-	-	-	-	-	-	-	3.0	-	-	-	14.3	12.2	17.1	38.9	1.6	2.2	2.4
C16	4	-	-	-	-	-	-	2.3	-	5.9	-	-	-	7.1	-	-	-	0.8	0.8	2.1
C17	1	-	-	-	-	-	-	-	-	-	3.4	-	-	-	-	-	-	0.2	0.2	0.7
C18	8	-	-	-	-	-	-	-	2.5	-	-	4.4	11.6	7.1	24.4	17.1	-	1.6	2.2	3.6
C19-20	6	-	-	-	-	-	-	-	2.5	-	-	4.4	11.6	-	-	-	25.9	1.2	1.4	2.7
C21	3	-	-	-	-	-	-	-	-	-	6.8	-	-	-	-	-	13.0	0.6	0.7	1.3
C22	5	-	-	-	-	-	-	-	-	-	-	-	5.8	7.1	24.4	17.1	-	1	1.6	1.7
C23-24	25	-	-	-	-	1.8	-	-	2.5	17.7	6.8	21.8	11.6	14.3	36.6	17.1	25.9	5	5.8	12.1
C25	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.7
C30-31	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C32	4	-	-	-	-	-	-	-	-	-	-	8.7	-	14.3	-	-	-	0.8	1	3.2
C33-34	16	-	-	-	-	-	-	-	-	-	3.4	-	17.4	7.1	73.2	51.2	25.9	3.2	4.9	3.8
C37-38	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C40-41	3	-	2.4	-	2.2	-	1.9	-	-	-	-	-	-	-	-	-	-	0.6	0.6	0
C43	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C44	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.1	-	0.2	0.3	0
C45	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C46	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C47,C49	3	-	-	2.4	-	-	-	-	-	-	3.4	-	-	7.1	-	-	-	0.6	0.7	1.6
C50	154	-	-	-	-	1.8	7.6	6.9	14.9	38.4	67.7	126.3	122.1	178.4	207.4	136.6	90.7	30.8	38	82.6
C51	1	-	-	-	-	-	-	-	-	-	3.4	-	-	-	-	-	-	0.2	0.2	0.7
C52	1	-	-	-	-	-	-	-	-	-	-	-	5.8	-	-	-	-	0.2	0.2	0.8
C53	43	-	-	-	-	-	1.9	9.1	5.0	11.8	16.9	21.8	40.7	35.7	73.2	51.2	13.0	8.6	10	19.9
C54	20	-	-	-	-	-	-	-	5.0	3.0	3.4	13.1	23.3	28.5	48.8	-	13.0	4	5.1	11
C55	2	-	-	-	-	-	-	-	2.5	-	-	-	-	7.1	-	-	-	0.4	0.4	1.4
C56	30	-	-	-	2.2	-	-	-	2.5	8.9	13.5	34.8	29.1	28.5	24.4	34.2	-	6	7.2	17.9
C57	2	-	-	-	-	-	-	-	-	-	3.4	4.4	-	-	-	-	-	0.4	0.4	1.4
C58	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C64	3	-	2.4	2.4	-	-	-	-	-	3.0	-	-	-	-	-	-	-	0.6	0.6	0.6
C65	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C66	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C67	6	-	-	-	-	1.8	1.9	-	-	-	3.4	-	-	14.3	-	-	13.0	1.2	1.3	2.4
C68	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C69	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C70-72	7	5.1	2.4	-	-	1.8	-	-	-	-	6.8	4.4	-	-	-	-	-	1.4	1.6	2.0
C73	8	-	-	-	-	-	7.6	4.6	-	3.0	-	-	-	-	-	-	13.0	1.6	1.3	0.6
C74	1	-	-	-	-	-	-	2.3	-	-	-	-	-	-	-	-	-	0.2	0.1	0
C75	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C81	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.0	0.2	0.3	0
C82-85, C96	19	-	-	-	4.4	-	-	-	-	-	6.8	13.1	5.8	14.3	73.2	34.2	13.0	3.8	5.4	6.0
C88	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
C90	8	-	-	-	-	-	-	-	-	-	3.4	8.7	5.8	14.3	12.2	17.1	-	1.6	2.1	4.7
C91	6	-	2.4	-	-	-	-	-	-	-	3.4	4.4	-	7.1	12.2	-	13.0	1.2	1.6	2.3
C92-94	9	-	2.4	-	2.2	-	-	2.3	-	3.0	3.4	-	5.8	7.1	12.2	17.1	-	1.8	2.2	2.9
C95	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
O&U*	6	-	-	-	-	1.8	-	-	2.5	3.0	-			7.1	12.2		13.0	1.2	1.4	2.0
ALL	427	5.1	11.8	4.8	11.0	9.0	21.0	27.4	42.3	106.3	162.6	278.6	308.1	435.2	658.9	444.1	337.0	85.3	105	201.1

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)

Table 16: Cumulative Rate (Cu. Rate %) & Cumulative Risk (Cu.Risk) of Individual Sites (ICD 10) based on Age Specific Rates (from 0-64 years and 0-74 years) 2013, Chandigarh: Male

ICD 10	Site	0-64 Years		0-74 Years	
		Cu. Rate %	Cu Risk %	Cu. Rate %	Cu Risk %
C00	Lip	0	0	0.08	0.08
C01-02	Tongue	0.32	0.32	0.58	0.58
C03-06	Mouth	0.31	0.31	0.47	0.47
C07-08	Salivary glands	0	0	0	0
C09	Tonsil	0.13	0.13	0.13	0.13
C10	Other oropharynx	0.07	0.07	0.07	0.07
C11	Nasopharynx	0.02	0.02	0.02	0.02
C12-13	Hypopharynx	0.15	0.15	0.34	0.34
C14	Pharynx unspecified	0.02	0.02	0.02	0.02
C15	Oesophagus	0.43	0.43	0.59	0.59
C16	Stomach	0.16	0.16	0.35	0.35
C17	Small intestine	0.06	0.06	0.06	0.06
C18	Colon	0.15	0.15	0.23	0.23
C19-20	Rectum	0.06	0.06	0.25	0.25
C21	Anus	0.04	0.04	0.11	0.11
C22	Liver	0.11	0.11	0.36	0.36
C23-24	Gallbladder etc.	0.18	0.18	0.55	0.55
C25	Pancreas	0.03	0.03	0.09	0.09
C30-31	Nose, sinuses etc.	0.02	0.02	0.02	0.02
C32	Larynx	0.28	0.28	0.56	0.56
C33-34	Trachea, bronchus and lung	0.78	0.78	1.51	1.51
C37-38	Other thoracic organs	0.01	0.01	0.01	0.01
C40-41	Bone	0.03	0.03	0.03	0.03
C43	Melanoma of skin	0	0	0	0
C44	Other skin	0.02	0.02	0.02	0.02
C45	Mesothelioma	0	0	0	0
C46	Kaposi sarcoma	0	0	0	0
C47,C49	Connective and soft tissue	0.02	0.02	0.02	0.02
C50	Breast	0.03	0.03	0.16	0.16
C60	Penis	0.02	0.02	0.02	0.02
C61	Prostate	0.17	0.17	1.01	1.01
C62	Testis	0.02	0.02	0.02	0.02
C63	Other male genital organs	0	0	0	0
C64	Kidney	0.02	0.02	0.08	0.08
C65	Renal pelvis	0	0	0	0
C66	Ureter	0	0	0	0
C67	Bladder	0.19	0.19	0.78	0.78
C68	Other urinary organs	0	0	0	0
C69	Eye	0	0	0	0
C70-72	Brain, nervous system	0.17	0.17	0.38	0.38
C73	Thyroid	0.05	0.05	0.05	0.05
C74	Adrenal gland	0	0	0	0
C75	Other endocrine	0	0	0	0
C81	Hodgkin disease	0.08	0.08	0.08	0.08
C82-85,C96	Non-Hodgkin lymphoma	0.29	0.29	0.84	0.84
C88	Immunoproliferative diseases	0	0	0	0
C90	Multiple myeloma	0.11	0.11	0.17	0.17
C91	Lymphoid leukemia	0.13	0.13	0.26	0.26
C92-94	Myeloid leukemia	0.14	0.14	0.22	0.22
C95	Leukemia unspecified	0	0	0	0
	Other and unspecified*	0.14	0.14	0.48	0.48
ALL	All sites	4.96	4.96	11	11

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)

Table 17: Cumulative Rate (Cu. Rate %) & Cumulative Risk (Cu.Risk) of individual Sites (ICD 10) based on Age Specific Rates (from 0-64 years and 0-74 years) 2013, Chandigarh: Female

ICD 10	Site	0-64 Years		0-74 Years	
		Cu. Rate %	Cu Risk %	Cu. Rate %	Cu Risk %
C00	Lip	0	0	0	0
C01-02	Tongue	0.04	0.04	0.04	0.04
C03-06	Mouth	0.12	0.12	0.21	0.21
C07-08	Salivary glands	0	0	0	0
C09	Tonsil	0	0	0.06	0.06
C10	Other oropharynx	0	0	0	0
C11	Nasopharynx	0	0	0	0
C12-13	Hypopharynx	0.04	0.04	0.04	0.04
C14	Pharynx unspecified	0	0	0	0
C15	Oesophagus	0.09	0.09	0.23	0.23
C16	Stomach	0.08	0.08	0.08	0.08
C17	Small intestine	0.02	0.02	0.02	0.02
C18	Colon	0.13	0.13	0.34	0.34
C19-20	Rectum	0.09	0.09	0.09	0.09
C21	Anus	0.03	0.03	0.03	0.03
C22	Liver	0.06	0.06	0.27	0.27
C23-24	Gallbladder etc.	0.38	0.38	0.65	0.65
C25	Pancreas	0.02	0.02	0.02	0.02
C30-31	Nose, sinuses etc.	0	0	0	0
C32	Larynx	0.11	0.11	0.11	0.11
C33-34	Trachea, bronchus and lung	0.14	0.14	0.76	0.76
C37-38	Other thoracic organs	0	0	0	0
C40-41	Bone	0.03	0.03	0.03	0.03
C43	Melanoma of skin	0	0	0	0
C44	Other skin	0	0	0.09	0.09
C45	Mesothelioma	0	0	0	0
C46	Kaposi sarcoma	0	0	0	0
C47,C49	Connective and soft tissue	0.06	0.06	0.06	0.06
C50	Breast	2.82	2.82	4.54	4.54
C51	Vulva	0.02	0.02	0.02	0.02
C52	Vagina	0.03	0.03	0.03	0.03
C53	Cervix uteri	0.71	0.71	1.34	1.34
C54	Corpus uteri	0.38	0.38	0.62	0.62
C55	Uterus unspecified	0.05	0.05	0.05	0.05
C56	Ovary	0.6	0.6	0.89	0.89
C57	Other female genital organs	0.04	0.04	0.04	0.04
C58	Placenta	0	0	0	0
C64	Kidney	0.04	0.04	0.04	0.04
C65	Renal pelvis	0	0	0	0
C66	Ureter	0	0	0	0
C67	Bladder	0.11	0.11	0.11	0.11
C68	Other urinary organs	0	0	0	0
C69	Eye	0	0	0	0
C70-72	Brain, nervous system	0.1	0.1	0.1	0.1
C73	Thyroid	0.08	0.08	0.08	0.08
C74	Adrenal gland	0.01	0.01	0.01	0.01
C75	Other endocrine	0	0	0	0
C81	Hodgkin disease	0	0	0	0
C82-85,C96	Non-Hodgkin lymphoma	0.22	0.22	0.76	0.76
C88	Immunoproliferative diseases	0	0	0	0
C90	Multiple myeloma	0.16	0.16	0.31	0.31
C91	Lymphoid leukemia	0.09	0.09	0.15	0.15
C92-94	Myeloid leukemia	0.13	0.13	0.28	0.28
C95	Leukemia unspecified	0	0	0	0
O&U	Other and unspecified*	0.07	0.07	0.13	0.13
ALL	All sites	7.12	7.12	12.63	12.63

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)

Table 18 : Incidence Cancer Case Distribution based on Method of Diagnosis in 2013, Chandigarh-Male

ICD 10	Site	Radiology		Endoscopy		Microscopic		Death Certificate /Other**		Total	
		#	%	#	%	#	%	#	%	#	%
C00	Lip	0	0	0	0	1	0.2	0	0	1	0.2
C01-02	Tongue	0	0	0	0	19	4.7	0	0	19	4.7
C03-06	Mouth	0	0	0	0	20	4.9	0	0	20	5.0
C07-08	Salivary glands	0	0	0	0	1	0.2	0	0	1	0.2
C09	Tonsil	0	0	0	0	7	1.7	0	0	7	1.7
C10	Other oropharynx	0	0	0	0	2	0.5	0	0	2	0.5
C11	Nasopharynx	0	0	0	0	1	0.2	0	0	1	0.2
C12-13	Hypopharynx	0	0	0	0	9	2.2	0	0	9	2.2
C14	Pharynx unspecified	0	0	0	0	1	0.2	0	0	1	0.2
C15	Oesophagus	0	0	0		24	5.9	2	0.5	26	6.4
C16	Stomach	1	0.2	0	0	12	3.0	0	0	13	3.2
C17	Small intestine	0	0	0	0	4	1.0	0	0	4	1.0
C18	Colon	0	0	0	0	9	2.2	0	0	9	2.2
C19-20	Rectum	0	0	0	0	8	2.0	0	0	8	2.0
C21	Anus	0	0	0	0	3	0.7	0	0	3	0.7
C22	Liver	1	0.2	1	0.2	8	2.0	0	0	10	2.5
C23-24	Gallbladder etc.	0	0	0	0	16	3.9	0	0	16	4.0
C25	Pancreas	2	0.5	0	0	4	1.0	0	0	6	1.5
C30-31	Nose, sinuses etc.	0	0	0	0	1	0.2	0	0	1	0.2
C32	Larynx	0	0	0	0	19	4.7	0	0	19	4.7
C33-34	Trachea, bronchus and lung	0	0	0		50	12.3	3	0.7	53	13.1
C37-38	Other thoracic organs	0	0	0	0	1	0.2	0	0	1	0.2
C40-41	Bone	0		0	0	3	0.7	1	0.2	4	1.0
C43	Melanoma of skin		0	0	0	0	0	0	0	0	0.0
C44	Other skin	0	0	0	0	2	0.5	0	0	2	0.5
C45	Mesothelioma	0	0	0	0	0	0	0	0	0	0.0
C46	Kaposi sarcoma	0	0	0	0	0	0	0	0	0	0.0
C47,C49	Connective and soft tissue	0	0	0	0	2	0.5	0	0	2	0.5
C50	Breast	0	0	0	0	4	1.0	0	0	4	1.0
C60	Penis	0	0	0	0	3	0.7	0	0	3	0.7
C61	Prostate	0	0	0	0	32	7.9	0	0	32	7.9
C62	Testis	0	0	0	0	2	0.5	0	0	2	0.5
C63	Other male genital organs	0	0	0	0	0	0	0	0	0	0.0
C64	Kidney	1	0.2	0	0	4	1.0	0	0	5	1.2
C65	Renal pelvis	0	0	0	0	0	0	0	0	0	0.0
C66	Ureter	0	0	0	0	0	0	0	0	0	0.0
C67	Bladder	0	0	0	0	18	4.4	0	0	18	4.5
C68	Other urinary organs	0	0	0	0	0	0	0	0	0	0.0
C69	Eye	0	0	0	0	0	0	0	0	0	0.0
C70-72	Brain, nervous system	1	0.2	0	0	12	3.0	0	0	13	3.2
C73	Thyroid	1	0.2	0	0	2	0.5	0	0	3	0.7
C74	Adrenal gland	0	0	0	0	0	0	0	0	0	0.0
C75	Other endocrine	0	0	0	0	0	0	0	0	0	0.0
C81	Hodgkin disease	0	0	0	0	7	1.7	0	0	7	1.7
C82-85,C96	Non-Hodgkin lymphoma	0	0	0	0	30	7.4	0	0	30	7.4
C88	Immunoproliferative diseases	0	0	0	0	0	0	0	0	0	0.0
C90	Multiple myeloma	0	0	0	0	12	3.0	0	0	12	3.0
C91	Lymphoid leukemia	0	0	0	0	13	3.2	0	0	13	3.2
C92-94	Myeloid leukemia	0	0	0		9	2.2	0	0	9	2.2
C95	Leukemia unspecified	0	0	0	0	0	0	0	0	0	0.0
O & U	Other and unspecified*	0	0	0	0	14	3.4	3	0.7	17	4.2
All	All sites	7	1.7	1	0.2	389	95.8	9	2.2	406	100

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)
** Other: Information based on patients relatives / medical note

Table 19: Incidence Cancer Case Distribution based on Method of Diagnosis in 2013, Chandigarh-Female

ICD 10	Site	Radiology		Endoscopy		Microscopic		Death Certificate /Other**		Total	
		#	%	#	%	#	%	#	%	#	%
C00	Lip	0	0	0	0	0	0	0	0	0	0.0
C01-02	Tongue	0	0	0	0	2	0.5	0	0	2	0.5
C03-06	Mouth	0	0	0	0	7	1.6	0	0	7	1.6
C07-08	Salivary glands	0	0	0	0	0	0	0	0	0	0.0
C09	Tonsil	0	0	0	0	1	0.2	0	0	1	0.2
C10	Other oropharynx	0	0	0	0	0	0	0	0	0	0.0
C11	Nasopharynx	0	0	0	0	0	0	0	0	0	0.0
C12-13	Hypopharynx	0	0	0	0	2	0.5	0	0	2	0.5
C14	Pharynx unspecified	0	0	0	0	0	0	0	0	0	0.0
C15	Oesophagus	0	0	0	0	8	1.9	0	0	8	1.9
C16	Stomach	0	0	0	0	4	0.9	0	0	4	0.9
C17	Small intestine	0	0	0	0	1	0.2	0	0	1	0.2
C18	Colon	0	0	0	0	8	1.9	0	0	8	1.9
C19-20	Rectum	0	0	0	0	6	1.4	0	0	6	1.4
C21	Anus	0	0	0	0	3	0.7	0	0	3	0.7
C22	Liver	0	0	0		5	1.2	0	0	5	1.2
C23-24	Gallbladder etc.	0	0	0	0	25	5.9	0	0	25	5.9
C25	Pancreas	0	0	0	0	1	0.2	0	0	1	0.2
C30-31	Nose, sinuses etc.	0	0	0	0	0	0.0	0	0	0	0.0
C32	Larynx	0	0	0	0	4	0.9	0	0	4	0.9
C33-34	Trachea, bronchus and lung	0	0	0	0	16	3.8	0		16	3.8
C37-38	Other thoracic organs	0	0	0	0	0	0.0	0	0	0	0.0
C40-41	Bone	0	0	0	0	3	0.7	0	0	3	0.7
C43	Melanoma of skin	0	0	0	0	0	0.0	0	0	0	0.0
C44	Other skin	0	0	0	0	1	0.2	0	0	1	0.2
C45	Mesothelioma	0	0	0	0	0	0.0	0	0	0	0.0
C46	Kaposi sarcoma	0	0	0	0	0	0.0	0	0	0	0.0
C47,C49	Connective and soft tissue	0	0	0	0	3	0.7	0	0	3	0.7
C50	Breast	1	0.2	0	0	152	35.6	1	0.2	154	36.2
C51	Vulva	0	0	0	0	1	0.2	0	0	1	0.2
C52	Vagina	0	0	0	0	1	0.2	0	0	1	0.2
C53	Cervix uteri	0	0	0	0	43	10.1	0	0	43	10.1
C54	Corpus uteri	0	0	0	0	20	4.7	0		20	4.7
C55	Uterus unspecified	0	0	0	0	2	0.5	0	0	2	0.5
C56	Ovary	1	0.2	0	0	29	6.8		0	30	7.0
C57	Other female genital organs	0	0	0	0	2	0.5	0	0	2	0.5
C58	Placenta	0	0	0	0	0	0.0	0	0	0	0.0
C64	Kidney	0	0	0	0	3	0.7	0	0	3	0.7
C65	Renal pelvis	0	0	0	0	0	0.0	0	0	0	0.0
C66	Ureter	0	0	0	0	0	0.0	0	0	0	0.0
C67	Bladder	0	0	0	0	6	1.4	0	0	6	1.4
C68	Other urinary organs	0	0	0	0	0	0.0	0	0	0	0.0
C69	Eye	0	0	0	0	0	0.0	0	0	0	0.0
C70-72	Brain, nervous system	1	0.2	0	0	6	1.4	0	0	7	1.6
C73	Thyroid	0	0	0	0	8	1.9	0	0	8	1.9
C74	Adrenal gland	0	0	0	0	1	0.2	0	0	1	0.2
C75	Other endocrine	0	0	0	0	0	0.0	0	0	0	0.0
C81	Hodgkin disease	0	0	0	0	1	0.2	0	0	1	0.2
C82-85,C96	Non-Hodgkin lymphoma	0	0	0	0	19	4.5	0	0	19	4.5
C88	Immunoproliferative diseases	0	0	0	0	0	0.0	0	0	0	0.0
C90	Multiple myeloma	0	0	0	0	8	1.9	0	0	8	1.9
C91	Lymphoid leukaemia	0	0	0	0	6	1.4	0	0	6	1.4
C92-94	Myeloid leukaemia	0	0	0	0	9	2.1	0	0	9	2.1
C95	Leukaemia unspecified	0	0	0	0	0	0.0	0	0	0	0.0
O&U	Other and unspecified*	1	0.2	0	0	2	0.5	3	0.7	6	1.4
ALL	All sites	4	0.9	0	0	419	98.1	4	0.9	427	100

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)
** Other: Information based on patients relatives / medical note

Table 20: Age Group wise Distribution of Cancer Mortality Cases in 2013, Chandigarh-Male

ICD 10	Site	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+	Total	%
C00	Lip	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.6
C01-02	Tongue	0	0	0	0	0	0	0	1	0	1	1	3	4	0	0	0	10	6.1
C03-06	Mouth	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	2	6	3.6
C07-08	Salivary glands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C09	Tonsil	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1.2
C10	Other oropharynx	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	1.2
C11	Nasopharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C12-13	Hypopharynx	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.6
C14	Pharynx unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C15	Oesophagus	0	0	0	0	0	0	0	1	0	1	4	3	2	0	1	1	13	7.9
C16	Stomach	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	4	2.4
C17	Small intestine	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2	1.2
C18	Colon	0	0	0	0	0	0	0	0	0	0	2	1	0	1	0	0	4	2.4
C19-20	Rectum	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	1.2
C21	Anus	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	1.2
C22	Liver	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	1	6	3.6
C23-24	Gallbladder etc.	0	0	0	0	0	0	0	0	0	1	0	0	0	2	1	1	5	3
C25	Pancreas	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	2	5	3
C30-31	Nose, sinuses etc.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.6
C32	Larynx	0	0	0	0	0	0	0	0	0	0	1	1	1	2	0	0	5	3
C33-34	Trachea, bronchus and lung	0	0	0	0	0	0	0	0	2	1	7	2	6	3	4	6	31	8.9
C37-38	Other thoracic organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C40-41	Bone	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	3	1.8
C43	Melanoma of skin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C44	Other skin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C45	Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C46	Kaposi sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C47,C49	Connective and soft tissue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C50	Breast	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C60	Penis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.6
C61	Prostate	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	6	10	6.1
C62	Testis	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.6
C63	Other male genital organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C64	Kidney	0	0	0	0	0	0	0	0	0	0	1	2	0	1	1	0	5	3
C65	Renal pelvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C67	Bladder	0	0	0	0	0	0	0	0	0	1	0	1	2	2	0	2	8	4.8
C68	Other urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C69	Eye	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C70-72	Brain, nervous system	0	0	0	0	0	0	2	0	1	1	0	3	0	0	0	0	7	4.2
C73	Thyroid	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	3	1.8
C74	Adrenal gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C75	Other endocrine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C81	Hodgkin disease	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
C82-85, C96	Non-Hodgkin lymphoma	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	6	3.6
C88	Immunoproliferative diseases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C90	Multiple myeloma	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	3	1.8
C91	Lymphoid leukaemia	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1.2
C92-94	Myeloid leukaemia	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	1.2
C95	Leukaemia unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O&U	Other and unspecified*	0	0	0	0	0	0	0	1	1	1	1	1	0	2	3	1	11	6.7
ALL	All sites	0	1	0	1	1	1	4	4	6	12	21	23	30	19	14	27	164	100

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)

Table 21: Age Group wise Distribution of Cancer Mortality Cases in 2013, Chandigarh- Female

ICD 10	Site	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+	Total	%
C00	Lip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C01-02	Tongue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C03-06	Mouth	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.8
C07-08	Salivary glands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C09	Tonsil	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.8
C10	Other oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C11	Nasopharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C12-13	Hypopharynx	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.8
C14	Pharynx unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C15	Oesophagus	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	2	6	4.9
C16	Stomach	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	4	3.3
C17	Small intestine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C18	Colon	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	4	3.3
C19-20	Rectum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.8
C21	Anus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C22	Liver	0	0	0	0	0	0	0	0	0	0	0	1	0	2	1	0	4	3.3
C23-24	Gallbladder etc.	0	0	0	0	0	0	0	0	5	1	2	2	0	2	0	1	13	10.6
C25	Pancreas	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	1.6
C30-31	Nose, sinuses etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C32	Larynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C33-34	Trachea, bronchus and lung	0	0	0	0	0	0	0	0	0	2	2	1	0	1	3	1	10	8.1
C37-38	Other thoracic organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C40-41	Bone	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.8
C43	Melanoma of skin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C44	Other skin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.8
C45	Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C46	Kaposi sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C47,C49	Connective and soft tissue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C50	Breast	0	0	0	0	0	0	0	1	1	4	2	1	3	5	3	2	22	17.9
C51	Vulva	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C52	Vagina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C53	Cervix uteri	0	0	0	0	0	0	0	0	1	0	1	0	2	1	2	0	7	5.7
C54	Corpus uteri	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	3	2.4
C55	Uterus unspecified	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	1.6
C56	Ovary	0	0	0	0	0	0	0	1	0	0	2	2	1	2	3	0	11	8.9
C57	Other female genital organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C58	Placenta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C64	Kidney	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.8
C65	Renal pelvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C67	Bladder	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	3	2.4
C68	Other urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C69	Eye	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C70-72	Brain, nervous system	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	4	3.3
C73	Thyroid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C74	Adrenal gland	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.8
C75	Other endocrine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C81	Hodgkin disease	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	1.6
C82-85, C96	Non-Hodgkin lymphoma	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	3	2.4
C88	Immunoproliferative diseases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C90	Multiple myeloma	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	1.6
C91	Lymphoid leukaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C92-94	Myeloid leukaemia	0	1	0	0	0	0	0	1	0	0	0	0	0	2	1	0	5	4.1
C95	Leukaemia unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O&U	Other and unspecified*	0	0	0	0	1	0	0	0	1	2	0	0	2	1	0	1	8	6.5
ALL	All sites	1	1	1	1	1	1	2	5	11	10	15	7	14	24	18	11	123	100

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)

Table 22: Average Annual Age Specific (ASR), Crude (CR), Age Adjusted (AAR) and Truncated (35-64years) Mortality Rate per 100,000 population in 2013, Chandigarh-Male

ICD 10	ALL Ages	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+	CR	AAR	TR
C00	1	-	-	-	-	-	-	-	-	-	-	-	-	7.1	-	-	-	0.2	0.3	0.8
C01-02	10	-	-	-	-	-	-	-	2.1	-	2.9	3.6	13.8	26.3	-	-	-	1.7	2.1	6.7
C03-06	6	-	-	-	-	-	-	-	-	2.6	-	-	4.6	6.6	11.0	-	26.1	1.0	1.5	1.9
C07-08	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C09	2	-	-	-	-	-	-	-	-	-	-	-	-	13.2	-	-	-	0.3	0.5	1.7
C10	2	-	-	-	-	-	-	-	-	-	2.9	-	-	6.6	-	-	-	0.3	0.4	1.4
C11	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C12-13	1	-	-	-	-	-	-	-	-	-	-	-	-	6.58	-	-	-	0.2	0.3	0.8
C14	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	13	-	-	-	-	-	-	-	2.1	-	2.9	14.4	13.8	13.2	0	15.4	13.2	2.1	2.7	6.8
C16	4	-	-	-	-	-	1.6	-	-	-	2.9	-	-	6.6	-	-	13.1	0.7	0.8	1.4
C17	2	-	-	-	-	-	-	1.9	-	-	-	-	-	-	11.0	-	-	0.3	0.4	0
C18	4	-	-	-	-	-	-	-	-	-	-	7.2	4.6	-	11.0	-	-	0.7	0.9	1.6
C19-20	2	-	-	-	-	-	Ñ	-	-	-	-	-	4.6	-	-	-	13.1	0.3	0.4	0.6
C21	2	-	-	-	-	-	-	-	-	2.6	-	-	4.6	-	-	-	-	0.3	0.3	1.1
C22	6	-	-	-	-	-	-	-	-	-	-	-	4.6	13.2	11.0	15.4	13.1	1.0	1.6	2.3
C23-24	5	-	-	-	-	-	-	-	-	-	2.9	-	-	-	22.1	15.4	13.1	0.8	1.4	0.6
C25	5	-	-	-	-	-	-	-	-	-	2.9	-	-	-	11.0	15.4	26.1	0.8	1.3	0.6
C30-31	1	-	-	-	-	-	-	-	-	-	-	3.6	-	-	-	-	-	0.2	0.2	0.6
C32	5	-	-	-	-	-	Ñ	-	-	-	-	3.6	4.6	6.6	22.1	-	-	0.8	1.3	2.0
C33-34	31	-	-	-	-	-	-	-	-	5.1	2.9	25.2	9.2	39.5	33.1	61.7	78.4	5.1	7.5	11.9
C37-38	0	-	-	-	-	-	-	-	-	-	-	-	-	Ñ	-	-	-	-	-	-
C40-41	3	-	-	-	-	1.4	-	1.9	-	-	2.9	-	-	-	-	-	-	0.5	0.4	0.6
C43	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C44	0	-	-	-	-	-	-	-	-	-	-	-	-	Ñ	-	-	-	-	-	-
C45	0	-	-	-	-	-	-	-	-	-	Ñ	-	-	-	-	-	-	-	-	-
C46	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C50	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C60	1	-	-	-	-	-	-	-	-	-	Ñ	-	-	-	-	-	13.1	0.2	0.3	0
C61	10	-	-	-	-	-	-	-	-	-	-	3.6		19.8	-	-	78.4	1.7	2.5	3.1
C62	1	-	-	-	-	-	-	-	-	-	2.9	-	-	-	-	-	-	0.1	0.2	0.6
C63	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C64	5	-	-	-	-	-	-	-	-	-	-	3.6	9.2	-	11.0	15.4	-	0.8	1.2	1.8
C65	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C66	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C67	8	-	-	-	-	-	-	-	-	-	2.9	-	4.6	13.2	22.1	-	26.1	1.3	2.1	2.8
C68	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C69	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C70-72	7	-	-	-	-	-	-	3.8	-	2.6	2.9	-	13.8	-	-	-	-	1.2	1.1	2.8
C73	3	-	-	-	-	-	-	-	2.1	-	-	-	-	-	-	15.4	13.1	0.5	0.7	0.4
C74	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C75	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C82-85, C96	6	-	-	-	-	-	-	-	-	-	-	3.6	4.6	6.6	11.0	15.4	13.1	1.0	1.5	2.0
C88	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C90	3	-	-	-	-	-	-	-	-	-	-	-	4.6	6.6	-	15.4	-	05	0.8	1.4
C91	2	-	2.0	-	1.6	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.3	0
C92-94	2	-	-	-	-	-	-	-	-	-	-	3.6	-	-	11.0	-	-	0.3	0.5	0.6
C95	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
O&U*	11	-	-	-	-	-	-	-	2.1	2.6	2.9	3.6	4.6	-	22.1	46.3	13.1	1.8	2.7	2.6
ALL	164	-	2.0	-	1.6	1.4	1.6	7.7	8.4	15.3	34.5	75.6	105.5	197.5	209.8	215.9	352.9	27.0	38.1	62.6

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)

Table 23: Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) and Truncated (35-64 years) (TR) Mortality Rate per 100,000 population : 2013, Chandigarh- Female

ICD 10	ALL Ages	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+	CR	AAR	TR
C00	0	-	-	-	-	-	-	-	-	-	-	Ñ	-	-	-	-	-	-	-	-
C01-02	0	-	-	-	-	-	-	-	-	-	-	-	Ñ	-	Ñ	-	-	-	-	-
C03-06	1	-	-	-	-	-	-	-	-	-	-	4.4	-	-	-	-	-	0.2	0.2	0.7
C07-08	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C09	1	-	-	-	-	-	-	-	-	-	-	-	-	-	12.2	-	-	0.2	0.4	-
C10	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C11	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C12-13	1	-	-	-	-	-	-	-	-	3.0	-	-	-	-	-	-	-	0.2	0.2	0.6
C14	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	6	-	-	-	-	-	-	-	-	-	-	-	-	14.3	12.2	17.1	25.9	1.2	1.8	1.8
C16	4	-	-	-	-	-	-	-	-	5.9	-	-	-	-	12.2	17.1	-	0.8	1.1	1.1
C17	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C18	4	-	-	-	-	-	-	-	2.5	-	-	-	-	7.1	24.4	-	-	0.8	1.2	1.4
C19-20	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.1	-	0.2	0.3	-
C21	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C22	4	-	-	-	-	-	-	-	-	-	-	-	5.8	-	24.4	17.1	-	0.8	1.3	0.8
C23-24	13	-	-	-	-	-	-	-	-	14.8	3.4	8.7	11.6	-	24.4	-	13.0	2.6	3.0	6.4
C25	2	-	-	-	-	-	-	-	2.5	-	-	4.4	-	-	-	-	-	0.4	0.4	1.2
C30-31	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C32	0	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
C33-34	10	-	-	-	-	-	-	-	-	-	6.8	8.7	5.8	-	12.2	51.2	13.0	2.0	2.7	3.5
C37-38	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C40-41	1	-	-	-	-	-	1.9	-	-	-	-	-	-	-	-	-	-	0.2	0.2	-
C43	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C44	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.1	-	0.2	0.3	-
C45	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C46	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ñ	-
C50	22	-	-	-	-	-	-	-	2.5	3.0	13.5	8.7	5.8	21.4	61.0	51.2	25.9	4.4	6.0	8.6
C51	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C52	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C53	7	-	-	-	-	-	-	-	-	3.0	-	4.4	-	14.3	12.2	34.2	-	1.4	2.0	3.1
C54	3	-	-	-	-	-	-	-	-	-	-	-	-	7.1	12.2	-	13.0	0.6	0.9	0.9
C55	2	-	-	-	-	-	-	-	-	-	-	4.4	-	-	-	17.1	-	0.4	0.6	0.7
C56	11	-	-	-	-	-	-	-	2.5	-	-	8.7	11.6	7.1	24.4	51.2	-	2.2	3.1	4.3
C57	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C58	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C64	1	-	-	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	-
C65	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C66	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C67	3	-	-	-	Ñ	-	-	-	-	-	-	-	-	7.1	12.2	-	13.0	0.6	0.9	0.9
C68	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C69	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C70-72	4	2.5	-	-	-	-	-	-	-	-	3.4	8.7	-	-	-	-	-	0.8	0.9	2.1
C73	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C74	1	-	-	-	-	-	-	2.3	-	-	-	-	-	-	-	-	-	0.2	0.1	-
C75	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	2	-	-	-	-	-	-	2.3	-	-	-	-	-	-	-	-	13.0	0.4	0.4	-
C82-85, C96	3	-	-	-	2.2	-	-	-	-	-	-	4.4	-	7.1	-	-	-	0.6	0.7	1.6
C88	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C90	2	-	-	-	-	-	-	-	-	-	-	-	-	-	12.2	-	13.0	0.4	0.6	-
C91	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C92-94	5	-	2.4	-	-	-	-	-	2.5	-	-	-	-	-	24.4	17.1	-	1.0	1.5	0.5
C95	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
O&U*	8	-	-	-	-	1.8	-	-	-	3.0	6.8	-	-	14.3	12.2	-	13.0	1.6	1.9	3.7
ALL	123	2.5	2.4	2.4	2.2	1.8	1.9	4.6	12.4	32.5	33.9	65.3	40.7	99.9	292.8	307.4	142.6	24.6	32.9	43.9

* O & U includes the sites (ICD - 10: C26, C39, C48, C75, C76, C77, C78, C79, C80, C97)

Table 24: Sector and Village wise Incidence and Mortality Cases

Sr. No.	Area	Incidence 2013			Mortality 2013		
		Male	Female	Total	Male	Female	Total
1	Sector-1	0	0	0	0	0	0
2	Sector-2	1	0	1	0	0	0
3	Sector-3	2	1	3	1	0	1
4	Sector-4	0	1	1	0	1	1
5	Sector-5	1	1	2	1	0	1
6	Sector-6	0	0	0	0	0	0
7	Sector-7	4	12	16	0	2	2
8	Sector-8	6	5	11	2	0	2
9	Sector-9	1	1	2	1	2	3
10	Sector-10	2	0	2	0	0	0
11	Sector-11	3	3	6	2	2	4
12	Sector-12 (PGIMER)	3	1	4	1	0	1
13	Sector-14	1	2	3	1	1	2
14	Sector-15	4	6	10	5	2	7
15	Sector-16	3	3	6	0	0	0
16	Sector-17	0	0	0	0	0	0
17	Sector-18	8	2	10	2	2	4
18	Sector-19	6	4	10	3	1	4
19	Sector-20	15	9	24	3	3	6
20	Sector-21	4	2	6	4	1	5
21	Sector-22	10	12	22	5	3	8
22	Sector-23	6	8	14	4	4	8
23	Sector-24	6	8	14	1	1	2
24	Sector-25	10	3	13	6	3	9
25	Sector-26	8	11	19	5	2	7
26	Sector-27	7	4	11	2	1	3
27	Sector-28	2	6	8	0	0	0
28	Sector-29	8	8	16	1	2	3
29	Sector-30	3	6	9	1	5	6
30	Sector-31	1	3	4	2	0	2
31	Sector-32	6	9	15	1	4	5
32	Sector-33	3	8	11	1	1	2
33	Sector-34	9	5	14	2	0	2
34	Sector-35	6	5	11	1	1	2
35	Sector-36	4	2	6	0	0	0
36	Sector-37	11	9	20	3	2	5
37	Sector-38 (west)	20	26	46	12	10	22
38	Sector-39	5	2	7	1	1	2
39	Sector-40	9	10	19	7	1	8
40	Sector-41	9	9	18	2	5	7
41	Sector-42	9	8	17	1	1	2
42	Sector-43	4	2	6	0	1	1
43	Sector-44	12	16	28	6	4	10
44	Sector-45	15	16	31	7	3	10
45	Sector-46	10	11	21	5	2	7

Sr. No.	Area	Incidence 2013			Mortality 2013		
		Male	Female	Total	Male	Female	Total
46	Sector-47	4	9	13	2	1	3
47	Sector-48	3	7	10	0	3	3
48	Sector-49	10	9	19	3	0	3
49	Sector-50	2	5	7	0	2	2
50	Sector-51	2	3	5	2	0	2
51	Sector-52	0	2	2	0	0	0
52	Sector-55	1	1	2	1	1	2
53	Sector-56	11	7	18	5	1	6
54	Sector-59	0	0	0	0	0	0
55	Sector-60	0	0	0	0	0	0
56	Industrial Area Chandigarh	4	3	7	0	0	0
57	New Industr-ial Area	0	0	0	0	0	0
58	Ram Darbar	14	6	20	5	4	9
59	Airforce Highground	1	1	2	1	0	1
60	Dadu Majra Colony	6	5	11	6	4	10
61	Dhanas	12	14	26	3	5	8
62	Maloya	10	12	22	5	2	7
63	Badheri	0	3	3	0	1	1
64	Batela	0	0	0	0	0	0
65	Atawa	1	1	2	1	0	1
66	Kajedhi	1	1	2	1	1	2
67	Burail	1	2	3	2	0	2
68	Mani Majra	17	29	46	10	8	18
69	Palsora Colony	0	2	2	0	0	0
70	Mauli Jagran	11	12	23	5	4	9
71	Hallo Majra	2	6	8	0	2	2
72	Khudda Lahora	4	5	9	0	2	2
73	Khudda Jassu	1	0	1	0	0	0
74	Kishangarh	6	0	6	1	2	3
75	Airport	1	0	1	0	0	0
76	Daria	2	8	10	0	2	2
77	Faidan	0	1	1	0	0	0
78	Colony No.4	3	0	3	1	0	1
79	Behlana	4	2	6	1	0	1
80	Raipur Khurd	2	2	4	1	2	3
81	Khudda Ali sher	3	1	4	0	0	0
82	Kaimbwala	2	2	4	0	0	0
83	Colony No.5	0	0	0	0	0	0
84	Sector-61	0	0	0	1	0	1
85	Indira Colony	7	5	12	4	2	6
86	Sarangpur	1	1	2	1	0	1
	Total	406	427	833	164	123	287

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17. Annexure

Special activities of the Cancer Registry (16th August 2013)

A training program on ICD Oncology for all the 4 PBCRs was organized on 16th August 2013 at School of Public Health, PGIMER. Dr. J.S. Thakur, Professor emphasized the importance of continuing training in his opening remark. Session started with pre assessment. Doctors from various oncology departments gave lectures on types of cancer registries, exercise on retrieval of medical data from hospital records, ICD Oncology training to educate the staff about medical terminology and method of verbal autopsy. Staff from Medical Record Department showed cancer patient's files to the staff for better understanding and practice. Training ended with post assessment. There was improvement in the Knowledge of staff.

Workshop on Cancer Registration and Cancer Control (10th-13th October 2013)

'Workshop on Cancer Registration and Cancer Control' was organized by Population Based Cancer Registries of Chandigarh, SAS Nagar, Sangrur and Mansa at Bhargava Auditorium, PGIMER on 10th to 13th October, 2013. The Chief Minister of Punjab S. Parkash Singh Badal was the Chief Guest of the function.

In his speech, the Chief Guest appreciated the efforts made by the collaborating institutes (TMC, Mumbai and PGIMER, Chandigarh) in executing the cancer control activities. National and international faculty conducted the lectures and the practical session. More than 50 participants from Punjab and other states of India participated in the workshop.

Inaugural Function: Lighting ceremony by Honorable Chief Minister of Punjab, S. Parkash Singh Badal- Workshop on Cancer Registration and Cancer Control