Trend & Microscopic Verification of top Five Cancer from First Population Based Cancer Registry of Nepal

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Abstract

Cancer is a group of disease characterized by uncontrolled, growth, invasion and spread (Metastasis) of abnormal cells. The available hospital based information shows some types of cancers ranked as a common cancer since 2003 in Nepal. In this population based study same types of cancer occupied in same pattern. This study carried out a descriptive analytical study with primary and secondary data analysis of new cancer that were collected from 1st January 2013 to 31st December 2015 from different data sources institution of 15 district of central part of Nepal. Descriptive epidemiological statistics along with the trend, geographical and microscopic verification of common types of cancer were analyzed. The most frequent form of cancer for both sexes was bronchus & lung (12.9%), followed by cervix uteri (10.9%), and breast (9.1%). Among the female cases cervix uteri cancer (19.2%) was the most frequent, followed by breast (15.7%) and bronchus & lung cancer (10.9%). Similarly, bronchus & lung cancer (15.6%) was the most common cancer among males, followed by stomach (6.6%) and larynx cancer (4.9%). The most prevalent age group in male 60-64 years (12.8%), while in female it was in same age group 60-64 years (13.4%). The trend of cancer incidence was relatively in same pattern with hospital based national cancer incidence. Well organized cancer awareness, vaccination and screening programme are recommended to prevent and control the cancer burden in study area as well as in the national context.

I. Introduction

Cancer is the uncontrolled growth of abnormal cells in the body. The global cancer burden is estimated to have risen to 18.1 million new cases and 9.6 million deaths in 2018 (GLOBO CAN 2018). Globally, about 1 in 6 deaths is due to cancer. Approximately 70% of deaths from cancer occur in low- and middle-income countries.[i]

Asia accounts for 60% of the world population and half the global burden of cancer. The incidence of cancer cases is estimated to increase from 6.1 million in 2008 to 10.6 million in 2030.[ii] According to WHO, India has a cancer mortality rate of 79 per 100,000 deaths and accounts for over 6 percent of total deaths. These numbers are very close to those of high-income countries.[5]

In Nepal total 9718 new cancer cases were reported by hospital based cancer registration this programme was supported by WHO Nepal. Cancer incidence in Nepal was increasing every year. Exact cancer death in Nepal is unknown but the report shows only hospital death of cancer patient in 2015 was 242.[2]

Various studies showed that cancer disease is different yearly reports about the prevalence of cancer diseases. Therefore the increasing day by day and there are aim of this study is to hit upon the national scenario of cancer on last three years and the liaison of community based statistics on cancer.

Table 1. Hospital Based Registered Cancer Cases for 2013-2015

Distribution of cases by hospital based national cancer Registry (HBNCR)							
S.N.	Sex	2013		2014		2015	
		#	%	#	%	#	%
1	Male	4011	46.0	4014	44.4	4483	46.1
2	Female	4718	54.0	5022	55.6	5235	53.9
	Total	8729	100.0	9036	100.0	9718	100

Table 2 . Most Prevalent Cancers in HBNCR for Both Sex - 2013

S.N.	ICD-10	Topography	Frequency	
			#	%
1	C 34	Bronchus & lung	1156	13.2
2	C 53	Cervix uteri	832	9.5
3	C 50	Breast	752	8.6
4	C 16	Stomach	527	6.0
5	C 32	Larynx	366	4.2
6	C 56	Ovary	350	4.0
7	C 67	Bladder	335	3.8
8	C 23	Gall bladder	253	2.9
9	C 22	Liver	231	2.7
10	C 20	Rectum	221	2.6
11	**	Other cancers	3706	42.5
	Total		8729	100.0

Table 3 . Most Prevalent Cancers in HBNCR for Male - 2013

S.N.	ICD-10	Topography	Frequency	
			#	%
1	C 34	Bronchus & lung	664	16.6
2	C 16	Stomach	312	7.8
3	C 32	Larynx	250	6.3
4	C 67	Bladder	238	5.9
5	C 06	Other mouth	136	3.4
6	C 22	Liver	121	3.0
7	C 71	Brain	118	2.9
8	C 20	Rectum	111	2.8
9	C 85	NHL	109	2.7
10	C 02	Other tongue	107	2.7
11	**	Other cancers	1845	45.9
	Total		4011	100.0

Table 4 . Most Prevalent Cancers in HBNCR for Female - 2013

S.N.	ICD-10	Topography	Frequency	
			#	%
1	C 53	Cervix uteri	832	17.6
2	C 50	Breast	728	15.4
3	C 34	Bronchus & lung	492	10.4
4	C 56	Ovary	350	7.4
5	C 16	Stomach	215	4.6
6	C 23	Gall bladder	161	3.4
7	C 73	Thyroid	126	2.7
8	C 32	Larynx	116	2.5
9	C 20	Rectum	110	2.3
10	C 22	Liver	110	2.3
11	**	Other cancers	1478	31.4
	Total		4718	100.0

Table 5. Most Prevalent Cancers in HBNCR Both Sex - 2014

S.N.	ICD-10	Topography	Frequency	
			#	%
1	C 34	Bronchus & lung	1241	13.7
2	C 53	Cervix uteri	852	9.4
3	C 50	Breast	848	9.4
4	C 16	Stomach	528	5.8
5	C 32	Larynx	359	4.0
6	C 56	Ovary	350	3.9
7	C 23	Gall bladder	320	3.5
8	C 20	Rectum	273	3.0
9	C 22	Liver	238	2.6
10	C 71	Brain	202	2.2
11	**	Other cancers	3825	42.5
	Total		9036	100.0

Table 6. Most Prevalent Cancers in HBNCR for Male - 2014

S.N.	ICD-10	Topography	Frequency	
			#	%
1	C 34	Bronchus & lung	692	17.2
2	C 16	Stomach	305	7.6
3	C 32	Larynx	247	6.2
4	C 67	Bladder	150	3.7
5	C 20	Rectum	139	3.5
6	C 02	Other & unspecified parts of tongue	134	3.3
7	C 22	Liver	130	3.2
8	C 06	Other & unspecified parts of mouth	124	3.1
9	C 71	Brain	119	3.0
10	C 15	Esophagus	117	2.9
11	**	Other cancers	1857	46.3
	Total		4014	100.0

Table 7. Most Prevalent Cancers in HBNCR for Female - 2014

S.N.	ICD-10	Topography	Frequency	
			#	%
1	C 53	Cervix uteri	852	17.0
2	C 50	Breast	826	16.4
3	C 34	Bronchus & lung	549	10.9
4	C 56	Ovary	350	7.0
5	C 16	Stomach	223	4.4
6	C 23	Gall bladder	220	4.4
7	C 73	Thyroid	145	2.9
8	C 20	Rectum	134	2.7
9	C 32	Larynx	112	2.2
10	C 22	Liver	108	2.2
11	**		1503	29.9
	Total		5022	100.0

Table 8. Most Prevalent Cancers in HBNCR for Both Sex - 2015

S.N.	ICD-10	Topography	Frequency	
			#	%
1	C34	Bronchus and lung	1334	13.7
2	C53	Cervix uteri	868	8.9
3	C50	Breast	856	8.8
4	C16	Stomach	519	5.3
5	C56	Ovary	365	3.8
6	C32	Larynx	360	3.7
7	C23	Gall bladder	338	3.5
8	C91	Leukemia/lymphoid	281	2.9

9	C20	Rectum	270	2.8
10	C71	Brain	245	2.5
11	**	Other cancers	4282	44.1
	Total		9718	100.0

Table 9. Most Prevalent Cancers in HBNCR for Male - 2015

S.N.	ICD-10	Topography	Frequency	
			#	%
1	C34	Bronchus and lung	760	17.0
2	C16	Stomach	292	6.5
3	C32	Larynx	254	5.7
4	C91	Leukemia/lymphoid	182	4.1
5	C67	Bladder	159	3.5
6	C20	Rectum	150	3.3
7	C71	Brain	137	3.1
8	C85	NHL	137	3.1
9	C18	Colon	124	2.8
10	C22	Liver	123	2.7
11	**	Other cancers	2165	48.2
	Total		4483	100.0

Table 10. Most Prevalent Cancers in HBNCR for Female - 2015

S.N.	ICD-10	Topography	Frequency	
			#	%
1	C53	Cervix uteri	868	16.6
2	C50	Breast	838	16.0
3	C34	Bronchus and lung	574	11.0
4	C56	Ovary	365	7.0
5	C23	Gall bladder	235	4.5
6	C16	Stomach	227	4.3
7	C73	Thyroid gland	143	2.7
8	C20	Rectum	120	2.3
9	C71	Brain	108	2.1
10	C32	Larynx	106	2.0
11	**	Larynx	1651	31.5
	Total		5235	100.0

Table 11. Study Area

Distribution of population by districts and sex				
S.N.	District's Name	Male	Female	Total
1	Chitwan	298400	297681	658114
2	Makwanpue	243921	238877	528160
3	Bara	361920	347026	708947
4	parsa	322851	305630	628481
5	Nawalparasi	350017	352031	702048
6	Rupandehi	456337	445481	901818
7	Kapilvastu	306323	295986	602309
8	Dhading	204735	207581	412317
9	Gorkha	165830	175941	341771
10	Myagdi	65686	69928	135613
11	Tanahun	183533	195926	378559
12	Baglung	154590	166206	320796
13	Parbat	89095	95287	320796
14	Kaski	235364	240541	475905
15	Mustang	9017	8146	17163
Total		3447619	3442268	6889887

Total population of Nepal: 2,66,208,09 (2068)

Total Population of study area : 68,89,887

Coverage 25.88% of total population

II. Materials and Methods

The information of all new cancer cases that were diagnosed and treated in hospitals and institutions were collected and recorded. The mortality data was also collected from office of the vital events registration unit of each DDC/VDCs/ Municipalities of relevant districts as well as study areas. Collected data were coded based on ICD O 3dr published by IARC/WHO and proceed for data analysis using SPSS 19.0.

III. Data Sources

District Hospitals, Medical colleges and other hospitals.

District Public Health Office and other relevant organizations.

DDC /VDC/Municipality of study area, i.e. office of vital event registration.

Privet hospitals, Diagnostic labs, hospice etc.

IV. Inclusion Criteria

The inclusion criteria of cancer cases were set up by National Cancer Registry as follows:

Those Cases living permanently in the study area, as per define population in census.

Diagnosed cases of cancer including mortality in the study year are included.

The minimum diagnostic criteria included tissue diagnosis (HPE or cytology)

V. Results

During the study period net 8039 (2013= 2469, 2014= 2620, 2015= 2950) cases were recorded as summarized in Table 12. Female cancer cases were more common than in male Most cancer cases were reported from Chitwan followed by Kaski and Rupandehi. The number of cases by site (ICD-10), microscopic details and percentage of various cases for males and females were given in Table.Whereas, Cancer of bronchous & lung ranked as a top leading topography followed by cervix uteri and breast, which reflect the same pattern with hospital based national data on Nepalese common cancer.

Table 12. Total Cancer Cases of Study Area for 2013-2015

Distribution cases by year and sex						
Sex	Year					
	2013		2014		2015	
	#	%	#	%	#	%
Male	1113	45.1	1088	41.5	1271	43.1
Female	1356	54.9	1532	58.5	1679	56.9
Total	2469	100.0	2620	100.0	2950	100.0

Table 13. Total Cancer cases of Study Area for 2013

Distribution of cases by site and sex						
S.N.	**ICD-10**	Topography	2013			
			Sex		Total	%
			Male	Female		
1	C 34	Bronchus & lung	215	175	390	15.8
2	C 53	Cervix uteri	0	272	272	11.3
3	C 50	Breast	4	184	188	7.6
4	C 16	Stomach	83	55	138	5.6
5	C 56	Ovary	0	105	106	4.2
6	C 32	Larynx	59	35	94	3.5
7	C 67	Bladder	58	35	93	3.5
8	C 71	Brain	33	37	70	2.8
9	C 22	Liver	36	28	64	2.5
10	C 23	Gall bladder	25	37	62	2.5
11	***	Other cancer cases	600	393	992	40.7
	Total		1113	1356	2469	100.0

Table 14 . Total Cancer Cases of Study Area for 2014

Distribution of cases by site and sex						
S.N.	ICD-10	Topography	2014			
			Sex		Total	%
			Male	Female		
1	C 34	Bronchus & lung	180	181	361	13.7
2	C 53	Cervix uteri	0	277	277	10.5
3	C 50	Breast	11	238	249	9.5
4	C 16	Stomach	81	63	144	5.8
5	C 56	Ovary	0	123	123	4.6
6	C 23	Gall bladder	30	80	110	4.1
7	C 20	Rectum	39	47	86	3.2
8	C 32	Larynx	58	27	85	3.2
9	C 67	Bladder	55	21	76	2.9
10	C 71	Brain	39	34	73	2.7
11	***	Other cancer cases	595	441	1036	39.5
	Total		1088	1532	2620	100.0

Table 16. Total cancer cases of Study Area for 2013 - 2014

Distribution of cancer cases by districts and year				
Districts	Year			
	2013		2014	
	#	%	#	%
Baglung	96	3.9	129	4.9
Bara	165	6.7	176	6.7
Chitawan	359	14.5	424	16.2
Dhading	157	6.4	183	7.0
Gorkha	153	6.2	150	5.7
Kapilbastu	95	3.8	107	4.1
Kaski	323	13.1	325	12.4
Makawanpur	180	7.3	180	6.9
Mustang	10	0.4	15	0.6
Myagdi	44	1.8	47	1.8
Nawalparasi	241	9.8	248	9.5
Parbat	89	3.6	93	3.5
Parsa	123	5.0	146	5.6
Rupandehi	303	12.3	259	9.9
Tanahun	131	5.3	138	5.3
Total	2469	100.0	2620	100.0

Table 16. Total Cancer Cases of Study area by district - 2015

Distribution of cases by districts						
Districts	Male		Female		Total	
	#	%	#	%	#	%
Baglung	64	5.0	88	5.2	152	5.2
Bara	68	5.4	101	6.0	169	5.7
Chitwan	176	13.8	198	11.8	374	12.7
Dhading	103	8.1	114	6.8	217	7.4
Gorkha	94	7.4	126	7.5	220	7.5
Kapilvastu	67	5.3	79	4.7	146	4.9
Kaski	154	12.1	215	12.8	369	12.5
Makwanpur	102	8.0	111	6.6	213	7.2
Mustang	6	0.5	12	0.7	18	0.6
Myagdi	20	1.6	43	2.6	63	2.1
Nawalparasi	104	8.2	172	10.2	276	9.4
Parbat	55	4.3	68	4.1	123	4.2
Parsa	69	5.4	82	4.9	151	5.1
Rupandehi	117	9.2	165	9.8	282	9.6
Tanahun	72	5.7	105	6.3	177	6.0
Total	1271	100.0	1679	100.0	2950	100.0

Table 13. Cancer Cases of Study Area by Site for Both Sex - 2015

Distribution of cases by site				
S.N.	ICD-10	Topography	#	%
1	C34	Bronchus and lung	381	12.9
2	C53	Cervix uteri	323	10.9
3	C50	Breast	267	9.1
4	C16	Stomach	169	5.7
5	C56	Ovary	125	4.2
6	C32	Larynx	99	3.4
7	C71	Brain	96	3.3
8	C23	Gall bladder	92	3.1
9	C67	Bladder	81	2.7
10	C20	Rectum	75	2.5
11	**	Other cancers	1242	42.2
	Total		2950	100.0

Table 14. Cancer Cases of Study Area by Site for Male - 2015

Distribution of cases by site				
SN	ICD-10	Topography	#	%
1	C34	Bronchus and lung	198	15.6
2	C16	Stomach	84	6.6
3	C32	Larynx	62	4.9
4	C67	Bladder	59	4.6
5	C71	Brain	51	4.0
6	C20	Rectum	42	3.3
7	C22	Liver	42	3.3
8	C91	Leukemia/lymphoid	41	3.2
9	C02	Other tongue	39	3.1
10	C15	Esophagus	36	2.8
11	**	Other cancers	617	48.5
	Total		1271	100.0

Table 15. Cancer Cases of Study Area by Site for Female - 2015

S.N.	ICD-10	Topography	#	%
1	C53	Cervix uteri	323	19.2
2	C50	Breast	264	15.7
3	C34	Bronchus and lung	183	10.9
4	C56	Ovary	125	7.4
5	C16	Stomach	85	5.1
6	C23	Gall bladder	64	3.8
7	C71	Brain	45	2.7
8	C73	Thyroid gland	38	2.3
9	C32	Larynx	37	2.2
10	C20	Rectum	33	2.0
11	**	Other cancers	482	28.7
	Total		1679	100.0

Table 16. Total Cancer Cases by Method of Diagnosis

Distribution of cases by basis of diagnosis and sex for 2015						
Basis of diagnosis	Sex				Total	
	Male		Female			
	#	%	#	%	#	%
Clinical Examination	10	0.8	5	0.3	15	0.5
Endoscopy	22	1.7	19	1.1	41	1.4
Biopsy/Histology	514	40.4	803	47.8	1317	44.6
Cytology/Haematology	250	19.7	278	16.6	528	17.9
Biochemical/Immunological test	1	0.1	6	0.4	7	0.2
Not Available	341	26.8	393	23.4	734	24.9
Radiology	128	10.1	169	10.1	297	10.1
Death Certificate	5	0.4	6	0.4	11	0.4
Total	1271	100.0	1679	100.0	2950	100.0

Table 19. Total cancer cases by treatment given/taken

Distribution of cases by treatment given and sex for 2015						
Treatment given/taken	Sex				Total	
	Male		Female			
	#	%	#	%	#	%
Yes	707	55.6	998	59.4	1705	57.8
No	29	2.3	28	1.7	57	1.9
Not accepted	1	0.1	3	0.2	4	0.1
Unknown	534	42.0	650	38.7	1184	40.1
Total	1271	100.0	1679	100.0	2950	100.0

Table 20. Total cancer cases by treatment modalities

Distribution of cases by treatment given and sex (for treatment received only) - 2015						
Extent of disease	Sex				Total	
	Male		Female			
	#	%	#	%	#	%
Curative	350	49.5	509	51.0	859	50.4
Palliative	161	22.8	183	18.3	344	20.2
Not available	196	27.7	306	30.7	502	29.4
Total	707	100.0	998	100.0	1705	100.0

Table 21. Table: 10 Total cancer cases by type of treatment received

Distribution of cases by treatment received and sex for 2015						
Extent of disease	Sex				Total	
	Male		Female			
	#	%	#	%	#	%
Surgery (alone)	117	16.5	159	15.9	276	16.2
Radiotherapy	126	17.8	169	16.9	295	17.3
Chemotherapy	212	30.0	263	26.4	475	27.9
Supportive	71	10.0	81	8.1	152	8.9
Symptomatic	28	4.0	14	1.4	42	2.5
Surgery & Radiotherapy	24	3.4	51	5.1	75	4.4
Surgery & Chemotherapy	53	7.5	98	9.8	151	8.9
Radiotherapy & Chemotherapy	54	7.6	104	10.4	158	9.3
Surgery, Radiotherapy & Chemotherapy	22	3.1	59	5.9	81	4.8
Surgery with other modalities	99	14.0	208	20.8	307	34.8
Total	707	100.0	998	100.0	1705	100.0

Table 22. Total cancer cases by status at last contact

Distribution of cases by status at last contact and sex - 2015						
Status at last contact	Sex				Total	
	Male		Female			
	#	%	#	%	#	%
Complete remission	5	0.4	22	1.3	27	0.9
Partial remission	306	24.1	508	30.3	814	27.6
Disease progression	28	2.2	36	2.1	64	2.2
Metastasis	14	1.1	14	0.8	28	0.9
Referred	9	0.7	9	0.5	18	0.6
Same	13	1.0	11	0.7	24	0.8
Death	28	2.2	36	2.1	64	2.2
Not available	868	68.3	1043	62.1	1911	64.8
Total	1271	100.0	1679	100.0	2950	100.0

Table 31. Top five cancer site for both sex

Top five cancer site by ICD-10 for both sex - 2015			
ICD-10	Topography	Total	
		#	%
C34	Bronchus & lung	381	12.9
C53	Cervix uteri	323	10.9
C50	Breast	267	9.1
C16	Stomach	169	5.7
C56	Ovary	125	4.2

Table 32. Top five cancer site for male

Top five cancer site by ICD-10 for male -2015			
ICD-10	Topography	Total	
		#	%
C34	Bronchus and lung	198	15.6
C16	Stomach	84	6.6
C32	Larynx	62	4.9
C67	Bladder	59	4.6
C71	Brain	51	4.0

Table 33. Top five cancer site for female

Top five cancer site by ICD-10 for female - 2015			
ICD-10	Topography	Total	
		#	%
C53	Cervix uteri	323	19.2
C50	Breast	264	15.7
C34	Bronchus and lung	183	10.9
C56	Ovary	125	7.4
C16	Stomach	85	5.1

Table 34. Microscopic verification of bronchus & lung cancer

Microscopic verification			
Bronchus & lung cancer		#	%
Small cell carcinoma		28	7.4
NSCLC	Squamous cell carcinoma	36	9.4
	Adenocarcinoma	20	5.3
	NSCLC (not differentiated)	17	4.5
Others		6	1.5
Not microscopic verification		274	71.9
Total		381	100.0

Table 35. Microscopic verification of Cervix uteri

Microscopic verification		
Cervix uteri	#	%
Squamous cell carcinoma	127	39.4
Adenocarcinoma	23	7.1
Others	2	0.6
Not microscopic confirmation	171	52.9
Total	323	100.0

Table 36. Microscopic verification of Breast Cancer

Microscopic verification		
Breast Cancer	#	%
Ductal carcinoma	62	23.2
Lobular carcinoma	7	2.6
Medullary carcinoma	3	1.1
Others	8	2.9
Not microscopic confirmation	103	38.5
Total	267	100

Table 37. Microscopic verification of Stomach cancer

Microscopic verification		
Stomach cancer	#	%
Adenocarcinoma	42	24.8
NHL	1	0.5
Others	3	1.7
Not microscopic confirmation	123	72.7
Total	169	100.0

Table 38. Microscopic verification of ovarian cancer

Microscopic verification		
Ovarian Cancer	#	%
Adenocarcinoma	12	9.6
Germ cell neoplasm	2	1.6
Others	10	8.0
Not microscopic confirmation	101	80.8
Total	125	100.0

Table 39. Treatment received by Top five cancer site

Treatment received by Top five cancer site				
ICD-10	Topography	Total cases	Treatment received	
			#	%
C34	Bronchus and lung	381	238	8.0
C53	Cervix uteri	323	222	7.5
C50	Breast	267	165	5.5
C16	Stomach	169	84	2.8
C56	Ovary	125	67	2.2

Table 40. Treatment received/modality of treatment

Treatment received/modality of treatment										
Treatment received	C34 Bronchus & lung		C53 Cervix uteri		C50 Breast		C16 Stomach		C56 Ovary	
	#	%	#	%	#	%	#	%	#	%
Surgery	12	5.0	19	9.0	18	71.5	29	34.1	19	28.3
Radiotherapy	58	24.3	59	28.2	22	13.3	5	5.8	0	0
Chemotherapy	103	43.2	23	11.0	27	16.3	23	27.0	23	34.3
Supportive	26	10.9	33	15.7	3	1.8	11	12.9	0	0
Symptomatic	8	3.30	3	1.4	3	1.8	7	8.2	1	1.4
Surgery & Radiotherapy	0	0	19	9.0	14	8.4	0	0	0	0
Surgery & Chemotherapy	3	1.2	3	1.4	42	25.4	10	11.7	24	35.8
Radiotherapy & Chemotherapy	28		50	23.9	12	7.2	0	0	0	0
Surgery, Radiotherapy & Chemotherapy	0	11.7	13	6.2	24	14.5	3	1.8	0	0
Total	238	100.0	209	100.0	165	100.0	85	100.0	67	100.0

Table 42. TNM classification bronchus & lung cancer

TNM classification for C34 bronchus and lung cancer			
TNM classification		#	%
T	1	1	0.2
	2	1	0.2
	3	4	1.2
	4	7	1.8
	NA	368	96.5
	Total	381	100.0
N	0	2	0.5
	1	1	0.2
	2	6	1.5
	3	4	1.0
	NA	368	96.8
	Total	381	100.0
M	0	5	1.3
	1	6	1.5
	2	1	0.2
	X	1	0.2
	NA	368	96.5
	Total	381	1000.0

Table 43. TNM/FIGO classification for cervix uteri

TNM/FIGO classification for C53 cancer of cervix uteri			
TNM/FIGO classification		#	%
T	1	3	0.9
	2	1	0.3
	NA	319	98.7
	Total	323	100.0
N	0	3	0.9
	1	1	0.3
	2	1	0.3
	NA	318	98.4
	Total	323	100.0
M	0	2	0.6
	1	3	0.9
	x	2	0.6
	NA	316	97.8
	Total	323	100.0
FIGO	I	3	0.9
	II	75	23.2
	III	14	4.3
	IV	3	0.9
	NA	228	70.5
	Total	323	100.0

Table 44. TNM classification breast cancer

TNM classification for C50 breast cancer			
TNM classification		#	%
T	1	4	1.4
	2	26	9.7
	3	8	2.9
	4	3	1.1
	NA	226	84.6
	Total	267	100.0
N	0	7	2.6
	1	15	5.6
	2	9	3.3
	3	7	2.6
	x	2	0.7
	NA	227	85.0
	Total	856	100.0
M	0	18	6.7
	x	12	4.4
	NA	237	88.7
	Total	267	100.0

Table 45. TNM **classification for stomach cancer**

TNM classification for C50 stomach cancer			
TNM classification		#	%
T	1	1	0.6
	2	1	0.6
	3	4	2.4
	4	7	4.1
	NA	156	92.3
	Total	169	100.0
N	0	3	1.7
	1	3	1.7
	2	2	1.1
	3	4	2.4
	X	1	0.6
	NA	156	92.3
	Total	519	100.0
M	0	3	1.7
	1	0	0.0
	X	7	4.1
	NA	156	92.3
	Total	169	100.0

Table 46. TNM classification for ovarian cancer

TNM classification for C32 Ovarian cancer			
TNM classification		#	%
T	1	2	1.7
	2	1	0.8
	3	2	1.7
	NA	120	96.0
	Total	125	100.0
N	0	2	1.7
	x	3	2.3
	NA	120	96.0
	Total	125	100.0
M	0	1	0.8
	X	3	2.3
	NA	121	96.9
	Total	125	100.0
FIGO	I	5	4.0
	II	2	1.7
	III	6	4.8
	IV	-	
	NA	112	89.5
	Total	125	100.0

Figure 1. Tread of bronchus and lung cancer

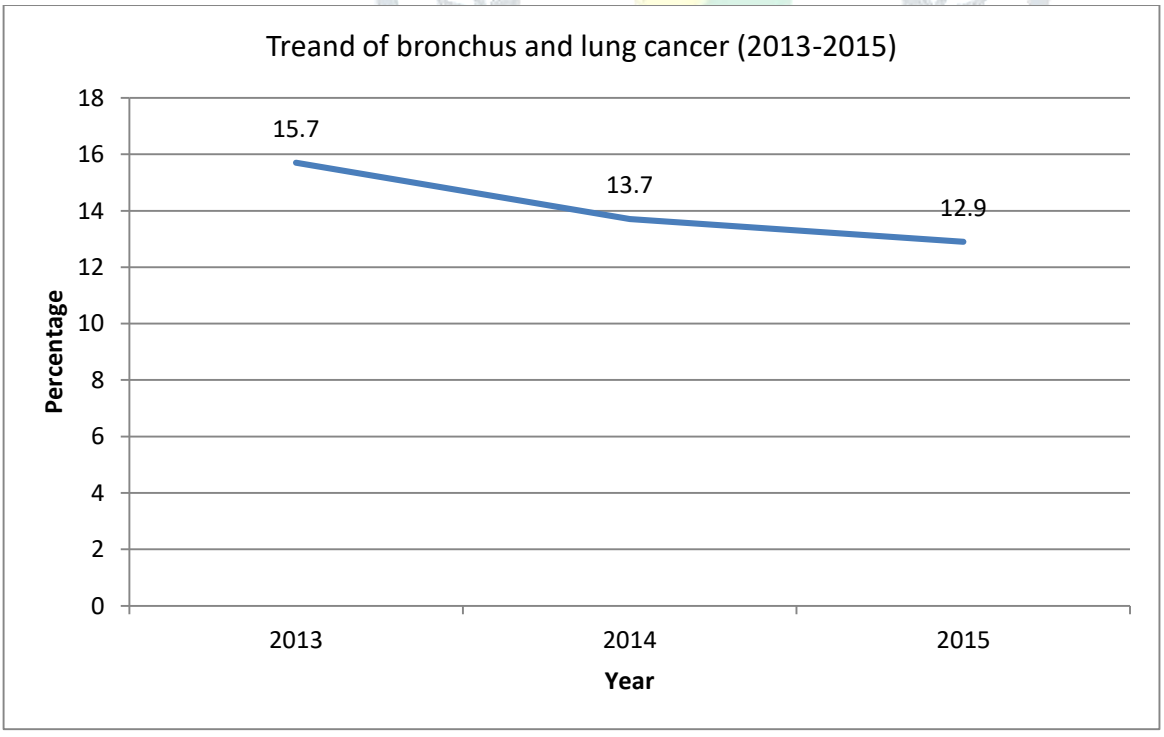


Figure 2. Trend of Cervical Cancer

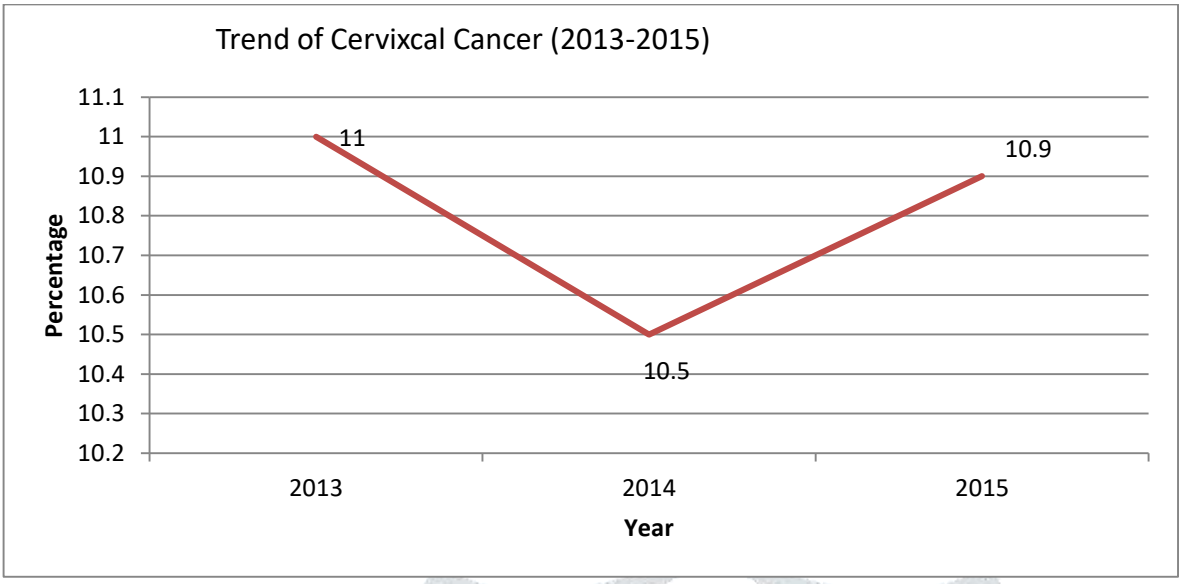


Figure 3. **Trend of Breast Cancer**

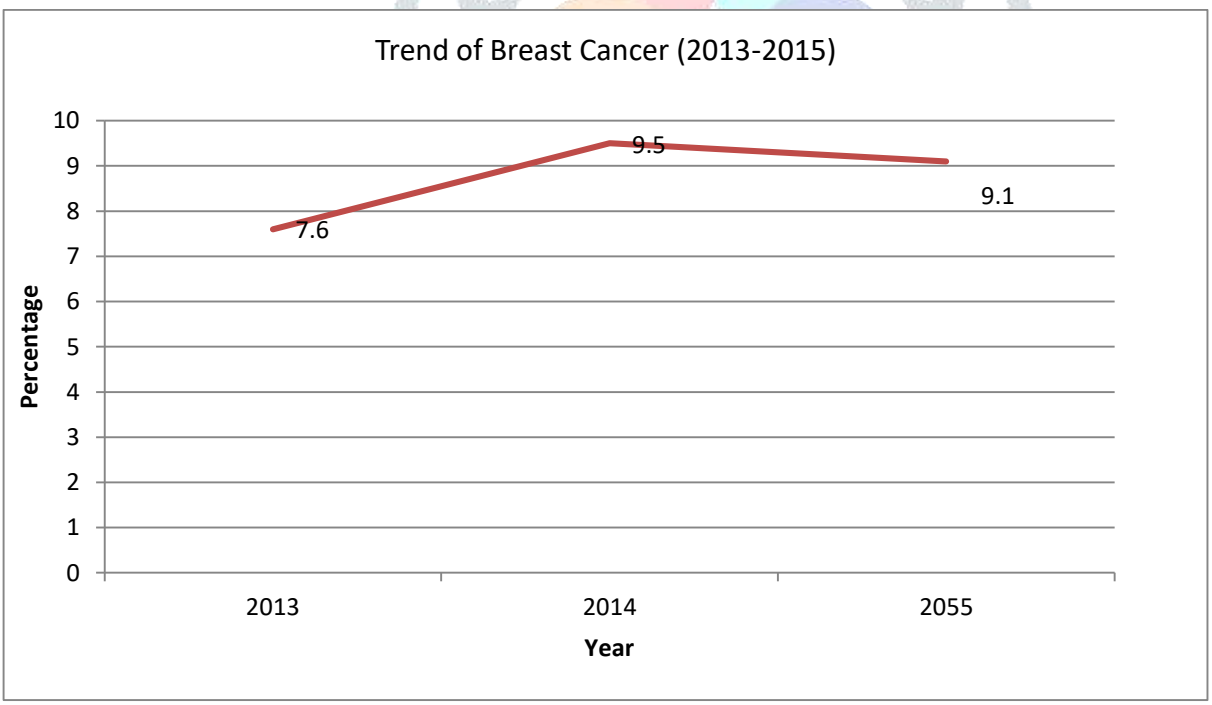


Figure 4. Trend of Stomach Cancer

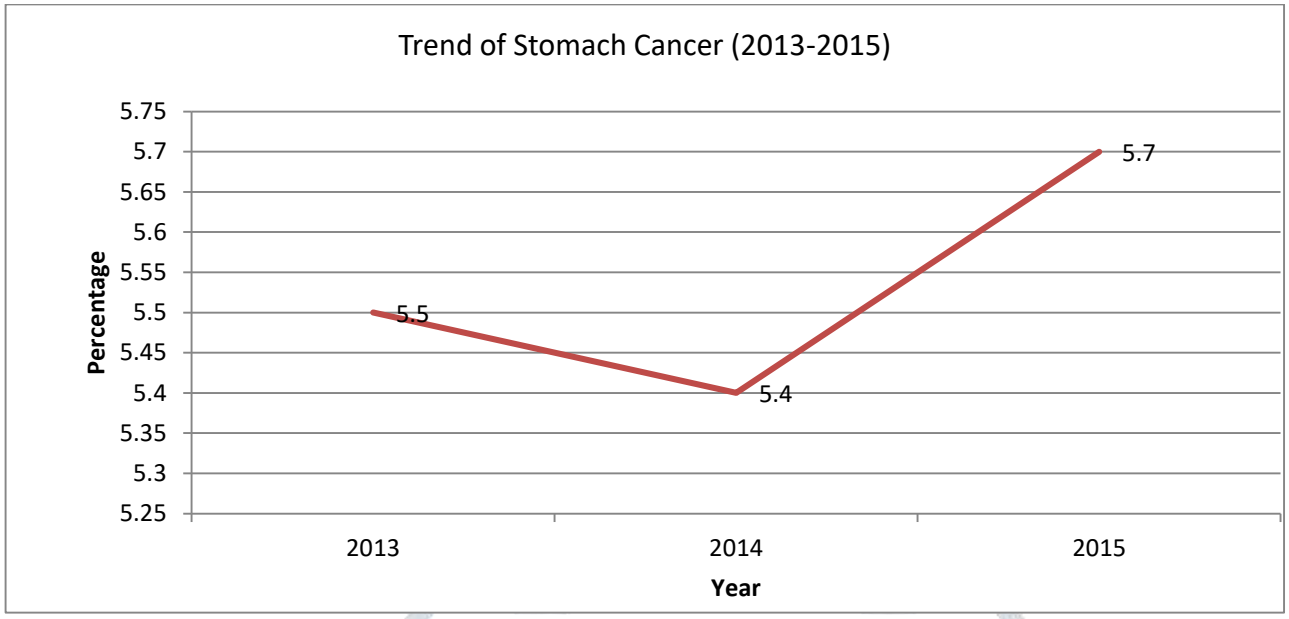
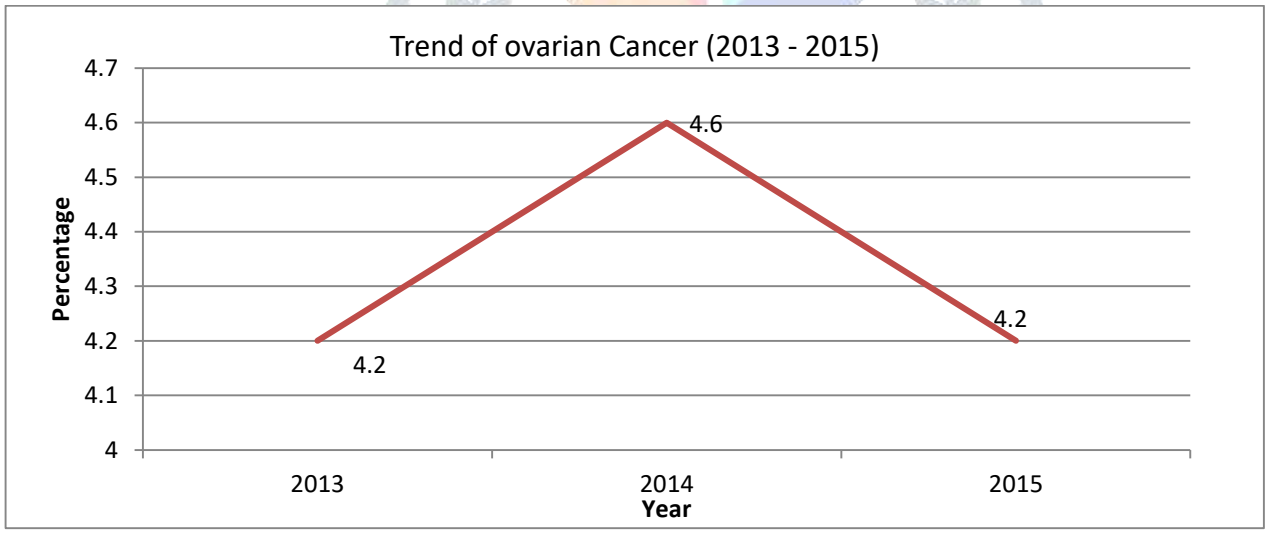


Figure 5. Trend of ovarian Cancer



Discussion

This epidemiological study was undertaken at BP Koirala memorial cancer hospital, Bharatpur, Chitwan, Nepal, Which is only national cancer institute of the nation, using primary and secondary data from study area in 2013, 2014 & 2015.

This hospital played vital role to control cancer by providing curative and preventive services and also conducting different programs like research and survey. To fulfill the above role, National level cancer registry program (HBCR & PBCR) is managed under the department of cancer prevention, control and research in this institution. To run the national level cancer registry program, different institutions of fifteen districts are the main sources of data collection i.e. District Hospital, Medical College and other hospitals., District Public Health Office and other relevant organizations., DDC /VDC/Municipality of project are i.e.

office of vital event registration., Private hospitals, Diagnostic lab, hospice etc. Our study showed that Cancer of bronchus and lung was the most common topography followed by cancer of cervix uteri and breast cancer for both sex.

Conclusion

Our study showed that Cancer of bronchus and lung was the most common topography followed by cancer of cervix uteri and breast cancer for both sex.

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