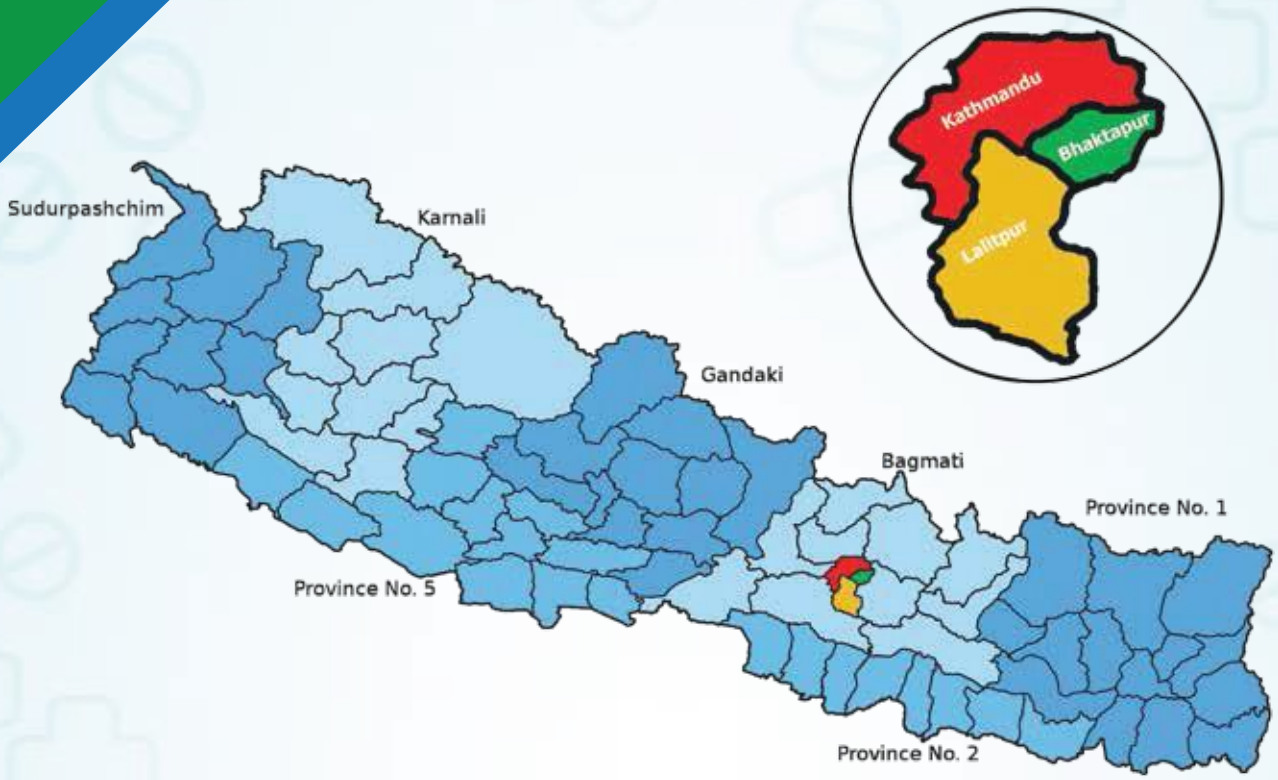

Cancer Incidence and Mortality in Kathmandu Valley in 2018

Kathmandu
Lalitpur
Bhaktapur

Government of Nepal
Nepal Health Research Council
Ramshah Path, Kathmandu

Cancer Incidence and Mortality in Kathmandu Valley in 2018

(Kathmandu, Lalitpur and Bhaktapur Districts)

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Preface

The burden of Non Communicable Disease is increasing globally. Currently, Nepal is also facing increasing double burden Non communicable disease like other developing countries. The major NCDs like cardiovascular disease, cancer, diabetes and chronic respiratory diseases are increasing in recent years. Cancer has become one of the major public health issues in Nepal which demands huge investment for prevention and treatment. It is reported as fifth leading cause of death in Nepal. In this context population based evidence of cancer is the primary need of government of Nepal in order to develop country specific strategies and programs to prevent, control and treat the diseases.

Population Based Cancer Registry has been established by Nepal Health Research Council since January 1, 2018 in close collaboration with Ministry of Health and Population (MoHP), WHO country office Nepal and International Agency for Research on Cancer (IARC) Regional Hub, Mumbai. The main aim of the registry is generating evidence on cancer incidence, mortality, pattern and trends in Nepal. The findings of the study will help in the development of cancer control strategy as per the need of the country. It also helps in providing the information regarding the geographical variation in the pattern of cancer which eventually helps the national, provincial and local governments to plan and develop targeted interventions to control cancer. It will serve as a basis in developing evidence based cancer control and prevention programs for the policy makers and planners.

I would like to take this opportunity to thank all who have supported and contributed in establishing the registry and generating the evidence. I express my sincere gratitude to the support of MoHP, technical assistance of IARC, Regional Hub and WHO Country Office for Nepal. I am very thankful to BP Koirala Memorial Cancer Hospital, Chitwan for their strong support and collaboration to continue the Population based cancer registry in Nepal. I extend my thankfulness to all the hospitals, hospice, ayurvedic centers, pathology laboratories, social security and nursing division, civil registration, local bodies like municipalities, DHOs/ DPHOs, Health posts, ward offices and community leaders in helping us in providing the data. Finally, I appreciate NHRC team members for their continuous effort in making registry successful and providing such a valuable evidence to the country.

Prof. Dr. Anjani Kumar Jha

Chairman

Nepal Health Research Council

Contribution to Population Based Cancer Registry in Nepal

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Director	B.P Koirala Memorial Cancer Hospital	Member
Director	Bir Hospital	Member
Director	Tribhuwan University Teaching Hospital	Member
Director	Civil Service Hospital	Member
Director	Patan Hospital	Member
Director	Bhaktapur Cancer Hospital	Member
Director	Kanti Children Hospital	Member
Director	Nepal Cancer Hospital & Research Center	Member
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List of Abbreviations

AAR	Age Adjusted Rate
AHW	Auxiliary Health Worker
ASR	Age Standardized Rate
ASR	Age Specific Rate
BPKMCH	B.P Koirala Memorial Cancer Hospital
CR	Crude Rate
DCO	Death Certificate Only
FCHV	Female Community Health Volunteer
HBCR	Hospital Based Cancer Registry
HMIS	Health Management Information System
IARC	International Agency for Research on Cancer
LMIC	Low and Middle Income Country
M/I	Mortality to Incidence Ratio
MoHP	Ministry of Health and Population
NCD	Non Communicable Disease
NHRC	Nepal Health Research Council
NHL	Non-Hodgkin's Lymphoma
PBCR	Population Based Cancer Registry
SSDM	Siraha, Saptari, Dhanusha and Mahottari
TWG	Technical Working Group
WHO	World Health Organization

Executive Summary

BACKGROUND:

Nepal Health Research Council (NHRC), a national apical body of Government of Nepal, responsible for promoting scientific study and quality health research in the country, has started Population Based Cancer Registry (PBCR) in Nepal since January 2018. Starting with the Kathmandu Valley, the PBCR has been expanded to other 6 districts with a total of three registries in order to obtain representative information of the country on cancer incidence. The Kathmandu valley cancer registry covers the population of Kathmandu, Bhaktapur and Lalitpur districts of Province 3, whereas the other registries are established in provinces 2, 5 and 6 (Karnali).The objective of Kathmandu valley PBCR is to generate evidence on cancer incidence, patterns and trends of disease and mortality related to cancer in the Kathmandu valley, and to enhance national capacity for sustainable PBCR in Nepal. The NHRC is working in close collaboration with Ministry of Health and Population (MoHP) and WHO to establish the registrie in Nepal that has been technically supported by International Agency for Research on Cancer (IARC). The council has made partnership with 38 health facilities in Kathmandu valley to obtain cancer registry data on regular basis, while the registry also receives data from other inter/national sources like B.P Koirala Memorial Cancer Hospital, Chitwan and Tata Memorial Hospital, India.

POPULATION COVERED

The Kathmandu valley PBCR covers 21 urban/rural municipalities of Kathmandu, Bhaktapur and Lalitpur districts with an estimated population of **30,71,932 in 2018.** The registry predominantly represents the urban region of the country.

REGISTRATION METHODOLOGY

The registry has used both the active and passive method of data collection. There are two major approaches to collect the registry data in the field. The first one is through the health facilities that includes data collection from the cancer and/or the general hospitals having diagnostic and cancer treatment facilities, pathology laboratories, hospices, ayurvedic centers and social security sections. The next is through the communities where the health coordinators, health in-charges and the female community health volunteers (FCHVs) at urban/rural municipalities have been oriented on PBCR. The FCHVs collect data through household visits in the given populations and submit them to the health in-charges, while the in-charges submit the data to the health coordinators, and the health coordinators directly to the NHRC office on monthly basis.

Beside this, in places with very less reporting of cancer cases and low incidence rate compared to the estimated incidence rates for Nepal, the data enumerators are trained and mobilized in the communities. They personally visit the health coordinators, health post in-charges, female community health volunteers, ward chairpersons and community leaders to identify the cancer cases and then visit the particular households to collect the information. Then, the obtained data from all these sources are verified for the completeness, accuracy and residence followed by the entry into the CanReg5 Software at the NHRC office.

FINDINGS

In 2018, out of 11,600 cancer cases obtained by Kathmandu Valley PBCR, a total of 2156 new cancer cases were registered (999 males and 1157 females). The Age Adjusted Incidence Rate (AAR) for male was 95.3 per 100,000 populations and for females, 98.1 per 100,000 populations. Similarly, 670 death cases due to cancer were registered in 2018. The Age Adjusted Mortality Rate (AAMR) for male was 36.3 per 100,000 populations (365 cases) and for female, 27.0 per 100,000 populations (305 cases). The mortality to incidence ratio (M/I) was 31%.The Government of Nepal is facing challenges in collecting death information since the cause of death as cancer is not registered by Civil Registration and still people feel reluctant to share cause of deaths including of cancer. The community-based approach followed by the PBCR has helped to get information on death cases in community; however, some death cases might have been missed in the registry.

In Kathmandu Valley, the leading sites of cancer in males have been found to be lungs, stomach, urinary bladder, gallbladder and Non-Hodgkin's Lymphoma. Both the cancer incidence and mortality are highest in 70-74 years age group. In females, the commonest sites are breast, lungs, cervix uteri, gallbladder and ovary with the peak age of incidence in them is above 75 years followed by the age group of 65-69 years, and it is same for cancer death.

Being the first year of registry, the unknown primary cases were only 4.5% in males and 3.2% in females indicating the good quality of the registry. However, with the improvement in record keeping and diagnostic and treatment facilities, the unknown primary cases will be minimized in future. In 90.5% of the cancer cases registered had microscopic basis of diagnosis. Remaining cases were registered based on non-microscopic ways like clinical, radiology, verbal information and Death Certificate Only. With the improvement in record keeping and continuation of registry, cases registered through non- microscopic basis will be reduced in future.

Due to lack of scientific technique of data recording and reporting in health facilities and lack of culture in reporting in civil registration, Kathmandu Valley PBCR incurs extra cost/burden in terms of man, money, time and materials; as for the residence, the registry cannot fully rely on the residence address given by the sources. Hence, each individual patient/relative are contacted to confirm the residence. Therefore, it is recommended to have digital and uniformed medical recording system with determined mandatory variables in all government and private health facilities. Similarly, the death registration system needs to be strengthened and improved with the inclusion of cancer as a cause of death. The MoHP, concerned provincial government and local authority are recommended to develop area specific cancer prevention and control policy and interventions based on the evidence provided by the registry.

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CHAPTER 1 BACKGROUND

Cancer has become one of the major public health issues globally. It is estimated that more than 20 million new cases of cancer will occur in 2025 and a majority of them would be in low and middle income countries (LMICs).(1) According to GLOBOCAN, there were an estimated 26,184 new cancer cases and 19,413 cancer deaths in Nepal in 2018.(2) Based on hospital based data, approximately 8,000–10,000 new cancer cases are identified every year in Nepal reflecting cancer as a major public health burden in the country.(3) This emphasizes the requirement of rigorous and collaborative efforts from all stakeholders working in and/or supporting towards cancer prevention and control strategies in Nepal.

Cancer registries play a vital role in planning and implementing cancer prevention and control programs and policies by the government.(4-6) The Population Based Cancer Registry (PBCR) is the systematic collection, storage, analysis and interpretation of all cancer cases diagnosed or dead in a particular geographical area over a period of time(7). Thus, PBCRs are the only means to support cancer control planning, documenting the scale and profile of cancer in a defined region, as well as to monitor the trends over the time.

Hospital Based Cancer Registrie (HBCR) was started in Nepal since 2003. The HBCRs are the registries that collect information on cancer cases diagnosed and/or treated in defined health institutions/hospitals. The data from HBCRs are an integral part of hospital management that helps serving administrative purposes and aiding the review of performances. Thus, HBCRs have of great value in providing a quality assessment of the services rendered, but they cannot give clear picture as to the underlying local, provincial, or national epidemiology of cancer. In contrast, the PBCRs give an unbiased profile of the cancer burden including how it is changing over the time. However, due to the unavailability of population based cancer registry in the past, the systematic data regarding cancer incidence, disease pattern and mortality ratio were unknown.

In this regard, Nepal Health Research Council (NHRC), has started PBCR in the country since January 2018 in close collaboration with Ministry of Health and Populations (MoHP) and with technical supports from WHO Nepal and IARC. Currently, three PBCRs have been established in 9 out of 77 districts of the country in which the Kathmandu valley PBCR covers the 3 districts of the valley, viz. Kathmandu, Bhaktapur and Lalitpur in province no. 3 (PBCR representing hill region), SSDM registry includes , Siraha, Saptari, Dhanusha and Mohattari in Province no. 2 (PBCR representing low land Terai region), and Rukum registry includes East and West Rukum in Province no. 5 and 6 (PBCR representing mountain region) representing urban, semi-urban and rural areas of the country. The objective of the Kathmandu valley PBCR is to generate evidence on cancer incidence, patterns and trends of disease and cancer specific mortality in Kathmandu valley. The registry data are useful to plan cancer prevention and control activities as well as to strengthen cancer care services by the government of Nepal.

Kathmandu District Profile

Kathmandu district as one of the three districts of the Kathmandu Valley is located in Bagmati province with an area of 395 km^2 (153 sq. mi). It is the most populated district of the country with 1,744,240 populations as per National Population Census, 2011. Kathmandu metropolitan city is the district headquarter and the federal capital of the country. The district borders with Bhaktapur and Kavrepalanchowk in the East, Dhading and Nuwakot in the West, Nuwakot and Sindhupalchowk in the North and Lalitpur and Makwanpur districts in the South. It comprises 11 Municipalities, including Kathmandu metropolitan city. Moreover, the big hospitals that include Bir Hospital, the oldest hospital of the country, TU Teaching Hospital, Birendra Sainik Hospital, Gangalal Heart Centre, Tilganga Eye Hospital, etc. are the major public hospitals in the district. Apart from the public hospitals, the district has huge number of private hospitals providing health care services to the residents.

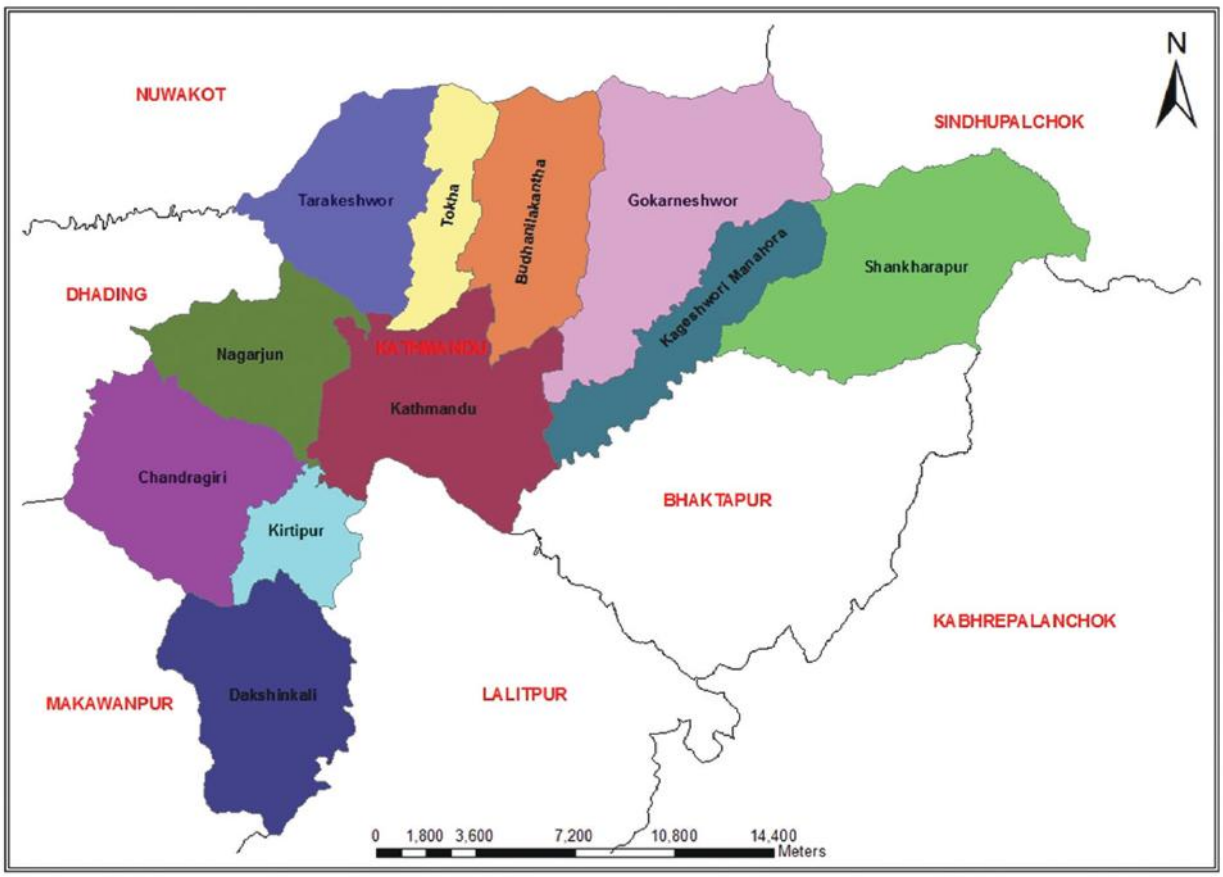

Figure 1 Administrative Map of Kathmandu District

Lalitpur District Profile

With an area of 385 km² and a population of about 468,132 (as per 2011census of Nepal), Lalitpur district is also located in Bagmati province. The district is surrounded by Kathmandu district in the West, Makwanpur in the South, Kavreplanchok in the East, and Bhaktapur districts in the North. There are six municipalities in Lalitpur district, including three rural municipalities and Lalitpur metropolitan city. One of the major cancer hospitals, Nepal Cancer Hospital and Research Center is located in the district along with many other cancer and/or general hospitals having cancer diagnosis and treatment facilities. The district has limited urban areas, adjoining Kathmandu and Bhatktapur districts, but large semi-urban and rural areas, which comparatively have less access to health, educational and other services than Kathmandu and Bhaktapur districts.

Figure 2 Administrative Map of Lalitpur District

Bhaktapur District Profile

Bhaktapur district is located in the eastern part of Kathmandu valley in Bagmati province. With an area of 123.79 square kilometers, Bhaktapur district has the population of about 304,651 as per National Population Census 2011. The district lies between Kavrepalanchowk district in the East, Kathmandu and Lalitpur districts in the West, Kathmandu and Kavrepalanchowk districts in the North and Lalitpur district in the South. The district has been divided into 4 municipalities as Bhaktapur, Changunarayan, Madhyapur Thimi and Suryabinayak municipalities. Bhaktapur does not have enough hospitals rendering qualitative medical facilities. However, some of the major cancer hospitals, Bhaktapur Cancer Hospital and Kathmandu Cancer Centre are located in Bhaktapur district.

Figure 3 Administrative Map of Bhaktapur District

1.2 Population Covered by the Cancer Registry

According to the national census 2011, the total population of Nepal is **2,64,94,504,** in which the Kathmandu Valley PBCR in Bagmati province covers 9.5% (2,517,023) of the total population. For the analysis purpose, the 2018 Population of the Kathmandu Valley has been estimated on the basis of 2001 and 2011 census that assumes the total population of Kathmandu Valley would be **30, 71,932** as described in the table below:

Table 1: Estimated Population, 2018

SN	Districts	Population			Remarks
		Male	Female	Total	
1	Kathmandu	1127450	1038314	2165764	Based on the population growth rate between 2001 and 2011
2	Lalitpur	279848	271235	551083	
3	Bhaktapur	180343	174691	355085	
	Total	**1587691**	**1484241**	**3071932**	

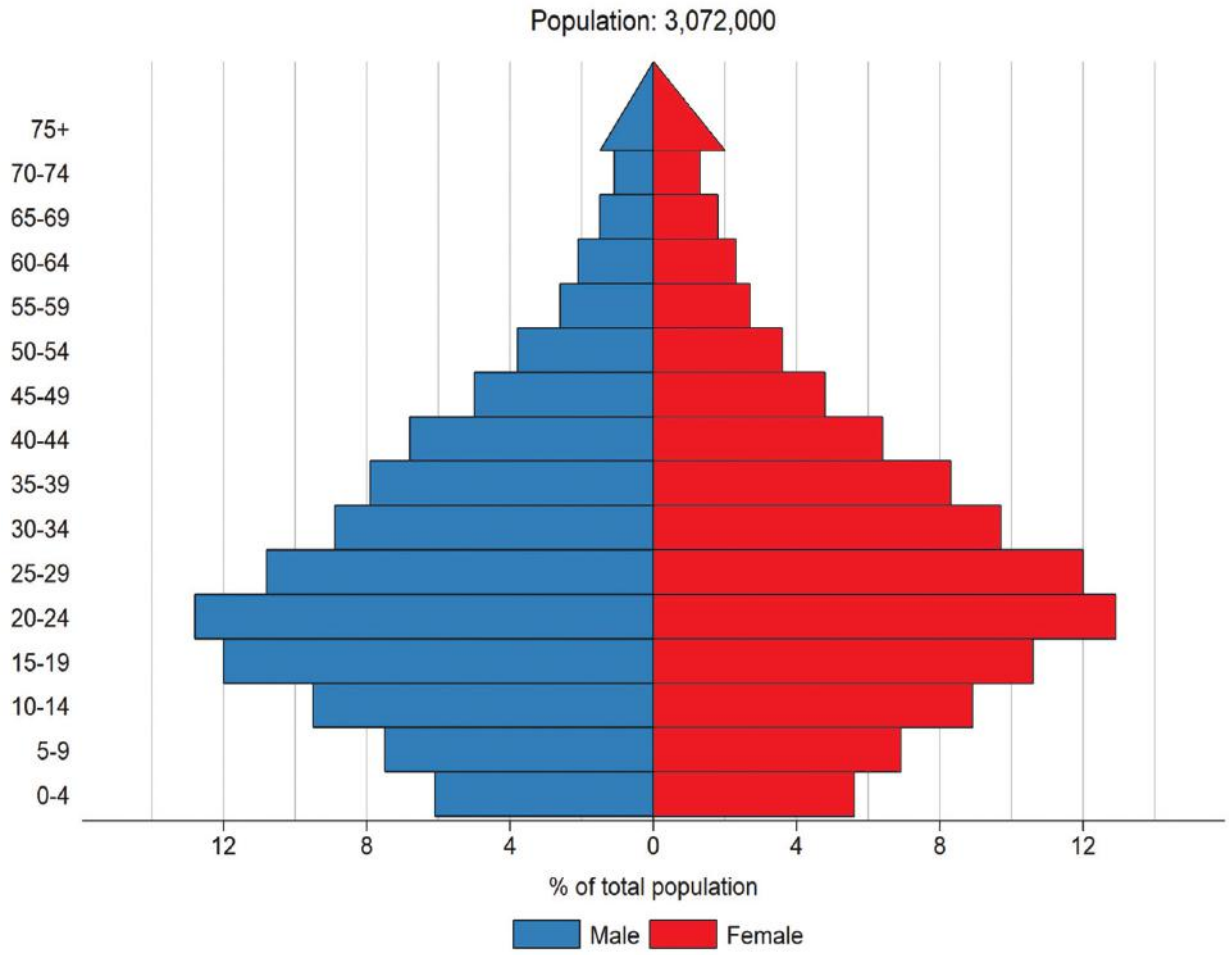

Figure 4 Population Pyramid, Kathmandu Valley, 2018

CHAPTER 2 CANCER REGISTRATION METHODOLOGY

A Steering committee with representatives from the Ministry of Health and Population (MoHP), NHRC (Chairman), WHO and directors of major cancer hospitals and hospitals with cancer care facility was formed that constantly provides guidelines and support for implementing PBCR. Under the steering committee, technical working group (TWG) was formed with oncologists, pathologists, representatives from civil registration and WHO, medical recorder and the PBCR staff who are responsible to implement PBCR. Ethical approval from Ethical Review Board (ERB) of NHRC was taken before the inception of registry.

2.1 Data Collection Method

Kathmandu Valley Cancer Registry has 2.5 million populations covering 9.5% of the total Population of the country. Since the registry focuses on identifying diagnosed cancer cases of the PBCR coverage area, health facilities are the major sources of the registry data (6). The PBCR co-ordinates and collects necessary information through active process from all cancer hospitals, general hospitals with cancer diagnosing and treatment facilities, pathology laboratories, hospice, ayurvedic and homoeopathic centers that are providing services to the cancer patients in the Kathmandu Valley. Besides, due to availability of advanced facilities, people from Kathmandu Valley visit B.P Koirala Memorial Cancer Hospital (BPKMCH), Bharatpur, the largest cancer hospitals in Nepal just about 250 km away from Kathmandu, and to some major cancer hospitals in neighboring country, India. Hence, the data of cancer patients of Kathmandu Valley visiting to BPKMCH and Indian hospitals (where possible) have also been collected by making coordination with the respective hospital authorities.

In addition, coordination has been made with other sources like social security and civil registration department of local authority in order to collect data on cancer incidences and deaths. The Nepal Government provides financial support up to $1000 for treatment of underprivileged cancer patients through social security department that it requires confirmation documents of Nepalese resident (citizenship certificate), disease confirmation by oncologist/ pathologist and recommendation letter from local government authority. Thus, the social security departments have become important sources of data on cancer cases.

The role of civil registration has great importance in cancer registry, however, in Nepal, the civil registration does not record cause of death as cancer in the death registry. Thus, coordination has been made with the concerned authority to incorporate variables related to cause of death in its vital registration process. Hence, the registry has followed community-based approach to PBCR in order to identify the cancer death cases and deaths due to cancer in the given communities. In close collaborations with respective local authorities, PBCR orientations have been given to all health coordinators (Key health personnel at the municipality), community based health post in-charges and FCHVs of urban/rural municipalities of the Kathmandu valley.

Further, a separate Porforma has been developed with important variables to obtain preliminary information regarding cancer incidences and deaths from the household level through FCHVs. The collected data from FCHVs are reported to health post during their regular monthly reporting, while the health posts provide information to the health coordinators in the urban/rural municipalities and finally comes to the NHRC office through urban/rural municipalities. In addition, in places with very less reporting of cancer cases and where the incidence rate is low compared to the estimated incidence rates for Nepal, the data enumerators are trained and mobilized in the communities. They personally visited the health coordinators, health post in-charges, FCHVs, ward chairpersons and community leaders to identify the cancer cases and then visit the particular households to collect the information.

After collection of data, confirmation of residence through individual phone calls to the patients and/or their family is done. Then the cases of Kathmandu Valley have been checked for accuracy and completeness of information and entered to CanReg5 software. The CanReg5 is an open sourced tool to input, store, check and analyze the data.

The following flow chart illustrates the clear pictures of the Population Based Cancer Registry in Nepal.

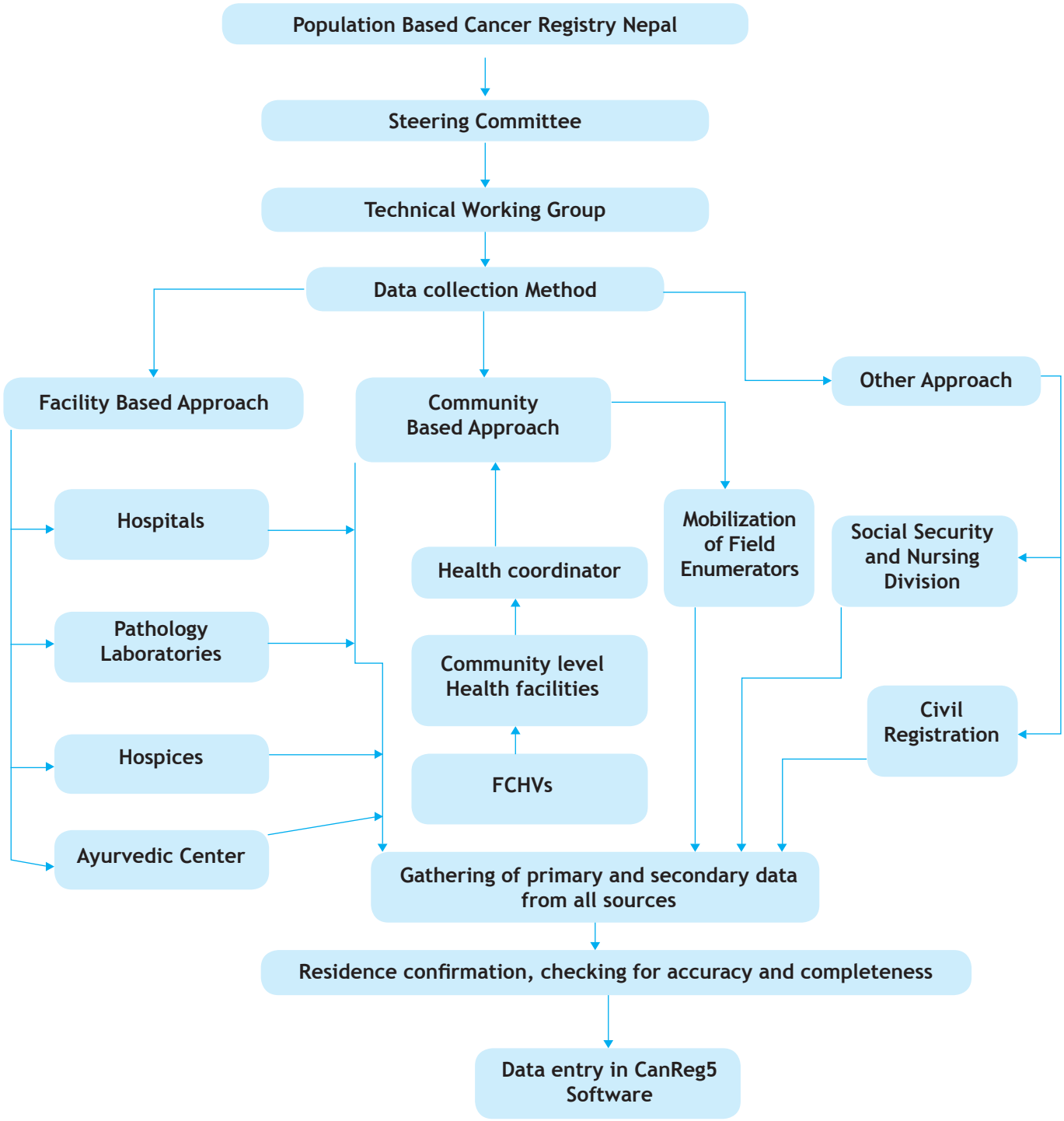

Figure 5 Flow Chart of Population Based Cancer Registry, Nepal

2.2 Source of Data

Currently, more than 28 (government and private) hospitals, three pathology laboratories, three palliative care centers and one ayurvedic center in Kathmandu valley are providing data for the registry. In the community, data is obtained through the local authorities, health post in-charges and the Female Community Health Volunteers. Besides, some hospitals outside the registry area where patients might visit for diagnosis and treatment are also included as the source of data. The list of the data sources follows:

Table 2 Data Sources of Kathmandu Valley PBCR

S.N.	Name of Source	District
1	Annapurna Neuro Hospital	Kathmandu
2	Bir Hospital	Kathmandu
3	Birendra Sainik Hospital	Kathmandu
4	Civil Service Hospital	Kathmandu
5	Divya Ayurvedic Aausadhalaya	Kathmandu
6	Grande International Hospital	Kathmandu
7	Green City Hospital	Kathmandu
8	Kanti Children Hospital	Kathmandu
9	Kantipur Hospital	Kathmandu
10	Kathmandu Medical Collage Teaching Hospital	Kathmandu
11	National Medicare and Research Centre	Kathmandu
12	National Public Health Laboratory	Kathmandu
13	Nepal Medical College Teaching Hospital	Kathmandu
14	Nepal Police Hospital	Kathmandu
15	Norvic International Hospital	Kathmandu
16	Om Hospital and Research Centre	Kathmandu
17	Paropakar Maternity and Children's Hospital	Kathmandu
18	Samyak Diagnostic Pvt. Ltd.	Kathmandu
19	Karuna Shechen Hospice	Kathmandu
20	Thankot Hospice	Kathmandu
21	TU Teaching Hospital	Kathmandu
22	Upendra Devkota Memorial National Institute of Neurological and Allied Sciences	Kathmandu
23	Alka Hospital	Lalitpur
24	B&B Hospital	Lalitpur
25	Hospice Nepal	Lalitpur
26	KIST Medical College and Teaching Hospital	Lalitpur
27	Medi Quest Laboratory Pvt. Ltd	Lalitpur
28	National Hospital and Cancer Research Centre	Lalitpur
29	Nepal Cancer Hospital & Research Center	Lalitpur
30	Nepal Medicity Hospital	Lalitpur
31	Patan Academy of Health Science	Lalitpur
32	Vayodha Hospital	Lalitpur
33	Bhaktapur Cancer Hospital	Bhaktapur
34	Kathmandu Cancer Centre	Bhaktapur
35	B.P Koirala Memorial Cancer Hospital	Chitwan
36	Department of Health Service, Social Security Section	Nepal
37	Other Centers (Urban/Rural Municipalities, ward office, Urban Health Centers and Health Posts)	Kathmandu, Bhaktapur,Lalitpur
38	Tata Memorial Cancer Hospital	India

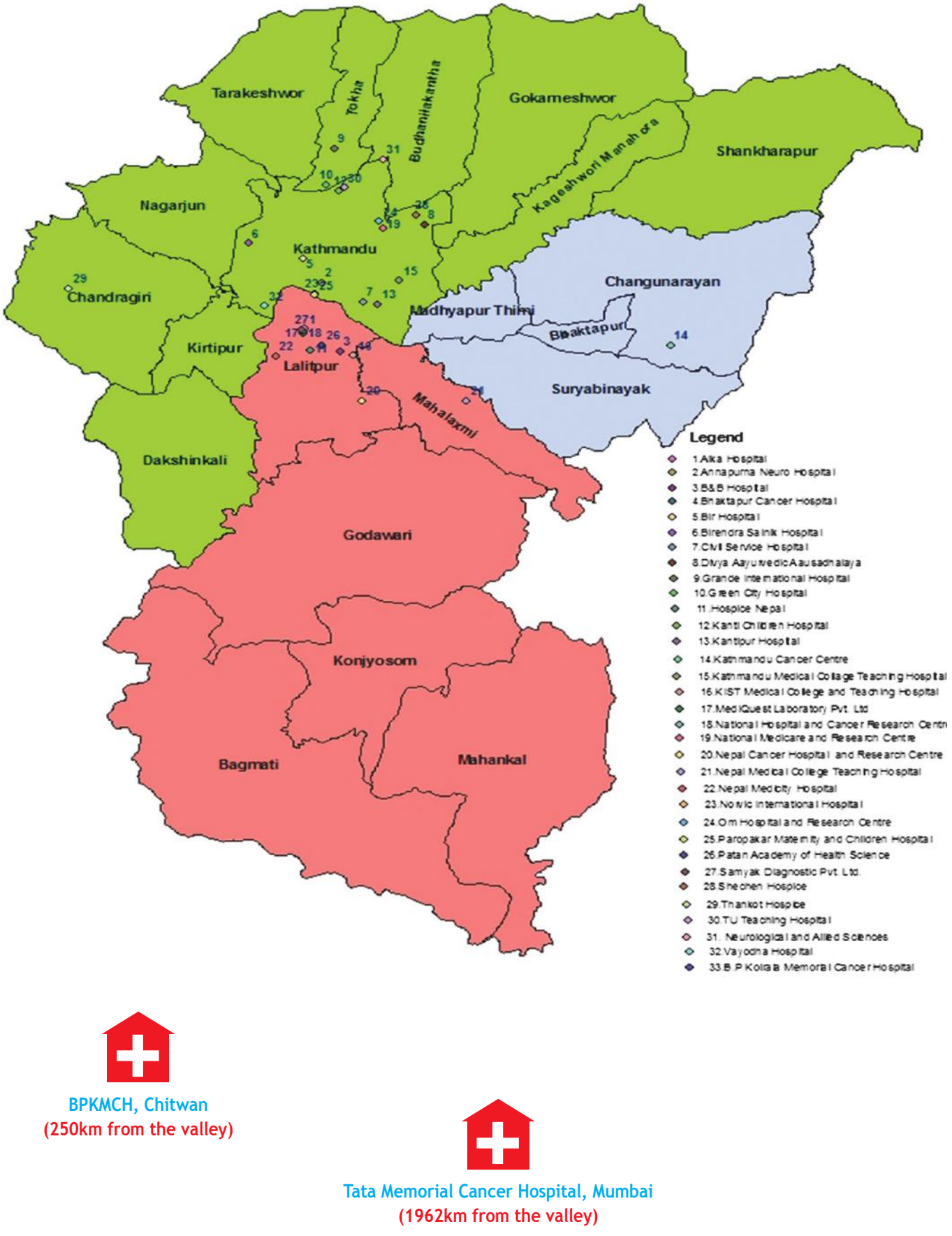

Figure 6 Pictorial Representation of distribution of source of registration of Kathmandu valley PBCR

2.3 Activities/Achievements of PBCR (Interaction programs, workshops and conference)

In order to initiate and establish PBCR, various workshops, meetings, and interaction programs had been conducted by the NHRC in Kathmamdu. Prior to the initiation of the registry, an inception workshop was conducted in the presence of experts from IARC, France and IARC Regional Hub, Tata memorial Centre, Mumbai on 17th January 2018. All the directors of major cancer/general hospitals from the valley, oncologists, pathologists, PBCR steering committee members, technical working group members and medical recorders participated the program and discussed on the PBCR, its importance and the commencement of the registry in the country. The Secretary of the Ministry of Health and Population had launched the registry program formally.

Since the PBCR has been established in the country for the first time, it is crucial to train the registry staff properly. Thus, the registry staff have been trained at the IARC Regional Hub, Mumbai regarding the establishement of PBCR, data extraction, data entry in CanReg5 on 22nd-28th November, 2017 (1st group) and on 7th- 14th August, 2018 (2nd Group), data management and report writing on September 13th -25th, 2019. These trainings including other technical support from the IARC regional hub have been great support to establish PBCR in Nepal. Various orientations related to the PBCR have been organized within the country to capacitate the registry staff.

During the process, series of meetings and orientations were conducted among the Hospital Directors, Oncologists, Medical Recordists, Urban/Rural Municipalities, Health Coordinators and Health Post Incharges. The Female Community Health Volunteers (FCHVs) at the communities were oriented and mobilized to collect cases from the communities. In this regard, the community engagement was ensured through the mobilization of FCHVs who visit the households to identify any given cancer cases regularly. Moreover, the health coordinators and health post in-charges provide the data of cancer cases they find in their locality. During 2018, the registry made intercation with a total of 987 community level health personnels as described in the

table below:

Table 3 Community Level involvement in Cancer Registration Process in the Valley

S.N	District	Health Coordinators	Health Post Incharge	FCHVs
1	Kathmandu	11	120	497
2	Lalitpur	6	59	207
3	Bhaktapur	4	38	45
	Total	21	217	749

Additionally, an interaction program was conducted in the participation of an expert from IARC Regional Hub Mumbai on 10th April, 2019. Various health professionals attended the program and provided their valuable feedback to strengthen PBCR in Nepal. Similarly, interim analysis of Kathmandu valley PBCR was completed and the findings were dessiminated on November 2018.

CHAPTER 3 QUALITY CONTROL

Mortality to Incidence Ratio

Mortality to incidence ratio is one of the quality control measures for completeness and accuracy of the cancer registry data. The overall mortality to incidence ratio (M/I ratio) in Kathmandu valley for 2018 was 31%, in which it was 37% for males and 26% for females. The M/I ratio was found to be less compared to the other urban registries in India. It might be due to under reporting of the death cases. The death cases registered by the PBCR were based on the information obtained from the hospital records, community visit and through the phone calls to the patient and/or their relatives during the residence confirmation. Since the government of Nepal doesn't have any provision to reflect the cause of death as cancer in its vital registration, some death incidences might have been missed by the registry. The number of death cases would have been increased if cancer as cause of death have been mentioned in vital registration. The organization is trying its best to improve the system of registering the death cases in the vital registration.

Quality Control of Cases:

Quality control of the cases has been done through checking and verification of the data collected by data enumerators by the trained registry staffs at the registry office. Training was given to the registry staffs at the IARC Regional Hub, Tata Memorial Centre, Mumbai, where 5% of the randomly selected cases were checked and verified by the experts. Besides, the doubtful cases found during the data cleaning was checked and verified for the tumor related information by the oncologists and pathologists. In the community, wards where low incidence were registered, the data enumerators were asked to revisit the community to further identify the missing cases if any.

Microscopic Verification of the Cases:

Microscopic verification is an internationally accepted tool for checking the data quality. The higher the proportion of microscopic verification, the more accurate the data is considered and microscopic verification is the gold standard for diagnosis of cancer.

Among the total 2156 cancer cases registerd in 2018, out of 999 male cases, 901 (90%) are diagnosed on microscopic verification, 8% are diagnosed through non-microscopic ways like radiological and clinical investigations. In females, out of 1157 cases, 1050 (91%) are diagnosed on microscopic verification and only 7% are registered through non-microscopic verification. Overall 90.5% incidence cases are microscopically verified reflecting the good quality of the data.

Table 4 Cancer incidence according to basis of diagnosis in Kathmandu Valley, 2018

Basis of Diagnosis	Male		Female		Total	
	Number	%	Number	%	Number	%
Microscopic Verification	901	90	1050	91	1951	90.5
Non-Microscopic	79	8	84	7	163	7.6
Verbal Information	6	1	5	0	11	0.5

Death Certificate Only (DCO) Cases:

In male, 1% and in females, 2% cases are registered under Death Certificate Only (DCO) cases. The death cases have been registered based on death certificates found in the hospital files, and as per the remarks by the relatives where no other information were identified during the follow up at the hospitals.

Childhood Incidence rates:

Out of total 2156 cancer cases, only 34 cases are pediatric cases. There are 20 cases of boys and 14 cases of girl as shown in table below. The age specific rate for pediatric cancer registered is less which reflects that some of the pediatric cancer cases might have been missed.

Table 5 Incidence Rates of Pediatric Cancer Cases in Kathmandu Valley 2018

Age Group	Boys		Girls	
	Number	ASR	Number	ASR
0-4 Yrs	8	7.2	5	8.5
5-9 Yrs	6	7	7	9.5
10-15 Yrs	6	3.8	2	2.2

Sources per case Registered:

The cancer cases were counted as per the source of data obtained, in which one case is obtained through 2 to 6 sources. In Kathmandu Valley, the source per case registered is 1.5 reflecting good coverage of the sources. Out of the total 2156 cancer cases, 1070 (50%) of the cases are registered from only one source and 846 (39%) cases are from two source of registration, and the remaining 11% of the cases are from more than 2 sources of registration.

Cancer Cases Registered by Source of Registration: First Source of Information

Since the Kathmandu Valley has comprehensive diagnostic and treatment centers within, the major sources of cancer information are the hospitals inside the valley. For around 50% of the cases, the first source of information is through two major cancer hospitals in the Lalitpur and Bhaktapur districts viz. Nepal Cancer Hospital and Research Centre and Bhaktapur Cancer Hospital, respectively.

Table 6 Cancer Cases Information by First Source of Registration

S.N	Name of the Source	Male	%	Female	%	Total	%
1	Nepal Cancer Hospital & Research Center	254	25.4	289	25.0	543	25.2
2	Bhaktapur Cancer Hospital	240	24.0	283	24.5	523	24.3
3	Bir Hospital	87	8.7	92	8.0	179	8.3
4	Grande International Hospital	51	5.1	67	5.8	118	5.5
5	National Cancer Hospital and Research Centre	25	2.5	61	5.3	86	4.0
6	Patan Hospital	41	4.1	45	3.9	86	4.0
7	Tribhuvan University Teaching Hospital	32	3.2	46	4.0	78	3.6
8	Kathmandu Cancer Centre	48	4.8	27	2.3	75	3.5
9	Civil Hospital	27	2.7	41	3.5	68	3.2
10	Nepal Medicity Hospital	21	2.1	31	2.7	52	2.4
11	Hospice Nepal	18	1.8	24	2.1	42	1.9
12	Birendra Sainik Hospital	30	3.0	11	1.0	41	1.9
13	Community: (FCHVs/Field Enumerators)	24	2.4	14	1.2	38	1.8
14	Norvic International Hospital	7	0.7	5	0.4	12	0.6
15	Kathmandu Medical College Teaching Hospital	14	1.4	12	1.0	26	1.2
16	Divya Parampara Ayurvedic Centre	15	1.5	13	1.1	28	1.3
17	Alka Hospital	8	0.8	12	1.0	20	0.9
18	Karun Sechan Hospice	8	0.8	11	1.0	19	0.9
19	Bharatpur Cancer Hospital	5	0.5	10	0.9	15	0.7
20	Om Hospital and Research Center	7	0.7	8	0.7	15	0.7
21	Paropakar Maternity and Women's Hospital	0	0.0	13	1.1	13	0.6
22	Norvic International Hospital	7	0.7	5	0.4	12	0.6
23	Green City Hospital	6	0.6	5	0.4	11	0.5
24	Nepal Medical College	2	0.2	9	0.8	11	0.5
25	Kanti Children Hospital	5	0.5	5	0.4	10	0.5
26	Thankot Hospice Centre	4	0.4	5	0.4	9	0.4
27	Medicare National Hospital and Research Center	3	0.3	5	0.4	8	0.4
28	B & B Hospital	4	0.4	3	0.3	7	0.3
29	KIST Medical College and Teaching Hospital	5	0.5	2	0.2	7	0.3
30	Tata Memorial Hospital	2	0.2	2	0.2	4	0.2
31	Upendra Devkota Memorial National Institute of Neurological and Allied Science	2	0.2	2	0.2	4	0.2
32	Annapurna Neuro Hospital	1	0.1	2	0.2	3	0.1
33	Nepal Police Hospital	2	0.2	0	0.0	2	0.1
34	Kantipur Hospital	1	0.1	0	0.0	1	0.0
35	Samyak Pathology Lab Pvt. Ltd.	0	0.0	1	0.1	1	0.0
34	Vayodha Hospital	0	0.0	1	0.1	1	0.0
Total		**999**	**100**	**1157**	**100**	**2156**	**100**

CHAPTER 4 FINDINGS

4.1 Cancer Incidence- All Sites

In 2018, the Kathmandu Valley PBCR has obtained a total of 11,249 cases from all the sources. After residence confirmation, duplicate adjustment and verification of the cases, Kathmandu Valley, PBCR had registered a total of 2156 new cancer cases in 2018. Among them, 999 were male cases and 1157 were female cases. The age adjusted incidence rate (AAR) for males was 95.3 per 100,000 population and for females, 98.1 per 100,000 population.

Cancer Mortality cases registered by PBCR Kathmandu Valley were 670, out of which 365 were male cases and 305 were female cases. The age adjusted mortality rates for male was 36.3 per 100,000 population and for females 27.0 per 100,000 population. The age adjusted incidence and mortality rate by sex for all sites in Kathmandu valley is illustrated in figure below:

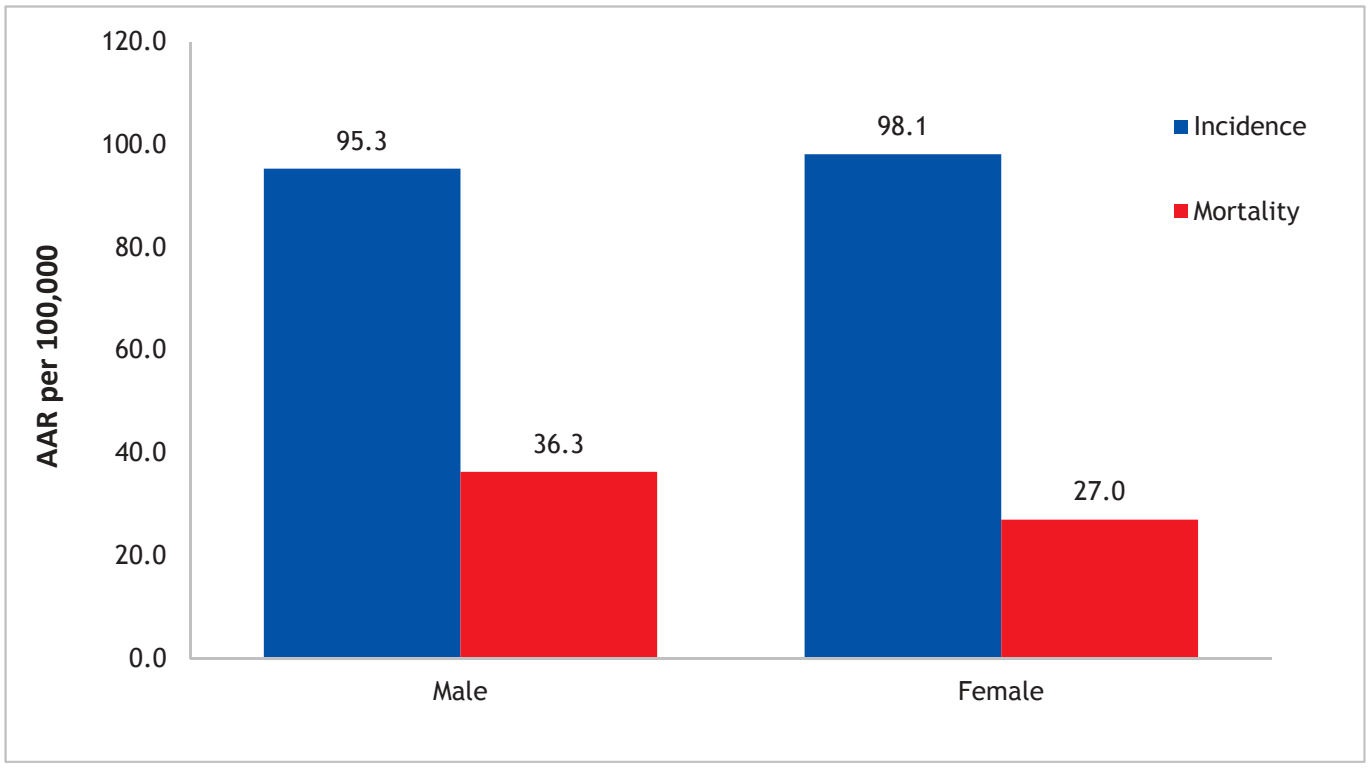

Figure 7 All Sites Cancer Incidence and Mortality Rate by Sex in Kathmandu Valley, 2018

Moreover, both the cancer incidence and mortality were found to be increased along with increasing age group for males, and reached peak at the age group of 70-74 years as shown in the figure below:

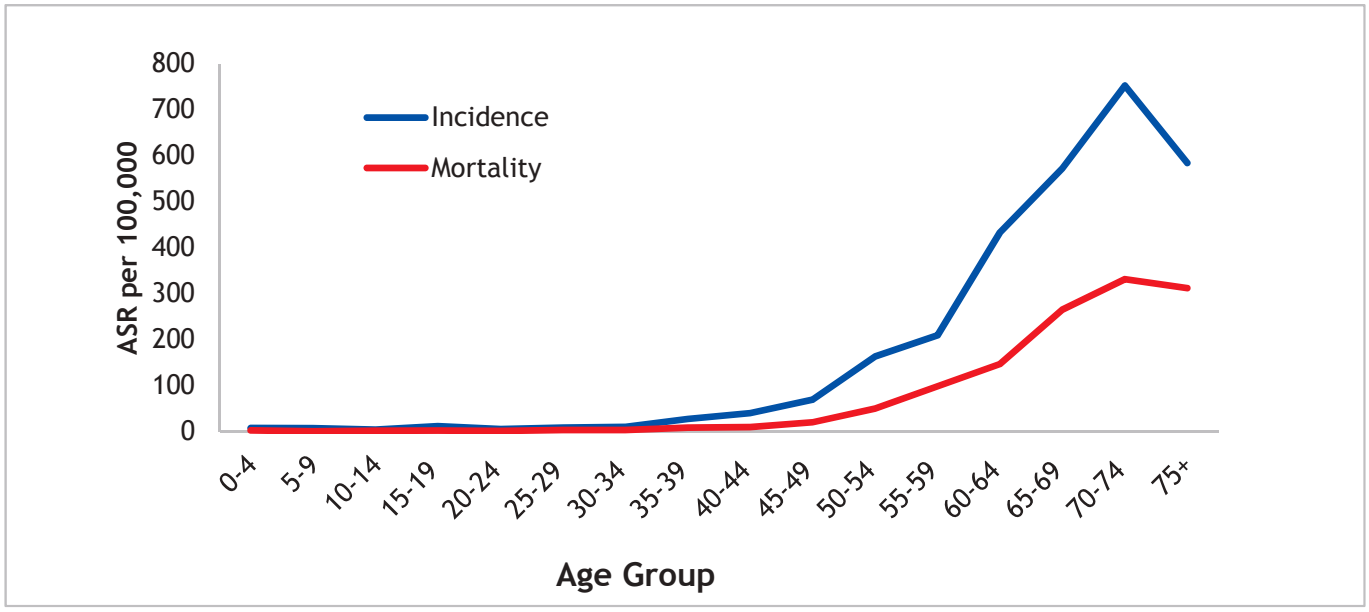

Figure 8 Age Specific Incidence and Mortality Rate in Kathmandu Valley: Male All Sites

The cancer incidence in Kathmandu Valley for females also increases with increasing age group. The incidence is highest among the age group over 75 years followed by the age groups 60-64 years, 70-74 yrs. and 65-69 yrs. respectively. The same trend is followed by mortality too as illustrated in the figure below:

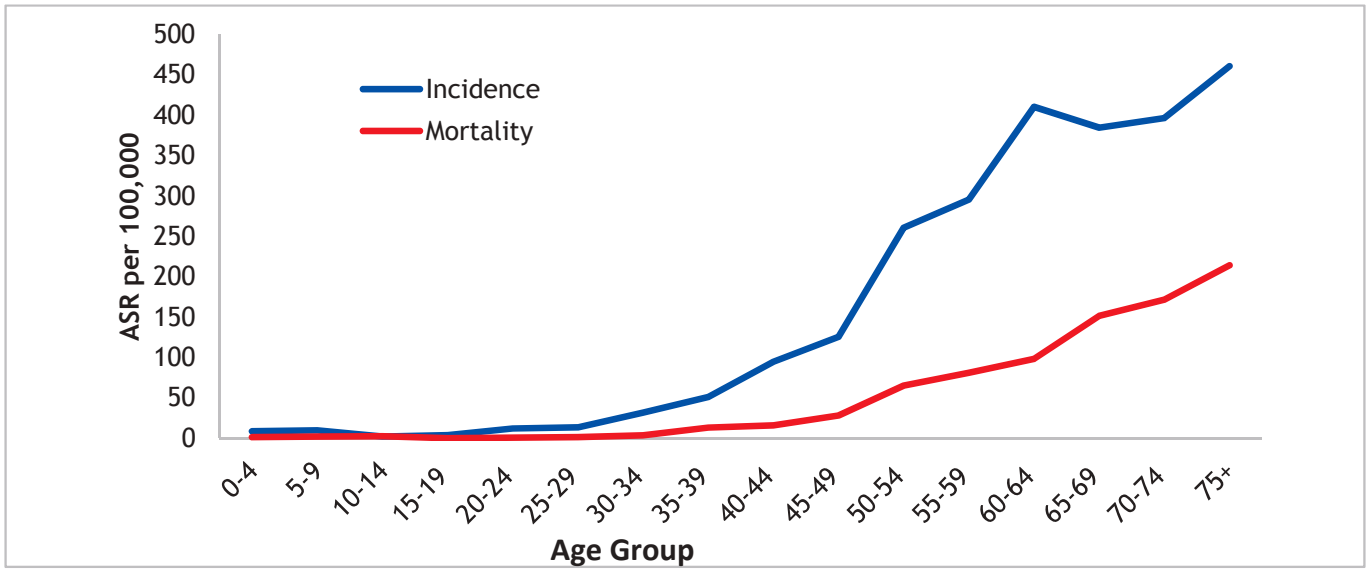

Figure 9 Age Specific Incidence and Mortality Rate in Kathmandu Valley: Female All Sites

While looking at the 3 districts of the Kathmandu valley (Kathmandu, Bhaktapur and Lalitpur) separately, Kathmandu district had a total of 1351 new cancer cases, out of which, 630 were male cases, with AAR 90.4 per 100,000, and 721 were female cases with AAR 92.6 per 100,000 populations. The morality cases in 2018 registered in Kathmandu district were 393 in which male case were 210 and female cases, 183 with the AAR 31.6 and 24.9 per 100,000 population, respectively.

In Lalitpur district, the total number of cases were 484. The age adjusted rate in males was 101.3 per 100,000 (222 cases) and for females, 109.2 per 100,000 (262 cases). The mortality was 173 in total with males death cases of 91 (AAR 43.3) and female, 82 AAR (34.7). Similarly, Bhaktapur district had 321 new cancer cases. Out of which, 147 were male cases having AAR 112.5 per 100,000 population and 174 were female cases having AAR 107.8 per 100,000. Cancer mortality cases registered at Bhaktapur were 104, out of which 64 were male cases and 40 were female cases. The age adjusted mortality rates for male was 49.4 per

100,000 population, and for females, it was 34.7 per 100,000 population. The age adjusted cancer incidence and mortality for all sites among male and female in the 3 districts has been presented in figure below:

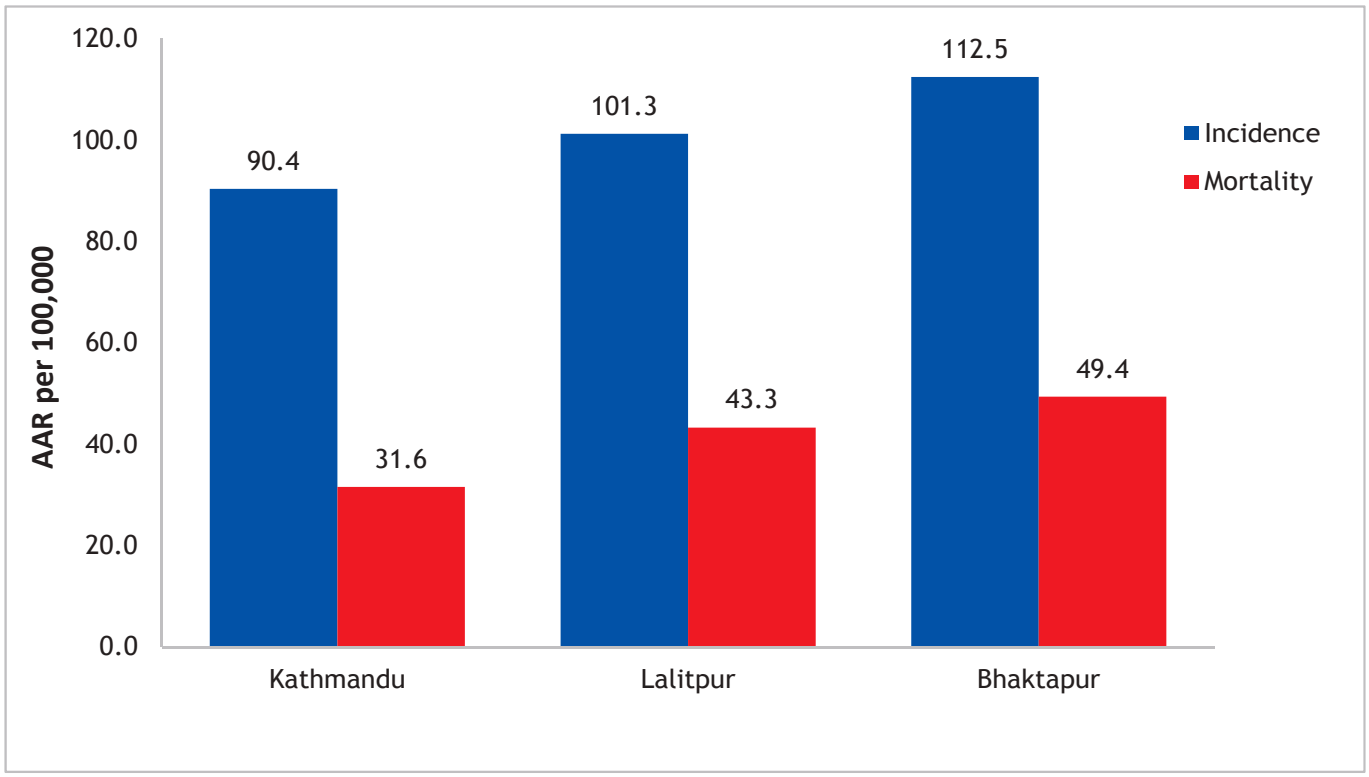

Figure 10 All Sites Cancer Incidence and Mortality Rate among Males in Kathmandu, Lalitpur and Bhaktapur Districts, 2018

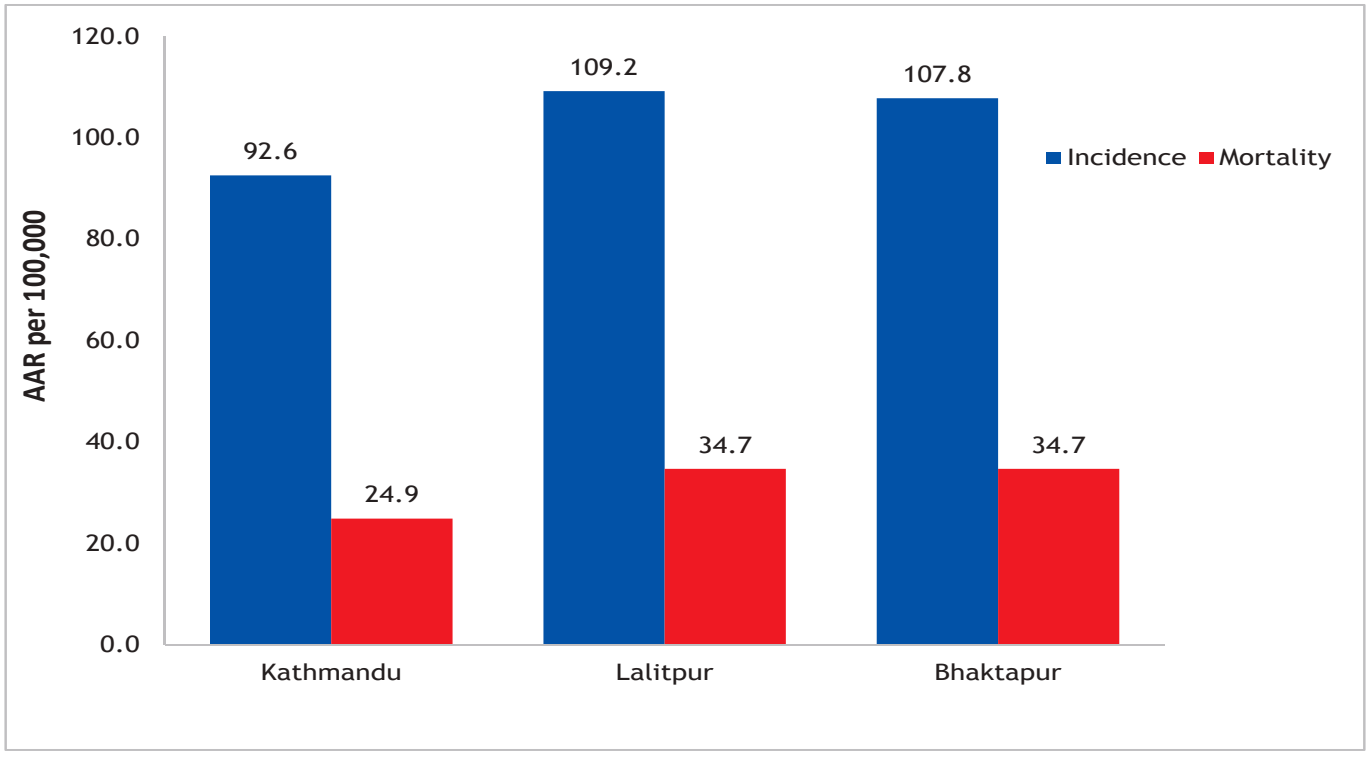

Figure 11 All Sites Cancer Incidence and Mortality Rate among Females in Kathmandu, Lalitpur and Bhaktapur Districts, 2018

4.2 Leading Cancer Sites

In Kathmandu Valley, the leading sites of cancer in males in 2018 were lungs, stomach, urinary bladder, gall Bladder and Non-Hodgkins Lymphoma (NHL). In females, breast, lungs, cervix uteri, gallbladder and ovary were the leading sites. The top ten leading sites in male and female is presented in figure below.

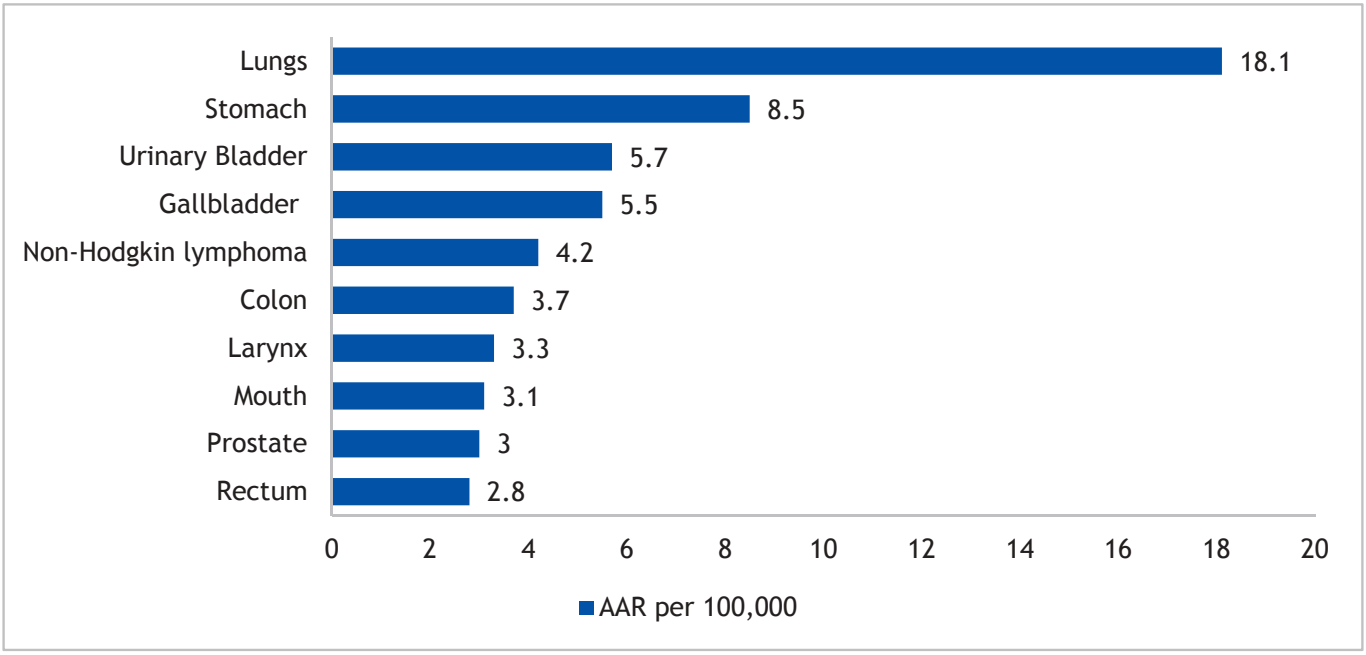

Figure 12 Leading Cancer Sites: Male, Kathmandu Valley (Kathmandu, Bhaktapur and Lalitpur Districts; n=999)

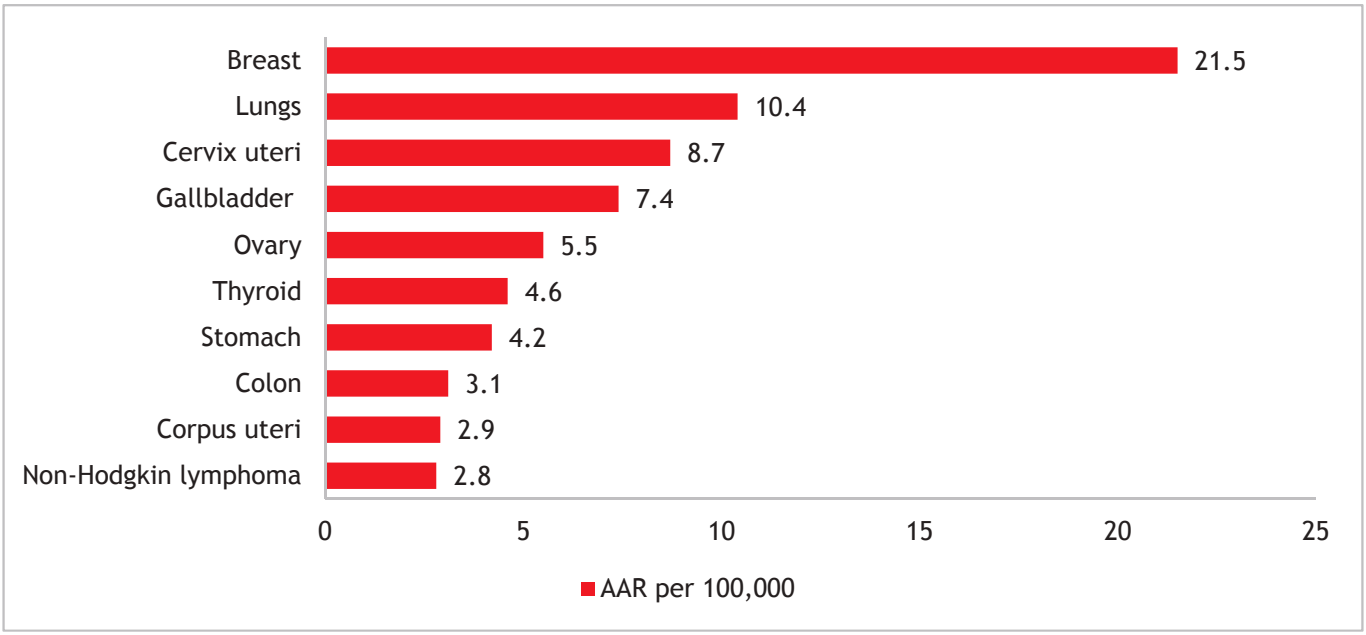

Figure 13 Leading Cancer Sites: Female, Kathmandu Valley (Kathmandu, Bhaktapur and Lalitpur Districts; n=1157)

The leading sites in both male and female in Kathmandu district were similar to Kathmandu valley as shown in figures below. In males, the top five leading sites were lungs, stomach, urinary bladder, gallbladder and NHL, whereas in females, the commonest sites were breast, cervix, lungs, ovary and gallbladder.

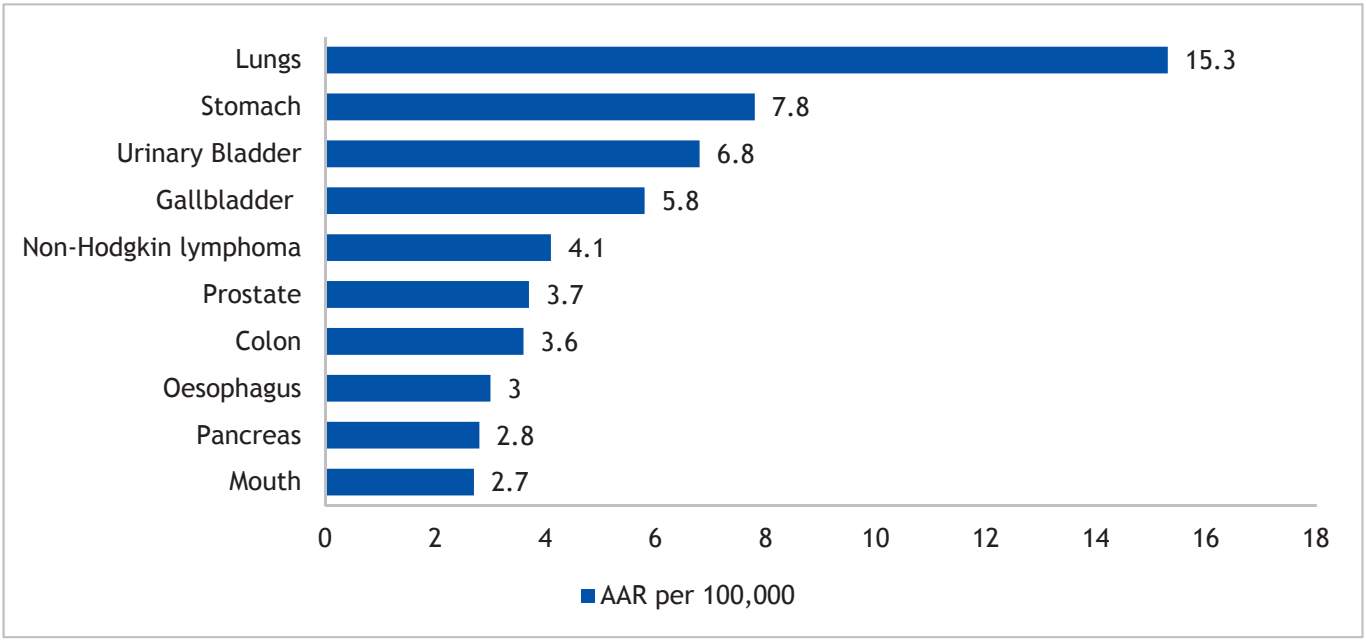

Figure 14 Leading Cancer Sites: Male, Kathmandu District (n=630)

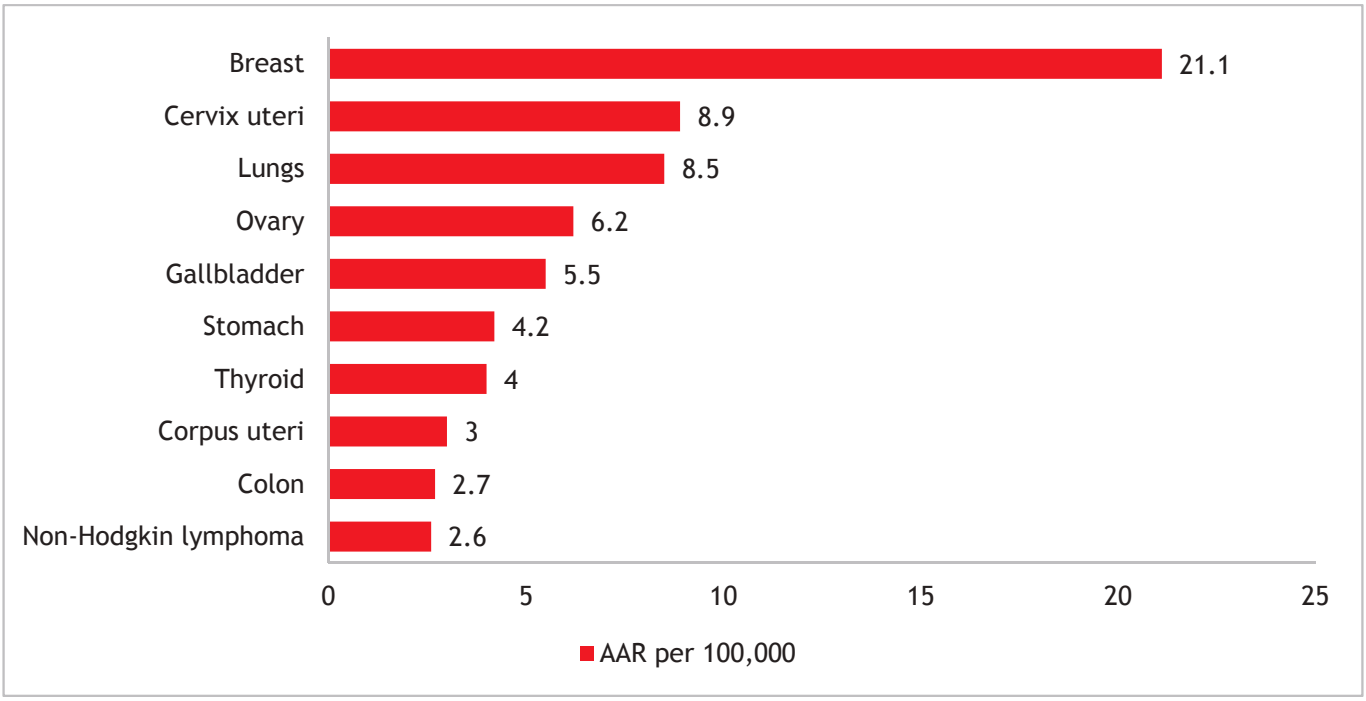

Figure 15 Leading Cancer Sites: Female, Kathmandu District (n=721)

In Lalitpur district, the leading sites in male in 2018 were lungs, stomach, Gallbladder, NHL and larynx. In contrast to Kathmandu, Urinary bladder was not commonest in Lalitpur district and larynx, kidney and rectum occupied the top ten leading sites. In female, the common sites were breast, lungs, gallbladder, cervix uteri and thyroid which was somewhat similar to Kathmandu district.

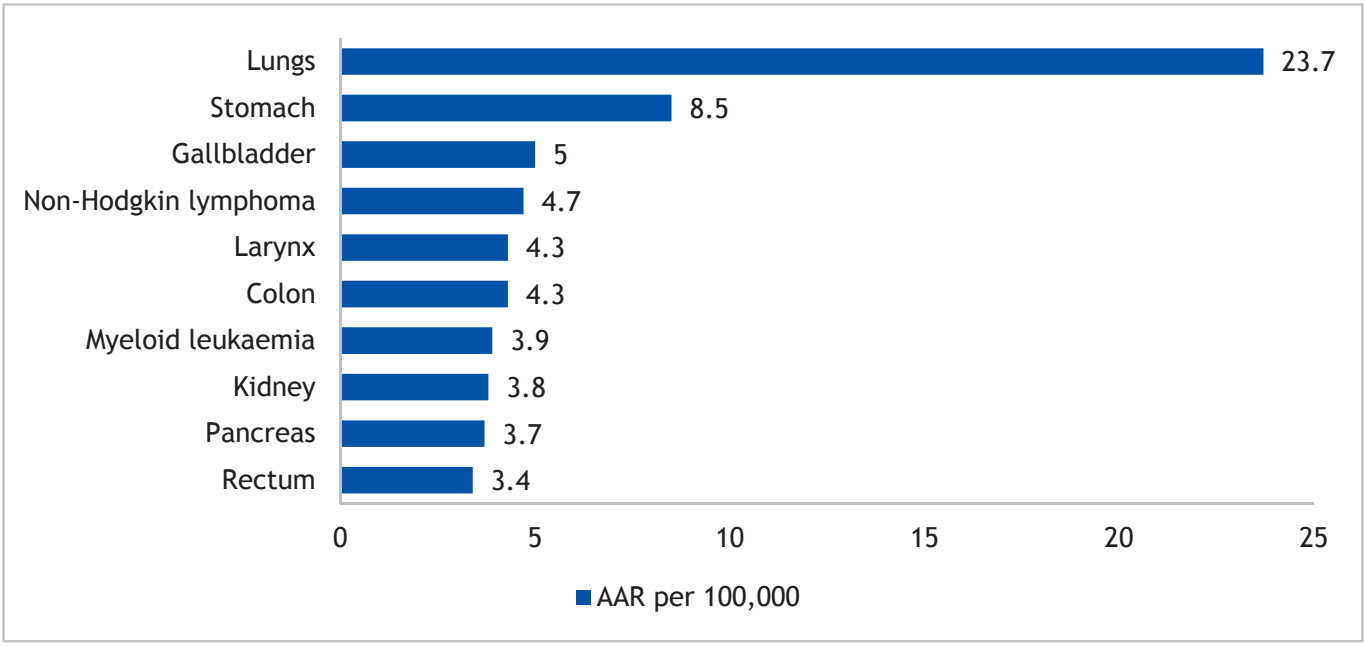

Figure 16 Leading Cancer Sites: Male, Lalitpur District (n=222)

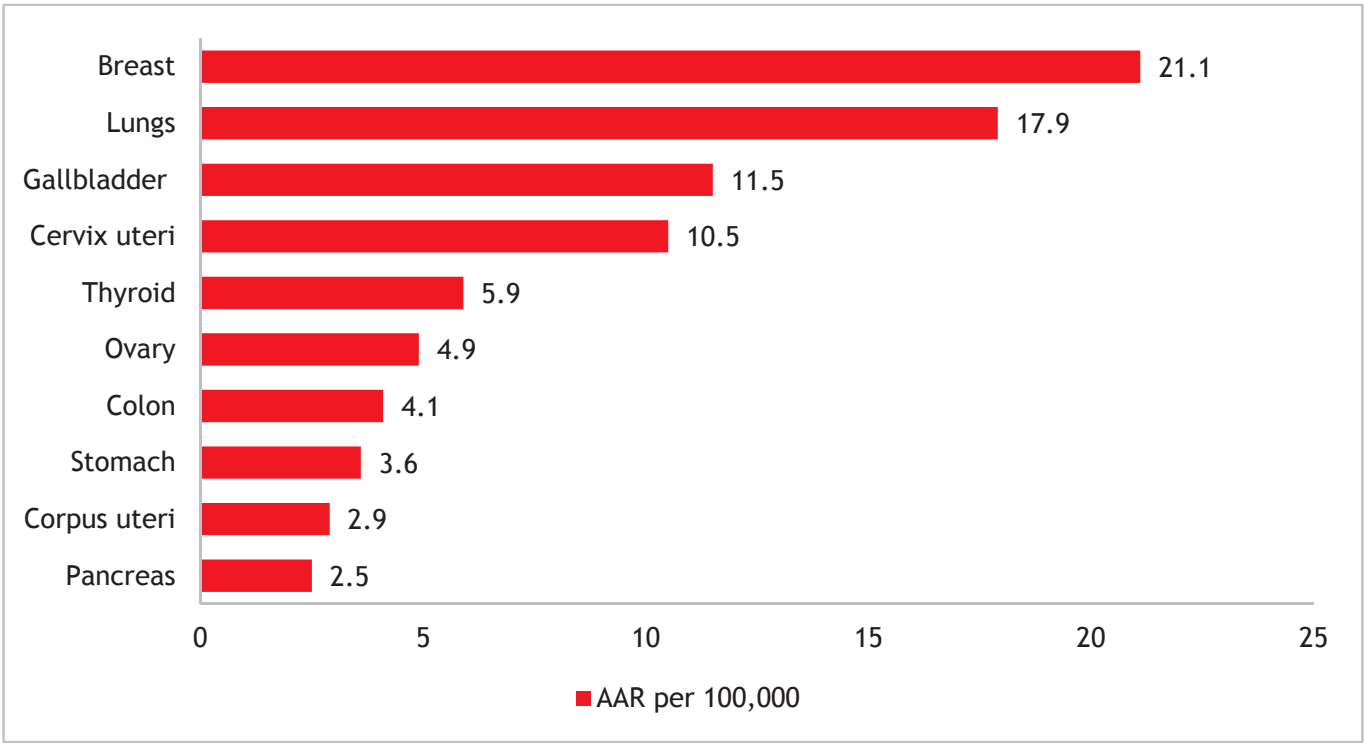

Figure 17 Leading Cancer Sites: Female, Lalitpur District (n=262)

In Bhaktapur district, the leading sites in male in 2018 were lungs, stomach, mouth, urinary bladder and larynx. Unlike Kathmandu and Lalitpur districts, the cancers of mouth and throat (larynx, pharynx) are more common in Bhaktapur district. In female the leading sites in female were breast, gallbladder, lungs, thyroid and NHL. In contrast to other two districts, the ASR of cervix uteri in females in Bhaktapur district has been found low.

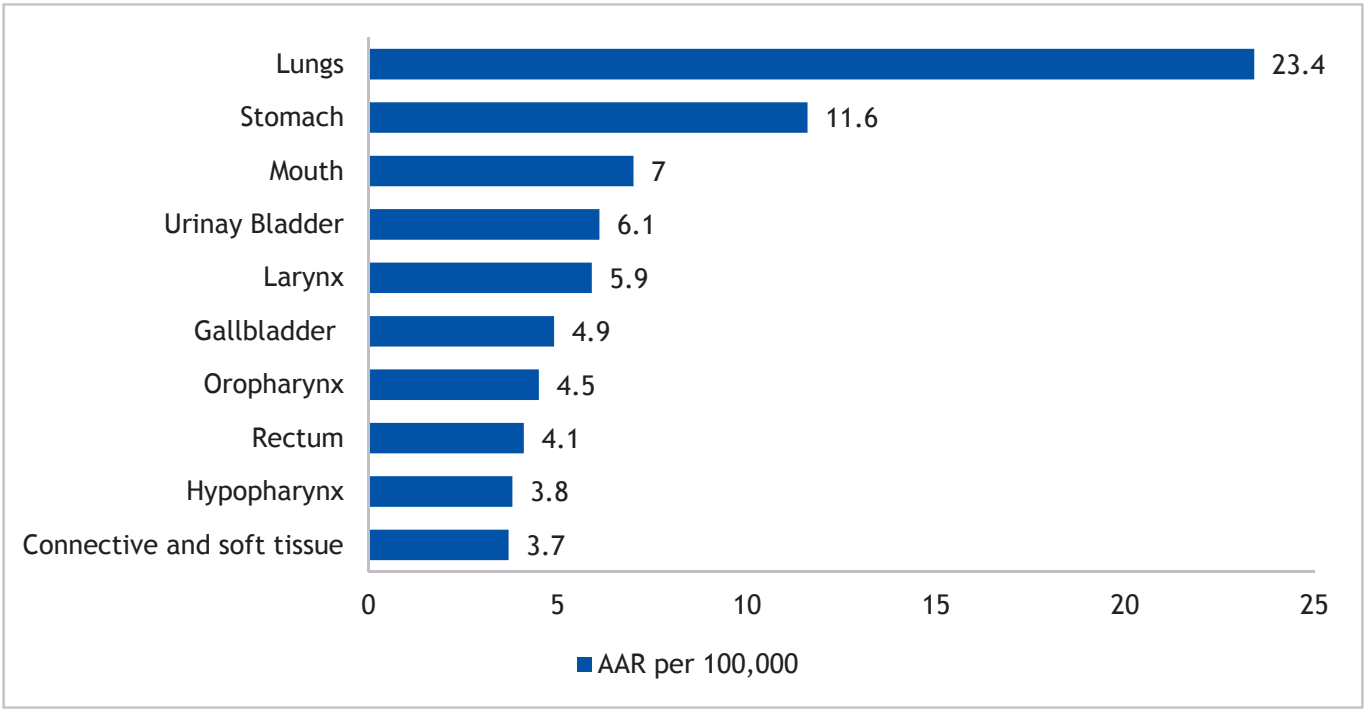

Figure 18 Leading Cancer Sites: Male, Bhaktapur District (n=147)

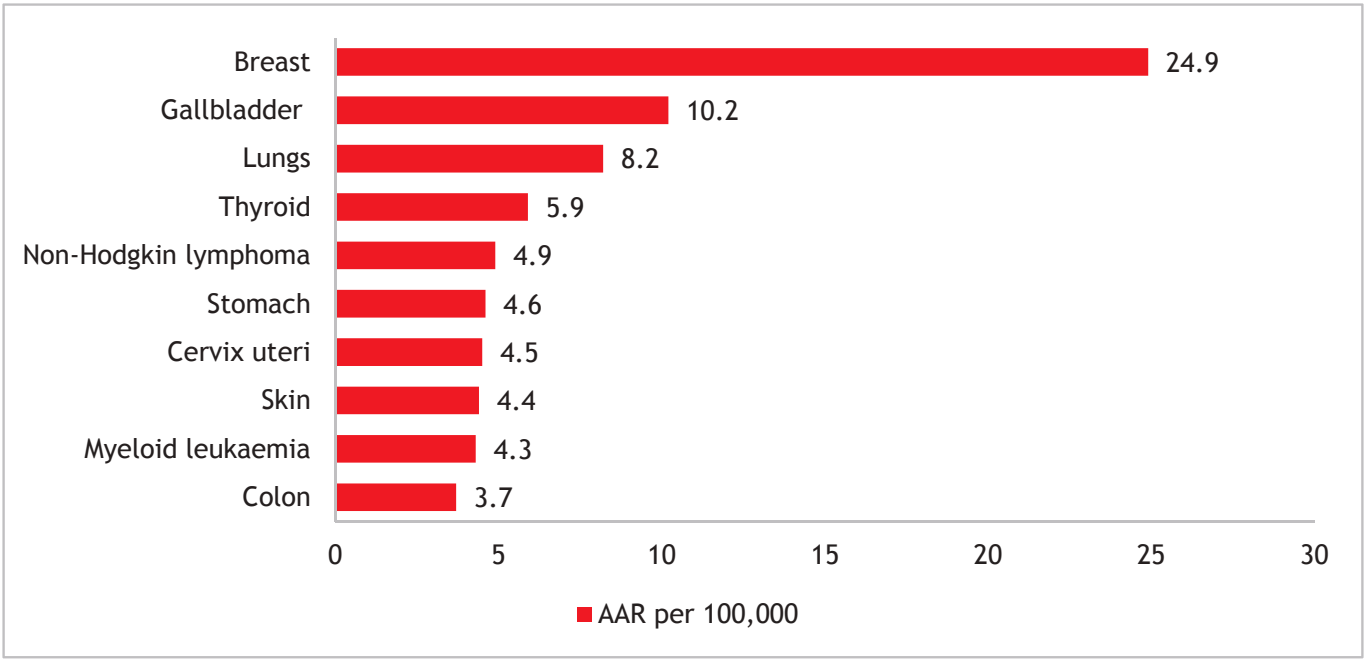

Figure 19 Leading Cancer Sites: Female, Bhaktapur District (n=174)

Cancer of Lung (C33-34)

Description	Male	Female
Number of Cases	177	116
% of Total Cases	18.1	10.2
Crude Incidence Rate per 100,000 population	11.15	7.82
Age Adjusted Incidence Rate per 100,000 population	18.1	10.4
Truncated Rate per 100,000 population	21.3	15.4

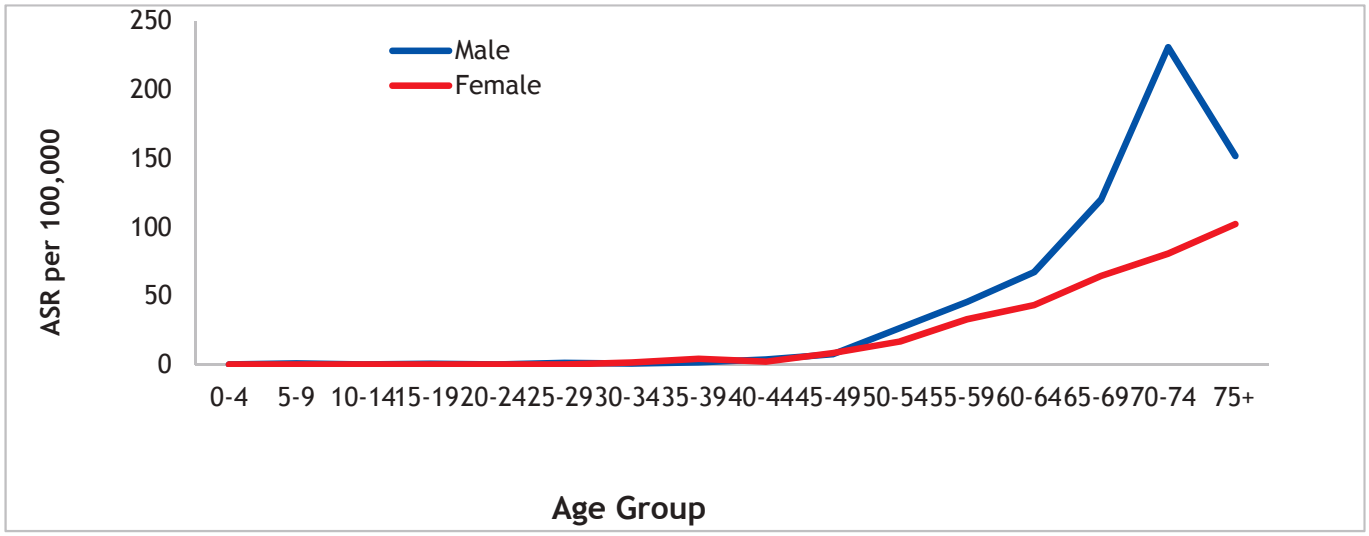

Figure 20 Age Specific Incidence rate of Cancer of Lung

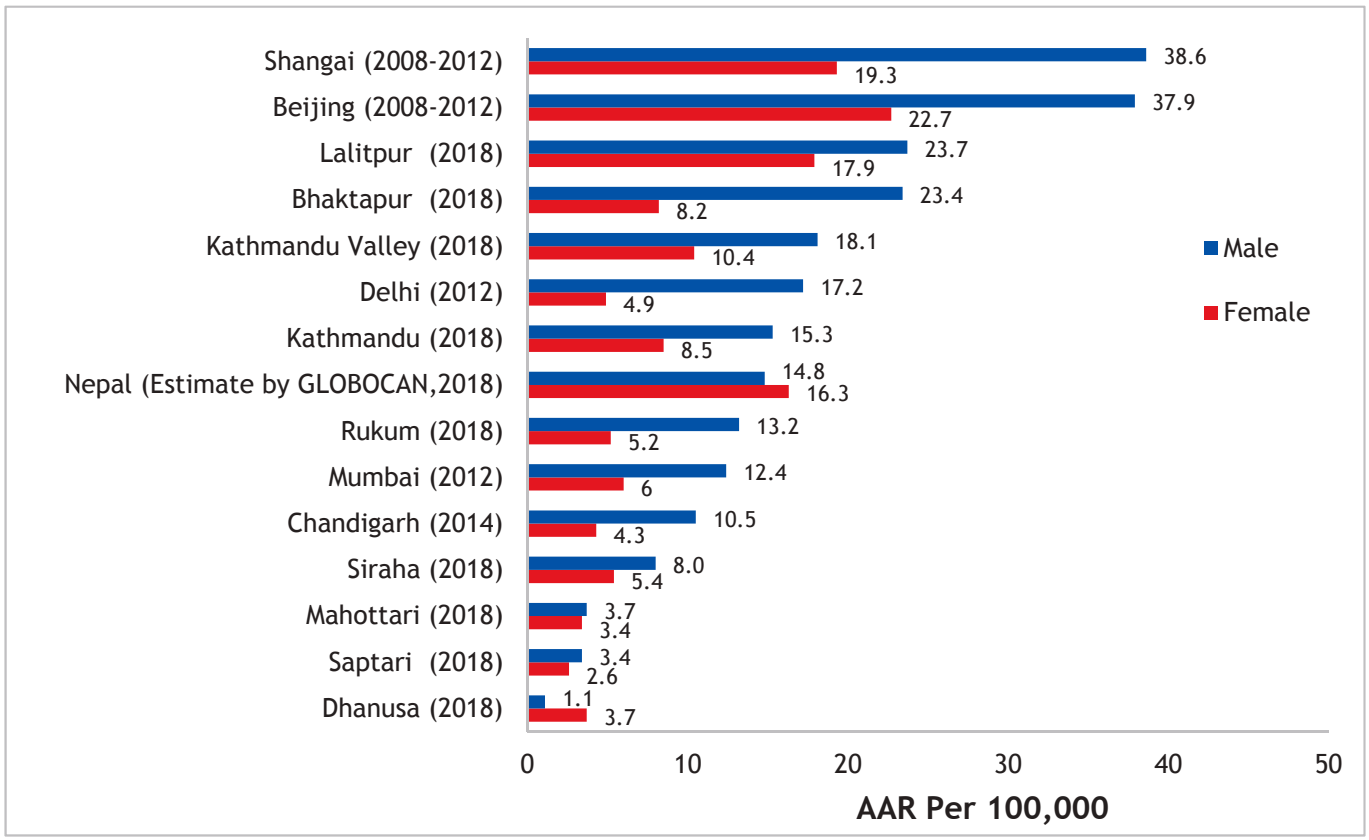

Figure 21 Comparison of Cancer of Lung with Other Neighboring Registries (9-13)

Cancer of Stomach (C16)

Description	Male	Female
Number of Cases	90	51
% of Total Cases	9.2	4.5
Crude Incidence Rate per 100,000 population	5.67	3.44
Age Adjusted Incidence Rate per 100,000 population	8.5	4.2
Truncated Rate per 100,000 population	14	9.4

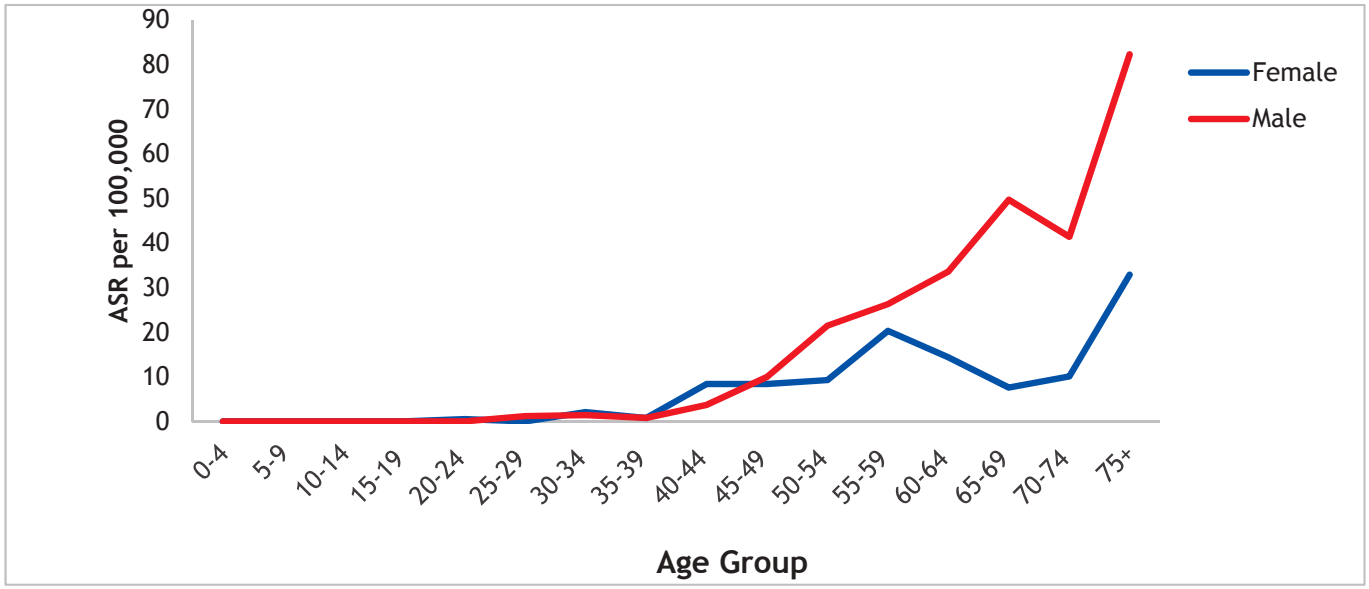

Figure 22 Age Specific Incidence Rate of Cancer of Stomach

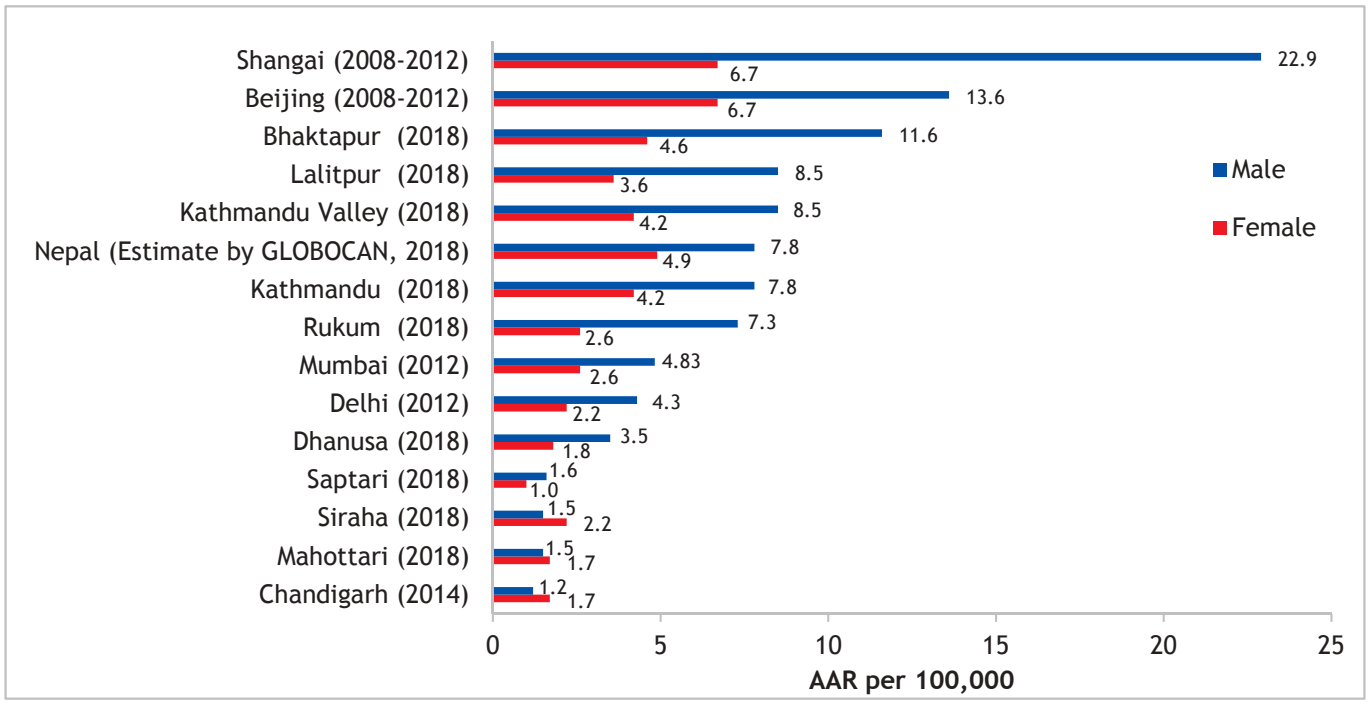

Figure 23 Comparison of Cancer of Stomach with Other Neighboring Registries (9-13)

Cancer of Urinary Bladder (C67)

Description	Male	Female
Number of Cases	54	9
% of Total Cases	5.5	0.8
Crude Incidence Rate per 100,000 population	3.4	0.61
Age Adjusted Incidence Rate per 100,000 population	5.7	0.8
Truncated Rate per 100,000 population	1.4	0.6

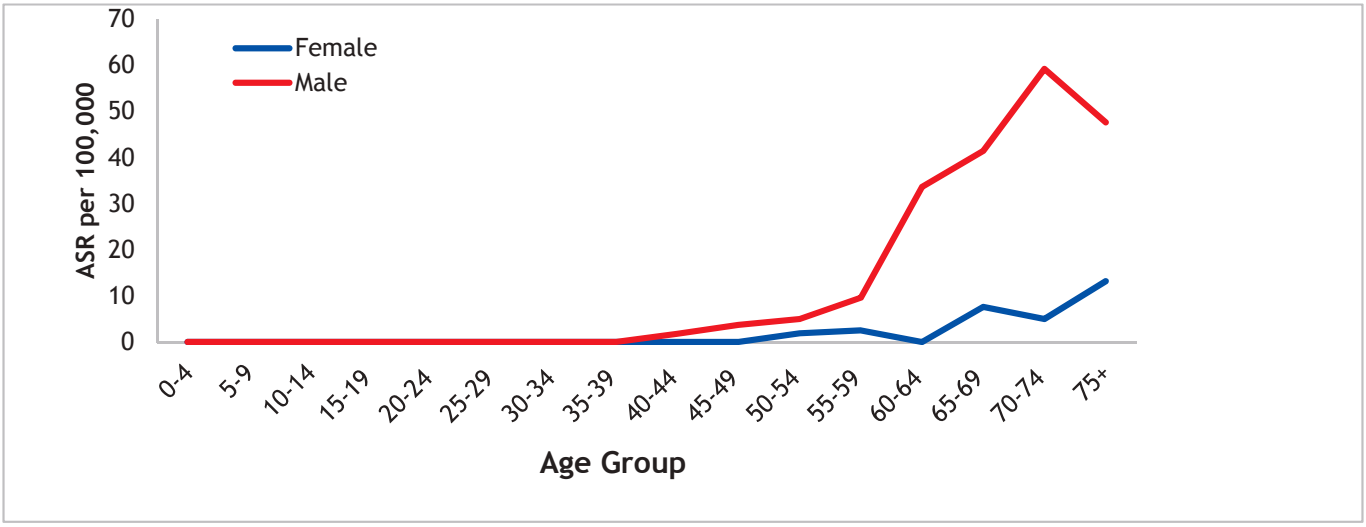

Figure 24 Age Specific Incidence Rate of Cancer of Urinary Bladder

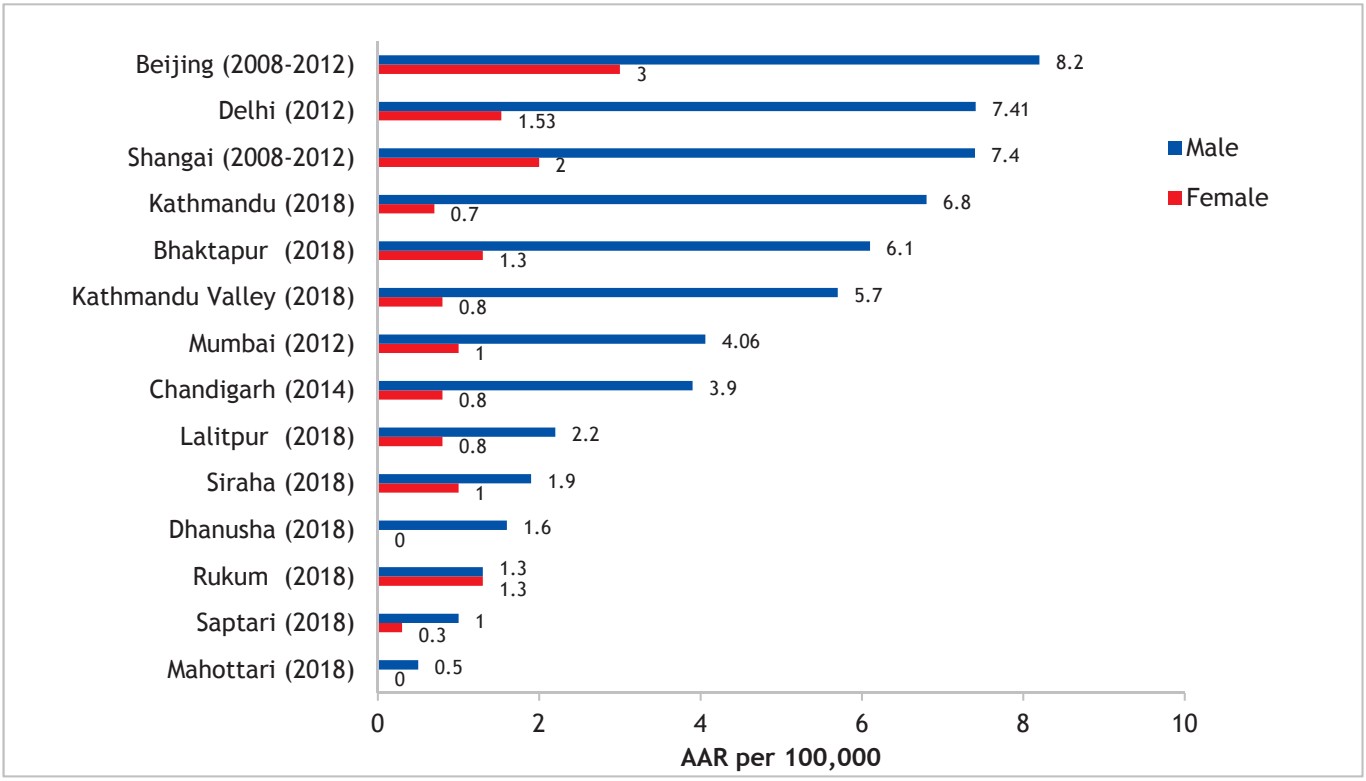

Figure 25 Comparison of Cancer of Urinary Bladder with Other Neighboring Registries (9-12)

Cancer of Gall Bladder (C23)

Description	Male	Female
Number of Cases	58	82
% of Total Cases	5.9	7.2
Crude Incidence Rate per 100,000 population	3.65	5.52
Age Adjusted Incidence Rate per 100,000 population	5.5	7.4
Truncated Rate per 100,000 population	7.9	13

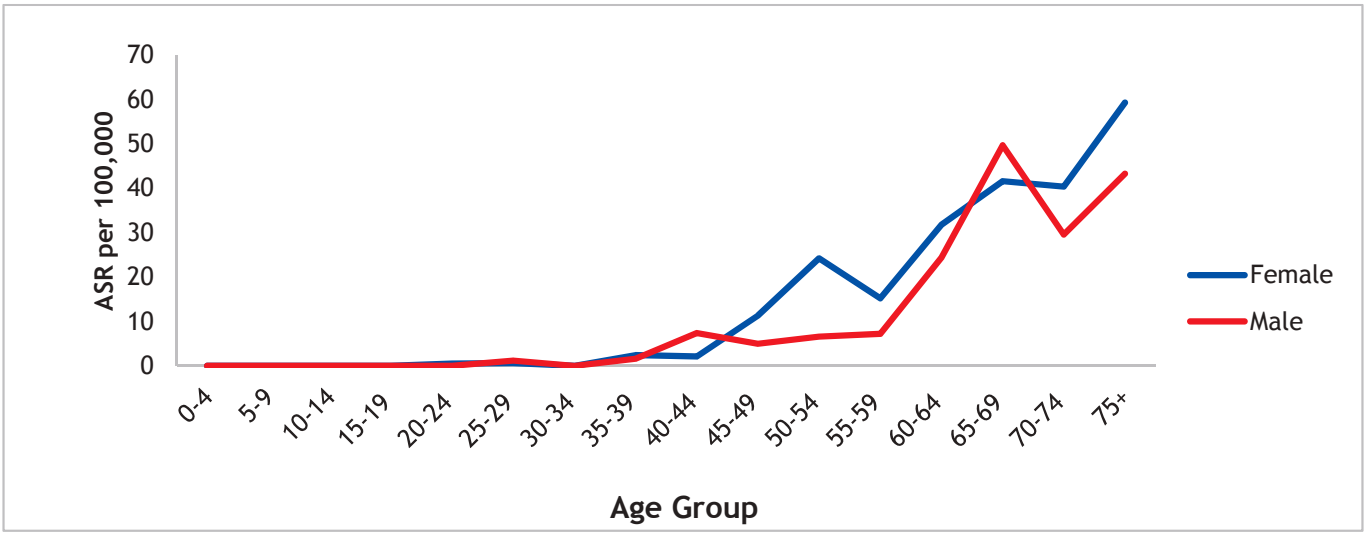

Figure 26 Age Specific Incidence Rate of Cancer of Gall Bladder

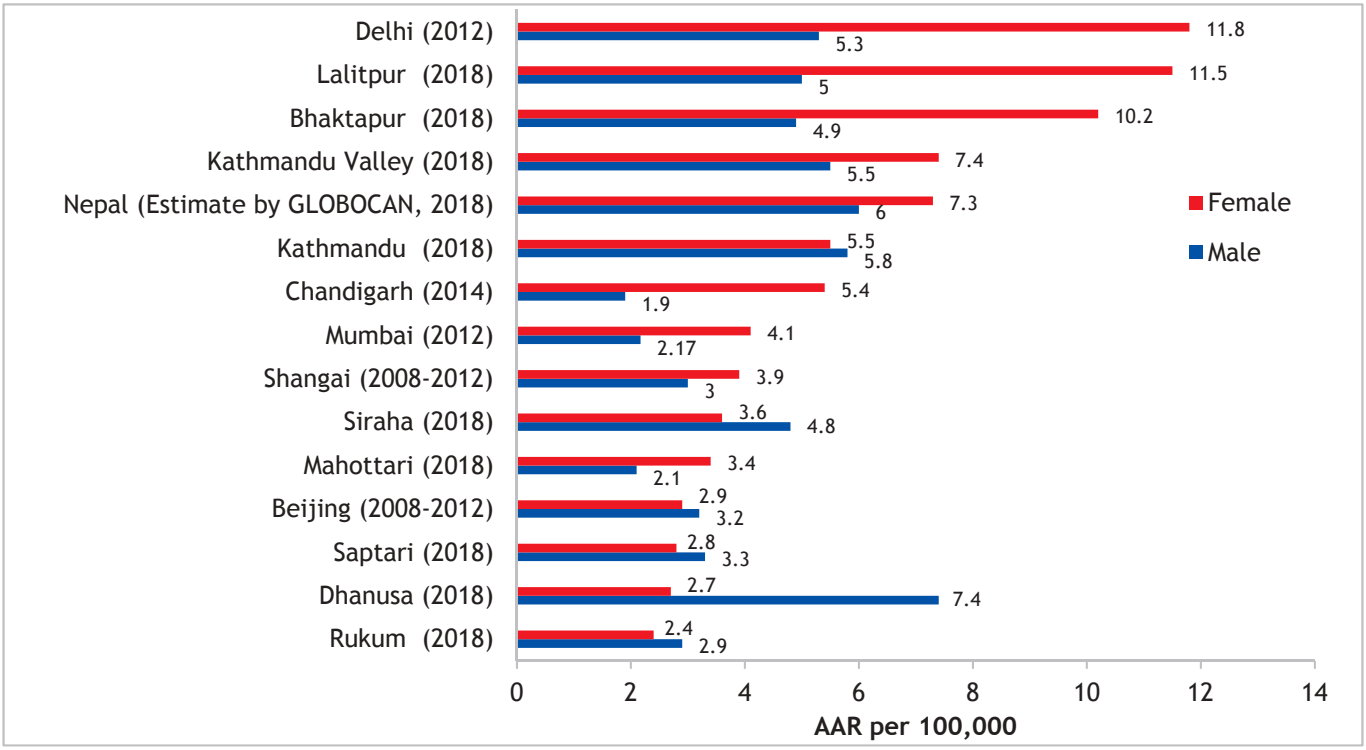

Figure 27 Comparison of Cancer of Gall Bladder with Other Neighboring Registries (9-13)

Cancer of Non Hodgkin's Lymphoma (C82-85, C96)

Description	Male	Female
Number of Cases	45	32
% of Total Cases	4.6	2.8
Crude Incidence Rate per 100,000 population	2.83	2.16
Age Adjusted Incidence Rate per 100,000 population	4.2	2.8
Truncated Rate per 100,000 population	5.4	5.2

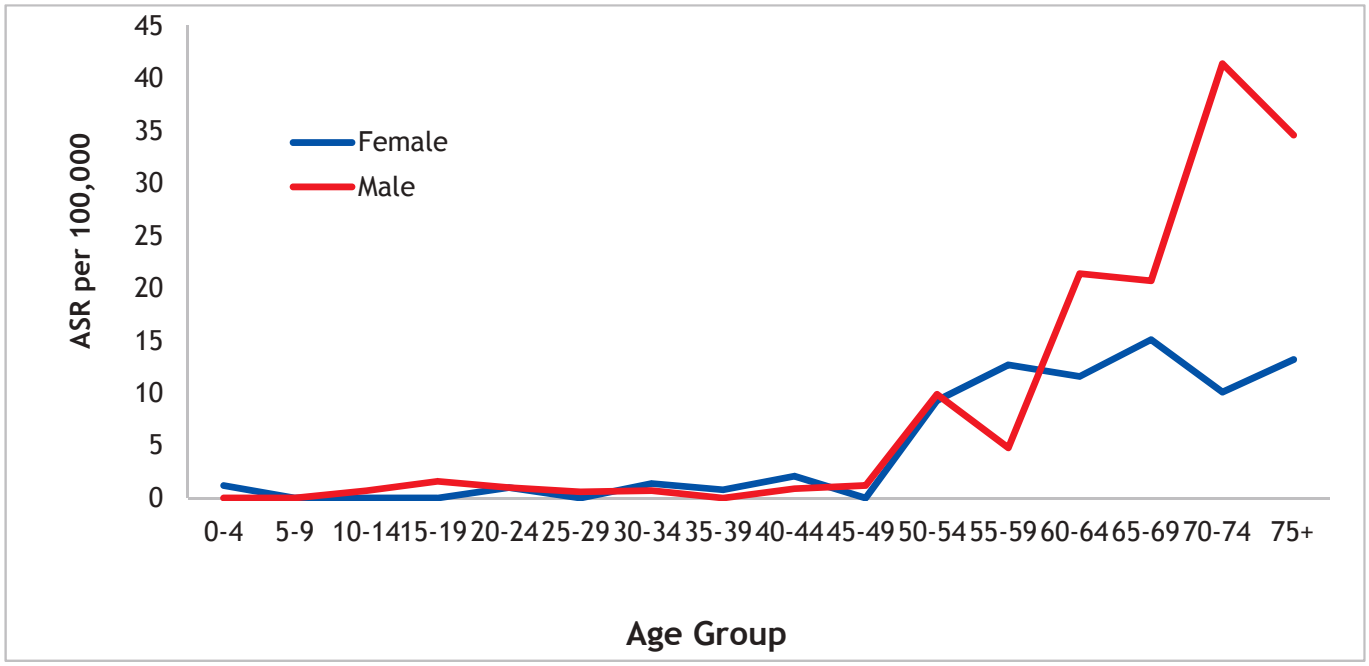

Figure 28 Age Specific Incidence Rate of Non Hodgkin's Lymphoma

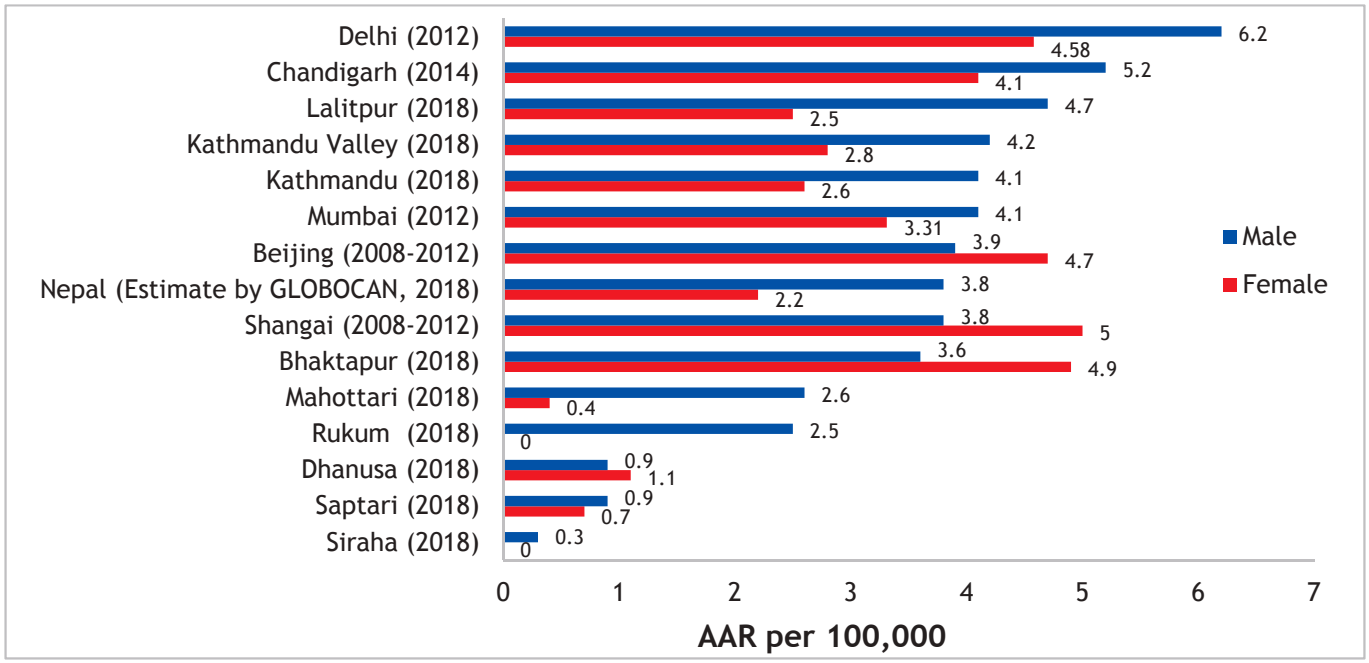

Figure 29 Comparison of Non Hodgkin's Lymphoma with Other Neighboring Registries (9-13)

Cancer of Breast (C50)

Description	Female
Number of Cases	259
% of Total Cases	22.9
Crude Incidence Rate per 100,000 population	17.45
Age Adjusted Incidence Rate per 100,000 population	21.5
Truncated Rate per 100,000 population	53.7

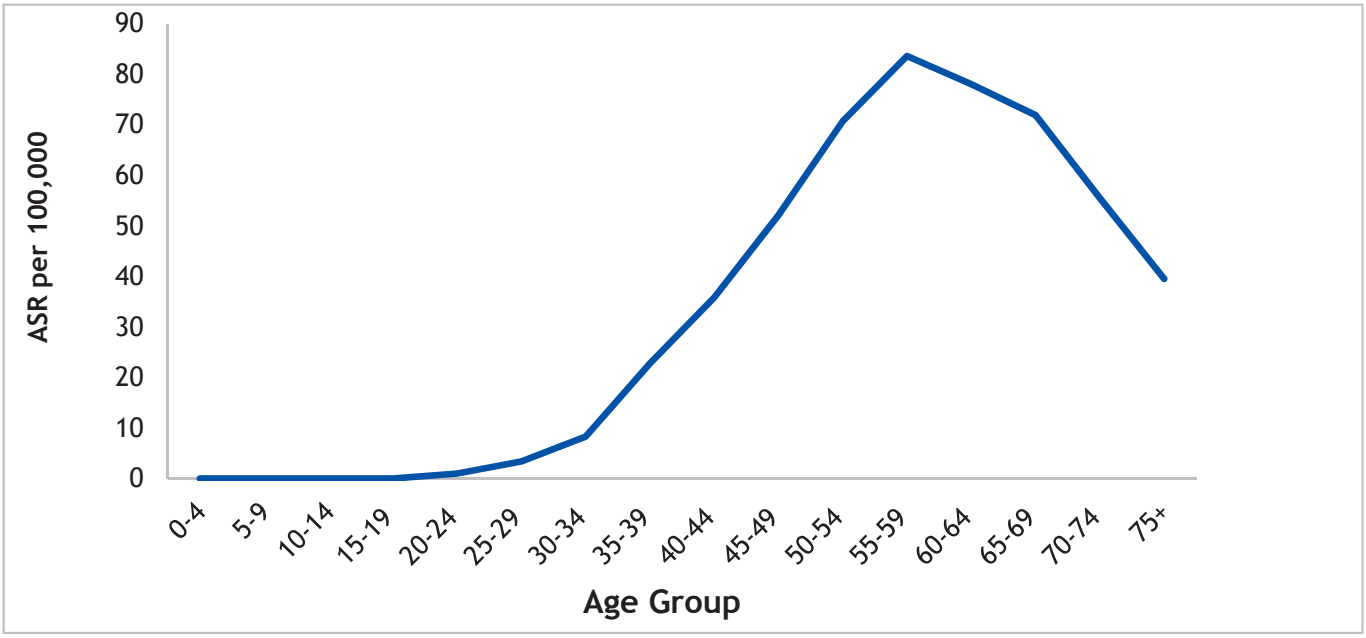

Figure 30 Age Specific Incidence Rate of Cancer of Breast

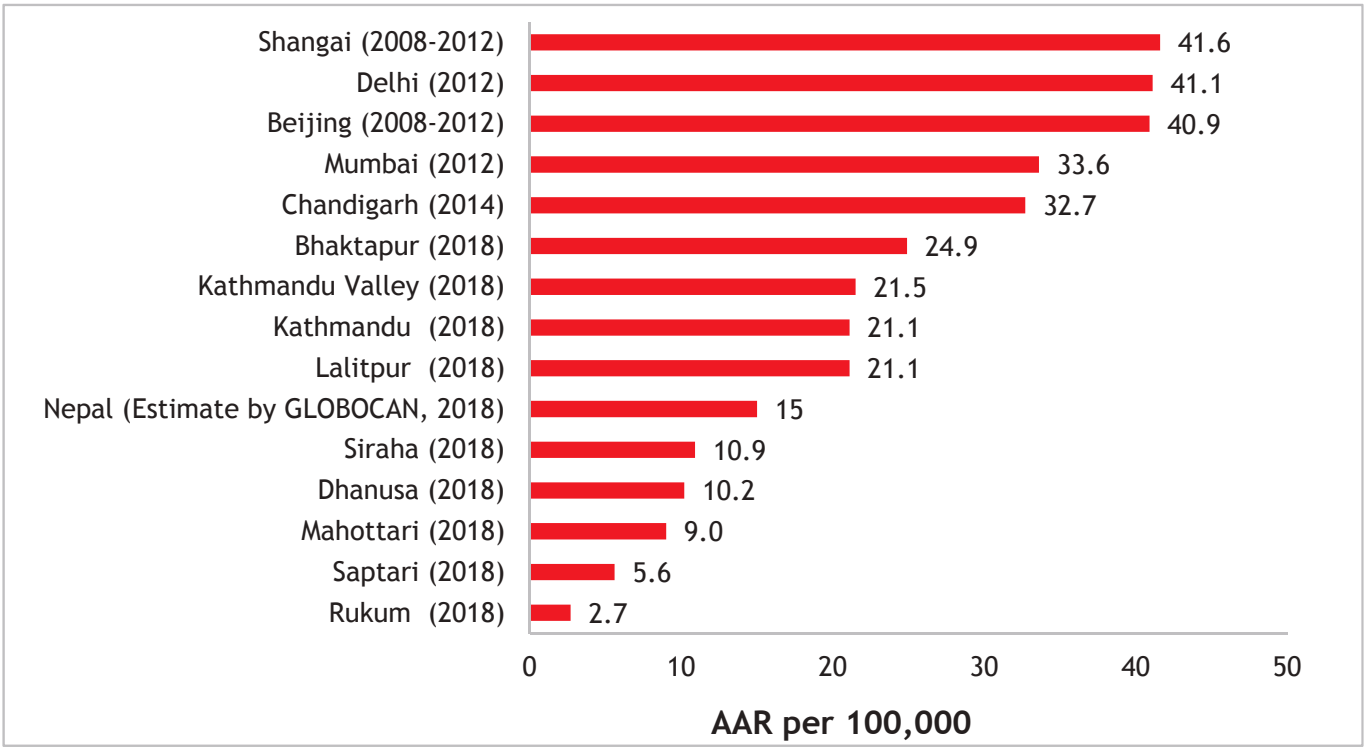

Figure 31 Comparison of Cancer of Breast with Other Neighboring Registries (9-13)

Cancer of Cervix Uteri (C54)

Description	Female
Number of Cases	99
% of Total Cases	8.7
Crude Incidence Rate per 100,000 population	6.67
Age Adjusted Incidence Rate per 100,000 population	8.7
Truncated Rate per 100,000 population	19.2

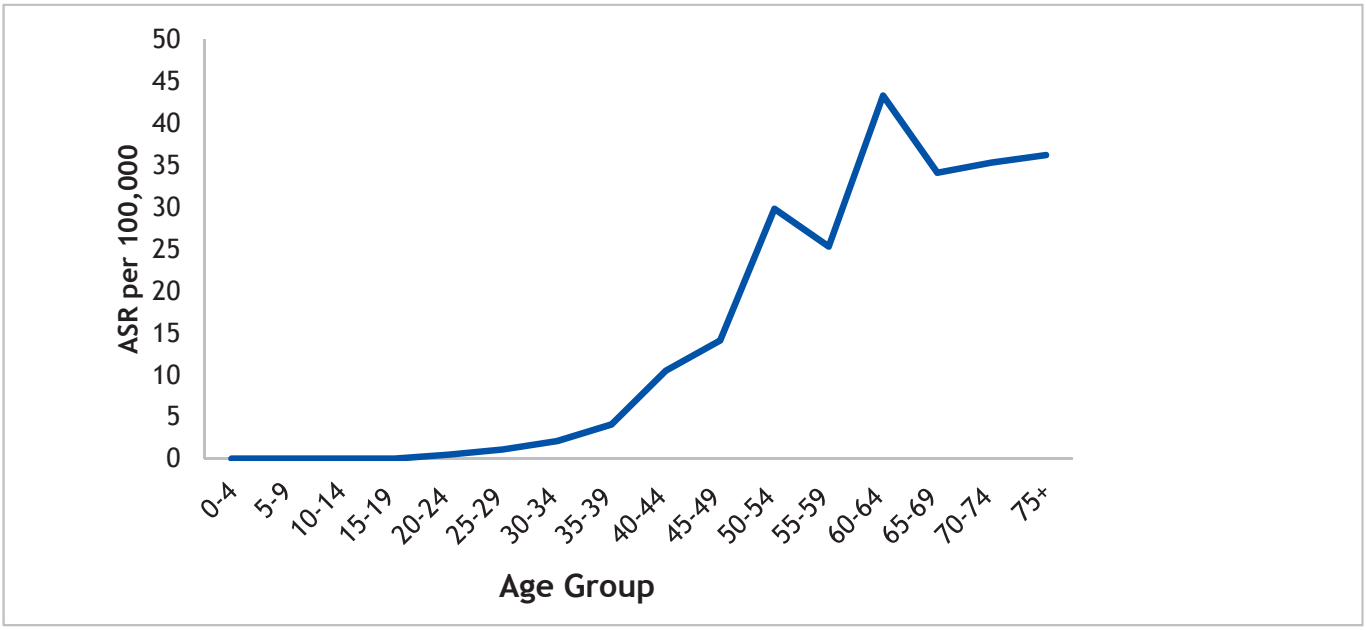

Figure 32 Age Specific Incidence Rate of Cancer of Cervix Uteri

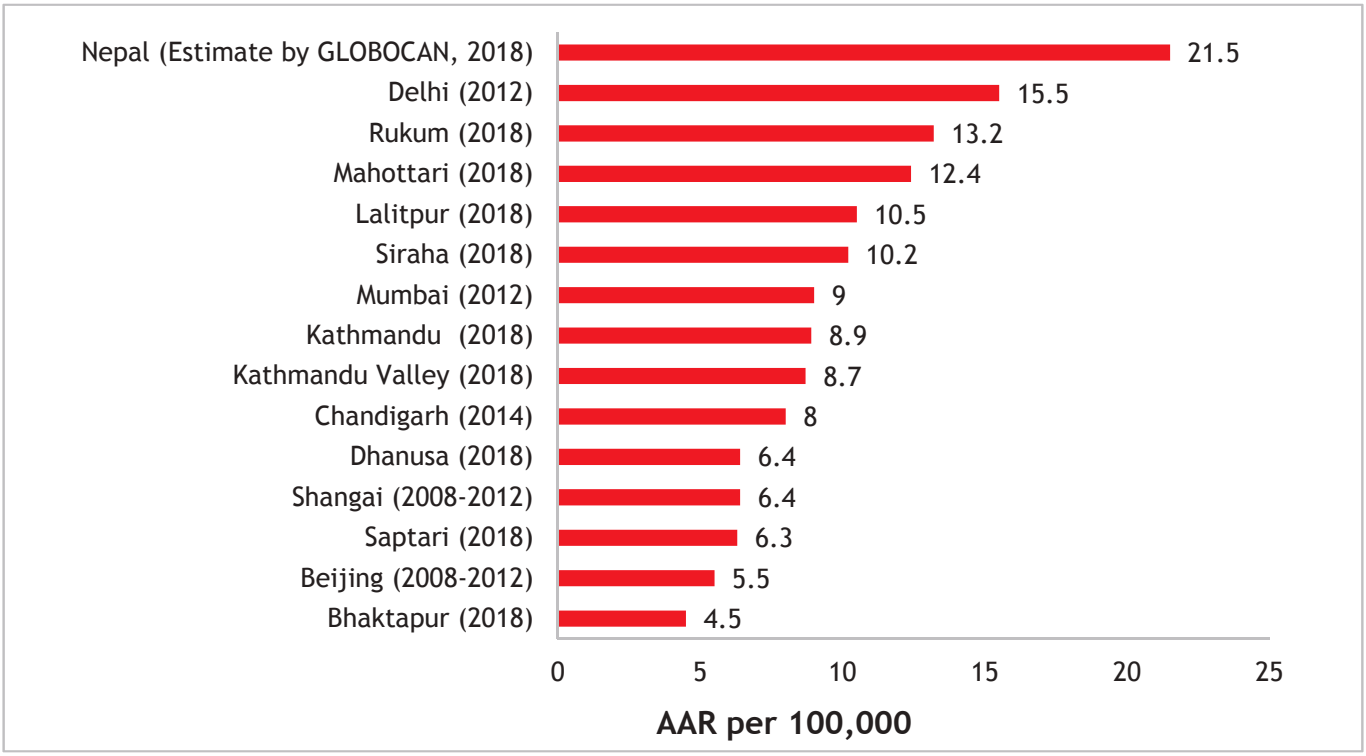

Figure 33 Comparison of Cancer of Cervix Uteri with Other Neighboring Registries (9-13)

Cancer of Ovary (C56)

Description	Female
Number of Cases	64
% of Total Cases	5.7
Crude Incidence Rate per 100,000 population	4.31
Age Adjusted Incidence Rate per 100,000 population	5.5
Truncated Rate per 100,000 population	13.1

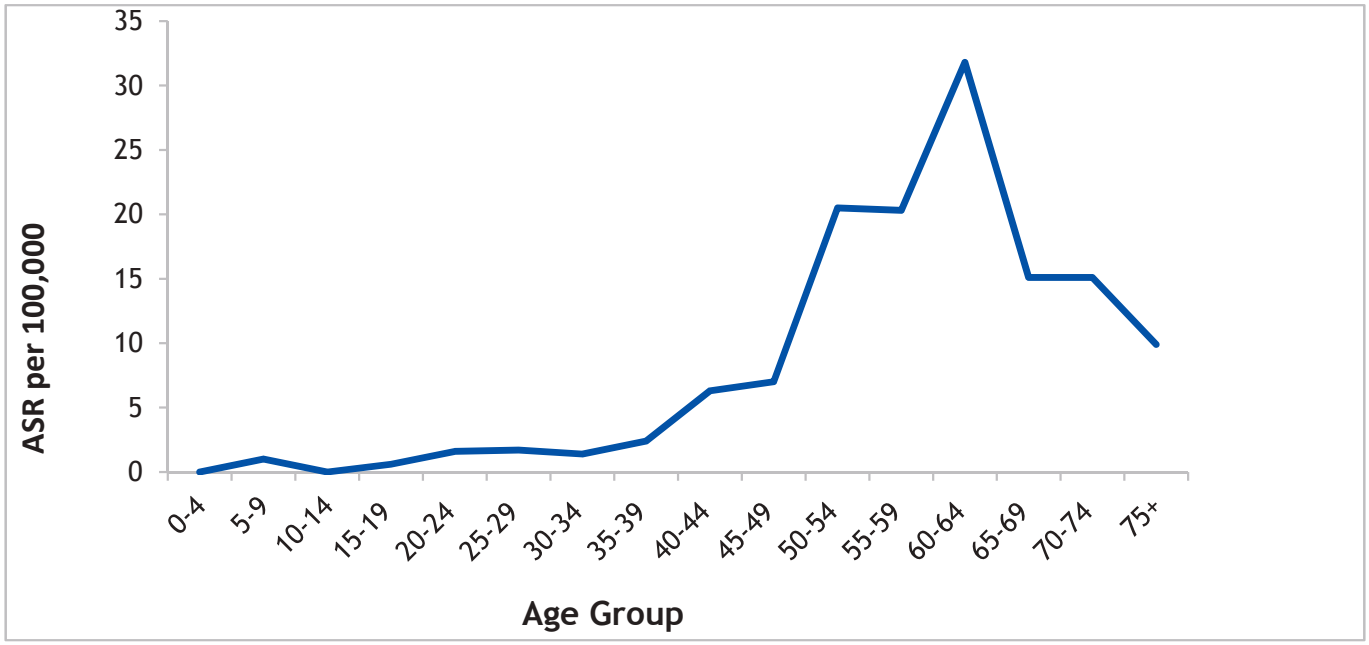

Figure 34 Age Specific Incidence Rate of Cancer of Ovary

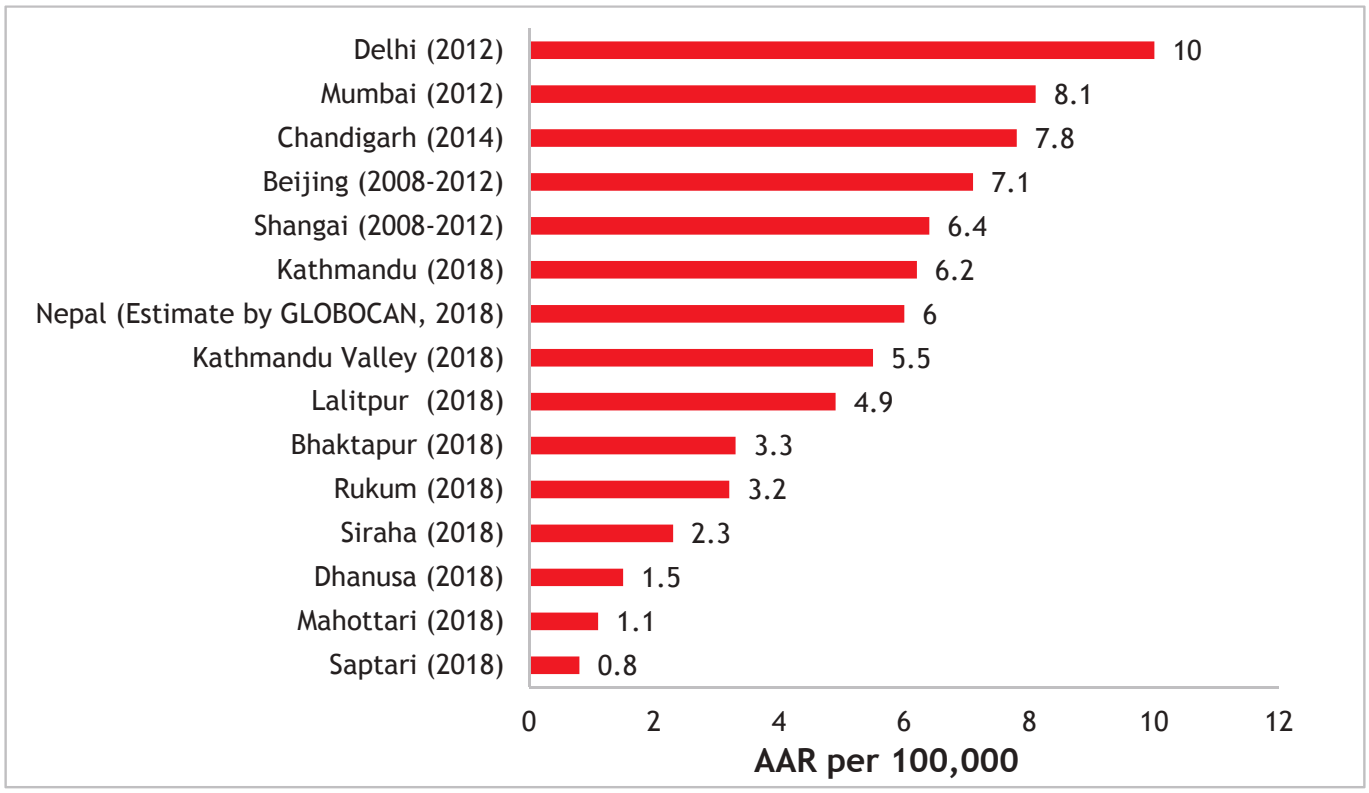

Figure 35 Comparison of Cancer of Ovary with Other Neighboring Registries (9-13)

Cancer of Thyroid (C73)

Description	Male	Female
Number of Cases	14	70
% of Total Cases	1.4	6.2
Crude Incidence Rate per 100,000 population	0.88	4.72
Age Adjusted Incidence Rate per 100,000 population	1	4.6
Truncated Rate per 100,000 population	1.9	9.7

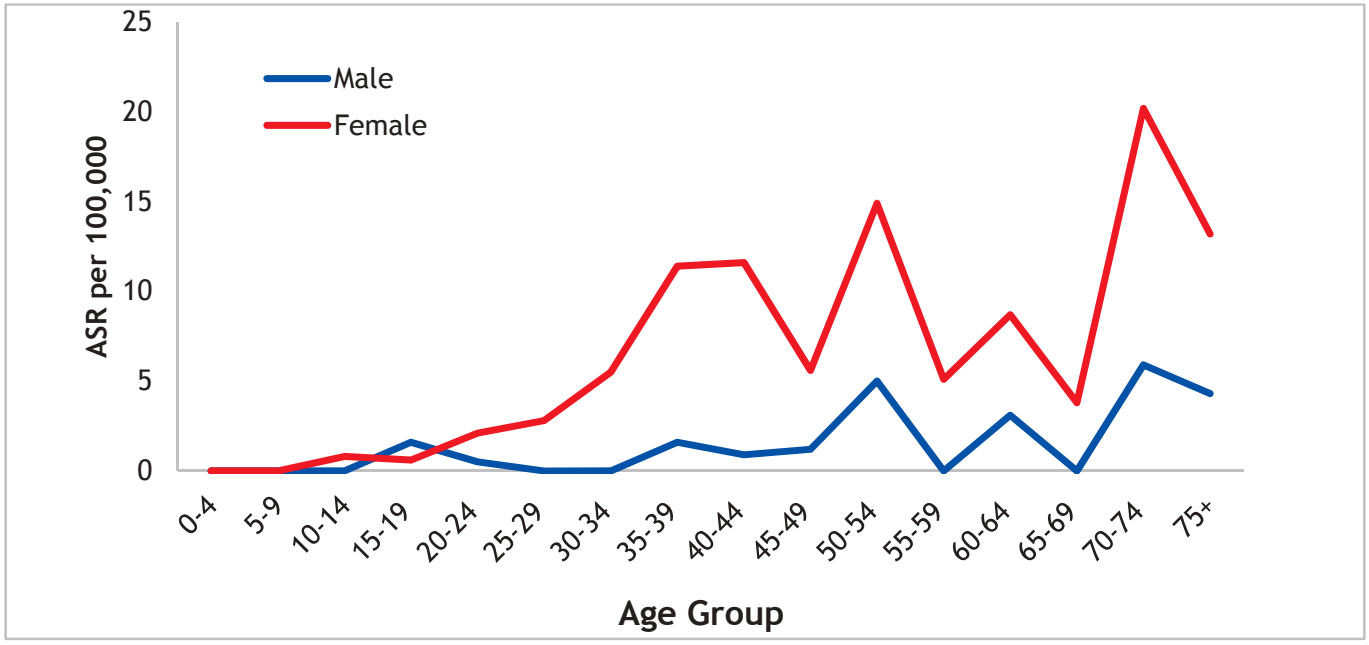

Figure 36 Age Specific Incidence Rate of Cancer of Thyroid

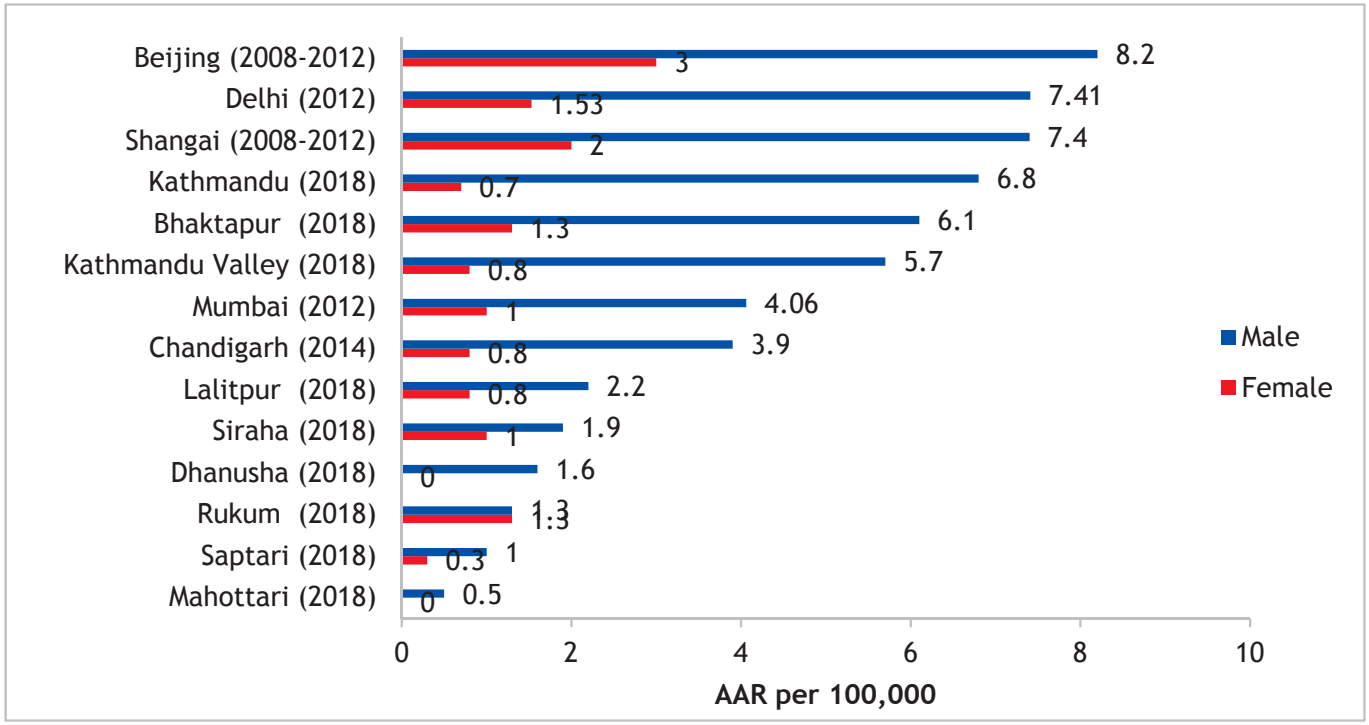

Figure 37 Comparison of Cancer of Thyroid with Other Neighboring Registries (9-12)

Other and Unspecified Sites

The other and unspecified sites include:

C26	Other and Ill-Defined Digestive Organ,	**C77**	Secondary and Unspecified Malignant Neoplasm of Lymph Node
C39	Other and Ill-Defined Sites Within Respiratory Systems and Intra-thoracic Organ,	**C78**	Secondary Malignant Neoplasm of Respiratory and Digestive Organs,
C48	Retro Peritoneum and Peritoneum,	**C79**	Secondary Malignant Neoplasm of Other and Unspecified Sites,
C75	Other Endocrine Glands and Related Structures,	**C80**	Malignant Neoplasm Without Specification of Site
C76	Other and Ill-Defined, Secondary and Unspecified sites	**C97**	Malignant Neoplasm of Independent(Primary) Multiple sites

The other and unspecified cases in Kathmandu valley were other and ill-defined digestive organs (C26) and primary unknown (C80) for both male and female. In males, among 999 cancer cases, 47 cases were of other and unspecified sites, predominantly of primary unknown (4.5%). Among 1157 female cases, 42 were of other and unspecified cases, out of which 37 (3.2%) cases were primary unknown and remaining 5 (0.4%) cases were of other and ill-defined digestive organs. (Described in Table 7)

The high percentage of primary unknown case in our setting is the indicator of the health infrastructure, as well as awareness and utilization of health facilities. It also indicates inadequate documentation of the health care service providers and the quality of diagnostic information. As Kathmandu valley is an area having availability of comprehensive cancer treatment and diagnostic (of high level) facilities, the predominant number of Primary unknown cases among both sexes have been observed due to poor maintenance of the record. Thus, along with the improvement in record keeping as well as diagnostic and treatment facilities, the percentage of primary site unknown will be decreased remarkably.

After going through the medical records, discharge summary, lungs metastasis, liver metastasis, bone metastasis have been identified and usually the patientare found to be of old age. As the disease reaches to metastatic stage, most of the cases prefer leaving behind the further investigation and rely on alternative medicine.

Table 7 Other and Unspecified cases by Sex

ICD	Male		Female	
	Number	%	Number	%
C26	2	0.2	5	0.4
C80	45	4.5	37	3.2
Total	47/999	4.7/100	42/1157	3.6/100

Cancer of Other and Unspecified Sites (ICD-10: C26, C80,)

Description	Male	Female
Number of Cases	47	42
% of Total Cases	4.8	3.7
Crude Incidence Rate per 100,000 population	2.96	2.83
Age Adjusted Incidence Rate per 100,000 population	4.5	3.8
Truncated Rate per 100,000 population	7.5	7.8

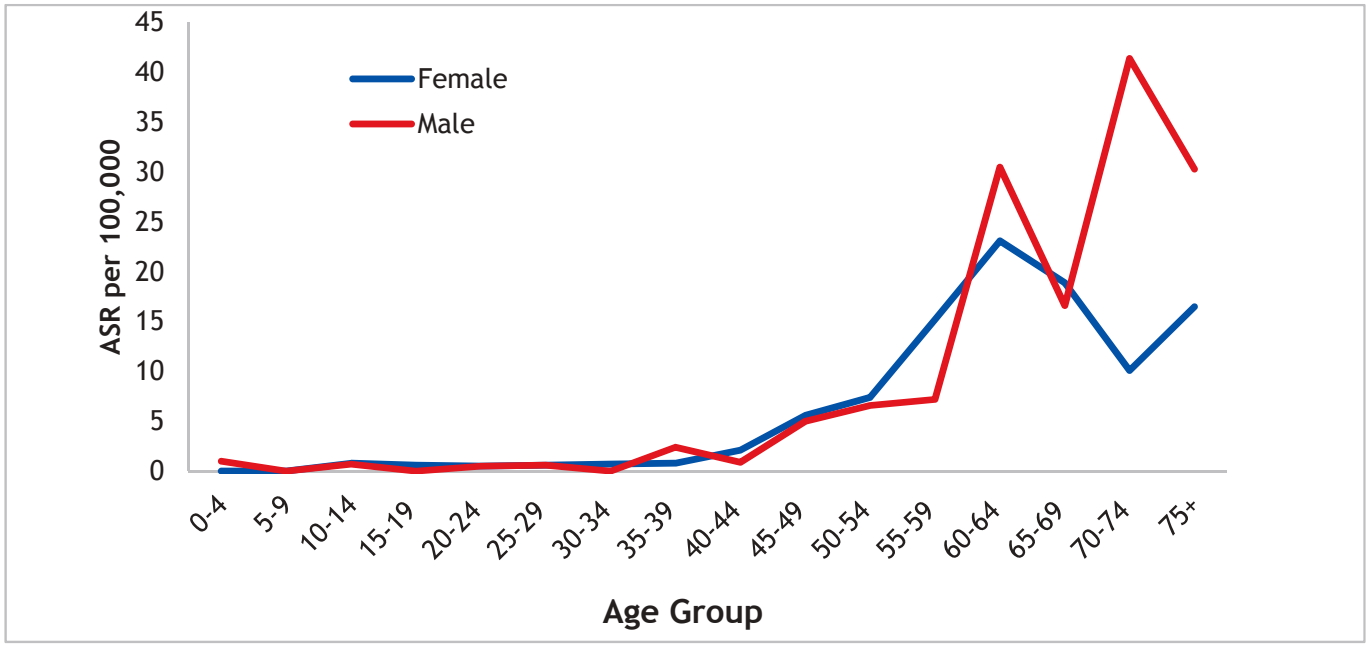

Figure 38 Age Specific Incidence Rate of Other and Unspecified Sites

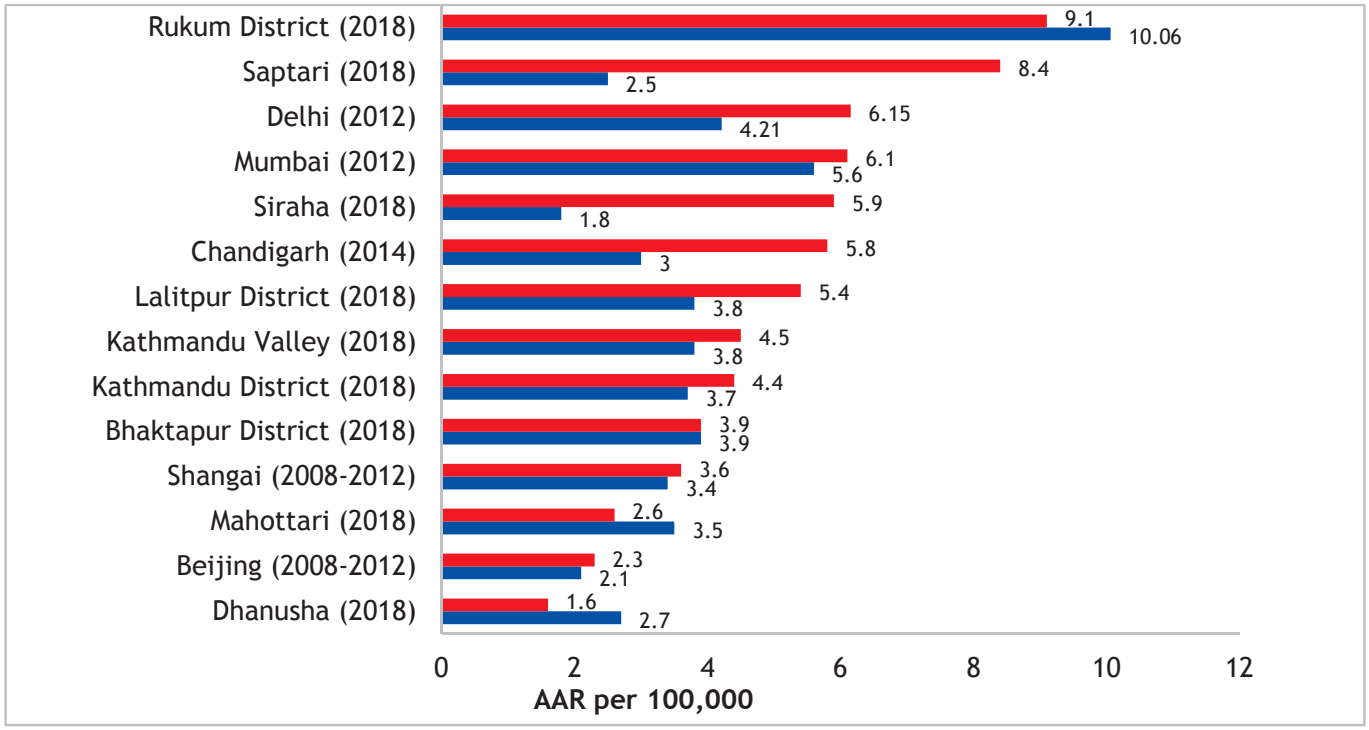

Figure 39 Comparison of Other and Unspecified Sites Cancer Incidence with Other Neighboring Registries (9-12)

Comparison of Cancer Incidence Rate with Other Neighboring Registries

The age adjusted rate for all cancer sites for both male and female of Kathmandu valley for the year 2018 is compared with the rates of various districts of Nepal, Cities of India , China and the estimated rate of GLOBOCAN for Nepal (Figure 39 and 40). The AAR for males in Kathmandu Valley is higher than the estimated incidence rate given by by GLOBOCAN for Nepal, India and the other registries of Nepal. However, it is lower than the big cities of India and China. Among females, the AAR is higher than the estimated rate of GLOBOCAN for India but it is very lower than the estimated rate by GLOBOCAN for Nepal.

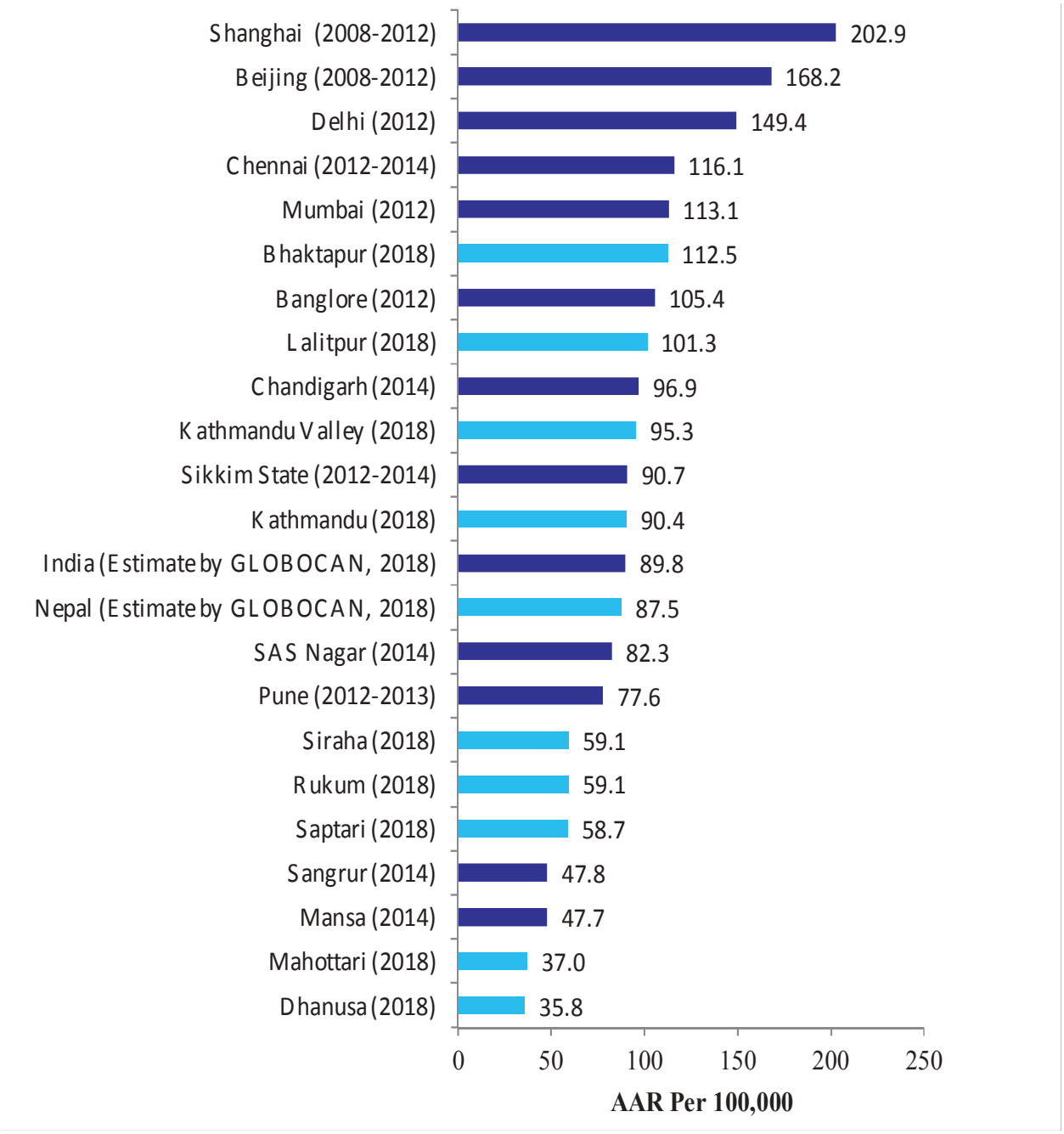

Figure 40 Age Adjusted Incidence Rate of All Cancer Sites in Males (9-13)

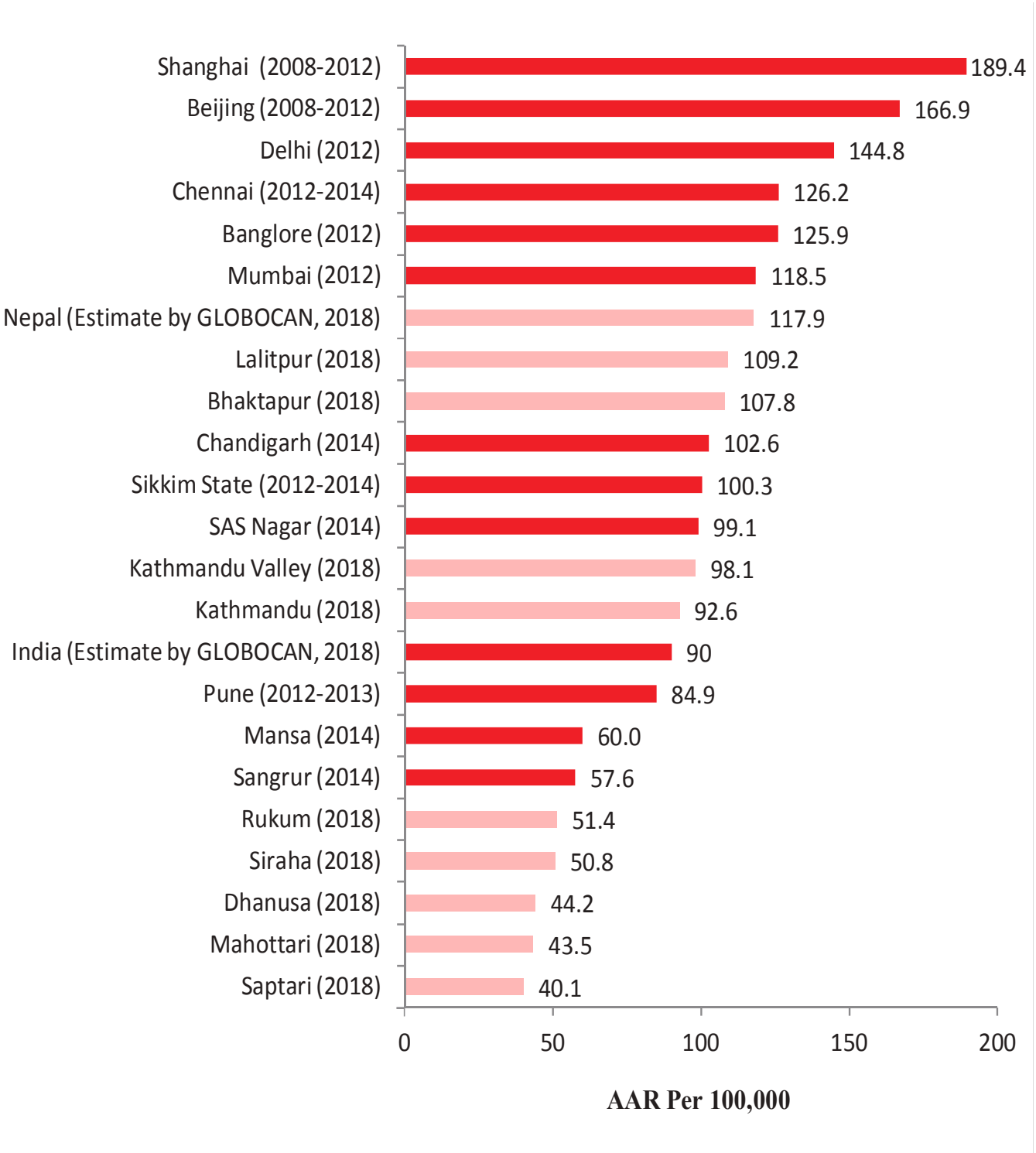

Figure 41 Age Adjusted Incidence Rate of All Cancer Sites in Females (9-13)

Challenges in Establishing PBCR in Nepal

Establishment of PBCR in the country is quite challenging no matter whether it is urban or rural registry. In order to initiate PBCR, the permission and support was provided from the Ministry of Health and Populations (MoHP), and from the various hospitals, hospices, laboratories and ayurvedic centres. In addition, the Ministry of Federal Affairs and Local Development circulated the letters to the local authorities to support for cancer-related data required for the Population Based Cancer Registry. One of the health facilities denied to provide registry information initially, however, continuous follow up meetings and discussions brought up the resolution of the issue. Some other hospitals required rigorous and extensive coordination with the oncologists, medical recorders, social security units and pathologists to obtain data, which was quite challenging.

The process of data collection in the community is passive, where the health coordinator, Health Post in- charge and FCHVs report to the registry when they find any cancer cases and mortality in their locality. Thus, the success of PBCR depends upon reporting and dedication of these staff. Since there are not fully and/or partially dedicated staffs available at these data source locations, it is difficult to obtain data regularly. As the FCHVs have already their own roles and responsibilities in the communities, they are overburdened to collect data on cancer cases and submit them on timely basis.

Poor recording system in the facilities has increased the financial burden of registry; as for the residence, the registry is not fully able to rely on the residence address given by the sources. Hence, each individual patient/relative should be contacted to confirm the residence, which incurs extra cost/burden in terms of man, money, time and materials. Moreover, in some cases, incomplete address and phone number on the hospital files and the pathology reports has made the registry staffs difficult to register the cases properly.

Summary of Work Accomplished by the Kathmandu Valley PBCR, 2018

The Kathmandu Valley PBCR observed a total of 11,249 cancer cases in the year 2018 from all the sources. Out of which, 2156 (19.2%) incidence cases and 670 (6%) mortality cases have been registered accounting 9% of the duplicate cases from different sources. Due to lack of uniformity in keeping the current address of the patients at given sources, maximum efforts were made (42%) in order to collect cases from all the districts of the country from where the patients visited different health facilities within the valley. This occupied two thirds of the workload of the Kathmandu valley PBCR due to the additional works created by non-uniformity as well as incomplete address kept in the sources, and by unscientific way of keeping the records at many other sources. The summary of the work accomplished by the Kathmandu Valley PBCR has been described in table below:

Table 8: Total Work Accomplished by the Kathmandu Valley PBCR, 2018

S.N	Name	Cases	%
1	Total number of cancer incidence cases registered	2156	19.2
2	Total number of cancer mortality cases registered	670	6.0
3	Total number of cases diagnosed before 2018	1797	16.0
4	Other districts Cases (Wrong address, Incomplete address , Non traceable and actual residence of other districts)	4745	42.2
5	Duplicates found (Incidence)	963	8.6
6	Duplicates found (Death)	71	0.6
7	Non cancer cases /Benign tumors	847	7.5
8	**Total Number of file studied**	**11249**	**100.0**

Recommendations

PBCR serves as a scientific basis for strategic planning and establishment of the cancer control and prevention programs at the national land sub-national levels. Areas identified for improvement are:

1. We suggest and recommend Ministry of Health and Population (MoHP) to develop the national cancer control policy which is an urgent and important need of the time.
2. Based on the findings of the PBCR data, intervention programs should be planned and launched in various regions of the country focusing on the special cancer site for that region. Concerned Provincial authority should be engaged in planning and intervention of the programs.
3. Establishment of a separate cancer wing in the MoHP to look after all the issues related to cancer.
4. As Lungs cancer is commonest in all the areas of Kathmandu valley, existing awareness program needs to be strengthened to encourage smoking/tobacco cessation. Information Technology (IT) based and community based interventions for “quit tobacco” is a good tool for this.
5. Kathmandu Valley PBCR shows Breast cancer as the most common cancer in female, thus government of Nepal as well as concerned authority should give priority for the breast cancer awareness, screening and early detection to reduce the future burden of breast cancer in Nepal.
6. It is necessary to conduct the risk factors study of the common cancer like head and neck, stomach, gallbladder, urinary bladder in order to strengthen cancer prevention strategies and activities.
7. Government should focus towards digitalization of uniformed medical recording system with some mandatory variable in all government and private health facilities. This will help to minimize work duplicate and save both human and financial resources at national level.
8. Death is one of the vital statistics which is also linked with human development index of the country, however, collecting death information is quite challenging in Nepal. Thus government should need to give emphasis towards strengthening the death recording system including cause of death.

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Glossay: Stastistical Terms used

Incidence: Cancer incidence denotes new cancer cases diagnosed in a defined population in a specified time period. For this report, all cancer cases were diagnosed from 1st January 2018 to 31st December 2018 in the Kathmandu Valley.

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. All cancer deaths between 1st January 2018 to 31st December 2018 in Kathmandu Valley have been included. 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 = Number of new cancer cases observed in the period 2018 multiplied by 100,000 divided by estimated population of the same year 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 (ASR): This refers to the rate obtained by the 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/ASR): 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 sub-groups overtime.

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

Table 9 Number of Incidence Cancer by Five Year Age Group and Site: 2018-Male Kathmandu Valley

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	-	-	-	-	-	-	1	-	-	-	1	-	1	-	-	-	3	0.3
C01-02	Tongue	-	-	-	-	1	-	-	1	1	2	2	3	3	5	1	1	20	2
C03-06	Mouth	1	-	-	-	-	-	-	-	1	3	7	4	9	2	2	2	31	3.2
C07-08	Salivary glands	-	-	-	1	-	-	1	-	-	-	2	1	-	-	1	1	7	0.7
C09	Tonsil	-	-	-	-	-	-	-	-	-	-	1	-	1	1	-	-	3	0.3
C10	Other oropharynx	-	-	-	-	-	-	-	-	-	-	1	1	2	3	1	2	10	1
C11	Nasopharynx	-	-	1	1	1	-	-	1	1	1	-	-	2	-	-	-	8	0.8
C12-13	Hypopharynx	-	-	-	-	-	-	-	-	-	2	2	1	2	8	4	5	24	2.5
C14	Pharynx unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	-	-	-	-	-	-	-	-	2	1	6	6	5	5	1	-	26	2.7
C16	Stomach	-	-	-	-	-	2	2	1	4	8	13	11	11	12	7	19	90	9.2
C17	Small intestine	-	-	-	-	-	-	-	1	1	-	-	-	1	2	1	2	8	0.8
C18	Colon	-	-	-	2	-	1	1	1	4	4	6	8	4	1	5	5	42	4.3
C19-20	Rectum	-	-	-	-	1	-	1	4	4	3	7	4	1	4	1	4	34	3.5
C21	Anus	-	-	-	-	-	-	1	-	-	-	2	-	-	1	-	-	4	0.4
C22	Liver	-	-	-	-	-	-	1	-	-	2	2	1	3	2	4	6	21	2.1
C23-24	Gallbladder etc.	-	-	-	-	-	2	-	2	8	4	4	3	8	12	5	10	58	5.9
C25	Pancreas	-	-	-	-	-	-	-	2	1	5	3	4	3	7	2	1	28	2.9
C30-31	Nose, sinuses etc.	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	2	0.2
C32	Larynx	-	-	-	-	-	-	-	-	1	-	5	7	5	3	5	7	33	3.4
C33-34	Trachea, bronchus and lung	-	1	-	1	-	2	1	2	4	6	16	19	22	29	39	35	177	18.1
C37-38	Other thoracic organs	-	-	-	1	-	-	-	-	-	-	-	-	-	1	1	-	3	0.3
C40-41	Bone	-	-	-	1	1	-	2	-	-	2	-	1	-	1	-	-	8	0.8
C43	Melanoma of skin	-	-	-	-	-	-	-	1	2	-	-	-	-	1	-	3	7	0.7
C44	Other skin	-	-	-	-	1	-	1	-	1	-	2	4	6	3	2	1	21	2.1
C45	Mesothelioma	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	0.1
C46	Kaposi sarcoma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	Connective and soft tissue	1	-	-	-	1	-	1	1	1	-	-	1	1	2	-	4	13	1.3
C50	Breast	-	-	-	-	-	-	-	-	-	1	2	1	2	1	1	1	9	0.9
C60	Penis	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	2	4	0.4
C61	Prostate	-	-	-	-	-	-	-	-	-	-	2	-	4	8	9	3	26	2.7
C62	Testis	-	-	-	-	1	1	-	1	2	-	-	-	-	-	-	-	5	0.5
C63	Other male genital organs	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	0.1
C64	Kidney	-	-	-	-	-	-	-	2	1	2	5	2	4	2	3	2	23	2.4
C65	Renal pelvis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C66	Ureter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C67	Bladder	-	-	-	-	-	-	-	-	2	3	3	4	11	10	10	11	54	5.5
C68	Other urinary organs	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	0.1
C69	Eye	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	3	5	0.5
C70-72	Brain, nervous system	1	-	-	-	-	-	3	2	2	2	-	5	3	3	-	-	21	2.1
C73	Thyroid	-	-	-	3	1	-	-	2	1	1	3	-	1	-	1	1	14	1.4
C74	Adrenal gland	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	0.2
C75	Other endocrine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	Hodgkin disease	-	3	-	1	-	-	-	2	-	-	1	-	-	-	-	-	7	0.7
C82-85,C96	Non-Hodgkin lymphoma	-	-	1	3	2	1	1	-	1	1	6	2	7	5	7	8	45	4.6
C88	Immunoproliferative diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C90	Multiple myeloma	-	-	-	-	-	-	-	-	-	-	2	-	5	1	1	5	14	1.4
C91	Lymphoid leukemia	1	-	-	1	1	3	1	1	-	-	-	-	-	1	1	-	10	1
C92-94	Myeloid leukemia	1	2	-	3	-	3	1	1	1	1	-	1	1	5	2	-	23	2.4
C95	Leukemia unspecified	1	-	3	1	-	-	-	-	-	-	-	-	1	-	-	-	-	0.6
MPD	Myeloproliferative disorders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MDS	Myelodysplastic syndromes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*O&U	Other and unspecified	1	-	1	-	1	1	-	3	1	4	4	3	10	4	7	7	47	4.8
ALL	All sites	8	6	6	19	12	16	19	32	48	58	112	99	141	146	124	153	999	102
ALLbC44	All sites but C44	8	6	6	19	11	16	18	32	47	58	110	95	135	143	122	152	978	100

% = Relatives Proportion of Cancer of All Sites; *O &U includes ICD 10: C26 and C80

Table 10 Number of Incidence Cancer by Five Year Age Group and Site: 2018-Female Kathmandu Valley

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	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	0.1
C01-02	Tongue	-	-	-	-	-	-	1	1	1	-	1	-	2	-	3	1	10	0.9
C03-06	Mouth	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	2	6	0.5
C07-08	Salivary glands	-	-	-	-	1	1	1	-	1	-	-	-	-	1	-	-	5	0.4
C09	Tonsil	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	0.1
C10	Other oropharynx	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	0.1
C11	Nasopharynx	-	-	-	-	-	-	-	1	-	1	-	-	-	1	-	-	3	0.3
C12-13	Hypopharynx	-	-	-	-	-	-	-	-	-	-	1	1	2	-	1	1	6	0.5
C14	Pharynx unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	-	-	-	-	-	-	-	-	2	-	3	3	1	1	3	4	17	1.5
C16	Stomach	-	-	-	-	1	-	3	1	8	6	5	8	5	2	2	10	51	4.5
C17	Small intestine	-	-	-	-	-	-	-	-	1	-	1	1	-	1	2	-	6	0.5
C18	Colon	-	-	-	-	-	-	1	3	2	3	9	1	3	6	1	7	36	3.2
C19-20	Rectum	-	-	-	-	-	2	4	2	1	1	2	-	1	3	2	3	21	1.9
C21	Anus	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	0.1
C22	Liver	-	-	-	-	-	-	-	-	1	-	1	1	1	3	-	1	8	0.7
C23-24	Gallbladder etc.	-	-	-	-	1	1	-	3	2	8	13	6	11	11	8	18	82	7.2
C25	Pancreas	-	-	-	-	-	-	-	-	-	-	4	3	1	1	3	5	17	1.5
C30-31	Nose, sinuses etc.	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	0.1
C32	Larynx	-	-	-	-	-	-	-	-	-	1	-	1	2	-	1	-	5	0.4
C33-34	Trachea, bronchus and lung	-	-	-	-	-	-	2	5	2	6	9	13	15	17	16	31	116	10.2
C37-38	Other thoracic organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C40-41	Bone	-	1	-	-	-	-	1	-	-	-	1	-	-	-	-	-	3	0.3
C43	Melanoma of skin	-	-	-	-	-	-	-	-	1	-	1	1	-	-	2	1	6	0.5
C44	Other skin	-	-	-	-	-	1	1	3	-	1	-	3	2	3	5	6	25	2.2
C45	Mesothelioma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C46	Kaposi sarcoma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	Connective and soft tissue	-	1	-	-	1	1	2	-	-	-	3	1	-	-	1	1	11	1
C50	Breast	-	-	-	-	2	6	12	28	34	37	38	33	27	19	11	12	259	22.9
C51	Vulva	-	-	-	-	-	-	-	1	-	-	1	1	4	-	1	1	9	0.8
C52	Vagina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C53	Cervix uteri	-	-	-	-	1	2	3	5	10	10	16	10	15	9	7	11	99	8.7
C54	Corpus uteri	-	-	-	-	-	-	1	4	1	5	2	6	4	2	4	4	33	2.9
C55	Uterus unspecified	-	-	-	-	1	-	-	-	-	1	-	-	2	-	1	1	6	0.5
C56	Ovary	-	1	-	1	3	3	2	3	6	5	11	8	11	4	3	3	64	5.7
C57	Other female genital organs	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	0.1
C58	Placenta	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	2	0.2
C64	Kidney	1	-	-	-	-	1	1	-	-	-	1	-	-	3	1	1	9	0.8
C65	Renal pelvis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.1
C66	Ureter	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	0.1
C67	Bladder	-	-	-	-	-	-	-	-	-	-	1	1	-	2	1	4	9	0.8
C68	Other urinary organs	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	0.1
C69	Eye	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	0.3
C70-72	Brain, nervous system	-	-	-	1	3	1	2	1	1	-	4	1	2	3	2	-	21	1.9
C73	Thyroid	-	-	1	1	4	5	8	14	11	4	8	2	3	1	4	4	70	6.2
C74	Adrenal gland	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	0.1
C75	Other endocrine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	Hodgkin disease	-	-	-	2	-	-	-	1	-	-	-	-	-	-	-	1	4	0.4
C82-85,C96	Non-Hodgkin lymphoma	1	-	-	-	2	-	2	1	2	-	5	5	4	4	2	4	32	2.8
C88	Immunoproliferative diseases	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	0.1
C90	Multiple myeloma	-	-	-	-	-	-	-	-	-	-	-	1	2	3	2	4	12	1.1
C91	Lymphoid leukemia	2	-	-	-	1	1	1	-	-	1	1	-	1	-	1	-	9	0.8
C92-94	Myeloid leukemia	-	1	-	-	1	-	2	1	2	5	1	2	2	2	1	-	20	1.8
C95	Leukemia unspecified	-	2	-	2	-	-	1	-	-	-	1	-	2	-	-	-	8	0.7
MPD	Myeloproliferative disorders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MDS	Myelodysplastic syndromes	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	0.1
*O&U	Other and unspecified	-	-	1	1	1	1	1	1	2	4	4	6	8	5	2	5	42	3.7
ALL	All sites	5	7	2	8	23	27	53	81	92	103	150	122	133	108	95	148	1157	102
ALLbC44	All sites but C44	5	7	2	8	23	26	52	78	92	102	150	119	131	105	90	142	1132	100

%=Relatives Proportion of Cancer of All Sites; *O &U includes ICD 10: C26 and C80

Table 11 Average Annual Age Specific (ASR), Crude (CR), Age Adjusted (AAR) and Truncated (35-64 years) Incidence Rate per 100,000 Population in 2018 Kathmandu Valley - Male

ICD 10	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	-	-	-	-	-	-	0.7	-	-	-	1.7	-	3.1	-	-	-	0.19	0.2	0.7
C01-02	-	-	-	-	0.5	-	-	0.8	0.9	2.5	3.3	7.2	9.2	20.7	5.9	4.3	1.26	1.9	3.5
C03-06	1.0	-	-	-	-	-	-	-	0.9	3.7	11.6	9.6	27.5	8.3	11.8	8.7	1.95	3.1	7.5
C07-08	-	-	-	0.5	-	-	0.7	-	-	-	3.3	2.4	-	-	5.9	4.3	0.44	0.6	0.8
C09	-	-	-	-	-	-	-	-	-	-	1.7	-	3.1	4.1	-	-	0.19	0.3	0.7
C10	-	-	-	-	-	-	-	-	-	-	1.7	2.4	6.1	12.4	5.9	8.7	0.63	1.1	1.4
C11	-	-	0.7	0.5	0.5	-	-	0.8	0.9	1.2	-	-	6.1	-	-	-	0.5	0.6	1.3
C12-13	-	-	-	-	-	-	-	-	-	2.5	3.3	2.4	6.1	33.1	23.7	21.7	1.51	2.6	2.1
C14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	-	-	-	-	-	-	-	-	1.8	1.2	9.9	14.4	15.3	20.7	5.9	-	1.64	2.6	6.0
C16	-	-	-	-	-	1.2	1.4	0.8	3.7	10	21.5	26.3	33.6	49.7	41.4	82.3	5.67	8.5	14.0
C17	-	-	-	-	-	-	-	0.8	0.9	-	-	-	3.1	8.3	5.9	8.7	0.5	0.8	0.7
C18	-	-	-	1.0	-	0.6	0.7	0.8	3.7	5	9.9	19.2	12.2	4.1	29.6	21.7	2.65	3.7	7.5
C19-20	-	-	-	-	0.5	-	0.7	3.2	3.7	3.7	11.6	9.6	3.1	16.6	5.9	17.3	2.14	2.8	5.6
C21	-	-	-	-	-	-	0.7	-	-	-	3.3	-	-	4.1	-	-	0.25	0.3	0.5
C22	-	-	-	-	-	-	0.7	-	-	2.5	3.3	2.4	9.2	8.3	23.7	26	1.32	2.1	2.5
C23-24	-	-	-	-	-	1.2	-	1.6	7.4	5	6.6	7.2	24.4	49.7	29.6	43.3	3.65	5.5	7.9
C25	-	-	-	-	-	-	-	1.6	0.9	6.2	5	9.6	9.2	29	11.8	4.3	1.76	2.7	4.9
C30-31	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	-	4.3	0.13	0.2	0.0
C32	-	-	-	-	-	-	-	-	0.9	-	8.3	16.8	15.3	12.4	29.6	30.3	2.08	3.3	5.7
C33-34	-	0.8	-	0.5	-	1.2	0.7	1.6	3.7	7.5	26.5	45.5	67.2	120	231	152	11.2	18.1	21.3
C37-38	-	-	-	0.5	-	-	-	-	-	-	-	-	-	4.1	5.9	-	0.19	0.3	-
C40-41	-	-	-	0.5	0.5	-	1.4	-	-	2.5	-	2.4	-	4.1	-	-	0.5	0.5	0.8
C43	-	-	-	-	-	-	-	0.8	1.8	-	-	-	-	4.1	-	13	0.44	0.5	0.5
C44	-	-	-	-	0.5	-	0.7	-	0.9	0	3.3	9.6	18.3	12.4	11.8	4.3	1.32	2.1	4.3
C45	-	-	-	-	-	-	-	-	-	-	-	2.4	-	-	-	-	0.06	0.1	0.3
C46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	1.0	-	-	-	0.5	-	0.7	0.8	0.9	-	-	2.4	3.1	8.3	-	17.3	0.8	1.1	1.0
C50	-	-	-	-	-	-	-	-	-	1.2	3.3	2.4	6.1	4.1	5.9	4.3	0.6	0.9	1.9
C60	-	-	-	-	-	-	-	-	-	-	1.7	-	3.1	-	-	8.7	0.3	0.4	0.7
C61	-	-	-	-	-	-	-	-	-	-	3.3	-	12.2	33.1	53.2	13.0	1.6	3.0	2.1
C62	-	-	-	-	0.5	0.6	0.0	0.8	1.8	-	-	-	-	-	-	-	0.3	0.2	0.5
C63	-	-	-	-	-	-	-	-	-	-	-	2.4	-	-	-	-	0.1	0.1	0.3
C64	-	-	-	-	-	-	-	1.6	0.9	2.5	8.3	4.8	12.2	8.3	17.7	8.7	1.5	2.2	4.5
C65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C67	-	-	-	-	-	-	-	-	1.8	3.7	5.0	9.6	33.6	41.4	59.2	47.6	3.4	5.7	7.4
C68	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	-	-	0.1	0.1	0.4
C69	-	-	-	-	-	-	-	0.8	-	-	1.7	-	-	-	-	13.0	0.3	0.4	0.4
C70-72	1.0	-	-	-	-	-	2.1	1.6	1.8	2.5	-	12.0	9.2	12.4	-	-	1.3	1.8	3.9
C73	-	-	-	1.6	0.5	-	-	1.6	0.9	1.2	5.0	0.0	3.1	-	5.9	4.3	0.9	1.0	1.9
C74	1.0	-	-	-	-	-	-	-	0.9	-	-	-	-	-	-	-	0.1	0.2	0.2
C75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	-	2.5	-	0.5	-	-	-	1.6	-	-	1.7	-	-	-	-	-	0.44	0.5	0.6
C82-85,C96	-	-	0.7	1.6	1	0.6	0.7	-	0.9	1.2	9.9	4.8	21.4	20.7	41.4	34.6	2.83	4.2	5.4
C88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C90	-	-	-	-	-	-	-	-	-	-	3.3	-	15.3	4.1	5.9	21.7	0.88	1.5	2.5
C91	1.0	-	-	0.5	0.5	1.8	0.7	0.8	-	-	-	-	-	4.1	5.9	-	0.6	0.7	0.2
C92-94	1.0	1.7	-	1.6	-	1.8	0.7	0.8	0.9	1.2	-	2.4	3.1	20.7	11.8	4.3	1.5	2.0	1.3
C95	1.0	-	2.0	0.5	-	-	-	-	-	-	-	-	3.1	-	-	-	0.4	0.5	0.4
MPD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*O&U	1.0	-	0.7	-	0.5	0.6	-	2.4	0.9	5.0	6.6	7.2	30.5	16.6	41.4	30.3	3.0	4.5	7.5
ALL	8.2	5.0	4.0	9.9	5.9	9.4	13.4	25.4	44.1	72.5	185.6	237.0	430.7	604.2	733.6	662.6	62.9	95.3	143.6
ALLbC44	8.2	5.0	4.0	9.9	5.4	9.4	12.7	25.4	43.2	72.5	182.3	227.4	412.4	591.8	721.7	658.3	61.6	93.2	139.3

*O &U includes ICD 10: C26 and C80

Table 12 Average Annual Age Specific (ASR), Crude (CR), Age Adjusted (AAR) and Truncated (35-64 years) Incidence Rate per 100,000 Population in 2018 Kathmandu Valley- Female

ICD 10	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	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	0.1	0.1	0.2
C01-02	-	-	-	-	-	-	0.7	0.8	1.1	-	1.9	-	5.8	-	15.1	3.3	0.7	0.8	1.4
C03-06	-	-	-	-	-	-	-	-	-	-	-	5.1	-	-	10.1	6.6	0.4	0.5	0.7
C07-08	-	-	-	-	0.5	0.6	0.7	-	1.1	-	-	-	-	3.8	-	-	0.3	0.3	0.2
C09	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	-	-	0.1	0.1	0.3
C10	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	-	0.1	0.1	-
C11	-	-	-	-	-	-	-	0.8	-	1.4	-	-	-	3.8	-	-	0.2	0.2	0.4
C12-13	-	-	-	-	-	-	-	-	-	-	1.9	2.5	5.8	-	5.0	3.3	0.4	0.6	1.4
C14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	-	-	-	-	-	-	-	-	2.1	-	5.6	7.6	2.9	3.8	15.1	13.2	1.2	1.5	2.7
C16	-	-	-	-	0.5	-	2.1	0.8	8.4	8.4	9.3	20.3	14.4	7.6	10.1	32.9	3.4	4.2	9.4
C17	-	-	-	-	-	-	-	-	1.1	-	1.9	2.5	-	3.8	10.1	-	0.4	0.6	0.8
C18	-	-	-	-	-	-	0.7	2.4	2.1	4.2	16.7	2.5	8.7	22.7	5	23	2.4	3.1	5.8
C19-20	-	-	-	-	-	1.1	2.8	1.6	1.1	1.4	3.7	-	2.9	11.4	10.1	9.9	1.4	1.5	1.8
C21	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	0.1	-	0.2
C22	-	-	-	-	-	-	-	-	1.1	-	1.9	2.5	2.9	11.4	-	3.3	0.5	0.8	1.2
C23-24	-	-	-	-	0.5	0.6	-	2.4	2.1	11.3	24.2	15.2	31.8	41.6	40.4	59.3	5.5	7.4	13
C25	-	-	-	-	-	-	-	-	-	-	7.4	7.6	2.9	3.8	15.1	16.5	1.2	1.5	2.5
C30-31	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	0.1	0.3
C32	-	-	-	-	-	-	-	-	-	1.4	-	2.5	5.8	-	5	-	0.3	0.5	1.3
C33-34	-	-	-	-	-	-	1.4	4.1	2.1	8.4	16.7	32.9	43.3	64.4	80.7	102	7.8	10.4	15.4
C37-38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C40-41	-	1.0	-	-	-	-	0.7	-	-	-	1.9	-	-	-	-	-	0.2	0.2	0.3
C43	-	-	-	-	-	-	-	-	1.1	-	1.9	2.5	-	-	10.1	3.3	0.4	0.5	0.8
C44	-	-	-	-	-	0.6	0.7	2.4	-	1.4	-	7.6	5.8	11.4	25.2	19.8	1.7	2.1	2.5
C45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	-	1.0	-	-	0.5	0.6	1.4	-	-	-	5.6	2.5	-	-	5.0	3.3	0.7	0.8	1.2
C50	-	-	-	-	1.0	3.4	8.3	22.8	35.8	52.1	70.7	83.6	78	71.9	55.5	39.5	17.5	21.5	53.7
C51	-	-	-	-	-	-	-	0.8	-	-	1.9	2.5	11.6	-	5.0	3.3	0.6	0.9	2.3
C52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C53	-	-	-	-	0.5	1.1	2.1	4.1	10.5	14.1	29.8	25.3	43.3	34.1	35.3	36.2	6.7	8.7	19.2
C54	-	-	-	-	-	-	0.7	3.3	1.1	7.0	3.7	15.2	11.6	7.6	20.2	13.2	2.2	2.9	6.3
C55	-	-	-	-	0.5	-	-	-	-	1.4	-	-	5.8	-	5.0	3.3	0.4	0.5	1
C56	-	1.0	-	0.6	1.6	1.7	1.4	2.4	6.3	7.0	20.5	20.3	31.8	15.1	15.1	9.9	4.3	5.5	13.1
C57	-	-	-	-	-	-	-	-	-	-	-	2.5	-	-	-	-	0.1	0.1	0.3
C58	-	-	-	-	-	0.6	-	-	-	1.4	-	-	-	-	-	-	0.1	0.1	0.3
C64	-	-	-	-	-	0.6	0.7	-	-	-	1.9	-	-	11.4	5.0	3.3	0.6	0.8	0.3
C65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	0.1	0.1	-
C66	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	0.1	0.3
C67	-	-	-	-	-	-	-	-	-	-	1.9	2.5	-	7.6	5.0	13.2	0.6	0.8	0.6
C68	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	0.1	-	0.2
C69	1.2	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	0.2	0.3	-
C70-72	-	-	-	0.6	1.6	0.6	1.4	0.8	1.1	-	7.4	2.5	5.8	11.4	10.1	-	1.4	1.7	2.6
C73	-	-	0.8	0.6	2.1	2.8	5.5	11.4	11.6	5.6	14.9	5.1	8.7	3.8	20.2	13.2	4.7	4.6	9.7
C74	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	-	-	0.1	0.1	0.3
C75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	-	-	-	1.3	-	-	-	0.8	-	-	-	-	-	-	-	3.3	0.3	0.2	0.2
C82-85,C96	1.2	-	-	-	1.0	-	1.4	0.8	2.1	-	9.3	12.7	11.6	15.1	10.1	13.2	2.2	2.8	5.2
C88	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	0.1	0.3
C90	-	-	-	-	-	-	-	-	-	-	-	2.5	5.8	11.4	10.1	13.2	0.8	1.1	1.1
C91	2.4	-	-	-	0.5	0.6	0.7	-	-	1.4	1.9	-	2.9	-	5.0	-	0.6	0.8	1
C92-94	-	1.0	-	-	0.5	-	1.4	0.8	2.1	7.0	1.9	5.1	5.8	7.6	5.0	-	1.4	1.7	3.6
C95	-	1.9	-	1.3	-	-	0.7	-	-	-	1.9	-	5.8	-	-	-	0.5	0.7	1.1
MPD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MDS	-	-	-	-	-	-	0.7	-	-	-	-	-	-	-	-	-	0.1	-	-
*O&U	-	-	0.8	0.6	0.5	0.6	0.7	0.8	2.1	5.6	7.4	15.2	23.1	18.9	10.1	16.5	2.8	3.8	7.8
ALL	6.0	6.8	1.5	5.1	12.0	15.2	36.6	66.1	97.0	144.9	279.0	308.9	384.2	408.9	479.2	487.3	78.0	98.1	194.0
ALLbC44	6.0	6.8	1.5	5.1	12.0	14.6	35.9	63.6	97.0	143.5	279.0	301.3	378.4	397.6	454.0	467.5	76.3	96.0	191.6

Table 13 Incidence Cancer Case Distribution Based on Method of Miagnosis in 2018, Male, Kathmandu Valley

ICD- 10	Sites	Clinical Investigation		Clinical Note		Microscopic		DCO		Verbal Information		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
C00	Lip	-	-	-	-	3	100	-	-	-	-	3	0.3
C01-02	Tongue	-	-	-	-	19	95	-	-	1	5	20	2.0
C03-06	Mouth	-	-	1	3.2	30	96.8	-	-	-	-	31	3.1
C07-08	Salivary glands	-	-	-	-	7	100	-	-	-	-	7	0.7
C09	Tonsil	-	-	-	-	3	100	-	-	-	-	3	0.3
C10	Other oropharynx	-	-	1	10	9	90	-	-	-	-	10	1.0
C11	Naso pharynx	-	-	-	-	8	100	-	-	-	-	8	0.8
C12-13	Hypo pharynx	-	-	-	-	23	95.8	1	4.2	-	-	24	2.4
C14	Pharynx unspecified	-	-	-	-	-	-	-	-	-	-	-	-
C15	Esophagus	-	-	1	3.8	23	88.5	2	7.7	-	-	26	2.6
C16	Stomach	-	-	11	12.2	77	85.6	2	2.2	-	-	90	9.0
C17	Small intestine	-	-	-	-	8	100	-	-	-	-	8	0.8
C18	Colon	-	-	5	11.9	36	85.7	-	-	1	2.4	42	4.2
C19-20	Rectum	-	-	2	5.9	32	94.1	-	-	-	-	34	3.4
C21	Anus	-	-	-	-	4	100	-	-	-	-	4	0.4
C22	Liver	5	23.8	1	4.8	14	66.7	1	4.8	-	-	21	2.1
C23-24	Gallbladder etc.	6	10.3	7	12.1	45	77.6	-	-	-	-	58	5.8
C25	Pancreas	2	7.1	1	3.6	25	89.3	-	-	-	-	28	2.8
C30-31	Nose, sinuses etc.	-	-	-	-	2	100	-	-	-	-	2	0.2
C32	Larynx	1	3.03	2	6.1	30	90.9	-	-	-	-	33	3.3
C33-34	Trachea, bronchus and lung	5	2.82	14	7.9	154	87	4	2.3	-	-	177	17.7
C37-38	Other thoracic organs	-	-	-	-	3	100	-	-	-	-	3	0.3
C40-41	Bone	-	-	-	-	8	100	-	-	-	-	8	0.8
C43	Melanoma of skin	-	-	-	-	7	100	-	-	-	-	7	0.7
C44	Other skin	-	-	-	-	20	95.2	-	-	1	4.8	21	2.1
C45	Mesothelioma	-	-	-	-	1	100	-	-	-	-	1	0.1
C46	Kaposi sarcoma	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	Connective and soft tissue	-	-	-	-	13	100	-	-	-	-	13	1.3
C50	Breast	-	-	1	11.1	8	88.9	-	-	-	-	9	0.9
C60	Penis	-	-	-	-	4	100	-	-	-	-	4	0.4
C61	Prostate	1	3.8	2	7.7	22	84.6	1	3.8	-	-	26	2.6
C62	Testis	-	-	-	-	5	100	-	-	-	-	5	0.5
C63	Other male genital organs	-	-	-	-	1	100	-	-	-	-	1	0.1
C64	Kidney	-	-	1	4.3	22	95.7	-	-	-	-	23	2.3
C65	Renal pelvis	-	-	-	-	-	-	-	-	-	-	-	-
C66	Ureter	-	-	-	-	-	-	-	-	-	-	-	-
C67	Bladder	1	1.9	6	11.1	46	85.2	1	1.9	-	-	54	5.4
C68	Other urinary organs	-	-	-	-	1	100	-	-	-	-	1	0.1
C69	Eye	-	-	-	-	5	100	-	-	-	-	5	0.5
C70-72	Brain, nervous system	-	-	-	-	21	100	-	-	-	-	21	2.1
C73	Thyroid	-	-	2	14.3	12	85.7	-	-	-	-	14	1.4
C74	Adrenal gland	-	-	-	-	2	100	-	-	-	-	2	0.2
C75	Other endocrine	-	-	-	-	-	-	-	-	-	-	-	-
C81	Hodgkin disease	-	-	-	-	7	100	-	-	-	-	7	0.7
C82-85,C96	Non-Hodgkin lymphoma	-	-	-	-	45	100	-	-	-	-	45	4.5
C88	Immunoproliferative diseases	-	-	-	-	-	-	-	-	-	-	0	0.0
C90	Multiple myeloma	-	-	-	-	14	100	-	-	-	-	14	1.4
C91	Lymphoid leukaemia	-	-	-	-	10	100	-	-	-	-	10	1.0
C92-94	Myeloid leukaemia	-	-	-	-	23	100	-	-	-	-	23	2.3
C95	Leukaemia unspecified	-	-	-	-	6	100	-	-	-	-	6	0.6
MPD	Myeloproliferative disorders	-	-	-	-	-	-	-	-	-	-	-	-
MDS	Myelodysplastic syndromes	-	-	-	-	-	-	-	-	-	-	-	-
*O&U	Other and unspecified	2	4.3	1	2.1	41	87.2	1	2.1	2	4.3	47	4.7
ALL	All sites	23	2.3	59	5.9	899	90	13	1.3	5	0.5	999	100

*O &U includes ICD 10: C26 and C80

Table 14 Incidence Cancer Case Distribution Based on Method of Diagnosis in 2018, Female, Kathmandu Valley

ICD-10	Sites	Clinical Investigation		Clinical Note		Microscopic		DCO		Verbal Information		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
C00	Lip	-	-	-	-	1	100	-	-	-	-	1	0.09
C01-02	Tongue	-	-	-	-	10	100	-	-	-	-	10	0.86
C03-06	Mouth	-	-	-	-	6	100	-	-	-	-	6	0.52
C07-08	Salivary glands	1	20	-	-	4	80	-	-	-	-	5	0.43
C09	Tonsil	-	-	-	-	1	100	-	-	-	-	1	0.09
C10	Other oropharynx	-	-	-	-	1	100	-	-	-	-	1	0.09
C11	Nasopharynx	-	-	-	-	3	100	-	-	-	-	3	0.26
C12-13	Hypopharynx	2	33.3	-	-	4	66.7	-	-	-	-	6	0.52
C14	Pharynx unspecified	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	-	-	2	11.8	15	88.2	-	-	-	-	17	1.47
C16	Stomach	1	2	6	11.8	42	82.4	1	2	1	2	51	4.41
C17	Small intestine	-	-	-	-	6	100	-	-	-	-	6	0.52
C18	Colon	-	-	3	8.3	32	88.9	1	2.8	-	-	36	3.11
C19-20	Rectum	-	-	1	4.8	20	95.2	-	-	-	-	21	1.82
C21	Anus	-	-	-	-	1	100	-	-	-	-	1	0.09
C22	Liver	3	37.5	-	-	4	50	1	12.5	-	-	8	0.69
C23-24	Gallbladder etc.	2	2.4	13	15.9	63	76.8	4	4.9	-	-	82	7.09
C25	Pancreas	2	11.8	2	11.8	13	76.5	-	-	-	-	17	1.47
C30-31	Nose, sinuses etc.	-	-	-	-	1	100	-	-	-	-	1	0.09
C32	Larynx	-	-	-	-	5	100	-	-	-	-	5	0.43
C33-34	Trachea, bronchus and lung	4	3.4	6	5.2	102	87.9	4	3.4	-	-	116	10.03
C37-38	Other thoracic organs	-	-	-	-	-	-	-	-	-	-	-	-
C40-41	Bone	-	-	-	-	3	100	-	-	-	-	3	0.26
C43	Melanoma of skin	-	-	-	-	6	100	-	-	-	-	6	0.52
C44	Other skin	2	8	-	-	23	92	-	-	-	-	25	2.16
C45	Mesothelioma	-	-	-	-	-	-	-	-	-	-	-	-
C46	Kaposi sarcoma	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	Connective and soft tissue	-	-	-	-	11	100	-	-	-	-	11	0.95
C50	Breast	2	0.8	10	3.9	243	93.8	2	0.8	2	0.8	259	22.39
C51	Vulva	-	-	-	-	9	100	-	-	-	-	9	0.78
C52	Vagina	-	-	-	-	-	-	-	-	-	-	-	-
C53	Cervix uteri	2	2	3	3	94	94.9	-	-	-	-	99	8.56
C54	Corpus uteri	-	-	1	3	32	97	-	-	-	-	33	2.85
C55	Uterus unspecified	-	-	-	-	5	83.3	-	-	1	2	6	0.52
C56	Ovary	-	-	4	6.3	58	90.6	2	3.1	-	-	64	5.53
C57	Other female genital organs	-	-	-	-	1	100	-	-	-	-	1	0.09
C58	Placenta	-	-	-	-	2	100	-	-	-	-	2	0.17
C64	Kidney	1	11.1	1	11.1	7	77.8	-	-	-	-	9	0.78
C65	Renal pelvis	-	-	-	-	1	100	-	-	-	-	1	0.09
C66	Ureter	-	-	-	-	1	100	-	-	-	-	1	0.09
C67	Bladder	1	11.1	1	11.1	7	77.8	-	-	-	-	9	0.78
C68	Other urinary organs	-	-	-	-	1	100	-	-	-	-	1	0.09
C69	Eye	-	-	-	-	3	100	-	-	-	-	3	0.26
C70-72	Brain, nervous system	-	-	-	-	20	95.2	1	4.8	-	-	21	1.82
C73	Thyroid	-	-	3	4.3	67	95.7	-	-	-	-	70	6.05
C74	Adrenal gland	-	-	-	-	1	100	-	-	-	-	1	0.09
C75	Other endocrine	-	-	-	-	-	-	-	-	-	-	-	-
C81	Hodgkin disease	-	-	-	-	4	100	-	-	-	-	4	0.35
C82-85,C96	Non-Hodgkin lymphoma	-	-	-	-	33	100	-	-	-	-	33	2.85
C88	Immunoproliferative diseases	-	-	-	-	-	-	-	-	-	-	-	-
C90	Multiple myeloma	-	-	-	-	12	100	-	-	-	-	12	1.04
C91	Lymphoid leukaemia	-	-	-	-	9	100	-	-	-	-	9	0.78
C92-94	Myeloid leukaemia	-	-	-	-	20	100	-	-	-	-	20	1.73
C95	Leukaemia unspecified	-	-	-	-	8	100	-	-	-	-	8	0.69
MPD	Myeloproliferative disorders	-	-	-	-	-	-	-	-	-	-	-	-
MDS	Myelodysplastic syndromes	-	-	-	-	1	100	-	-	-	-	1	0.09
O&U*	Other and unspecified	3	7.1	-	-	36	85.7	2	4.8	1	2	42	3.63
ALL	All sites	26	2.2	56	4.8	1052	90.9	18	1.6	5	0.4	1157	100

Table 15 Age Group Wise Distribution of Cancer Mortality Cases in 2018 Kathmandu Valley-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	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	0.3
C01-02	Tongue	-	-	-	-	-	-	-	1	-	-	1	3	-	2	1	-	8	2.2
C03-06	Mouth	-	-	-	-	-	-	-	1	-	2	2	1	1	1	-	-	8	2.2
C07-08	Salivary glands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.3
C09	Tonsil	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	0.3
C10	Other oropharynx	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	3	0.8
C11	Nasopharynx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C12-13	Hypopharynx	-	-	-	-	-	-	-	-	-	-	-	-	2	1	1	1	5	1.4
C14	Pharynx unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	-	-	-	-	-	-	-	-	-	2	2	-	1	2	4	1	12	3.3
C16	Stomach	-	-	-	-	-	1	1	-	3	4	1	4	5	8	3	8	38	10.5
C17	Small intestine	-	-	-	-	-	-	-	1	1	-	-	-	2	1	-	-	5	1.4
C18	Colon	-	-	-	1	-	-	1	-	-	1	2	3	1	1	2	1	13	3.6
C19-20	Rectum	-	-	-	-	-	-	-	-	-	-	1	1	2	1	-	1	6	1.7
C21	Anus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C22	Liver	-	-	-	-	-	-	1	1	-	1	-	2	4	4	2	4	19	5.3
C23-24	Gallbladder etc.	-	-	-	-	-	1	-	2	1	1	1	1	3	6	2	6	24	6.6
C25	Pancreas	-	-	-	-	-	-	-	-	2	1	1	4	1	2	3	1	15	4.2
C30-31	Nose, sinuses etc.	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	0.6
C32	Larynx	-	-	-	-	-	-	-	-	-	-	1	2	2	-	4	4	13	3.6
C33-34	Trachea, bronchus and lung	-	-	-	-	-	-	-	-	2	-	8	9	11	19	20	20	89	24.7
C37-38	Other thoracic organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	0.3
C40-41	Bone	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2	4	1.1
C43	Melanoma of skin	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	2	0.6
C44	Other skin	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	2	4	1.1
C45	Mesothelioma	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	0.3
C46	Kaposi sarcoma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	Connective and soft tissue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C50	Breast	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C60	Penis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C61	Prostate	-	-	-	-	-	-	-	-	-	-	1	-	3	3	1	4	12	3.3
C62	Testis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C63	Other male genital organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C64	Kidney	-	-	-	-	-	-	-	-	-	-	1	-	-	1	3	3	8	2.2
C65	Renal pelvis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C66	Ureter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C67	Bladder	-	-	-	-	-	-	-	-	-	-	-	1	-	3	2	6	12	3.3
C68	Other urinary organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C69	Eye	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C70-72	Brain, nervous system	-	-	-	-	-	-	-	-	-	1	2	1	2	1	-	-	7	1.9
C73	Thyroid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.3
C74	Adrenal gland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C75	Other endocrine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	Hodgkin disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C82-85,C96	Non-Hodgkin lymphoma	-	-	1	2	-	-	-	-	-	-	-	1	2	3	1	3	13	3.6
C88	Immunoproliferative diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C90	Multiple myeloma	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	0.3
C91	Lymphoid leukemia	1	-	1	-	-	2	1	-	-	-	-	-	-	-	-	-	5	1.4
C92-94	Myeloid leukemia	-	-	-	-	-	1	-	1	-	1	-	2	-	-	1	-	6	1.7
C95	Leukemia unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MPD	Myeloproliferative disorders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MDS	Myelodysplastic syndromes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*O&U	Other and unspecified	-	-	-	-	-	-	-	2	1	2	3	3	4	2	5	3	25	6.9
ALL	All sites	2	-	2	3	2	5	4	10	10	16	30	41	48	64	56	72	365	101
ALLbC44	All sites but C44	2	-	2	3	2	5	4	10	10	16	30	40	47	64	56	70	361	100

%=Relatives Proportion of Cancer of All Sites; *O &U includes ICD 10: C26 and C80

Table 16 Age Group Wise Distribution of Cancer Mortality Cases in 2018 Kathmandu Valley-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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C01-02	Tongue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	0.7
C03-06	Mouth	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	0.7
C07-08	Salivary glands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C09	Tonsil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C10	Other oropharynx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C11	Nasopharynx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C12-13	Hypopharynx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	0.3
C14	Pharynx unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	-	-	-	-	-	-	-	-	-	-	2	2	2	1	-	3	10	3.3
C16	Stomach	-	-	-	-	-	-	1	-	5	1	4	4	2	1	4	4	26	8.5
C17	Small intestine	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	-	3	1
C18	Colon	-	-	-	-	-	-	-	4	-	1	2	1	-	-	-	3	11	3.6
C19-20	Rectum	-	-	-	-	-	-	-	1	-	1	-	-	1	2	-	1	6	2
C21	Anus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C22	Liver	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	2	4	1.3
C23-24	Gallbladder etc.	-	-	-	-	-	-	-	-	2	5	9	3	3	8	3	8	41	13.4
C25	Pancreas	-	-	-	-	-	-	-	-	-	-	2	1	-	-	3	3	9	3
C30-31	Nose, sinuses etc.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C32	Larynx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C33-34	Trachea, bronchus and lung	-	-	-	-	-	-	-	1	-	1	3	6	8	11	11	16	57	18.7
C37-38	Other thoracic organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C40-41	Bone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C43	Melanoma of skin	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	1	3	1
C44	Other skin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C45	Mesothelioma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C46	Kaposi sarcoma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	Connective and soft tissue	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	2	0.7
C50	Breast	-	-	-	-	-	-	2	4	5	5	3	5	3	4	1	3	35	11.5
C51	Vulva	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	0.3
C52	Vagina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C53	Cervix uteri	-	-	-	-	-	-	-	1	-	1	3	-	2	1	-	2	10	3.3
C54	Corpus uteri	-	-	-	-	-	-	-	-	-	-	-	2	2	1	-	1	6	2
C55	Uterus unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	0.3
C56	Ovary	-	-	-	-	1	-	-	-	1	2	3	2	4	1	2	5	21	6.9
C57	Other genital organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C58	Placenta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C64	Kidney	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	0.3
C65	Renal pelvis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C66	Ureter	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	0.3
C67	Bladder	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	2	0.7
C68	Other urinary organs	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	0.3
C69	Eye	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.3
C70-72	Brain, nervous system	-	-	-	-	-	-	-	1	-	-	1	-	-	2	1	-	5	1.6
C73	Thyroid	-	-	-	-	-	1	-	-	-	-	-	2	-	-	1	1	5	1.6
C74	Adrenal gland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C75	Other endocrine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	Hodgkin disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C82-85,C96	Non-Hodgkin lymphoma	-	-	-	-	-	-	-	-	-	-	1	-	1	-	2	1	5	1.6
C88	Immunoproliferative diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C90	Multiple myeloma	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	3	1
C91	Lymphoid leukemia	1	1	1	-	-	-	-	-	-	1	-	-	-	-	1	-	5	1.6
C92-94	Myeloid leukemia	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	1	3	1
C95	Leukemia unspecified	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	2	0.7
MPD	Myeloproliferative disorders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MDS	Myelodysplastic syndromes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
O&U	Other and unspecified	-	-	1	-	-	1	1	-	-	1	-	4	6	1	1	4	20	6.6
ALL	All sites	1	2	3	-	1	2	5	16	15	20	35	32	34	40	34	65	305	100
ALLbC44	All sites but C44	1	2	3	-	1	2	5	16	15	20	35	32	34	40	34	65	305	100

Table 17 Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) and Truncated (35-65 years)(TR) mortality Rate per 100,000 Population:2018 Kathmandu Valley-Male

ICD 10	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						0.06	0.1	0.3
C01-02	-	-	-	-	-	-	-	0.8	-	-	1.7	7.2		8.3	5.9		0.50	0.8	1.3
C03-06	-	-	-	-	-	-	-	0.8	-	2.5	3.3	2.4	3.1	4.1	-	-	0.50	0.7	1.9
C07-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	0.06	0.1	-
C09	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-	0.06	0.1	-
C10	-	-	-	-	-	-	-	-	-	-	3.3	2.4	-	-	-	-	0.19	0.3	0.8
C11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C12-13	-	-	-	-	-	-	-	-	-	-	-	-	6.1	4.1	5.9	4.3	0.31	0.6	0.8
C14	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-
C15	-	-	-	-	-	-	-	-	-	2.5	3.3	-	3.1	8.3	23.7	4.3	0.76	1.2	1.4
C16	-	-	-	-	-	0.6	0.7	-	2.8	5.0	1.7	9.6	15.3	33.1	17.7	34.6	2.39	3.7	5.0
C17	-	-	-	-	-	-	-	0.8	0.9	-	-	-	6.1	4.1	-	-	0.31	0.5	1.1
C18	-	-	-	0.5	-	-	0.7	-	-	1.2	3.3	7.2	3.1	4.1	11.8	4.3	0.82	1.2	2.1
C19-20	-	-	-	-	-	-	-	-	-	-	1.7	2.4	6.1	4.1	-	4.3	0.38	0.6	1.4
C21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C22	-	-	-	-	-	-	0.7	0.8	-	1.2	-	4.8	12.2	16.6	11.8	17.3	1.20	1.9	2.6
C23-24	-	-	-	-	-	0.6	-	1.6	0.9	1.2	1.7	2.4	9.2	24.8	11.8	26.0	1.51	2.3	2.5
C25	-	-	-	-	-	-	-	-	1.8	1.2	1.7	9.6	3.1	8.3	17.7	4.3	0.94	1.5	2.5
C30-31	1.0	-	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-	0.13	0.2	-
C32	-	-	-	-	-	-	-	-	-	-	1.7	4.8	6.1	0.0	23.7	17.3	0.82	1.3	1.7
C33-34	-	-	-	-	-	-	-	-	1.8	-	13.3	21.5	33.6	78.6	118.3	86.6	5.61	9.4	9.6
C37-38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	-	0.06	0.1	-
C40-41	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	8.7	0.25	0.3	-
C43	-	-	-	-	-	-	-	0.8	-	-	-	-	-	4.1	-	-	0.13	0.2	0.2
C44	-	-	-	-	-	-	-	-	-	-	-	2.4	3.1	-	-	8.7	0.25	0.4	0.7
C45	-	-	-	-	-	-	-	-	-	-	-	2.4	-	-	-	-	0.06	0.1	0.3
C46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C61	-	-	-	-	-	-	-	-	-	2.5	3.3	-	3.1	8.3	23.7	4.3	0.76	1.2	1.4
C62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C64	-	-	-	-	-	-	-	-	-	-	1.7	-	-	4.1	17.7	13.0	0.50	0.8	0.3
C65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C67	-	-	-	-	-	-	-	-	-	-	-	2.4	-	12.4	11.8	26.0	0.76	1.7	0.3
C68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C70-72	-	-	-	-	-	-	-	-	-	1.2	3.3	2.4	6.1	4.1	-	-	0.44	0.7	1.9
C73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	0.06	0.1	-
C74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C82-85,C96	-	-	0.7	1.0	-	-	-	-	-	-	-	2.4	6.1	12.4	5.9	13.0	0.82	1.2	1.1
C88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C90	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	-	-	0.06	0.1	0.4
C91	1.0	-	0.7	-	-	1.2	0.7	-	-	-	-	-	-	-	-	-	0.31	0.3	-
C92-94	-	-	-	-	-	0.6	-	0.8	-	1.2	-	4.8	-	-	5.9	-	0.38	0.5	1.0
C95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MPD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*O&U	-	-	-	-	-	-	-	1.6	0.9	2.5	5.0	7.2	12.2	8.3	29.6	13.0	1.57	2.4	4.3
ALL	2.1	-	1.3	1.6	1.0	2.9	2.8	7.9	9.2	20.0	49.7	98.2	146.6	264.8	331.3	311.8	22.99	36.3	46.8
ALLbC44	2.1	-	1.3	1.6	1.0	2.9	2.8	7.9	9.2	20.0	49.7	95.8	143.6	264.8	331.3	303.2	22.74	35.9	46.1

*O &U includes ICD 10: C26 and C80

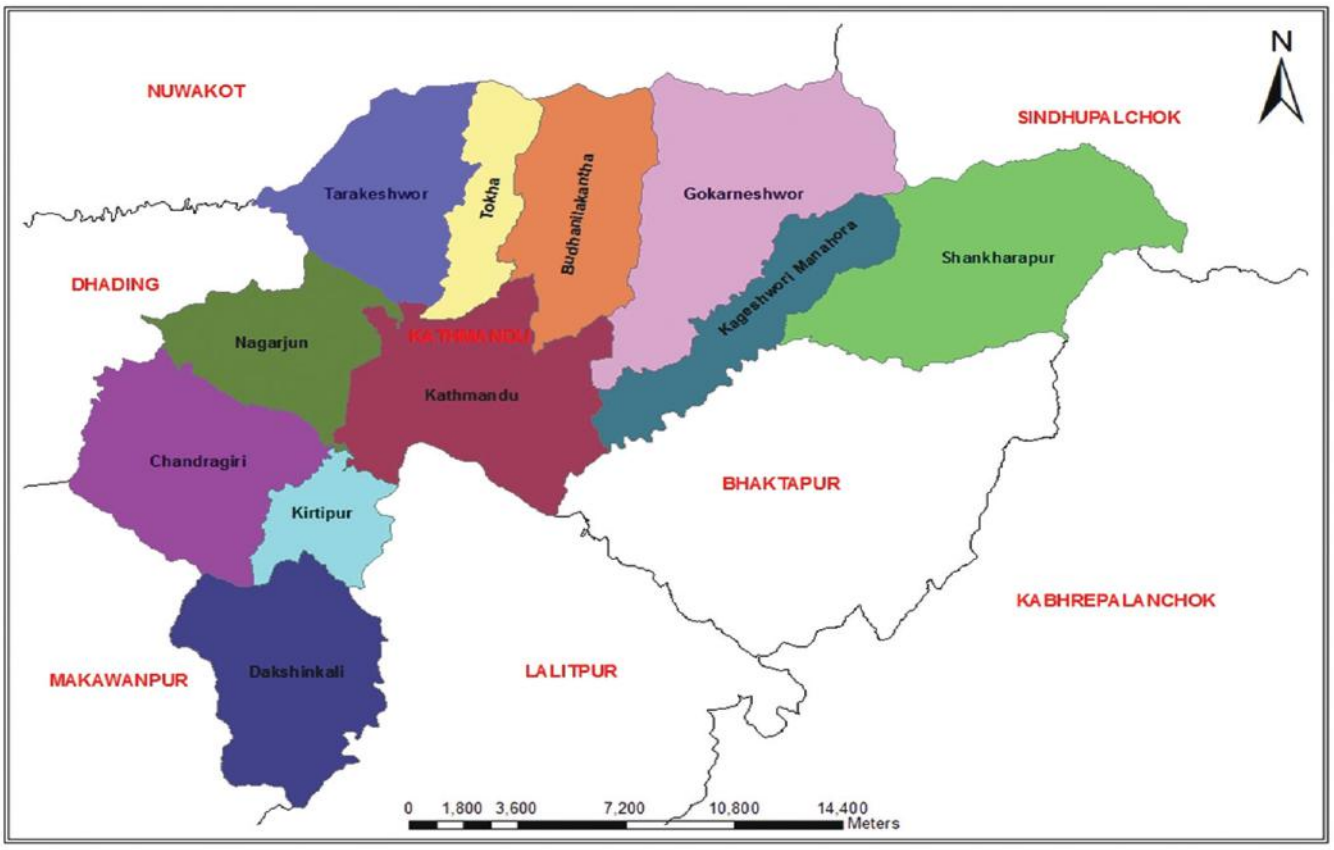
Table 18 Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) and Truncated (35-65 years)(TR) mortality Rate per 100,000 Population:2018 Kathmandu Valley-Female

ICD 10	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C01-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	0.1	0.1	-
C03-06	-	-	-	-	-	-	-	-	-	-	-	-	-	7.6	-	-	0.1	0.2	-
C07-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C12-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0	-	0.1	0.1	-
C14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	-	-	-	-	-	-	-	-	-	-	3.7	5.1	5.8	3.8	-	9.9	0.7	0.9	2.0
C16	-	-	-	-	-	-	0.7	-	5.3	1.4	7.4	10.1	5.8	3.8	20.2	13.2	1.8	2.2	4.5
C17	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-	10.1	-	0.2	0.3	0.2
C18	-	-	-	-	-	-	-	3.3	-	1.4	3.7	2.5	-	-	-	9.9	0.7	0.8	1.8
C19-20	-	-	-	-	-	-	-	0.8	-	1.4	-	-	2.9	7.6	-	3.3	0.4	0.5	0.8
C21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C22	-	-	-	-	-	-	-	-	1.1	-	1.9	-	-	-	-	6.6	0.3	0.3	0.5
C23-24	-	-	-	-	-	-	-	-	2.1	7.0	16.7	7.6	8.7	30.3	15.1	26.3	2.8	3.8	6.6
C25	-	-	-	-	-	-	-	-	-	-	3.7	2.5	-	-	15.1	9.9	0.6	0.8	0.9
C30-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C33-34	-	-	-	-	-	-	-	0.8	0.0	1.4	5.6	15.2	23.1	41.6	55.5	52.7	3.8	5.4	6.3
C37-38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C40-41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
C43	-	-	-	-	-	-	-	0.8	-	-	-	-	-	3.8	-	3.3	0.2	0.2	0.2
C44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47,C49	-	-	-	-	-	-	0.7	-	-	-	1.9	-	-	-	-	-	0.1	0.1	0.3
C50	-	-	-	-	-	-	1.4	3.3	5.3	7.0	5.6	12.7	8.7	15.1	5.0	9.9	2.4	2.9	6.7
C51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	0.1	0.1	-
C52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C53	-	-	-	-	-	-	-	0.8	-	1.4	5.6	-	5.8	3.8	-	6.6	0.7	0.9	2.1
C54	-	-	-	-	-	-	-	-	-	-	-	5.1	5.8	3.8	-	3.3	0.4	0.6	1.4
C55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0	-	0.1	0.1	
C56	-	-	-	-	0.5	-	-	-	1.1	2.8	5.6	5.1	11.6	3.8	10.1	16.5	1.4	1.9	3.8
C57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C64	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	-	0.1	0.1	-
C65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C66	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	0.1	0.3
C67	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	3.3	0.1	0.1	0.2
C68	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	0.06	0.1	0.2
C69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-
C70-72	-	-	-	-	-	-	-	0.8	-	-	1.9	-	-	7.6	5.0	-	0.3	0.5	0.5
C73	-	-	-	-	-	0.6	-	-	-	-	-	5.1	-	-	5.0	3.3	0.3	0.4	0.7
C74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C82-85,C96	-	-	-	-	-	-	-	-	-	-	1.9	-	2.9	-	10.1	3.3	0.3	0.5	0.7
C88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C90	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	6.6	0.2	0.2	-
C91	1.2	1.0	0.8	-	-	-	-	-	-	1.4	-	-	-	-	5.0	-	0.3	0.5	0.3
C92-94	-	-	-	-	-	-	-	0.8	-	-	-	-	-	3.8	-	3.3	0.2	0.2	0.2
C95	-	-	0.8	-	-	-	-	-	-	-	-	-	-	3.8	-	-	0.1	0.2	-
MPD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MDS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
*O&U	-	-	0.8	-	-	0.6	0.7	-	-	1.4	-	10.1	17.3	3.8	5.0	13.2	1.3	1.8	3.8
ALL	1.2	1.9	2.3	-	0.5	1.1	3.5	13.1	15.8	28.1	65.1	81.0	98.2	151.5	171.5	214.0	20.5	27.0	44.7
ALLbC44	1.2	1.9	2.3	-	0.5	1.1	3.5	13.1	15.8	28.1	65.1	81.0	98.2	151.5	171.5	214.0	20.5	27.0	44.7

*O &U includes ICD 10: C26 and C80

Cases According to Wards Within Municipality in Each District

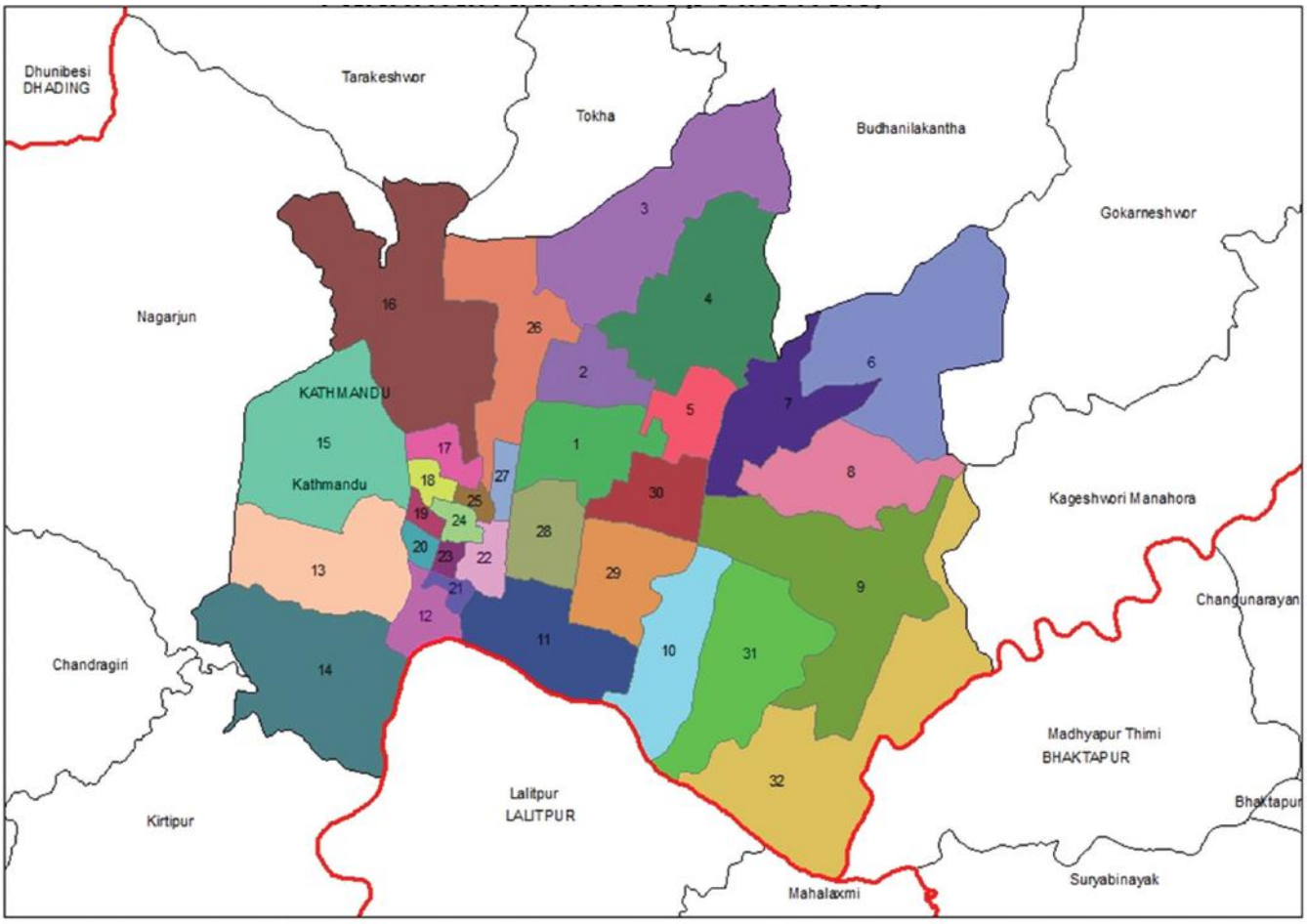
Municipality wise Cancer Incidence and Mortality: Kathmandu District



Municipality/Village Council wise Cancer Incidence and Mortality: Kathmandu District

S.N	Municipality	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	Kathmandu Metropolitan City	302	394	696	103	100	203
2	Budhanilkantha Municipality	56	55	111	21	15	36
3	Nagarjun Municipality	30	21	51	7	6	13
4	Shankharapur Municipality	8	5	13	3	1	4
5	Kageshswori Manohara Municipality	40	27	67	9	5	14
6	Gokarneswor Municipality	37	44	81	10	12	22
7	Daksinkali Municipality	9	14	23	4	7	11
8	Tarakeshwor Municipality	25	40	65	3	10	13
9	Tokha Municipality	29	40	69	8	6	14
10	Chandragiri Municipality	46	29	75	19	8	27
11	Kritipur Municipality	27	25	52	13	10	23
12	Municipality not confirmed	21	27	48	10	3	13
Total		630	721	1351	210	183	393

Ward wise Cancer Incidence and Mortality: Kathmandu Metropolitan City, Kathmandu District

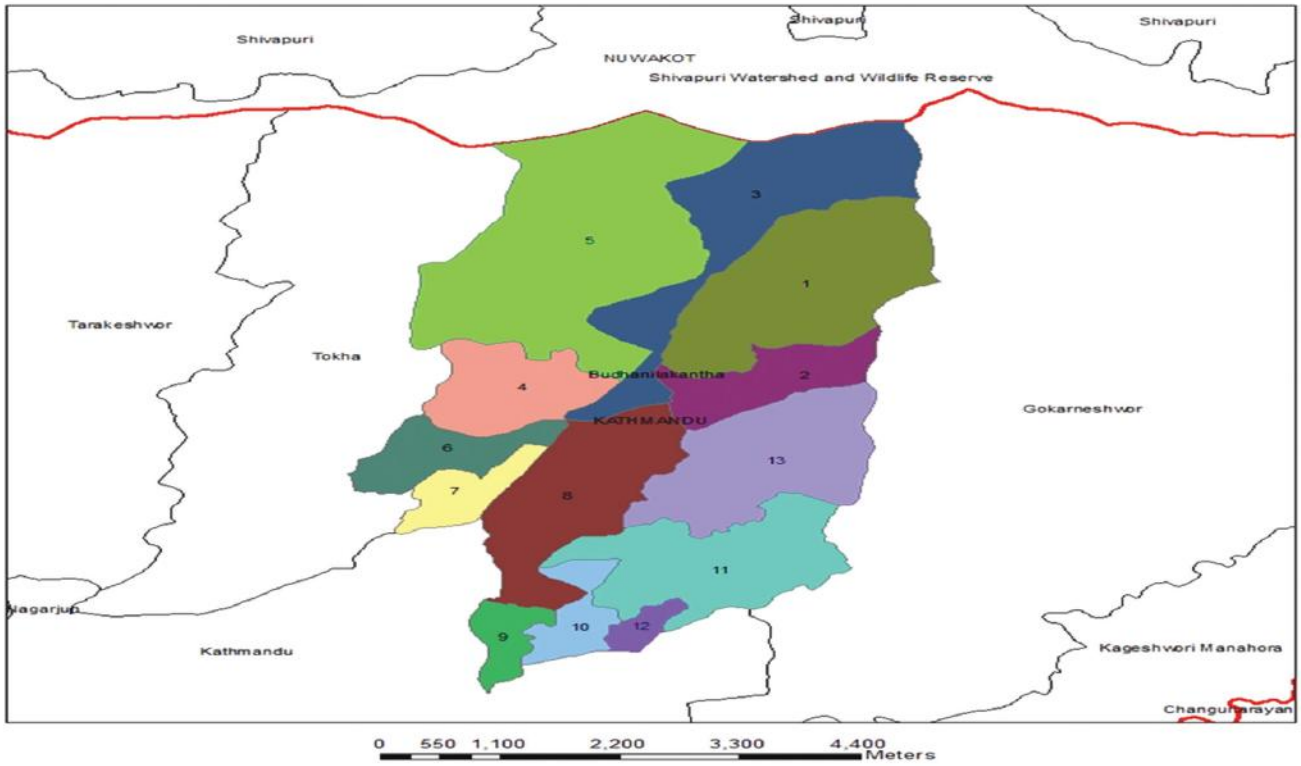


Ward wise Cancer Incidence and Mortality:Kathmandu Metropolitan City, Kathmandu District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	7	4	11	3	-	3
2	2	10	17	27	2	6	8
3	3	8	15	23	2	2	4
4	4	13	25	38	5	2	7
5	5	4	4	8	1	2	3
6	6	21	25	46	4	5	9
7	7	19	20	39	4	9	13
8	8	6	7	13	1	-	1
9	9	14	13	27	4	7	11
10	10	10	19	29	4	2	6
11	11	5	8	13	3	2	5
12	12	1	4	5	1	3	4
13	13	14	17	31	6	7	13

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
14	14	13	24	37	1	5	6
15	15	17	15	32	4	3	7
16	16	21	23	44	5	5	10
17	17	8	4	12	3	1	4
18	18	3	7	10	2	1	3
19	19	3	3	6	2	1	3
20	20	2	6	8	1	-	1
21	21	2	2	4	-	1	1
22	22	2	-	2	-	1	1
23	23	2	1	3	3	2	5
24	24	3	5	8	-	1	1
25	25	2	9	11	2	2	4
26	26	7	17	24	1	4	5
27	27	5	10	15	2	1	3
28	28	1	6	7	-	-	-
29	29	10	9	19	6	-	6
30	30	6	8	14	-	1	1
31	31	7	12	19	1	1	2
32	32	26	20	46	4	8	12
33	Unknown	30	35	65	26	15	41
Total		302	394	696	103	100	203

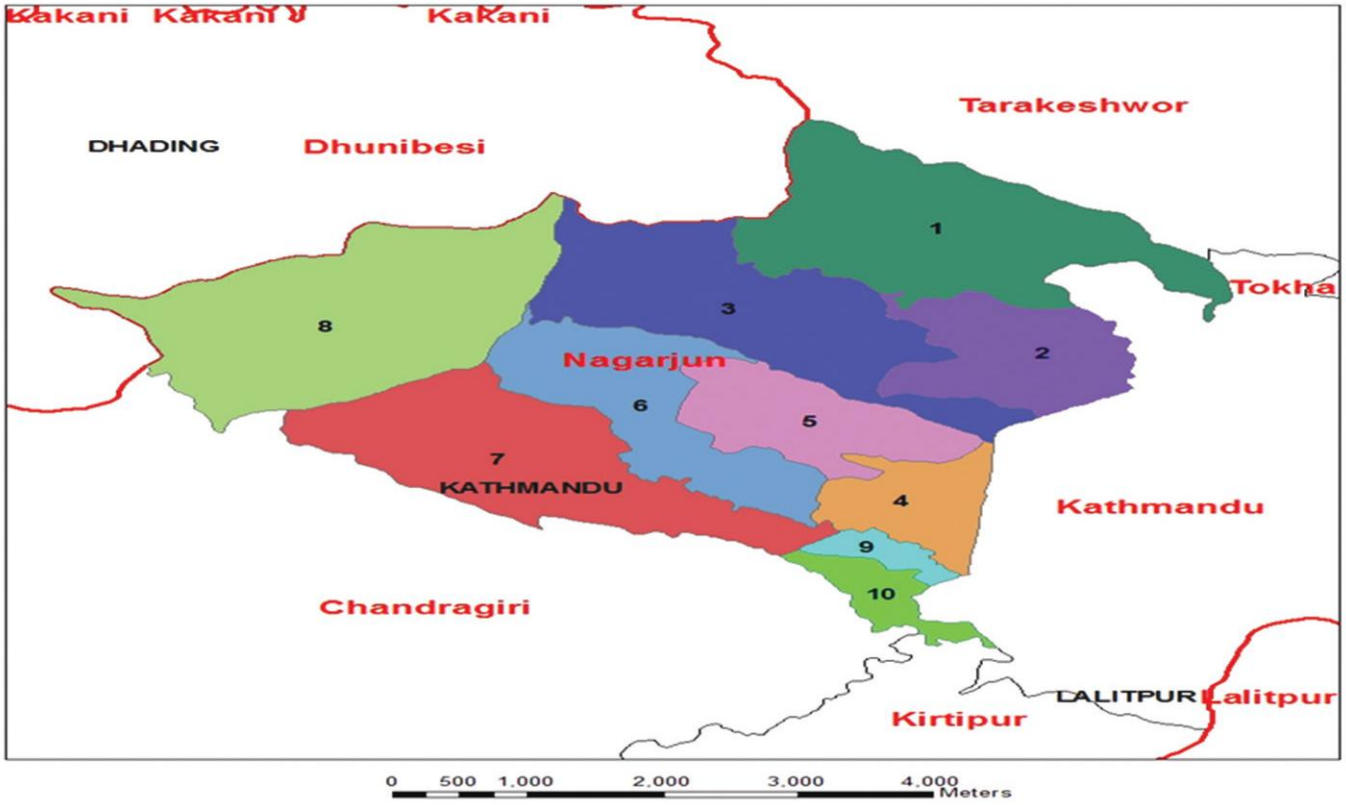
Ward wise Cancer Incidence and Mortality: Budhanilkantha Municipality, Kathmandu District



Ward wise Cancer Incidence and Mortality: Budhanilkantha Municipality, Kathmandu District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	2	-	2	1	-	1
2	2	2	3	5	-	1	1
3	3	3	2	5	1	1	2
4	4	7	9	16	2	1	3
5	5	1	1	2	1	1	2
6	6	3	7	10	-	-	-
7	7	1	1	2	-	-	-
8	8	2	8	10	1	1	2
9	9	5	5	10	-	1	1
10	10	11	6	17	4	2	6
11	11	3	3	6	2	-	2
12	12	2	1	3	-	-	-
13	13	6	3	9	4	-	4
14	Unknown	8	6	14	5	7	12
Total		56	55	111	21	15	36

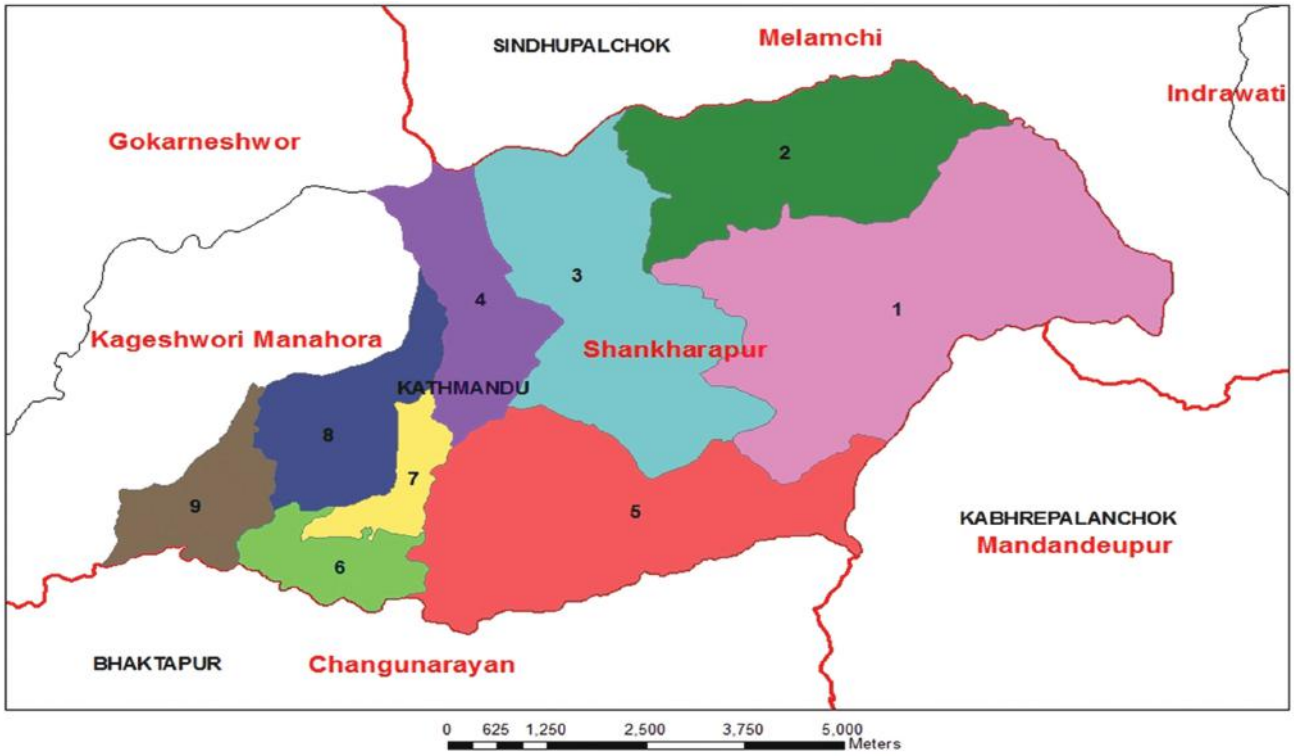
Ward wise Cancer Incidence and Mortality: Nagarjun Municipality, Kathmandu District



Ward wise Cancer Incidence and Mortality: Nagarjun Municipality, Kathmandu District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	5	2	7	1	-	1
2	2	3	-	3	-	-	-
3	3	1	4	5	-	1	1
4	4	4	1	5	1	1	2
5	5	2	2	4	1	1	2
6	6	3	2	5	-	-	-
7	7	2	2	4	1	-	1
8	8	4	2	6	-	1	1
9	9	2	3	5	1	-	1
10	10	1	1	2	-	1	1
11	Unknown	3	2	5	2	1	3
Total		30	21	51	7	6	13

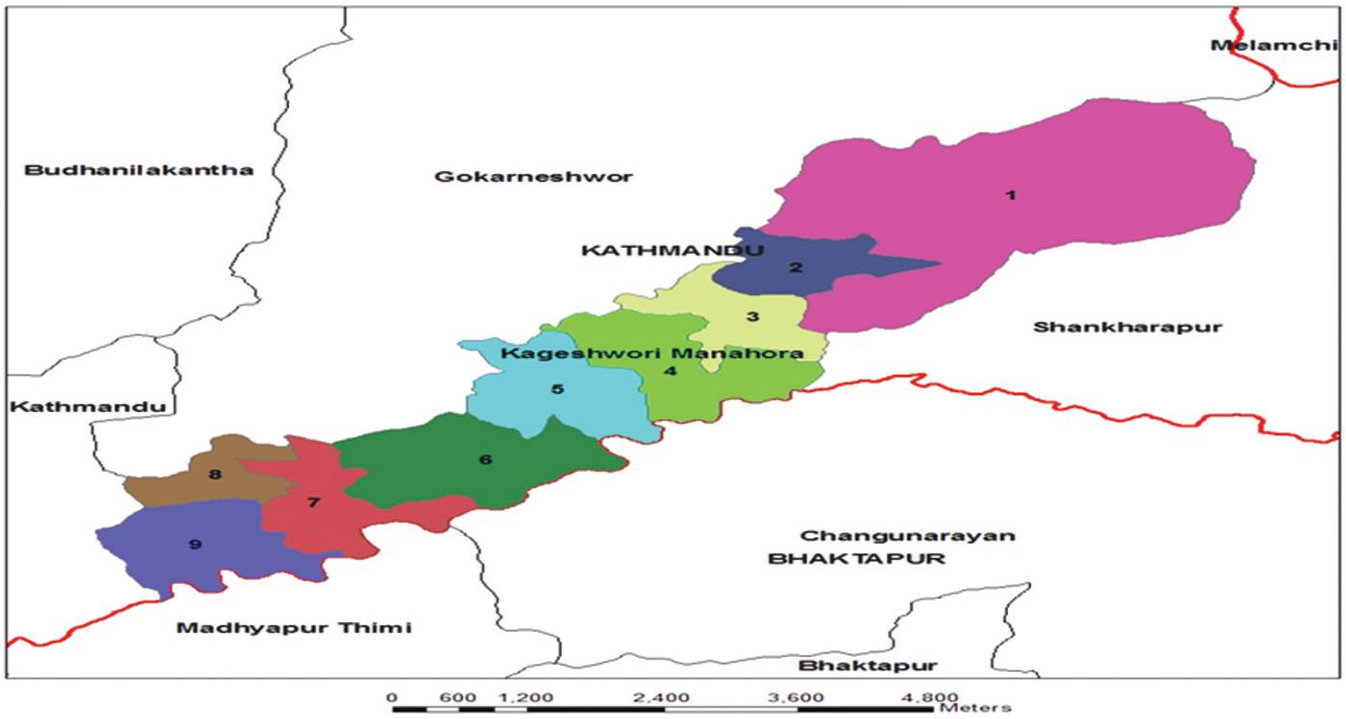
Ward wise Cancer Incidence and Mortality: Shankarapur Municipality, Kathmandu District



Ward wise Cancer Incidence and Mortality: Shankarapur Municipality, Kathmandu District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	2	-	2	-	-	-
2	2	-	-	-	-	-	-
3	3	-	-	-	-	-	-
4	4	-	-	-	-	-	-
5	5	1	1	2	-	-	-
6	6	2	1	3	1	-	1
7	7	3	2	5	2	-	2
8	8	-	-	-	-	-	-
9	9	-	1	1	-	-	-
10	Unknown	-	-	-	-	1	1
Total		8	5	13	3	1	4

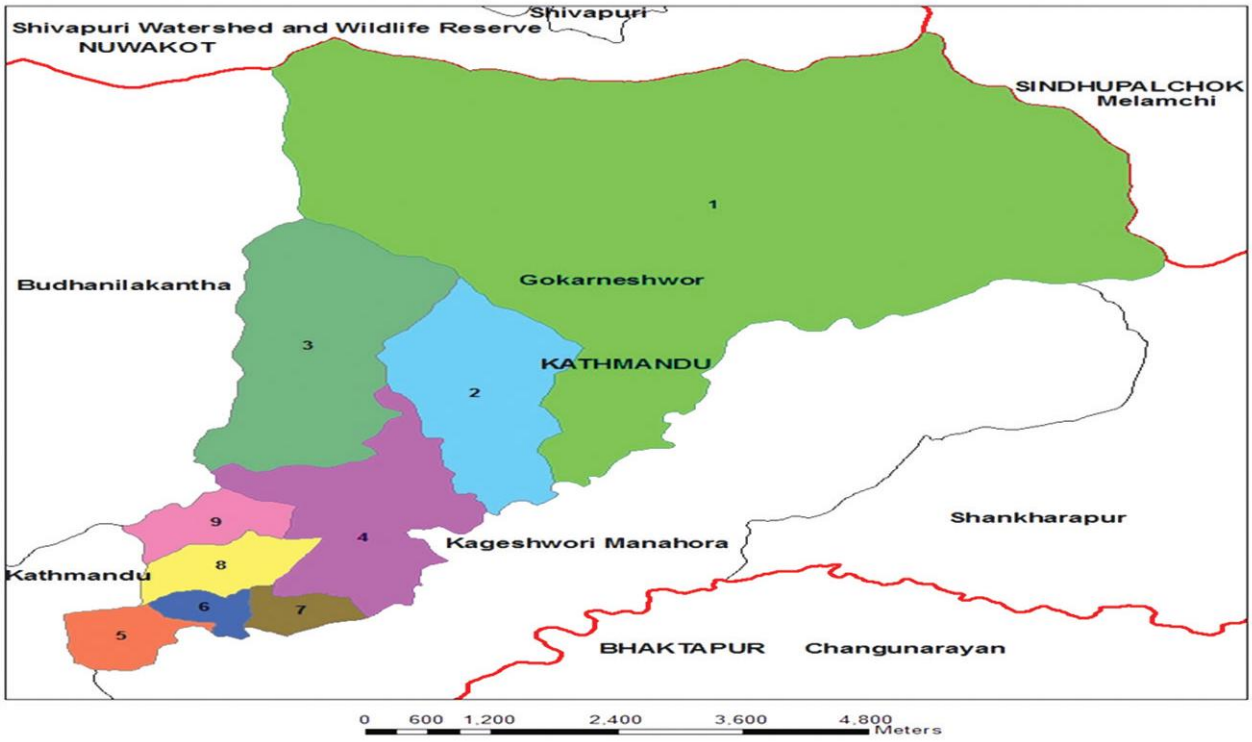
Ward wise Cancer Incidence and Mortality: Kageshswori Manohara Municipality, Kathmandu District



Ward wise Cancer Incidence and Mortality: Kageshswori Manohara Municipality, Kathmandu District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	1	1	2	-	1	1
2	2	-	-	-	-	-	-
3	3	4	1	5	2	-	2
4	4	3	4	7	2	1	3
5	5	3	1	4	1	-	1
6	6	6	2	8	2	-	2
7	7	3	7	10	-	-	-
8	8	3	2	5	1	-	1
9	9	15	6	21	1	1	2
10	10	-	-	-	-	-	-
11	Unknown	2	3	5	-	2	2
Total		40	27	67	9	5	14

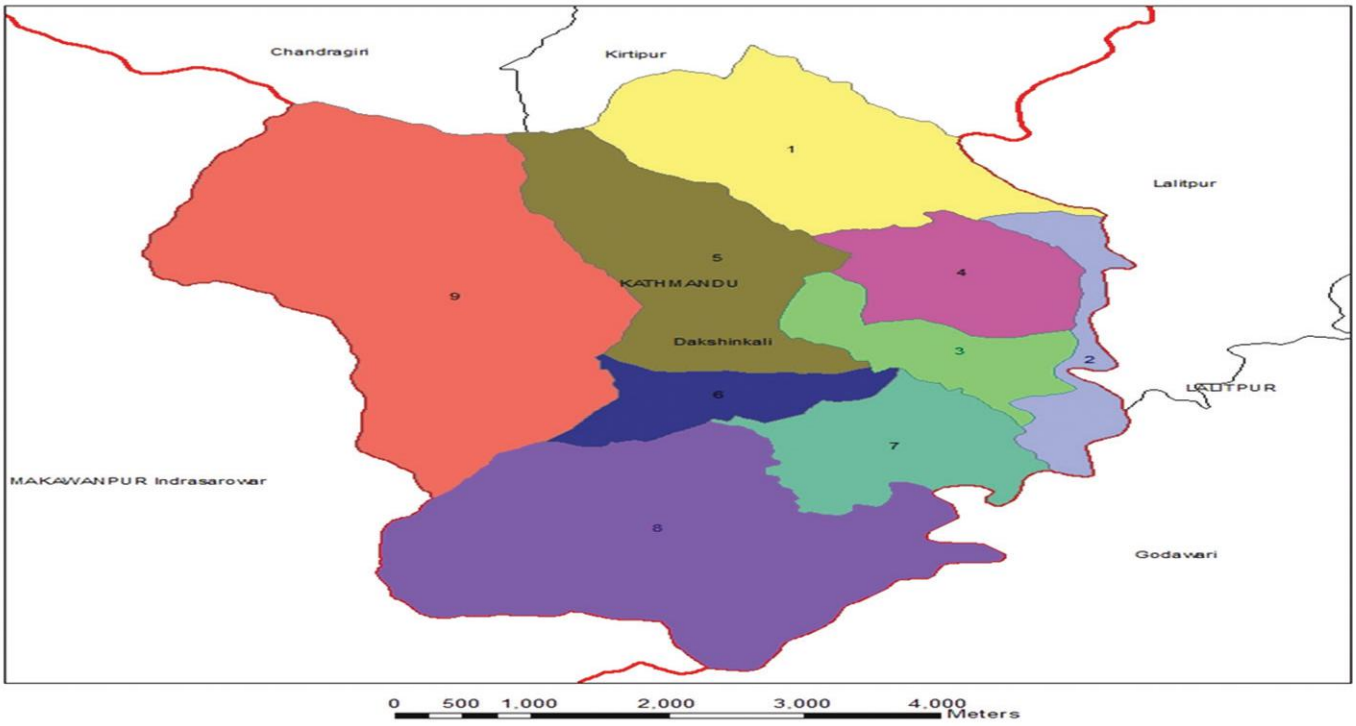
Ward wise Cancer Incidence and Mortality: Gokarneshwor Municipality, Kathmandu District



Ward wise Cancer Incidence and Mortality: Gokarneshwor Municipality, Kathmandu District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	3	1	4	1	-	1
2	2	2	2	4	-	-	-
3	3	2	2	4	-	1	1
4	4	1	5	6	-	-	-
5	5	6	9	15	-	2	2
6	6	8	7	15	4	2	6
7	7	3	2	5	-	1	1
8	8	7	10	17	3	3	6
9	9	2	2	4	-	1	1
10	Unknown	3	4	7	2	2	4
Total		37	44	81	10	12	22

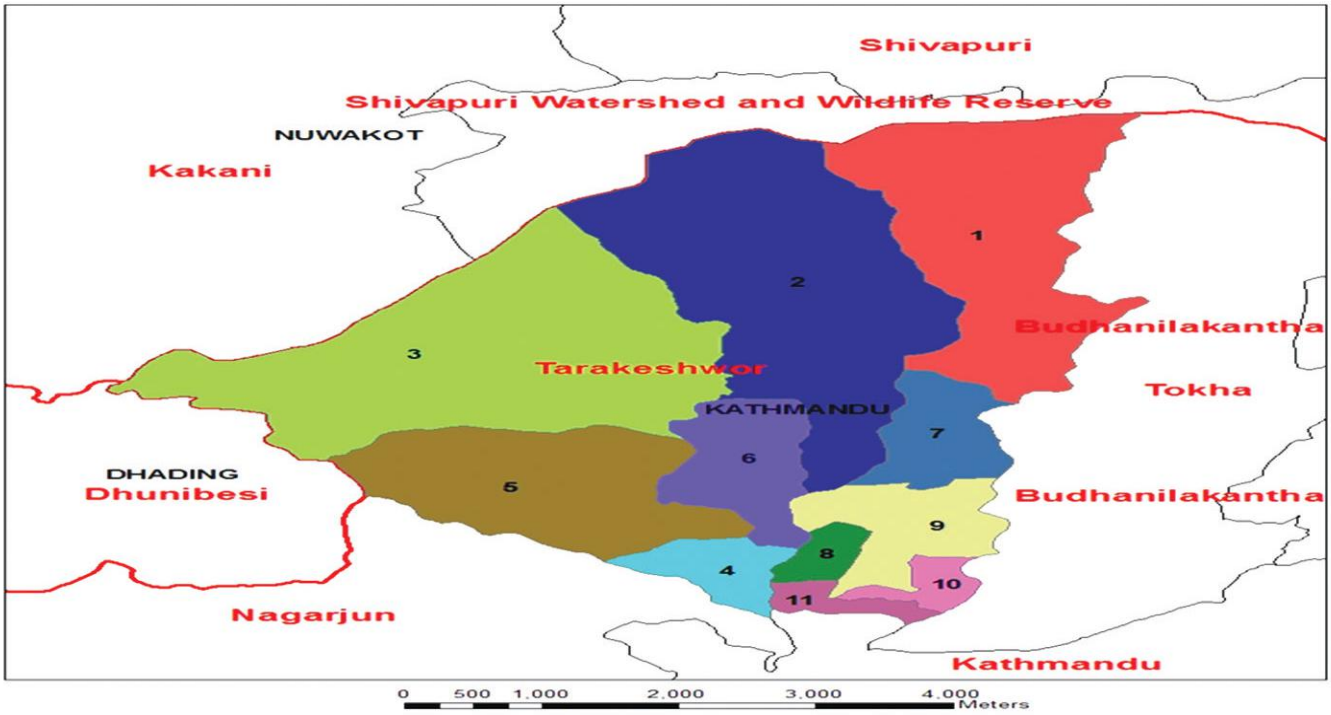
Ward wise Cancer Incidence and Mortality: Dakshinkali Municipality, Kathmandu District



Ward wise Cancer Incidence and Mortality: Dakshinkali Municipality, Kathmandu District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	2	2	4	-	-	-
2	2	-	2	2	-	1	1
3	3	2	1	3	1	1	2
4	4	-	-	-	-	-	-
5	5	-	3	3	1	1	2
6	6	1	1	2	-	-	-
7	7	2	1	3	1	1	2
8	8	-	1	1	1	2	3
9	9	1	3	4	-	-	-
10	Unknown	1	-	1	-	1	1
Total		9	14	23	4	7	11

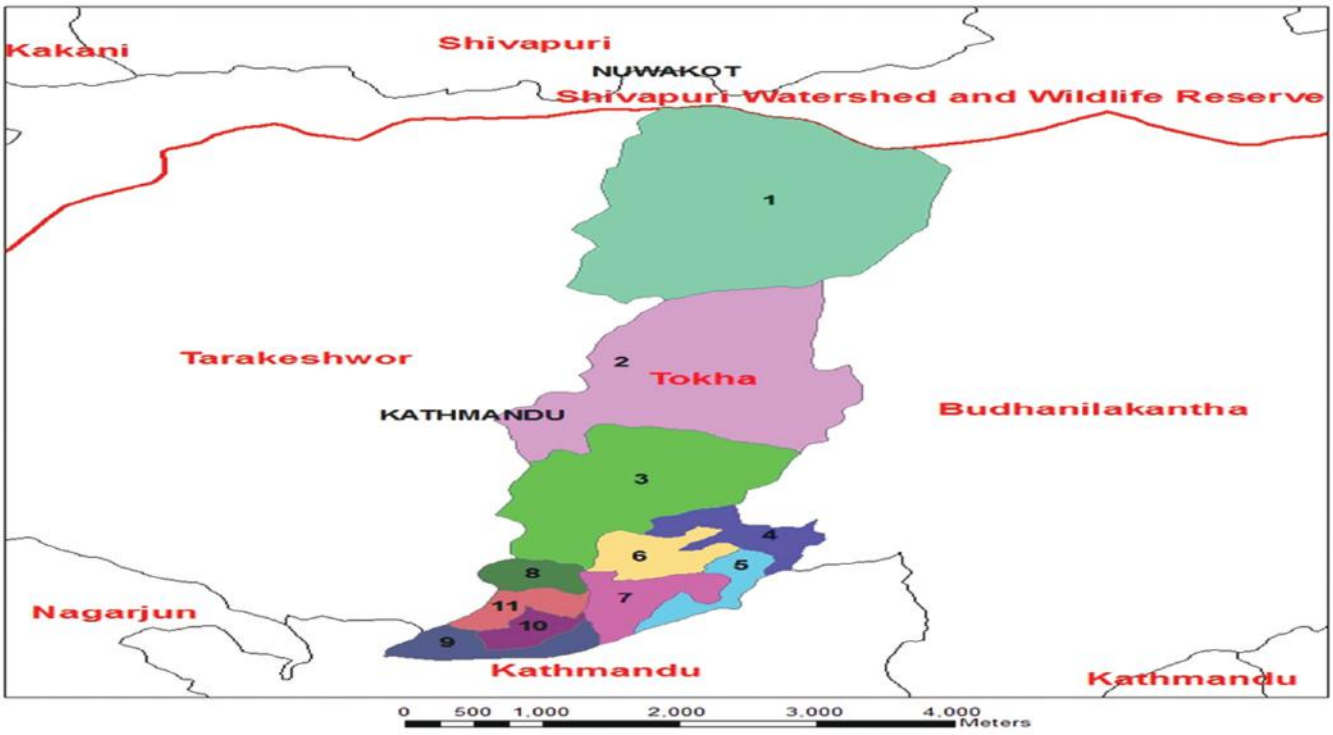
Ward wise Cancer Incidence and Mortality: Tarakeshswor Municipality, Kathmandu District



Ward wise Cancer Incidence and Mortality: Tarakeshswor Municipality, Kathmandu District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	3	2	5	1	-	1
2	2	1	3	4	-	-	-
3	3	1	4	5	-	2	2
4	4	2	4	6	-	2	2
5	5	2	1	3	-	2	2
6	6	6	3	9	1	-	1
7	7	5	3	8	-	-	-
8	8	2	6	8	-	2	2
9	9	-	4	4	-	1	1
10	10	1	4	5	-	-	-
11	11	1	3	4	1	-	1
12	Unknown	1	3	4	-	1	1
Total		25	40	65	3	10	13

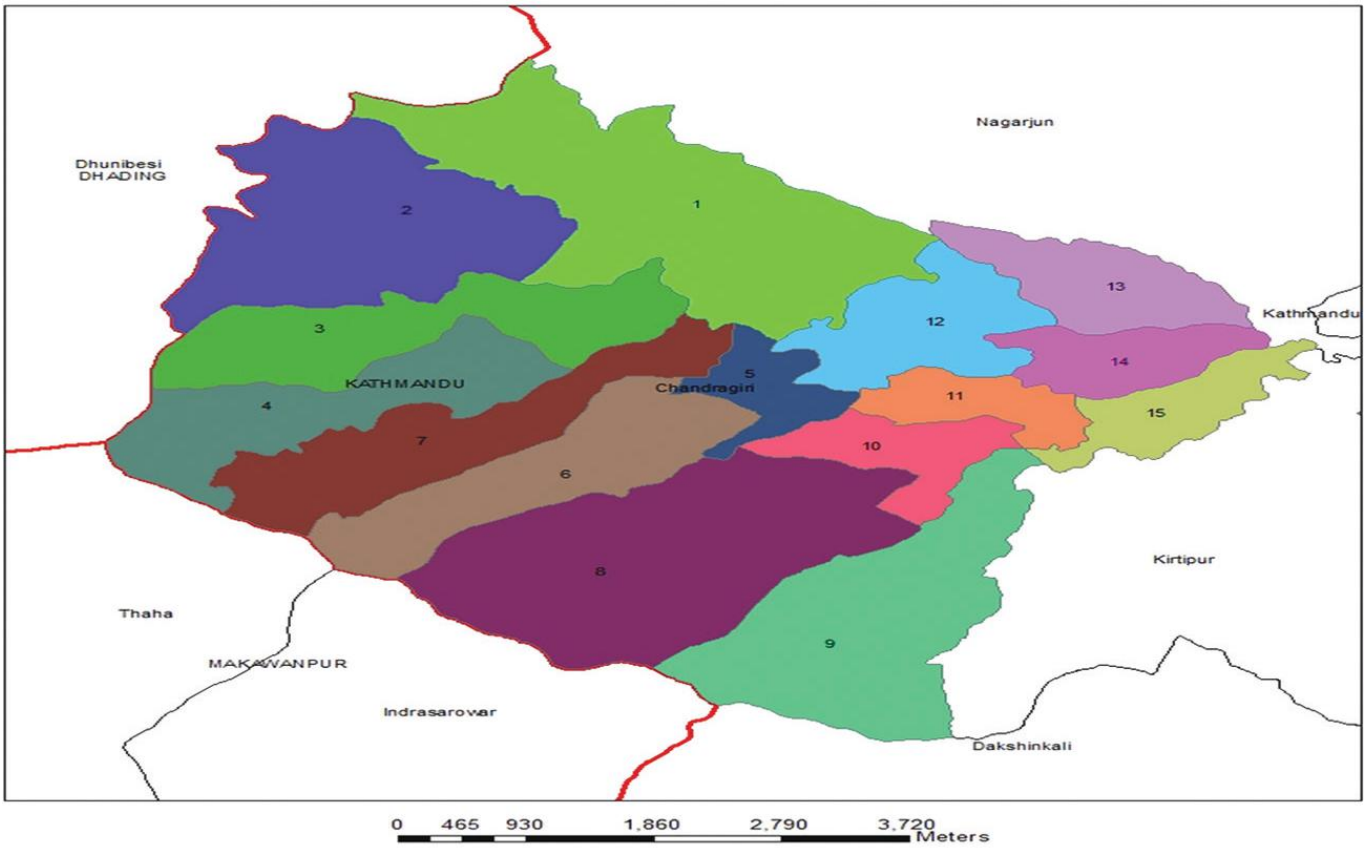
Ward wise Cancer Incidence and Mortality: Tokha Municipality, Kathmandu District



Ward wise Cancer Incidence and Mortality: Tokha Municipality, Kathmandu District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	2	3	5	-	-	-
2	2	3	-	3	-	-	-
3	3	8	8	16	3	1	4
4	4	-	2	2	-	-	-
5	5	1	4	5	-	-	-
6	6	1	2	3	1	-	1
7	7	1	3	4	1	2	3
8	8	4	4	8	2	2	4
9	9	4	6	10	1	1	2
10	10	3	1	4	-	-	-
11	11	1	5	6	-	-	-
12	Unknown	1	2	3	-	-	-
Total		29	40	69	8	6	14

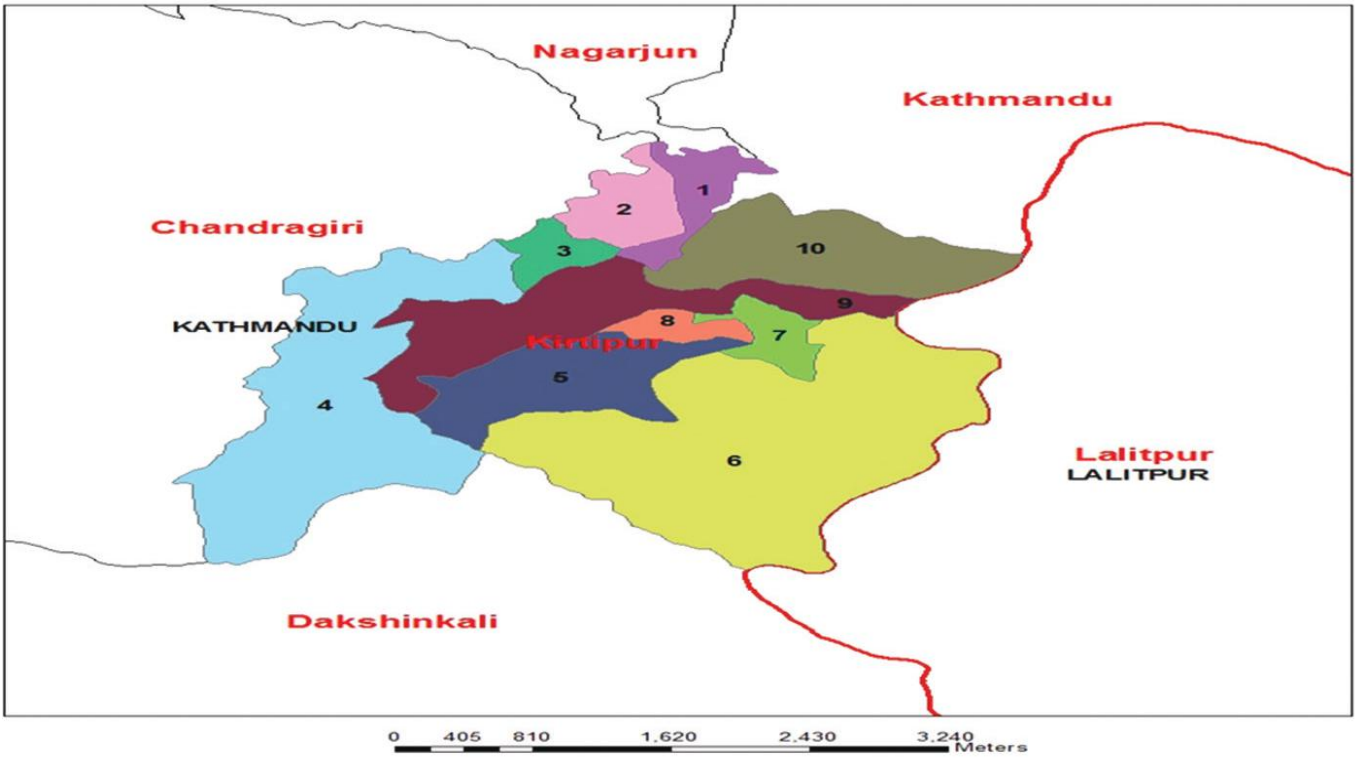
Ward wise Cancer Incidence and Mortality: Chandragiri Municipality, Kathmandu District



Ward wise Cancer Incidence and Mortality: Chandragiri Municipality, Kathmandu District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	5	2	7	1	2	3
2	2	3	1	4	3	-	3
3	3	2	1	3	-	1	1
4	4	4	1	5	2	-	2
5	5	4	-	4	1	-	1
6	6	4	5	9	-	1	1
7	7	2	1	3	3	2	5
8	8	1	3	4	1	-	1
9	9	2	3	5	1	-	1
10	10	1	1	2	1	-	1
11	11	1	2	3	1	-	1
12	12	4	3	7	2	1	3
13	13	3	2	5	-	1	1
14	14	5	3	8	1	-	1
15	15	2	1	3	1	-	1
16	Unknown	3	-	3	1	-	1
Total		46	29	75	19	8	27

Ward wise Cancer Incidence and Mortality: Kritipur Municipality, Kathmandu District



Ward wise Cancer Incidence and Mortality: Kritipur Municipality, Kathmandu District

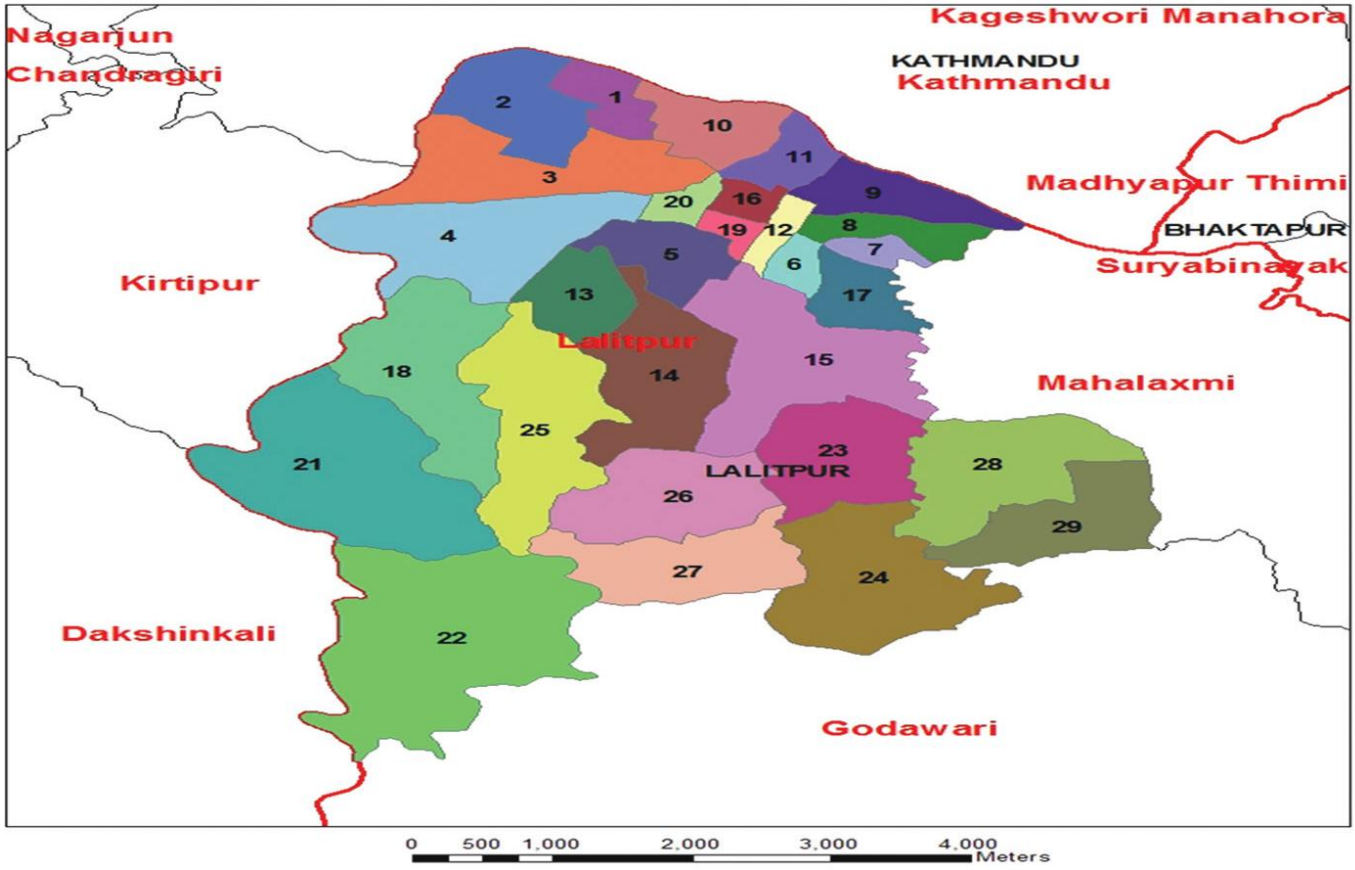
S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	1	1	2	-	-	-
2	2	1	1	2	1	1	2
3	3	6	2	8	1	2	3
4	4	2	2	4	-	1	1
5	5	2	2	4	3	1	4
6	6	3	6	9	2	2	4
7	7	2	-	5	-	1	1
8	8	-	3	3	-	-	-
9	9	5	3	6	2	-	2
10	10	-	2	2	-	1	1
11	Unknown	5	3	8	4	1	5
Total		27	25	52	13	10	23

Municipality wise Cancer Incidence and Mortality: Lalitpur District

Municipality wise Cancer Incidence and Mortality: Lalitpur District

S.N	Name of Municipality	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	Lalitpur Metropolitan City	132	153	285	55	53	108
2	Godawari Municipality	42	38	80	18	13	31
3	Mahalaxmi Municipality	34	57	91	15	12	27
4	Bagmati Village Council	4	5	9	1	1	2
5	Mahankal Village Council	4	1	5	0	1	1
6	Konjyosom Village Council	2	1	3	0	0	0
7	Unknown	4	7	11	2	2	4
Total		222	262	484	91	82	173

Ward wise Cancer Incidence and Mortality: Lalitpur Metropolitan City, Lalitpur District

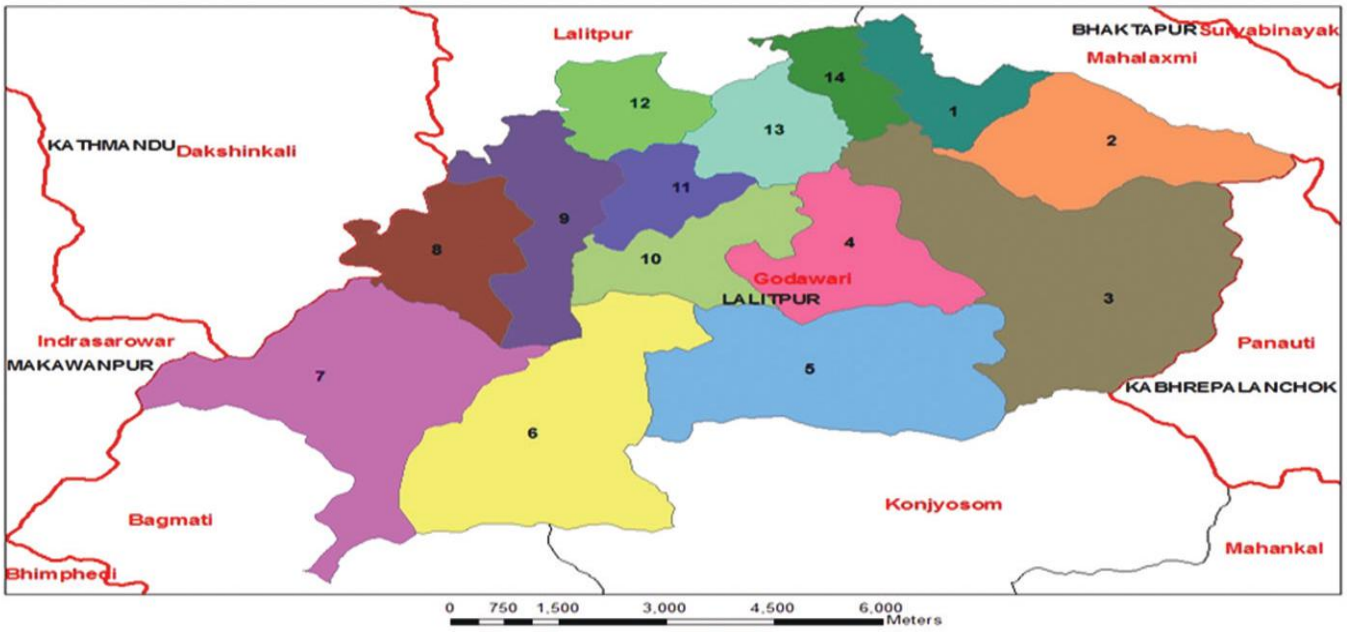


Ward wise Cancer Incidence and Mortality: Lalitpur Metropolitan City, Lalitpur District

S.N	Ward Number	Incidence Cases				Mortality Cases	
		Male	Female	Total	Male	Female	Total
1	1	4	3	7	1	-	1
2	2	12	10	22	4	2	6
3	3	6	10	16	2	-	2
4	4	8	20	28	2	3	5
5	5	3	2	5	2	1	3
6	6	6	4	10	6	-	6
7	7	2	2	4	2	1	3
8	8	9	3	12	2	1	3
9	9	2	4	6	4	2	6
10	10	4	3	7	-	3	3
11	11	3	4	7	1	4	5
12	12	1	3	4	-	-	-
13	13	1	7	8	2	3	5

S.N	Ward Number	Incidence Cases				Mortality Cases	
		Male	Female	Total	Male	Female	Total
14	14	7	12	19	2	4	6
15	15	7	8	15	3	1	4
16	16	8	7	15	1	2	3
17	17	2	5	7	-	3	3
18	18	1	2	3	-	-	-
19	19	5	5	10	2	-	2
20	20	2	2	4	-	-	-
21	21	1	1	2	-	1	1
22	22	5	3	8	2	3	5
23	23	3	1	4	2	1	3
24	24	5	2	7	-	1	1
25	25	2	2	4	1	-	1
26	26	1	1	2	-	1	1
27	27	5	3	8	2	2	4
28	28	1	3	4	1	2	3
29	29	-	3	3	-	1	1
30	Unknown	16	18	34	11	11	22
Total		132	153	285	55	53	108

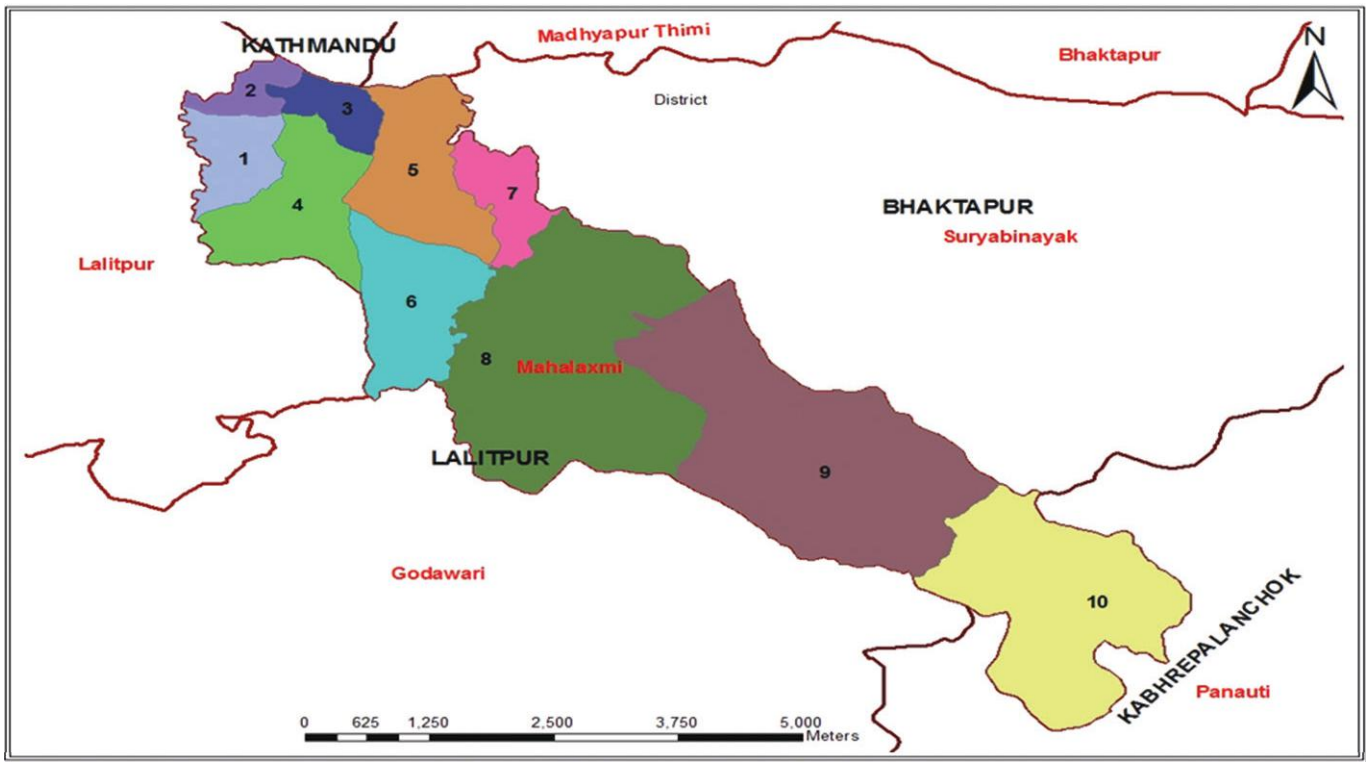
Ward wise Cancer Incidence and Mortality: Godawari Municipality, Lalitpur District



Ward wise Cancer Incidence and Mortality: Godawari Municipality, Lalitpur District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	1	2	3	-	-	-
2	2	3	2	5	-	2	2
3	3	5	5	10	3	-	3
4	4	2	2	4	-	3	3
5	5	4	4	8	1	1	2
6	6	3	3	6	-	1	1
7	7	-	1	1	-	1	1
8	8	2	-	2	1	-	1
9	9	2	4	6	3	2	5
10	10	3	2	5	1	1	2
11	11	3	4	7	2	-	2
12	12	3	4	7	1	1	2
13	13	3	2	5	-	-	-
14	14	5	3	8	3	1	4
15	Unknown	3	-	7	3	-	3
Total		42	38	80	18	13	31

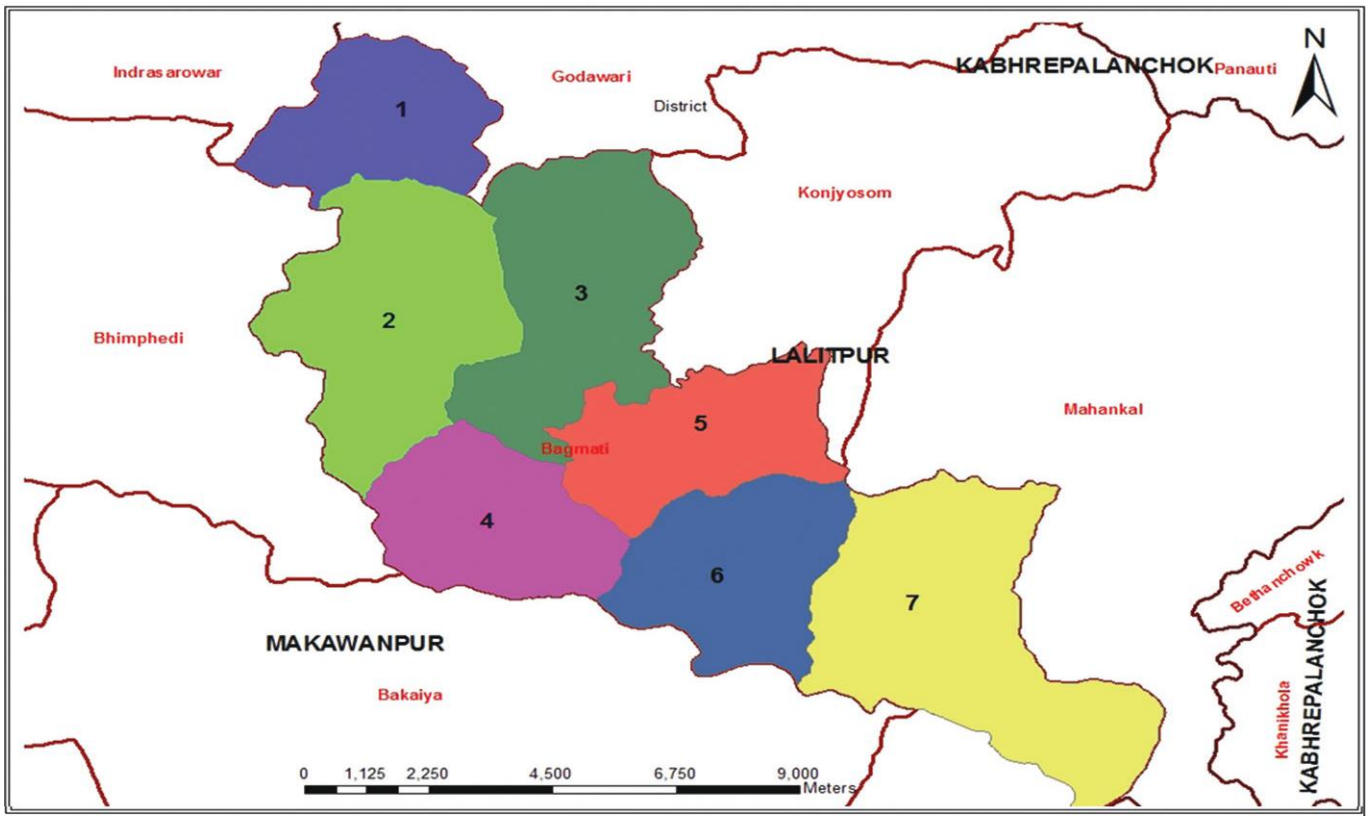
Ward wise Cancer Incidence and Mortality: Mahalaxmi Municipality, Lalitpur District



Ward wise Cancer Incidence and Mortality: Mahalaxmi Municipality, Lalitpur District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	2	3	5	-	-	-
2	2	3	2	5	-	-	-
3	3	2	5	7	-	-	-
4	4	3	9	12	-	-	-
5	5	2	5	7	-	1	1
6	6	8	3	11	-	-	-
7	7	2	3	5	-	-	-
8	8	4	11	15	-	-	-
9	9	3	6	9	-	-	-
10	10	2	1	3	-	-	-
11	Unknown	3	9	12	-	-	-
Total		34	57	91	-	1	1

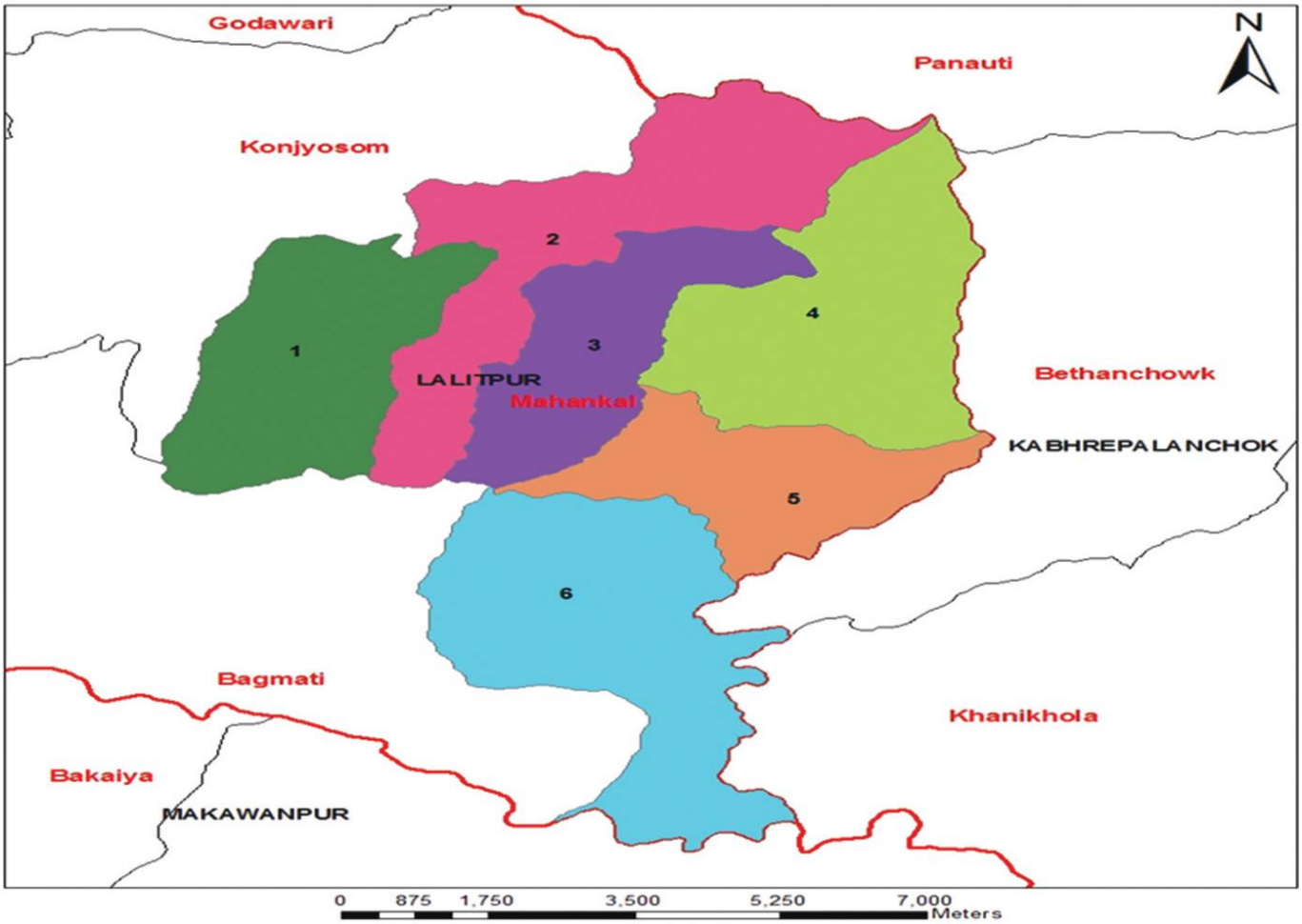
Ward wise Cancer Incidence and Mortality: Bagmati Rural Municipality, Lalitpur District



Ward wise Cancer Incidence and Mortality: Bagmati Rural Municipality, Lalitpur District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	1	1	2	-	-	-
2	2	2	-	2	-	-	-
3	3	-	-	-	-	-	-
4	4	-	1	1	-	-	-
5	5	-	1	1	-	-	-
6	6	-	-	-	-	-	-
7	7	-	1	1	-	1	1
8	Unknown	1	1	2	1	-	1
Total		4	5	9	1	1	2

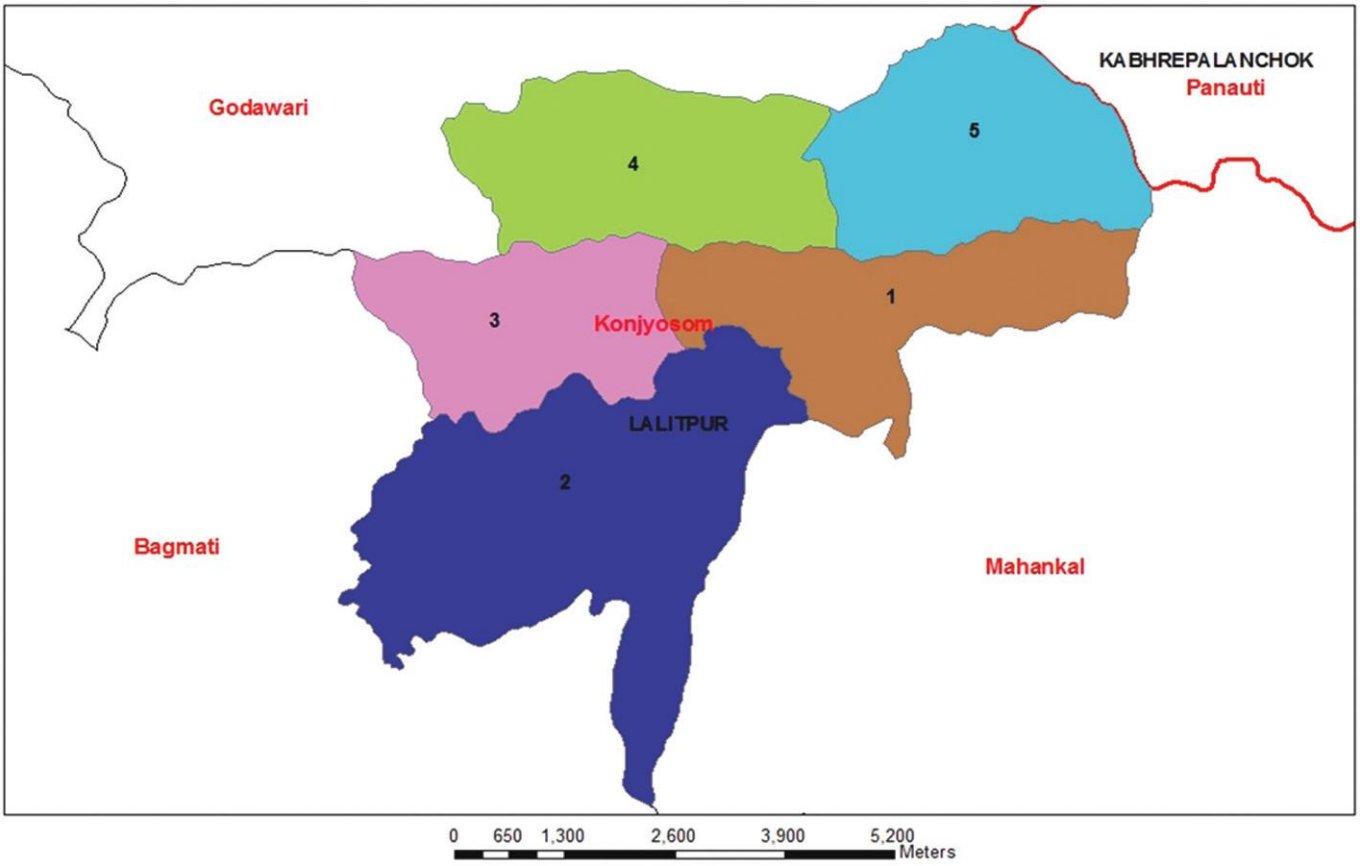
Ward wise Cancer Incidence and Mortality: Mahankal Rural Municipality, Lalitpur District



Ward wise Cancer Incidence and Mortality: Mahankal Rural Municipality, Lalitpur District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	-	-	-	-	-	-
2	2	1	-	1	-	-	-
3	3	-	-	-	-	-	-
4	4	1	-	1	-	-	-
5	5	-	1	1	-	-	-
6	6	-	-	-	-	-	-
7	Unknown	2	-	2	-	-	-
Total		4	1	5	-	-	-

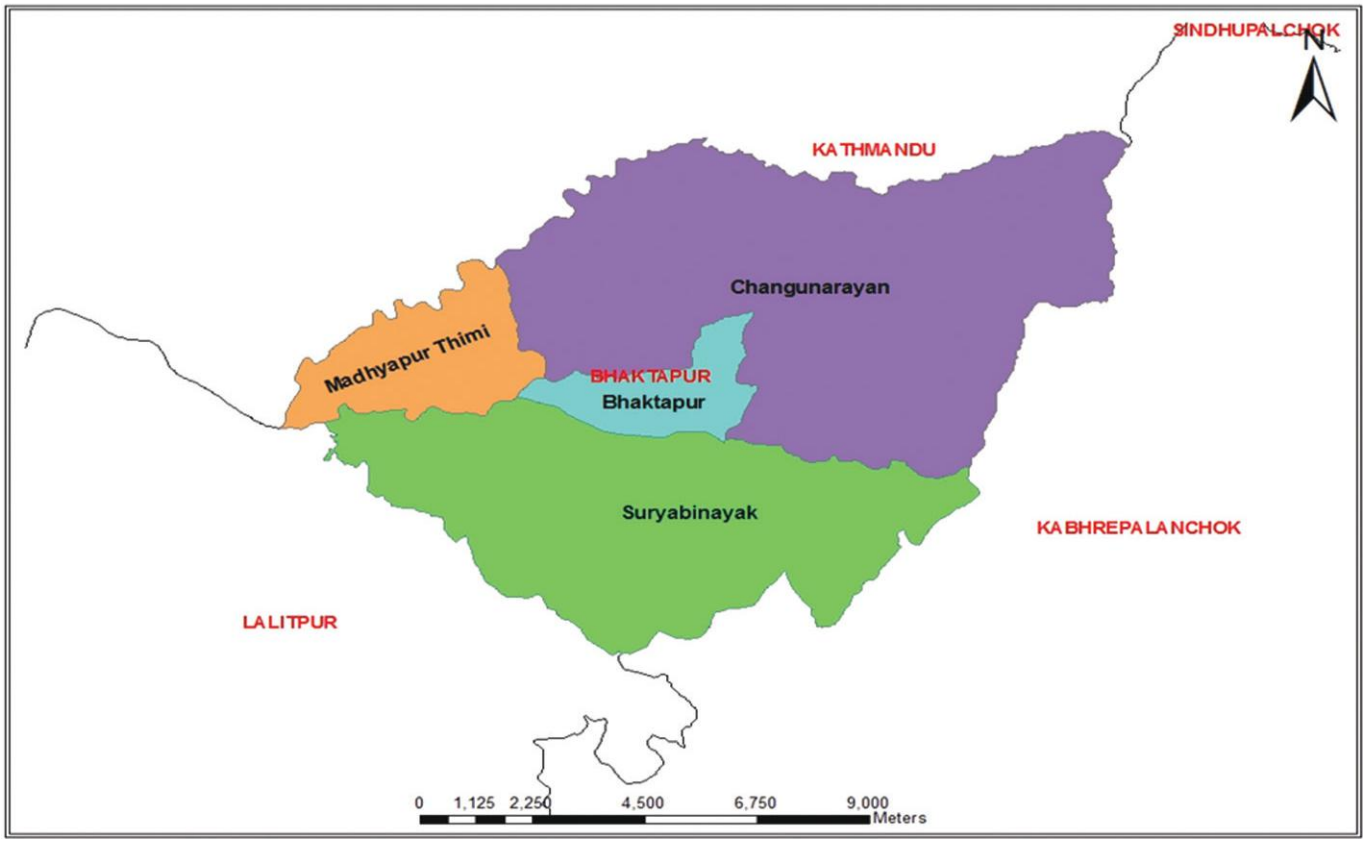
Ward wise Cancer Incidence and Mortality: Konjyosom Rural Municipality, Lalitpur District



Ward wise Cancer Incidence and Mortality: Konjyosom Rural Municipality, Lalitpur District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	-	-	-	-	-	-
2	2	-	-	-	-	-	-
3	3	-	-	-	-	-	-
4	4	2	-	2	-	-	-
5	5	-	-	-	-	-	-
6	Unknown	-	1	1	-	-	-
Total		2	1	3	-	-	-

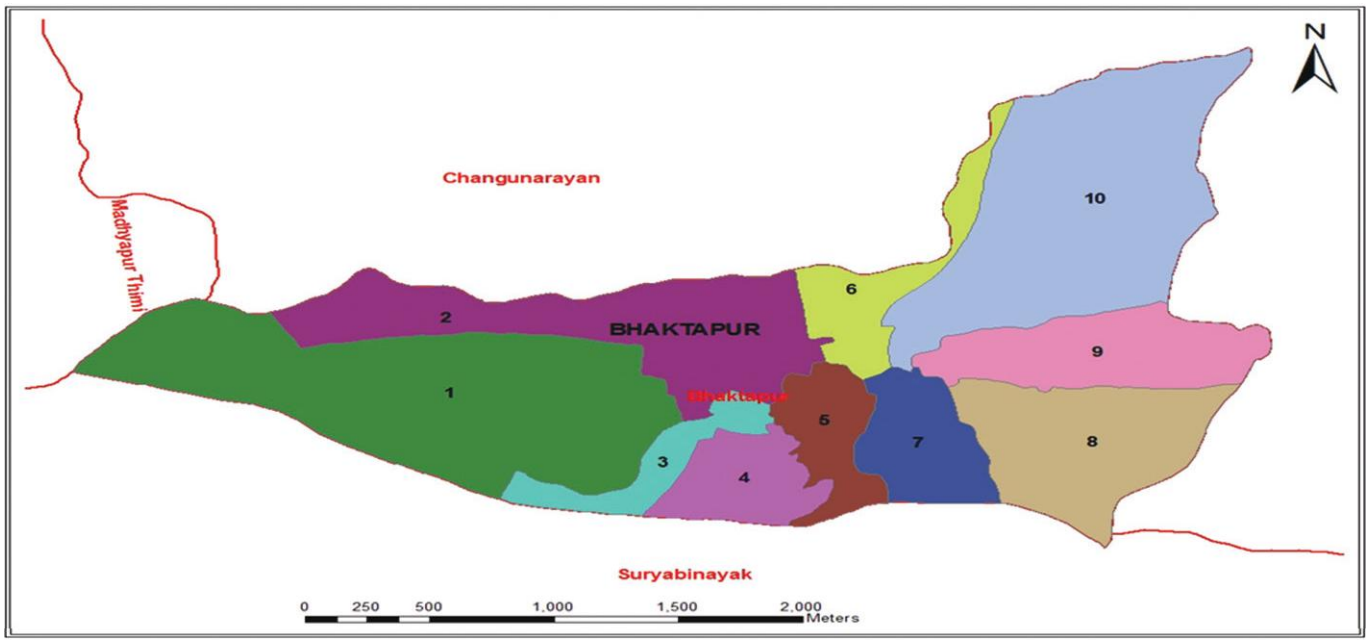
Municipality wise Cancer Incidence and Mortality: Bhaktapur District



Municipality wise Cancer Incidence and Mortality: Bhaktapur District

S.N	Name of Municipality	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	Bhaktapur Municipality	37	59	96	13	22	35
2	Suryabinayak Municipality	49	51	100	16	6	22
3	Madhyapur Thimi Municipality	34	41	75	20	10	30
4	Changunarayan Municipality	23	16	39	11	1	12
5	Unknown	4	7	11	4	1	5
Total		147	174	321	64	40	104

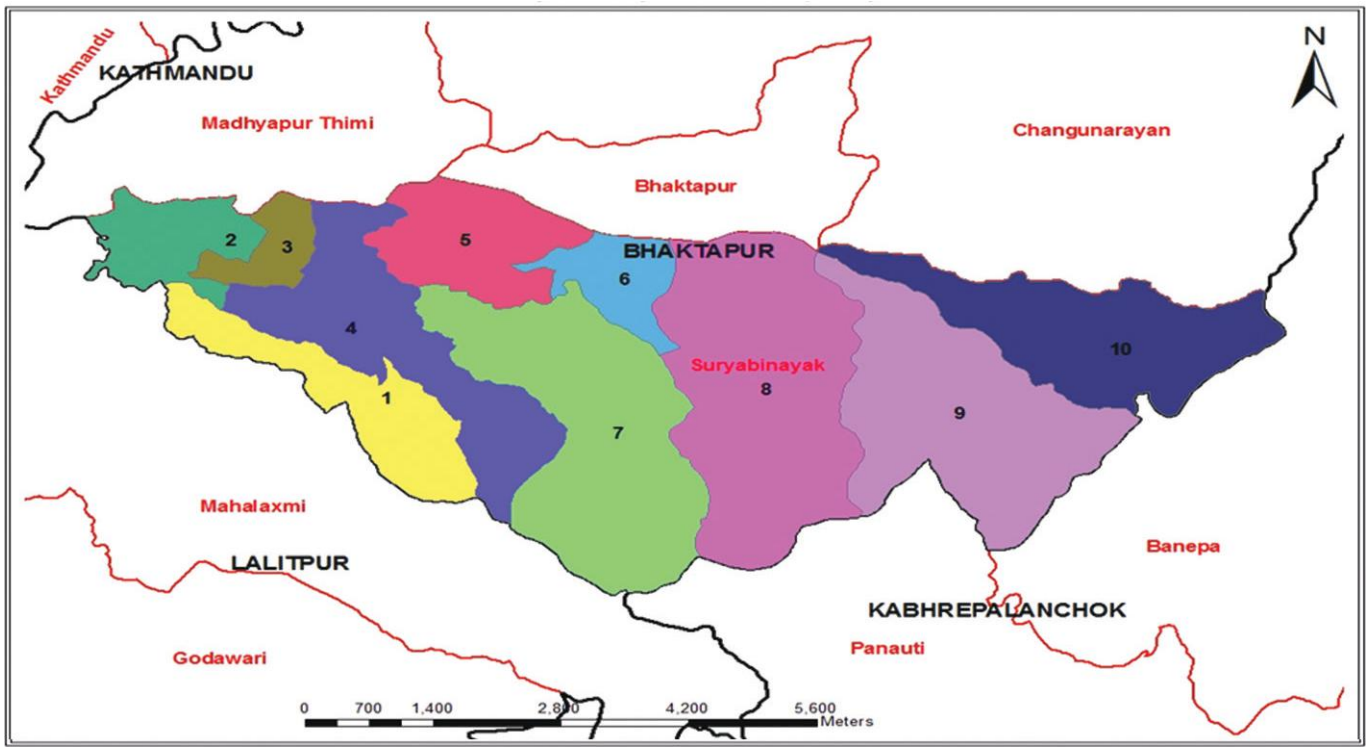
Ward wise Cancer Incidence and Mortality: Bhaktapur Municipality, Bhaktapur District



Ward wise Cancer Incidence and Mortality: Bhaktapur Municipality, Bhaktapur District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	6	2	8	4	3	7
2	2	1	5	6	-	3	3
3	3	4	3	7	1	-	1
4	4	6	5	11	1	2	3
5	5	3	11	14	2	5	7
6	6	2	5	7	1	3	4
7	7	2	4	6	1	2	3
8	8	4	2	6	1	-	1
9	9	3	9	12	-	2	2
10	10	5	10	15	1	1	2
11	Unknown	1	3	4	1	1	2
Total		37	59	96	13	22	35

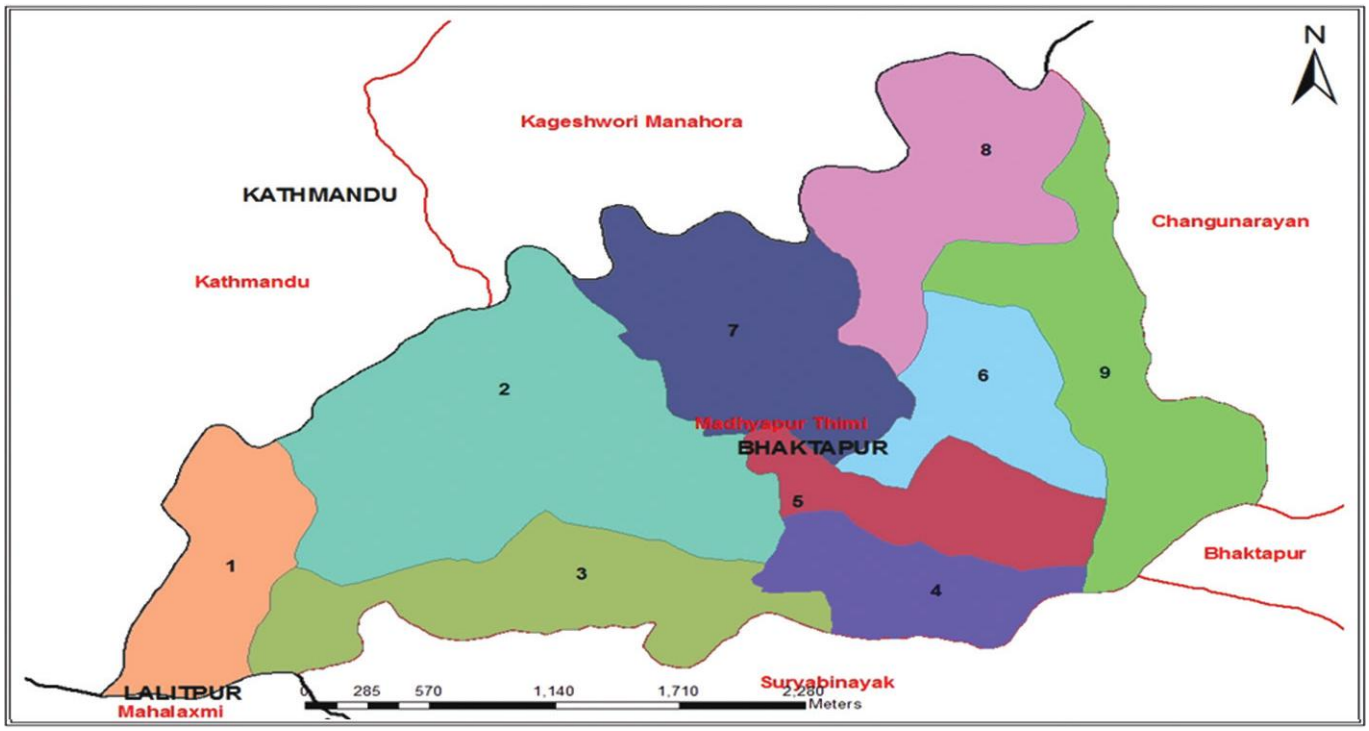
Ward wise Cancer Incidence and Mortality: Suryabinayak Municipality, Bhaktapur District



Ward wise Cancer Incidence and Mortality: Suryabinayak Municipality, Bhaktapur District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	5	5	10	1	-	1
2	2	2	7	9	-	2	2
3	3	1	1	2	1	-	1
4	4	9	8	17	2	3	5
5	5	7	6	13	2	-	2
6	6	1	6	7	-	1	1
7	7	4	4	8	1	-	1
8	8	7	2	9	3	-	3
9	9	9	3	12	4	-	4
10	10	3	8	11	1	-	1
11	Unknown	1	1	2	1	-	1
Total		49	51	100	16	6	22

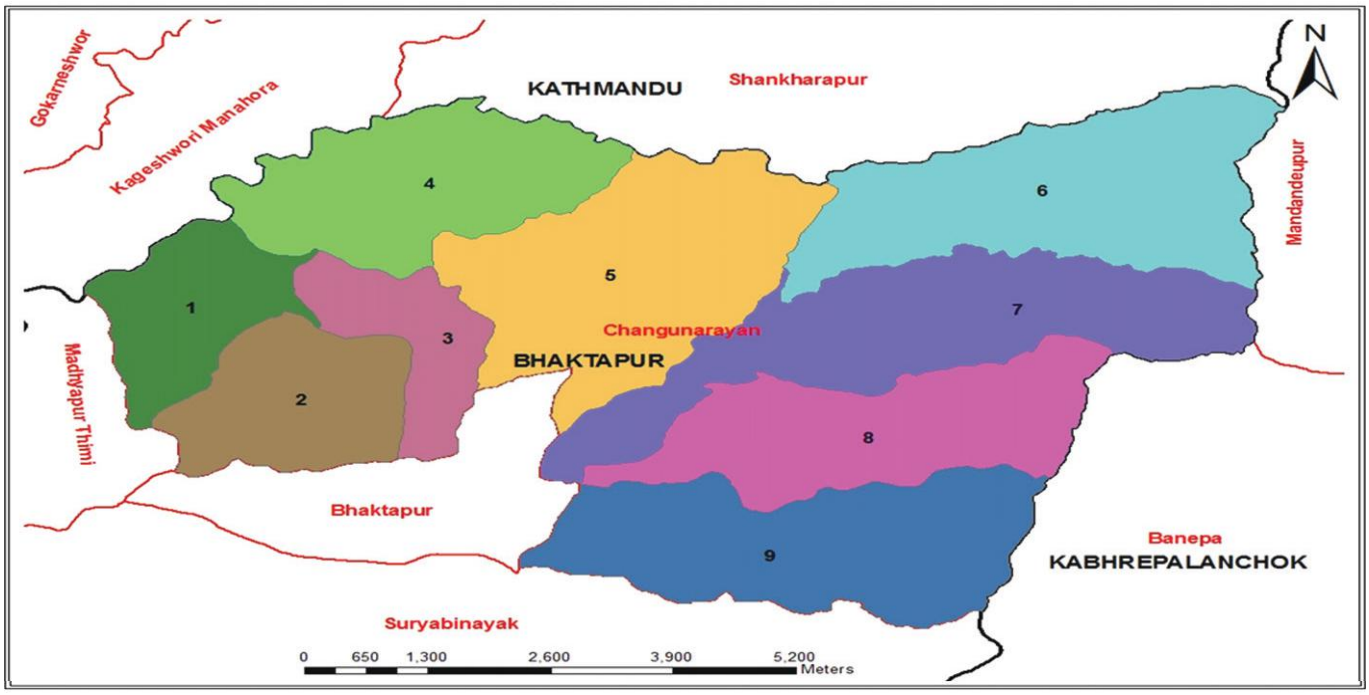
Ward wise Cancer Incidence and Mortality: Madhyapur Thimi Municipality, Bhaktapur District



Ward wise Cancer Incidence and Mortality: Madhyapur Thimi Municipality, Bhaktapur District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	4	6	10	3	-	3
2	2	2	1	3	4	-	4
3	3	3	5	8	2	1	3
4	4	6	4	10	2	1	3
5	5	3	4	7	3	1	4
6	6	4	5	9	1	2	3
7	7	5	5	10	3	2	5
8	8	1	1	2	-	-	-
9	9	4	6	10	1	-	1
10	Unknown	2	4	6	1	3	4
Total		34	41	75	20	10	30

Ward wise Cancer Incidence and Mortality: Changunarayan Municipality, Bhaktapur District



Ward wise Cancer Incidence and Mortality: Changunarayan Municipality, Bhaktapur District

S.N	Ward Number	Incidence Cases			Mortality Cases		
		Male	Female	Total	Male	Female	Total
1	1	3	1	4	2	-	2
2	2	1	4	5	-	-	-
3	3	5	1	6	-	-	-
4	4	4	1	5	2	-	2
5	5	1	4	5	1	-	1
6	6	1	1	2	1	-	1
7	7	3	2	5	3	-	3
8	8	3	-	3	2	1	3
9	9	2	2	4	-	-	-
10	Unknown	-	-	-	-	-	-
Total		23	16	39	11	1	12

Acknowledgments

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Miss Sabina Rajthala, Medical Recorder

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Dr. Reena Baidya, Pathologist
Miss. Jeforsana Naveen Tamrakar, Nurse

B.P. Smriti Samudayak Hospital, Kathmandu
Dr. Ramila Gurung

Bhaktapur Cancer Hospital, Bhaktapur
Dr Rishikesh N. Shrestha, Medical Director
Dr. Ajay Jha, Oncologist
Mr. Rajaram Tajale, Administrator
Mr. Jaganath Bhurtel, Account Section
Mr. Prem Sujakhu, Medical Record Section

Birendra Millitary Hospital, Kathmandu
Dr. Rajeev Kumar Deo, Oncologist
Dr. Kavita Karmacharya, Pathologist
Mr. Chandra B. Shrestha, Oncology Ward

Divya Ayurvedic Aausadhalaya, Kathmandu

Grande International Hospital, Kathmandu
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Miss Durga Rijal, Medical Record Section
Miss Ramina Shrestha, Medical Record Section

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Mr. Ganesh koirala and Team

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Dr. Sharad Gajurel

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Dr. Nirmal Lamichhane, Deputy Director
Dr. Shivaji Poudel, Oncologist
Dr. Rajan Raj Bhatta, Pathologist
Er. Ibrahim Ansari, IT Department
Mrs. Bimala Sharma, Nurse
Mrs. Pabitra Bhusal
Mr. Pravin Jha, Medical Record

Bir Hospital, Kathmandu
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Dr. Bishnu D Paudel, Medical Oncologist
Dr. Prativa Bista, Pathologist
Miss Nika Maharjan, Nurse
Miss Nagina Maharjan, Nurse
Mrs. Rekha Jha, Medical Record Section

Civil Service Hospital, Kathmandu
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Dr. Simit Sapkota, Oncologist
Dr. Subash Pandit, Oncologist
Dr. Jitendra Pariyar, Gyane Oncologist
Dr. Samir Neupane, Pathologist
Mr. Sudeep Dahal, Medical Record Section
Miss Prastuti Dahal

Green City Hospital, Kathmandu
Dr. Romeo Kashakar, Surgical Oncologist
Mr. Chuna Shrestha, Assistant, Oncology OPD

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Mr. Aasaram Prajapati
Mr. Mithun Neupane
Mrs. Laxmi Rijal
And Nursing Department

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Dr. Sushma Bhatta, Pathologist
Mrs. Tulasi Dahal, Medical Record Section
Mr. Naveen Gurung, IT Section

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Dr. Madan Kumar Piya, Director
Mrs. Sanu Maiya Maharjan, Nurse
Miss Sujata Pandit, Nurse
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Dr. Rakesh Pathak, Pathologist
Mrs Bimala, Medical Record Section
Mrs Juna Maya Karki, Nurse, Oncology OPD

Nepal Police Hospital, Kathmandu
Bishnu Basnet, Medical Record Section

Norvic International Hospital, Kathmandu
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Dr. Rajendra Baral, Oncologist

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Dr. Karishma Malla, Pathologist
Mrs. Prava, Medical Record Section

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Miss Pooja Dhakal, Nurse
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Kathmandu Medical Collage Teaching Hospital, Kathmandu
Dr. Mukunda Raj Joshi, Director
Dr. Sailesh Pradhan, Pathologist
Mrs. Ranjana Chhetri and Nursing Department
Miss Pooja Shrestha, Medical Record Section

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Mr. Sunil Shrestha and Team

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Dr. Pradip Kumar Yadhav, Director
Dr. Mamta Lakhey, Pathologist
Mrs. Bimala Neupane, Nurse
Mrs. Meena Prajapati, Nurse

Nepal Cancer Hospital & Research Center, Lalitpur
Dr. Sudip Shrestha, Executive Chairman
Dr. Hari Prasad Dhakal, Pathologist
Dr. Murariman Shrestha, Medical Epidemiologist
Dr. Gisupnikha Prasiko Prasai, Radiation Oncologist
Mrs. Sabita Poudel, Nursing Supervisor
Mr. Pradeep Thakuri, IT Section
Miss Sajina Maharjan, Medical Record Department and Team

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Dr. Sudakhar Jayram, CEO
Dr. Pankaj Barma, Oncologist
Dr. Sabina Maharjan, Oncologist
Mr. Tribhuwan Singh, Medical Record Department

Om Hospital and Research Centre, Kathmandu
Mrs. Kalpana Poudel, Former Metron
Mrs. Sushila Rana, Nurse Officer

Patan Academy of Health Science, Lalitpur
Dr. Bishnu P. Sharma, Director
Dr. Gyan Kayastha, Physician
Dr. Shivaraj K.C. Pathologist

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Shechan Hospice and Team, Kathmandu

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Ms. Roshani Tui Tui

Mr. Prakash Ghimire

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Mrs. Gita Khanal, Nurse

Mrs. MeenaDawadi, Medical Record Section

Mr. Aswin K.C., Medical Record Section

Mr. Lok Bahadur Gurung, Administration

TU Teaching Hospital, Kathmandu

Dr. Deepak Mahara, Former Director

Dr. Gita Sayami, Pathologist

Dr. Abhimanyu Jha, Pathologist

Dr. Yogendra Prasad Singh, Surgeon

Dr. Anjan Shrestha, Pathologist

Mrs. Tulasi Pandey, Medical Record Section

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Health Coordinator, Ward Chairperson, Ward Secretary, Health Post In Charge , FCHVs of all the Urban/Rural Municipalities of Kathmandu, Bhaktapur and Lalitpur districts.

Last but not the least, all the **field enumerators** who have helped in collecting the data of cancer cases from the community.

Dr. Pradeep Gyawali
Executive Chief
Nepal Health Research Council

नेपाल सरकार

स्वास्थ्य मन्त्रालय

(नीति, योजना तथा कार्यक्रम शाखा)

☎ ४२६२६४३

रामशाहपथ,

काठमाण्डौं

प.सं: २०७४।०७५(यो)

च.नं. १३०

नेपाल सरकार स्वास्थ्य मन्त्रालय रामशाहपथ, काठमाण्डौं

मितिः २०७४।११।२३

विषयः स्वीकृत वार्षिक कार्यक्रम पठाइएको सम्बन्धमा।

श्री नेपाल स्वास्थ्य अनुसन्धान परिषद्
रामशाहपथ, काठमाण्डौं।

चालु आ.ब. २०७४।७५ मा तहाँवाट सञ्चालन हुने व.उ.शि.नं. ३७०१२७ स्वास्थ्य करकोषको कार्यक्रम र तहाँवाट पेश भएको नेपालमा जनसंख्यामा आधारित क्यान्सर रजिष्ट्रि (Population based Cancer Registry-PBCR) सम्बन्धी विस्तृत परियोजना प्रस्ताव (Detail Project Proposal) नेपाल सरकार (सचिवस्तर) मिति २०७४।११।२१ को निर्णयानुसार स्वीकृत भएकोले आवश्यक कार्यार्थ यसैसाथ संलग्न गरी पठाइएको छ। सबैसम्म कार्यक्रम संशोधन नगर्नु हुन र कथकदाचित संशोधन गर्नु पर्ने अवस्था आएमा त्यसबाट पर्ने असरहरु तथा संशोधन गर्नुपर्नाको पर्याप्त पुष्टयाई सहितको विवरण उपलब्ध गराउने व्यवस्था गर्नुहुन तथा कार्यक्रम संचालन गर्दा प्रचलित कानून एवं अख्तियारीको पालना गर्नुका अतिरिक्त वित्तीय पारदर्शिता, जवाफदेहिता र अनुगमन सम्बन्धी व्यवस्था अनुरुप नियमानुसार प्रगति विवरण यस मन्त्रालयको जनस्वास्थ्य प्रशासन, अनुगमन तथा मूल्यांकन महाशाखामा पठाउनु हुन समेत निर्देशानुसार अनुरोध गर्दछु।

२०७४।११।२३

(हरिकृष्ण फुयाँल)
शाखा अधिकृत

बोधार्थ:
श्री अर्थ मन्त्रालय,
बजेट तथा कार्यक्रम महाशाखा,
सिंहदरवार।

नेपाल सरकार

सङ्घीय मामिला तथा सामान्य प्रशासन मन्त्रालय

सिँहदरबार, काठमण्डौं

(स्थानीय तह समन्वय शाखा)

पत्र सङ्ख्या २००८/७५

चलानी नं. 295

मिति : २०७५।०२।१३

विषय: आवश्यक सहयोग गरिदिने सम्बन्धमा ।

श्री महा/उपमहा/नगरपालिका सबै,

श्री गाउँपालिका सबै ।

नेपाल स्वास्थ्य अनुसन्धान परिषद्को प. सं. ०७४/७५, च. नं. २६२२, मिति २०७५।०१।२० को पत्रबाट नेपाल सरकारको स्वीकृत कार्यक्रम अनुसार नेपाल स्वास्थ्य अनुसन्धान परिषद्ले आ. व. ०७४/७५ मा सञ्चालन गर्ने "जनसंख्यामा आधारित क्यान्सर रजिष्ट्री" (Population Based Cancer Registry, PBCR) सम्बन्धी कार्य गर्न हरेक नगरपालिका तथा गाउँपालिकाबाट क्यान्सर रोग लागेका बिरामीहरू तथा क्यान्सर रोग लागी मृत्यू भएका मानिसहरूको सम्पूर्ण विवरण आवश्यक पर्ने भएकाले प्रत्येक स्थानीय तहले सो सम्बन्धी अभिलेख तयार गरी website मा राख्ने व्यवस्था गर्नुहुन, उक्त विवरण तयार गरी नेपाल स्वास्थ्य अनुसन्धान परिषद्लाई उपलब्ध गराई दिनुहुनका साथै नेपालमा जनसंख्यामा अधारित क्यान्सर रजिष्ट्री सम्बन्धी परियोजना सञ्चालनमा आवश्यक समन्वय गरिदिनुहुन मिति २०७५।०२।१३ को नेपाल सरकार (सचिवस्तरीय) निर्णयानुसार अनुरोध छ।

केशवराज पार्थे

(शाखा अधिकृत)

बोधार्थ

श्री नेपाल स्वास्थ्य अनुसन्धान परिषद्, रामशाहपथ, काठमाडौं ।

श्री सूचना तथा प्रविधि शाखा, website मा upload गर्नुहुन ।

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