

COLLECTIVE CANCER REGISTRY REPORT FROM DECEMBER 1994 TO DECEMBER 2019, OF THE SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL & RESEARCH CENTER, PAKISTAN

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CANCER STATISTICS

This report includes patients registered at the centers affiliated with the Shaukat Khanum Memorial Trust and accessioned into the hospital information system in Lahore. The affiliated centers include two hospitals called the 'Shaukat Khanum Memorial Cancer Hospital and Research Center' (SKMCH&RC) in Lahore and Peshawar and the Karachi Diagnostic Center (KDC). SKMCH&RC Lahore is the oldest center and has been functioning since December 29, 1994, SKMCH&RC Peshawar since December 29, 2015, KDC since 2010 and SKDCL in August 01, 2019. For presenting the results, all these centers are referred to as SKMCH&RC/hospital in this report.

Distribution of neoplasms

Of a total of 104,150 neoplasms, 50,152 were seen in males (48.2%) and 53,998 (51.8%) in females registered at the aforementioned facilities in Pakistan in a twenty-five-year period extending from December 29, 1994 till December 31, 2019. A total of ninety-four thousand eight (94,008 (90.3%)) tumors were found in adults, whereas 10,142 (9.7%) in children. Children were classified as patients 18-years or less and adults as patients more than 18-years of age. Table 1 shows the stratification of cases by behavior and age-group, whereas Table 2 shows the counts of malignancies in males and females according to age-group.

Table 1. Distribution of neoplasms by behavior and age-group, from Dec. 1994 to Dec. 2019.

Behavior	Age-groups	Registered patients (100,543)	Reported neoplasm* (104,150)
Malignant~	Adults	86,572	88,216
	Pediatrics	9,728	9,793
	Total	96,300	98,009
Benign^ &	Adults	5,459	5,792
	Pediatrics	331	349
Uncertain behavior	Total	5,790	6,141

*The difference in the number of registered patients and reported neoplasms is attributed to multiple malignancies and benign neoplasms diagnosed in 1,709 and 351 patients, respectively. Further, 1,547 patients have both malignant & benign neoplasm simultaneously.

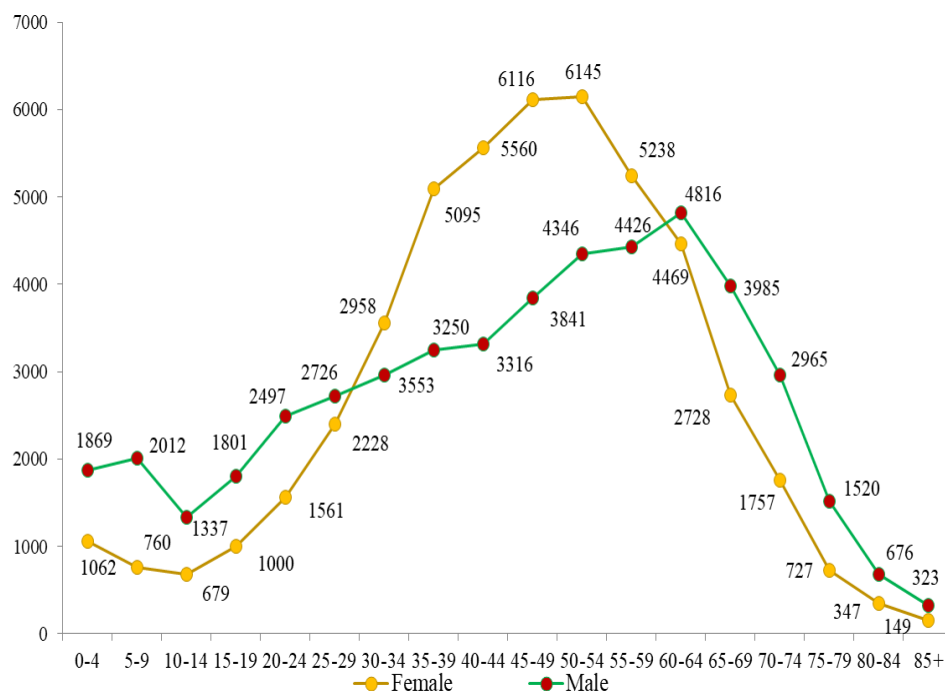
~Cases with behavior code /3 and /2 are considered as malignant cases.

^Cases with behavior code /0 and /1 are considered as benign and of uncertain behavior, respectively.

Table 2. Malignancies registered at SKMCH&RC from Dec. 1994 to Dec. 2019, stratified by sex and age-group.

Age-range	Female	Male	Total
0-4	1062	1869	2931
5-9	760	2012	2772
10-14	679	1337	2016
15-19	1000	1801	2801
20-24	1561	2497	4058
25-29	2399	2726	5125
30-34	3553	2958	6511
35-39	5095	3250	8345
40-44	5560	3316	8876
45-49	6116	3841	9957
50-54	6145	4346	10491
55-59	5238	4426	9664
60-64	4469	4816	9285
65-69	2728	3985	6713
70-74	1757	2965	4722
75-79	727	1520	2247
80-84	347	676	1023
85+	149	323	472
Total	49345	48664	98009

Figure 1. Distribution of malignancies by sex and age-group (yrs.).



Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

Demographics

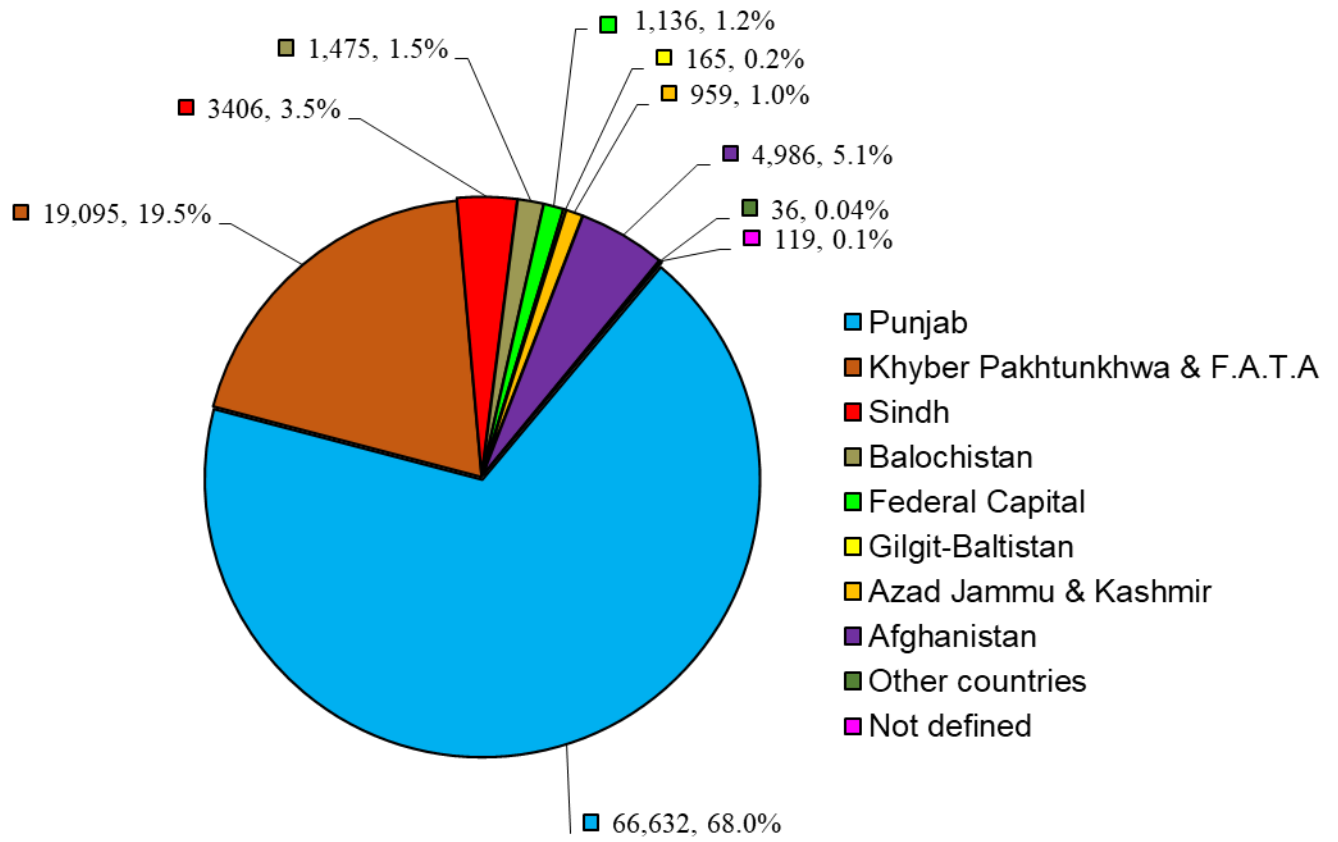
Of the 98,009 malignancies, nearly 68.0% (66,632) belonged to the province of Punjab and approximately 19.5% (19,095) to the Khyber Pakhtunkhwa (NWFP) & FATA*. The fact that the geographic area of residence of a vast majority of patients was Punjab can be explained in light of the information that the oldest SKMCH&RC hospital is situated in the provincial capital of Punjab and that, this province account for almost 50% of the total population of the country.

Table 3. Distribution of malignancies according to the geographic area of residence of the patients, from Dec. 1994 to Dec. 2019.

Demographic area	Malignancies (N=98,009)	Percent (%)
Punjab	66,632	68.0
Khyber Pakhtunkhwa & F.A.T.A*	19,095	19.5
Sindh	3,406	3.5
Balochistan	1,475	1.5
Federal Capital	1,136	1.2
Gilgit-Baltistan	165	0.2
Azad Jammu & Kashmir	959	1.0
Afghanistan	4,986	5.1
Other countries	36	0.04
Not defined	119	0.1

* Khyber Pakhtunkhwa and F.A.T.A merged on May 28, 2018.

Figure 2. Distribution of malignancies according to the geographic area of residence of the patients, from Dec. 1994 to Dec. 2019.



Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

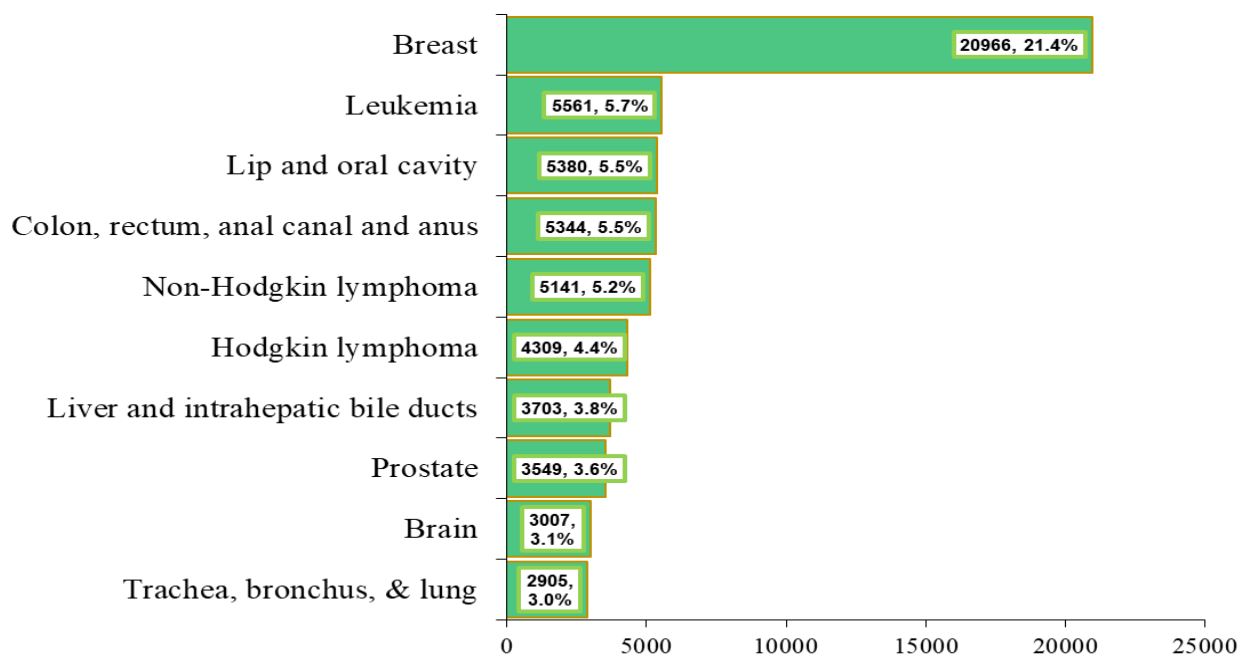
Distribution of malignancies

Tables 4-8 display lists of top 10 cancers registered at the hospital during the twenty-five years period under study. The results have been divided into those for males, females, adults, children, and all age-groups combined. The results for all age-groups, both sexes combined show that breast cancer, leukemia, lip and oral cavity cancers, colon, rectum, anal canal and anus cancers, and non-Hodgkin lymphoma, were the commonest malignancies seen at the hospital (Table 4).

Table 4. Top 10 malignancies seen amongst all age-groups, both sexes combined (N=98,009), at SKMCH&RC, from Dec. 1994 to Dec. 2019.

Sr. No.	ICD Category	Count	Percentage	ICD-10-CM Code
1	Breast	20,966	21.4	C50, D05
2	Leukemia	5,561	5.7	C91 – C95
3	Lip and oral cavity	5,380	5.5	C00 – C08, C76.0, D00.0
4	Colon/rectum/anal canal/anus	5,344	5.5	C18–C21, D01,C7A.02, C49.A
5	Non-Hodgkin lymphoma	5,141	5.2	C82 – C87, C88.4
6	Hodgkin lymphoma	4,309	4.4	C81
7	Liver & intrahepatic bile ducts	3,703	3.8	C22
8	Prostate	3,549	3.6	C61, D07.5
9	Brain	3,007	3.1	C70 - C71
10	Trachea, bronchus, & lung	2,905	3.0	C33 – C34, D02.1-2, C7A.090

Figure 3. Top 10 malignancies seen amongst all age-group, both sexes combined at SKMCH&RC, from Dec. 1994 to Dec. 2019.



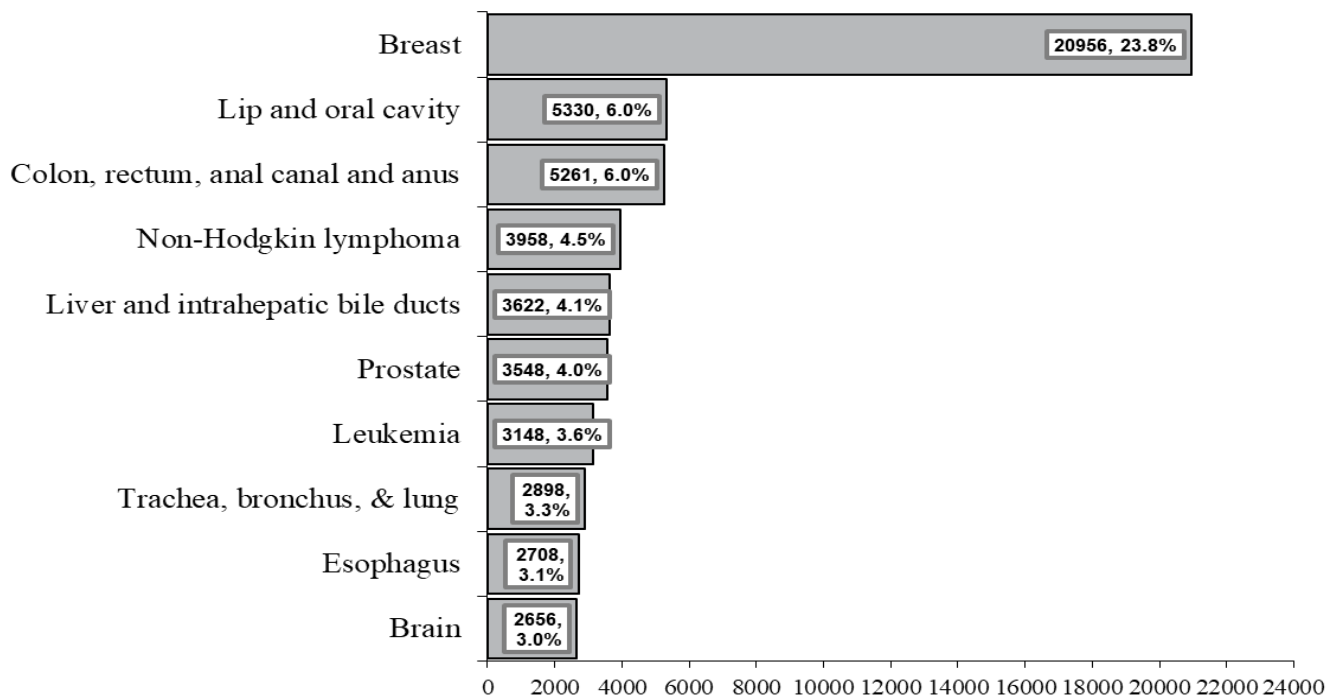
Data Source: Cancer Registry & Clinical Data Mangement, SKMCH&RC

Amongst adults (> 18 years), the commonest malignancies were those of the breast, lip & oral cavity, and colon/rectum/anal canal/anus (Table 5).

Table 5. Top 10 malignancies seen amongst adults (> 18-years, N=88,216), in both sexes combined, from Dec. 1994 to Dec. 2019.

Sr. No.	ICD Category	Count	Percentage	ICD-10-CM Code
1	Breast	20,956	23.8	C50, D05
2	Lip & oral cavity	5,330	6.0	C00 – C08, C76.0, D00.0
3	Colon/rectum/anal canal/anus	5,261	6.0	C18–C21,D01,C7A.02,C49.A
4	Non-Hodgkin lymphoma	3,958	4.5	C82 – C86, C88.4
5	Liver & intrahepatic bile ducts	3,622	4.1	C22
6	Prostate	3,548	4.0	C61, D07.5
7	Leukemia	3,148	3.6	C91 – C95
8	Trachea, bronchus, & lung	2,898	3.3	C33 – C34, D02.1-2, C7A.090
9	Esophagus	2,708	3.1	C15, D00.1
10	Brain	2,656	3.0	C70 - C71

Figure 4. Top 10 malignancies seen amongst adults (> 18 years) in both sexes combined, from Dec. 1994 to Dec. 2019.



Data Source: Cancer Registry & Clinical Data Mangement, SKMCH&RC

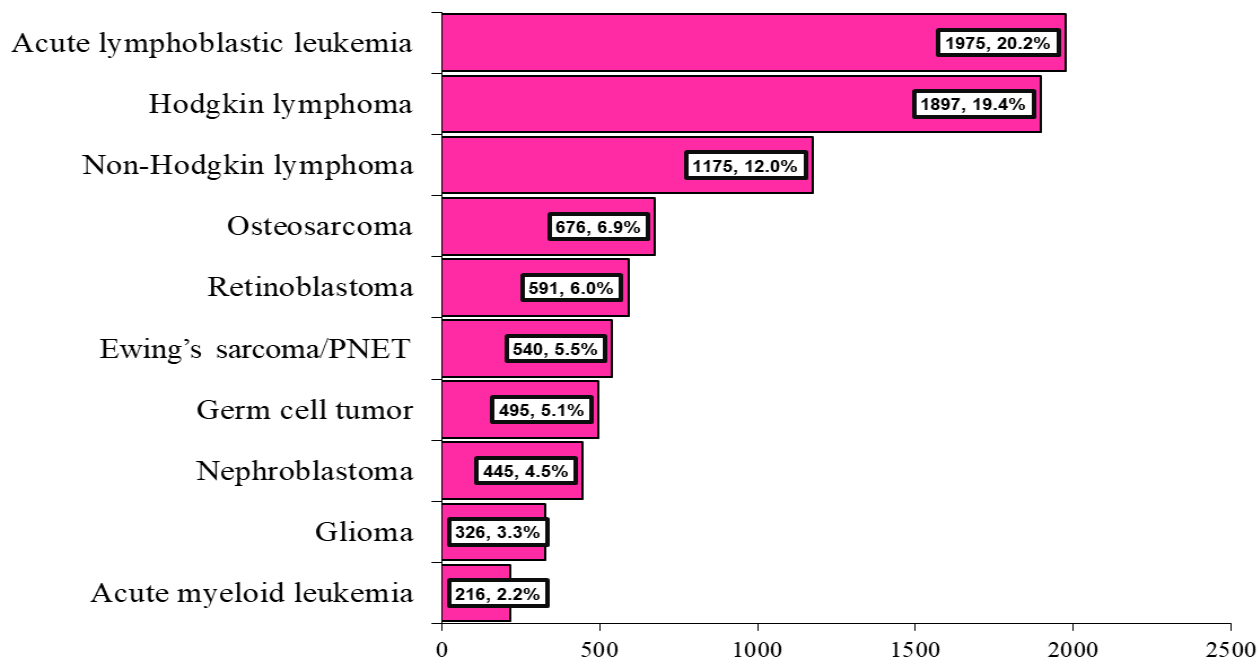
In children (<= 18 years), the most frequent cancers were acute lymphoblastic leukemia, Hodgkin lymphoma, and non-Hodgkin lymphoma (Table 6).

Table 6. Top 10 malignancies seen in children (<= 18 years, N=9,793), in both sexes combined, from Dec. 1994 to Dec. 2019

Sr. No.	ICD Category	Count	%	Morphology Code [^]
1	Acute lymphoblastic leukemia	1,975	20.2	M983
2	Hodgkin lymphoma	1,897	19.4	M965-966
3	Non-Hodgkin lymphoma	1,175	12.0	M959, M967-972
4	Osteosarcoma	676	6.9	M918
5	Retinoblastoma	591	6.0	M951
6	Ewing's sarcoma/PNET	540	5.5	M9260, M9364
7	Germ cell tumor	495	5.1	M906 - M909
8	Nephroblastoma	445	4.5	M8960
9	Glioma	326	3.3	M938-M948
10	Acute myeloid leukemia	216	2.2	M9840,9861, 9866-9874,9891-9920

[^] Classification of childhood cancers is based on tumor morphology using the ICD-O-3 coding scheme for childhood cancers.

Figure 5. Top 10 malignancies seen in children (<= 18 years), in both sexes combined, from Dec. 1994 to Dec. 2019.



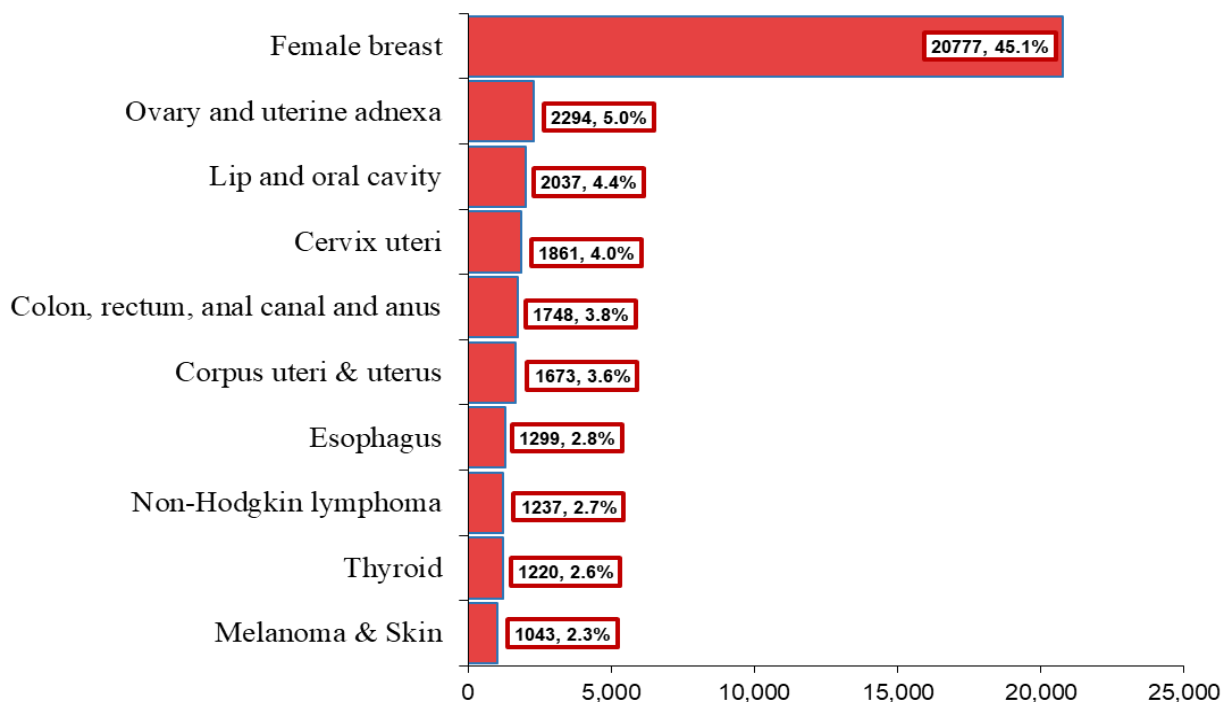
Data Source: Cancer Registry & Clinical Data Mangement, SKMCH&RC

The most frequent cancers, amongst adult females were those of the breast, ovary & uterine adnexa, lip & oral cavity, cervix uteri and colon/rectum/anal canal/anus (Table 7), whereas, amongst adult males, cancers of the prostate, colon/rectum/anal canal/anus, lip & oral cavity, Non-Hodgkin lymphoma, and liver & intrahepatic bile ducts (Table 8).

Table 7. Top 10 malignancies seen in adult females (> 18 years, N=46,098), from Dec. 1994 to Dec. 2019.

Sr. No.	ICD Category	Count	Percentage	ICD-10-CM Code
1	Female breast	20,777	45.1	C50, D05
2	Ovary & uterine adnexa	2,294	5.0	C56
3	Lip & oral cavity	2,037	4.4	C00 – C08, C76.0, D00.0
4	Cervix uteri	1,861	4.0	C53, D06
5	Colon/rectum/anal canal/anus	1,748	3.8	C18–C21, D01, C7A.02, C49.A
6	Corpus uteri & uterus	1,673	3.6	C54 – C55, C58, D07.0
7	Esophagus	1,299	2.8	C15, D00.1
8	Non-Hodgkin lymphoma	1,237	2.7	C82 – C86, C88.4
9	Thyroid	1,220	2.6	C73
10	Melanoma & skin	1,043	2.3	C43 – C44, D03 – D04

Figure 6. Top 10 malignancies seen in adult females (> 18 years), from Dec. 1994 to Dec. 2019.

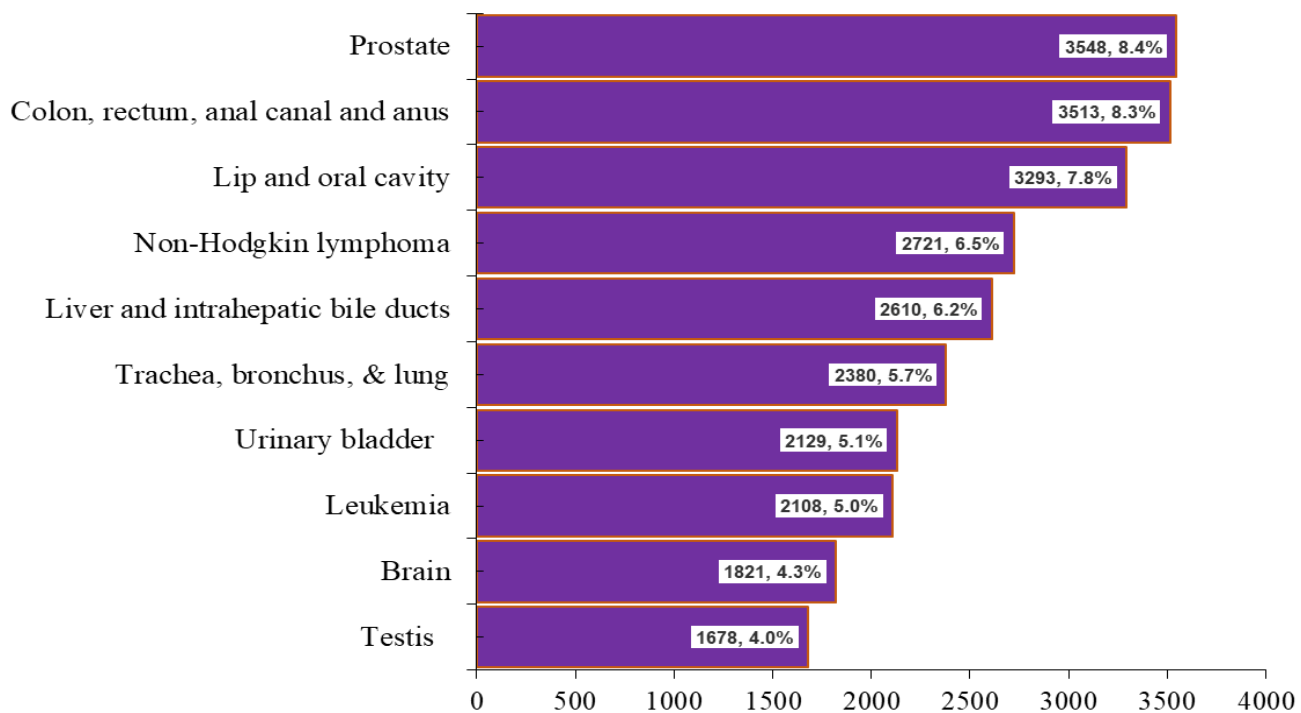


Data Source: Cancer Registry & Clinical Data Mangement, SKMCH&RC

Table 8. Top 10 malignancies seen in adult males (> 18 years, N=42,118), from Dec. 1994 to Dec. 2019.

Sr. No.	ICD Category	Count	Percentage	ICD-10-CM Code
1	Prostate	3,548	8.4	C61, D07.5
2	Colon/rectum/anal canal/anus	3,513	8.3	C18–C21, D01, C7A.02, C49.A
3	Lip & oral cavity	3,293	7.8	C00 – C08, C76.0, D00.0
4	Non-Hodgkin lymphoma	2,721	6.5	C82 – C86, C88.4
5	Liver and intrahepatic bile ducts	2,610	6.2	C22
6	Trachea, bronchus, & lung	2,380	5.7	C33 – C34, D02.1-2, C7A.090
7	Urinary bladder	2,129	5.1	C67, D09.0
8	Leukemia	2,108	5.0	C91 – C95
9	Brain	1,821	4.3	C70 - C71
10	Testis	1,678	4.0	C62

Figure 7. Top 10 malignancies seen in adult males (> 18 years), from Dec. 1994 to Dec. 2019.



Data Source: Cancer Registry & Clinical Data Mangement, SKMCH&RC

SUPPLEMENTAL INFORMATION

Table 9 shows the result stratified by primary site, age-group, and sex. According to this, cancers of the breast, leukemia, lymphoma, lip & oral cavity and colon/rectum/anal canal/anus are the commonest site(s) for malignancies seen at the hospital.

Table 9. Distribution by sex, primary malignant site, and 5-year age-group, 1994-2019.

Female

ICD-10-CM Code **	Primary Site	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	Total
C00	Lip	0	0	0	0	1	0	2	1	1	2	9	14	13	12	7	2	1	2	67
C01-C02, D00.07	Tongue	0	1	0	3	11	23	28	60	58	122	128	106	102	68	48	21	9	6	794
C03	Gum	0	1	0	2	2	3	8	9	17	40	34	50	41	28	28	16	5	4	288
C04-C06, D00.02-06	Floor and other parts of mouth	1	0	0	4	12	15	23	37	53	69	84	73	75	56	44	25	10	4	585
C07	Parotid gland	0	1	4	11	32	26	31	35	25	36	29	20	21	13	11	0	2	0	297
C08	Other salivary glands	0	0	0	1	4	2	4	5	3	3	0	0	1	2	0	0	0	0	25
C09-C10	Oropharynx	0	0	0	0	0	1	2	4	7	7	6	5	8	4	4	1	1	0	50
C11	Nasopharynx	1	1	10	23	37	35	28	29	27	31	25	20	13	8	4	1	0	0	293
C12-C13	Hypopharynx & pyriform sinus	0	0	0	5	11	21	28	56	47	49	54	37	45	23	16	3	1	2	398
C14	Other sites of lip, oral cavity & pharynx	0	0	0	0	0	1	0	0	0	4	2	1	7	1	0	1	0	0	17
C15, D00.1, C49.A1	Esophagus	0	0	0	4	15	35	61	114	184	188	189	193	138	94	47	20	13	8	1303
C16, C49.A2	Stomach	0	0	0	7	11	25	53	72	87	69	94	110	77	51	22	8	5	1	692
C17, C7A.01, C49.A3	Small intestine	0	0	0	2	2	1	8	10	5	12	19	17	12	6	2	1	0	0	97
C18, D01.0, C7A.02, C49.A4	Colon	0	0	2	4	24	41	56	64	64	76	94	103	88	46	32	13	9	2	718
C19	Rectosigmoid	0	0	1	2	6	6	13	8	12	14	11	15	13	6	11	3	0	0	121
C20, D01.2, C7A.02, C49.A5	Rectum	0	1	1	10	59	88	77	71	57	75	76	77	72	42	25	16	4	4	755
C21, D01.3	Anal canal & anus	0	0	0	5	12	19	21	15	13	17	20	14	16	10	10	4	1	0	177
C22	Liver & intrahepatic bile ducts	22	1	4	3	2	2	7	30	38	94	172	197	199	140	83	37	8	1	1040
C23-C24, D01.5	Gall bladder & extrahepatic bile ducts	0	0	0	1	2	6	9	28	69	88	137	126	129	88	62	22	16	7	790
C25	Pancreas	0	0	0	2	2	6	9	19	19	43	53	64	66	62	43	18	10	2	418
C26	Other & ill-defined digestive organs	0	0	0	0	0	1	0	2	1	1	0	0	0	1	0	0	0	0	6
C30-C31	Nasal cavity & sinuses	1	0	3	8	5	9	15	19	14	21	34	23	31	10	8	2	2	0	205
C32, D02.0	Larynx	0	1	0	1	4	3	6	9	13	12	20	27	25	8	9	4	2	2	146
C33-C34, D02.2, C7A.090	Trachea, bronchus & lung	1	1	0	1	1	17	29	26	43	39	65	74	80	65	43	17	16	3	521
C37-C39, C7A.091	Thymus, heart, mediastinum & pleura	4	0	2	1	3	7	4	8	7	5	8	1	5	6	3	1	0	0	65
C40-C41	Bone & articular cartilage	22	90	177	186	87	49	29	24	16	10	13	13	5	5	2	2	0	0	730
C43-C44, D03-D04	Melanoma & other malignant neoplasm of skin	0	1	2	13	25	34	45	63	69	95	123	118	147	110	102	48	41	18	1054
C48	Retroperitoneum	2	2	2	1	2	2	1	6	4	3	6	3	3	2	0	0	0	0	39
C47-C49	Peripheral nerves and connective tissues	37	18	29	67	57	86	69	79	57	55	50	40	43	34	20	11	4	1	757
C50, D05	Breast	0	1	1	13	180	773	1732	2796	3270	3271	2963	2263	1665	900	573	230	108	48	20787
C51-C52, D07.1-2	Vulva & vagina	8	0	2	0	3	10	13	19	18	25	34	37	43	22	20	10	2	0	266
C53, D06	Cervix	0	0	2	12	10	32	82	215	273	295	318	229	205	105	58	25	9	4	1874
C54-C55, C58	Corpus, uterus & placenta	0	0	3	6	35	55	63	87	112	155	232	263	313	193	104	41	16	2	1680
C56	Ovary	7	29	83	127	161	158	176	206	245	308	321	242	215	99	55	21	8	6	2467
C57	Other female genital organs	0	0	1	0	0	4	2	2	0	6	1	2	2	5	0	2	0	0	29
C64-C66, C7A.093	Kidney & ureter	137	53	8	9	13	26	26	40	32	61	66	86	73	54	20	12	3	1	720
C67, D09.0	Urinary bladder	3	1	2	0	1	6	14	24	26	43	44	54	55	46	33	18	8	5	383
C68	Other & unspecified urinary organs	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
C69, D09.2	Eye and adnexa	224	35	9	3	6	1	3	1	4	5	3	2	4	1	2	0	2	0	305
C70-C71	Brain & meninges	18	37	25	39	83	88	103	106	78	93	78	71	57	41	17	7	3	0	944
C72	Spinal cord	3	4	4	1	4	5	3	12	2	5	4	3	1	3	0	0	0	0	54
C73	Thyroid	0	3	8	51	122	186	190	162	127	127	82	74	58	35	30	5	6	2	1268
C74	Adrenal gland	10	2	1	0	5	6	2	3	7	5	2	4	2	0	1	0	0	0	50
C75	Other endocrine glands	2	1	3	1	0	4	1	1	1	1	0	2	2	0	1	0	0	0	20
C76	Other & ill-defined sites	49	11	3	7	12	4	2	8	8	11	10	9	7	6	5	3	0	2	157
C80	Unknown primary	2	2	2	6	8	13	21	44	44	87	110	91	94	68	54	25	7	5	683
C81	Hodgkin lymphoma	32	174	82	140	198	148	112	94	45	35	17	14	15	12	0	3	1	1	1123
C82-C87, C88.4	Non-Hodgkin lymphoma	64	101	70	71	117	122	132	168	100	118	113	95	91	81	51	23	9	4	1530
C90	Multiple myeloma & immuno. neoplasms	0	0	0	0	3	2	2	9	13	31	46	37	23	19	12	1	0	0	198
C91	Lymphoid leukemia	364	145	65	57	41	28	21	27	17	27	40	46	22	8	9	1	0	0	918
C92	Myeloid leukemia	21	34	54	75	79	101	107	111	79	75	65	41	21	12	10	2	0	0	887
C93-C95	Other specified leukemia	2	0	1	0	1	2	1	2	0	4	2	0	3	3	0	0	0	0	21
C96, C88.0-3	Other lymph. histiocytic & hemato. Tissue	20	3	3	1	0	2	2	1	2	1	5	3	3	3	1	0	1	0	51
D32-33, D35.2-4 *	Other reportable CNS neoplasms	5	5	10	14	50	59	76	54	46	43	33	24	19	14	8	2	1	2	465
D46	Myelodysplastic syndrome & Refractory anemia	0	0	0	0	0	0	1	0	0	3	1	5	1	0	2	1	1	0	15
	Total	1062	760	679	1000	1561	2399	3553	5095	5560	6116	6145	5238	4469	2728	1757	727	347	149	49345

Male

ICD-10-CM Code **	Primary Site	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	Total
C00	Lip	0	0	0	2	3	4	6	12	16	13	28	26	23	26	14	8	0	4	185
C01-C02, D00.07	Tongue	2	2	0	6	14	26	71	112	132	147	170	143	149	96	64	30	15	7	1186
C03	Gum	0	1	1	3	6	9	20	38	39	65	88	85	104	50	43	17	9	3	581
C04-C06, D00.02-06	Floor and other parts of mouth	0	0	2	1	9	28	45	87	114	158	152	122	100	62	50	32	5	5	972
C07	Parotid gland	1	2	5	11	20	32	34	32	25	57	40	30	29	16	12	14	4	3	367
C08	Other salivary glands	0	0	0	0	2	1	1	1	2	6	7	3	5	3	1	0	0	0	32
C09-C10	Oropharynx	0	0	0	0	0	3	4	13	11	12	9	9	18	6	6	3	0	2	96
C11	Nasopharynx	2	3	29	44	67	43	54	68	65	83	89	72	48	39	17	7	3	1	734
C12-C13	Hypopharynx & pyriform sinus	0	0	0	5	19	20	36	43	41	47	46	45	64	39	29	20	8	1	463
C14	Other sites of lip, oral cavity, pharynx	0	0	0	0	0	1	1	2	1	2	1	4	3	0	1	0	0	0	16
C15, D00.1, C49.A1	Esophagus	0	1	0	8	20	45	65	103	138	160	185	186	184	140	111	43	17	10	1416
C16, C49.A2	Stomach	0	0	1	3	16	53	60	102	154	194	207	231	224	152	117	46	18	5	1583
C17, C7A.01, C49.A3	Small intestine	0	1	1	4	5	6	14	22	19	15	19	29	24	11	9	4	1	0	184
C18, D01.0, C7A.02, C49.A4	Colon	0	1	9	20	45	74	99	137	186	170	181	126	151	92	76	28	16	6	1417
C19	Rectosigmoid	0	0	2	8	12	19	21	28	21	23	24	21	28	20	11	7	5	0	250
C20, D01.2, C7A.02, C49.A5	Rectum	0	1	6	32	118	154	172	166	138	151	147	132	129	111	58	31	14	4	1564
C21, D01.3	Anal canal & anus	0	0	0	4	15	16	38	40	43	35	29	36	27	35	8	10	6	0	342
C22	Liver & intrahepatic bile ducts	43	5	2	5	8	12	29	63	115	265	406	460	486	368	242	101	40	12	2662
C23-C24, D01.5	Gall Bladder & extrahepatic bile ducts	0	0	0	1	1	6	20	30	39	57	75	99	94	58	48	22	10	6	566
C25	Pancreas	0	2	0	2	4	7	16	24	57	62	79	104	120	91	49	27	12	8	664
C26	Other & ill-defined digestive organs	0	0	0	0	0	0	0	0	1	0	2	2	1	0	0	0	0	0	6
C30-C31	Nasal cavity & sinuses	1	1	3	7	11	23	24	23	41	33	44	25	40	24	19	4	3	2	328
C32, D02.0	Larynx	0	0	0	1	5	9	31	58	81	104	163	197	203	170	124	68	30	12	1256
C33-C34, D02.2, C7A.090	Trachea, bronchus & lung	0	0	2	2	9	19	45	60	104	175	259	318	420	413	284	184	63	27	2384
C37-C39, C7A.91	Thymus, heart & mediastinum	6	3	7	14	16	18	16	18	20	16	19	8	10	6	5	1	0	1	184
C40-C41	Bone & articular cartilage	20	90	285	389	189	84	51	42	25	25	18	18	12	8	4	2	1	0	1263
C43-C44, D03-D04	Melanoma & other malignant neopl. of skin	0	6	3	8	29	55	71	89	109	123	168	180	203	185	165	103	67	48	1612
C48	Retroperitoneum	8	2	1	2	8	11	5	5	3	7	2	4	6	3	1	2	0	0	70
C49	Peripheral nerves and connective tissues	50	34	41	87	152	125	121	93	97	67	81	73	77	60	39	16	13	3	1229
C50, D05	Breast	0	0	0	0	3	3	7	6	14	24	18	29	28	16	19	11	1	1	180
C60	Penis	0	0	0	0	0	0	3	0	4	2	2	4	11	1	3	2	1	0	33
C61	Prostate	0	1	0	1	0	3	3	5	13	60	197	365	680	835	726	394	183	83	3549
C62-C63, D07.6	Testis & other male genital organs	100	5	9	114	338	411	341	220	140	74	54	28	13	11	2	3	0	0	1863
C64-C66, C7A.093	Kidney & ureter	211	65	11	8	18	19	44	91	109	152	171	130	152	84	60	32	14	5	1376
C67, D09.0	Urinary bladder	7	1	2	2	14	23	35	107	161	231	236	320	312	297	217	102	43	30	2140
C68	Other & unspecified urinary organs	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3
C69, D09.2	Eye and adnexa	292	56	7	4	3	1	7	7	7	7	7	4	9	7	4	3	3	1	429
C70-C71	Brain & meninges	32	85	73	77	159	215	266	236	209	193	146	136	110	66	40	13	4	3	2063
C72	Spinal cord	7	1	1	8	4	18	14	12	8	10	6	3	5	0	0	0	0	0	97
C73	Thyroid	0	1	6	26	59	77	67	80	61	57	55	49	37	26	20	7	3	1	632
C74	Adrenal gland	13	6	3	0	0	4	6	4	6	5	1	2	1	3	0	0	0	0	54
C75	Other endocrine glands	2	3	2	1	2	6	2	1	1	1	1	0	2	2	0	0	0	0	26
C76	Other & ill-defined sites	41	11	8	3	25	24	16	9	15	21	24	7	15	14	6	4	3	2	248
C80	Unknown primary	1	3	2	6	19	33	36	41	63	79	103	99	116	98	85	43	18	10	855
C81	Hodgkin lymphoma	148	789	340	323	378	307	258	229	120	110	59	34	44	26	10	6	4	1	3186
C82-C87, C88.4	Non-Hodgkin lymphoma	162	390	168	220	293	317	366	382	245	245	213	159	174	108	96	39	23	12	3612
C90	Multiple myeloma & immuno. neoplasms	0	0	0	1	1	3	8	19	43	44	62	66	40	32	12	9	5	2	347
C91	Lymphoid leukemia	648	362	193	190	153	77	43	49	75	85	124	116	37	25	21	10	8	0	2216
C92	Myeloid leukemia	23	60	95	121	161	212	193	173	136	105	84	54	28	24	25	6	2	1	1503
C93-C95	Other specified leukemia	2	1	1	0	2	2	0	2	1	0	0	2	0	0	0	0	0	0	13
C96, C88.0-3	Other lymphatic, histiocytic & hematopoietic tissue	43	10	8	3	4	3	7	3	4	4	4	5	3	2	1	1	0	0	105
D32-33, D35.2-4 *	Other reportable CNS neoplasms	3	7	8	24	57	65	65	62	44	60	39	25	13	21	11	5	0	1	510
D46	Myelodysplastic syndrome & Refractory anemia	0	0	0	0	1	0	1	1	0	0	2	0	3	3	0	0	1	0	12
Total		1869	2012	1337	1801	2497	2726	2958	3250	3316	3841	4346	4426	4816	3985	2965	1520	676	323	48664

Table 10. Count and percentage of cancer cases by province, district, and sex, 1994-2019.

Province/Country	District	Female	Male	Total
Punjab	Attock	187 .3%	164 .2%	351 .5%
	Bahawalnagar	398 .6%	424 .6%	822 1.2%
	Bahawalpur	319 .5%	390 .6%	709 1.1%
	Bhakkar	289 .4%	331 .5%	620 .9%
	Chakwal	214 .3%	233 .3%	447 .7%
	Chiniot	24 .0%	35 .1%	59 .1%
	D.G.Khan	300 .5%	456 .7%	756 1.1%
	Faisalabad	2179 3.3%	2034 3.1%	4213 6.3%
	Gujranwala	2194 3.3%	1931 2.9%	4125 6.2%
	Gujrat	1009 1.5%	879 1.3%	1888 2.8%
	Hafizabad	242 .4%	242 .4%	484 .7%
	Jehlum	373 .6%	299 .4%	672 1.0%
	Jhang	578 .9%	559 .8%	1137 1.7%
	Kasur	651 1.0%	611 .9%	1262 1.9%
	Khanewal	343 .5%	392 .6%	735 1.1%
	Khushab	279 .4%	321 .5%	600 .9%
	Lahore	14917 22.4%	11070 16.6%	25987 39.0%
	Layyah	181 .3%	243 .4%	424 .6%
	Lodhran	80 .1%	125 .2%	205 .3%
	Mandi Bahuddin	306 .5%	317 .5%	623 .9%
	Mianwali	429 .6%	523 .8%	952 1.4%
	Multan	971 1.5%	843 1.3%	1814 2.7%
	Muzaffargarh	232 .3%	361 .5%	593 .9%
	Nankana Sahib	129 .2%	91 .1%	220 .3%
	Narowal	297 .4%	267 .4%	564 .8%
	Okara	674 1.0%	664 1.0%	1338 2.0%
	Pakpattan	321 .5%	311 .5%	632 .9%
	RahimYar Khan	440 .7%	524 .8%	964 1.4%
	Rajanpur	107 .2%	162 .2%	269 .4%

Rawalpindi	774 1.2%	766 1.1%	1540 2.3%	
Sahiwal	741 1.1%	639 1.0%	1380 2.1%	
Sargodha	1077 1.6%	931 1.4%	2008 3.0%	
Sheikhupura	928 1.4%	825 1.2%	1753 2.6%	
Sialkot	1758 2.6%	1547 2.3%	3305 5.0%	
T.T.Singh	433 .6%	401 .6%	834 1.3%	
Unknown Punjab	705 1.1%	810 1.2%	1515 2.3%	
Vehari	414 .6%	418 .6%	832 1.2%	
Total	35493 53.3%	31139 46.7%	66632 100.0%	
Khyber Pakhtunkhwa & FATA	Abbottabad	249 1.3%	270 1.4%	519 2.7%
	BAJAUR	139 .7%	265 1.4%	404 2.1%
	Bannu	251 1.3%	371 1.9%	622 3.3%
	Batgram	32 .2%	68 .4%	100 .5%
	Bunair	1 .0%	2 .0%	3 .0%
	Buner	83 .4%	164 .9%	247 1.3%
	Charsadda	436 2.3%	585 3.1%	1021 5.3%
	Chitral	57 .3%	106 .6%	163 .9%
	Dera Ismail Khan	265 1.4%	296 1.6%	561 2.9%
	Hangu	151 .8%	169 .9%	320 1.7%
	Haripur	126 .7%	135 .7%	261 1.4%
	Karak	125 .7%	139 .7%	264 1.4%
	KHYBER	145 .8%	313 1.6%	458 2.4%
	Kohat	295 1.5%	366 1.9%	661 3.5%
	Kohistan	16 .1%	52 .3%	68 .4%
	KURRAM	99 .5%	174 .9%	273 1.4%
	Lakki Marwat	147 .8%	170 .9%	317 1.7%
	Lower Dir	394 2.1%	548 2.9%	942 4.9%
	Malakand P/A	258 1.4%	291 1.5%	549 2.9%
	Mansehra	167 .9%	277 1.5%	444 2.3%
Mardan	748 3.9%	974 5.1%	1722 9.0%	
MOHMAND	86 .5%	105 .5%	191 1.0%	

N.WAZIRISTAN	93 .5%	224 1.2%	317 1.7%	
Nowshera	434 2.3%	462 2.4%	896 4.7%	
ORAKZAI	26 .1%	59 .3%	85 .4%	
Parachanar	24 .1%	34 .2%	58 .3%	
Peshawar	1803 9.4%	1841 9.6%	3644 19.1%	
Risalpur	6 .0%	1 .0%	7 .0%	
S.WAZIRISTAN	107 .6%	180 .9%	287 1.5%	
Shangla	54 .3%	94 .5%	148 .8%	
Swabi	358 1.9%	482 2.5%	840 4.4%	
Swat	719 3.8%	1044 5.5%	1763 9.2%	
Tank	56 .3%	82 .4%	138 .7%	
Unknown Khyber Pakhtunkhwa	118 .6%	221 1.2%	339 1.8%	
Upper Dir	154 .8%	309 1.6%	463 2.4%	
Total	8222 43.1%	10873 56.9%	19095 100.0%	
Sindh	Badin	9 .3%	24 .7%	33 1.0%
	Dadu	13 .4%	29 .9%	42 1.2%
	Ghotki	47 1.4%	71 2.1%	118 3.5%
	Hyderabad	116 3.4%	109 3.2%	225 6.6%
	Jacobabad	37 1.1%	77 2.3%	114 3.3%
	Jamshoro	6 .2%	6 .2%	12 .4%
	Karachi	1244 36.5%	874 25.7%	2118 62.2%
	Khairpur	16 .5%	22 .6%	38 1.1%
	Larkana	20 .6%	37 1.1%	57 1.7%
	Malir	8 .2%	5 .1%	13 .4%
	Mirpur Khas	20 .6%	18 .5%	38 1.1%
	Naushahro Feroze	16 .5%	23 .7%	39 1.1%
	Nawab Shah	18 .5%	31 .9%	49 1.4%
	Sanghar	30 .9%	50 1.5%	80 2.3%
	Shikarpur	17 .5%	19 .6%	36 1.1%
	Sukkur	64 1.9%	66 1.9%	130 3.8%
	Tharparkar	1 .0%	1 .0%	2 .1%

	Thatta	15 .4%	13 .4%	28 .8%
	Umerkot	8 .2%	7 .2%	15 .4%
	Unknown Sindh	93 2.7%	126 3.7%	219 6.4%
	Total	1798 52.8%	1608 47.2%	3406 100.0%
Balochistan	Awaran	0 0.0%	1 .1%	1 .1%
	Barkhan	3 .2%	16 1.1%	19 1.3%
	Bolan	4 .3%	7 .5%	11 .7%
	Chaghi	11 .7%	22 1.5%	33 2.2%
	Dera Bugti	6 .4%	19 1.3%	25 1.7%
	Gwadar	5 .3%	3 .2%	8 .5%
	Jafarabad	9 .6%	33 2.2%	42 2.8%
	Jhal Magsi	0 0.0%	2 .1%	2 .1%
	Kalat	3 .2%	7 .5%	10 .7%
	Kech	8 .5%	13 .9%	21 1.4%
	Kharan	1 .1%	3 .2%	4 .3%
	Khuzdar	9 .6%	8 .5%	17 1.2%
	Killa Abdullah	32 2.2%	55 3.7%	87 5.9%
	Killa Saifullah	7 .5%	13 .9%	20 1.4%
	Kohlu	3 .2%	8 .5%	11 .7%
	Lasbela	2 .1%	8 .5%	10 .7%
	Loralai	62 4.2%	111 7.5%	173 11.7%
	Mastung	5 .3%	6 .4%	11 .7%
	Nasirabad	8 .5%	24 1.6%	32 2.2%
	Panjgur	4 .3%	0 0.0%	4 .3%
	Pishin	26 1.8%	43 2.9%	69 4.7%
	Quetta	278 18.8%	387 26.2%	665 45.1%
	Sibi	12 .8%	21 1.4%	33 2.2%
	UNKNOWN BALOCHISTAN	20 1.4%	39 2.6%	59 4.0%
	Zhob	31 2.1%	52 3.5%	83 5.6%
	Ziarat	13 .9%	12 .8%	25 1.7%
		Total	562 38.1%	913 61.9%

Gilgit-Baltistan	Astore	2 1.2%	1 .6%	3 1.8%
	DIAMIR	20 12.1%	32 19.4%	52 31.5%
	GHANCHE	1 .6%	15 9.1%	16 9.7%
	GHIZER	1 .6%	2 1.2%	3 1.8%
	GILGIT	20 12.1%	25 15.2%	45 27.3%
	Hunza-Nagar	6 3.6%	18 10.9%	24 14.5%
	Kharmang	1 .6%	0 0.0%	1 .6%
	Shigar	2 1.2%	6 3.6%	8 4.8%
	Skardu	1 .6%	12 7.3%	13 7.9%
	Total	54 32.7%	111 67.3%	165 100.0%
FEDERAL CAPITAL	Islamabad	651 57.3%	485 42.7%	1136 100.0%
	Total	651 57.3%	485 42.7%	1136 100.0%
Azad Jammu & Kashmir	BAGH	49 5.1%	69 7.2%	118 12.3%
	BHIMBER	67 7.0%	72 7.5%	139 14.5%
	KOTLI	40 4.2%	57 5.9%	97 10.1%
	MIRPUR	161 16.8%	129 13.5%	290 30.2%
	MUZAFFARABAD	68 7.1%	70 7.3%	138 14.4%
	POONCH	48 5.0%	68 7.1%	116 12.1%
	SUDHNOTI	12 1.3%	19 2.0%	31 3.2%
	Unknown Azad Jammu & Kashmir	12 1.3%	18 1.9%	30 3.1%
	Total	457 47.7%	502 52.3%	959 100.0%
Afghanistan	Districts are not listed	2038 40.9%	2948 59.1%	4986 100.0%
Other countries	Districts are not listed	16 44.4%	20 55.6%	36 100.0%
Districts and provinces are not defined		54 45.4%	65 54.6%	119 100.0%
Grand Total		49345 50.3%	48664 49.7%	98009 100.0%

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