



المجلس الصحي السعودي
Saudi Health Council

Kingdom of Saudi Arabia
Saudi Health Council
National Health Information Center
Saudi Cancer Registry

Cancer Incidence Report
Saudi Arabia
2016

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Cancer Registry Annual Reports



Cancer Registry Dashboard







Introduction

This is the twentieth cancer incidence report published by the Saudi Cancer Registry. Previous publications included the Incidence Reports for the years: 1994 - 1996, 1997 - 1998, 1999-2000, and yearly reports until 2015.

This report provides statistics on cancer incidence that can be used for better planning and effective measurement on early detection and management of cancer.

The structure of this report can be outlined as follows:

Part I- Materials and Methods

This part of the report contains information about the background and methods of the Saudi Cancer Registry used in collecting and analyzing the data. We present the basics of coding and classification of tumor topography, morphology and extent of disease at the time of diagnosis. Also we describe the software programs we have used to analyze the data.

Part II- Overview of Cancer Incidence

Part II presents the overall cancer incidence in Saudi Arabia diagnosed between 01 January and 31 December 2016. Figures, tables, line and bar charts are used to present cancer distribution by gender and age groups. Morphology distributions for the most common cancers are also presented in tables. In addition, incidence tables are used to present the total number of cases, Age-Standardized Incidence Rate (ASR), Crude Incidence Rate (CIR), and Cumulative Rates (per 100,000 population) by gender for each primary cancer site. Separate bar charts are used to demonstrate distribution of the most common cancers by

Part III- Cancer Incidence for Most Common Sites 2016

In this part, the incidence of the most common cancers reported among the Saudi males and females are outlined. For each cancer site, the total number and proportions of all newly diagnosed cases, the ASR, and the corresponding cancer ranking for each gender are also presented. In addition, ASR for the most common cancers among Saudis is compared with the ASR reported from selected developed and developing countries.

Part IV-Cancer Incidence among Non-Saudis

This part presents numbers of cancer cases among the Non-Saudis including the most common types of cancer. The analysis of the Non-Saudis is performed separately due to the nature of the expatriate population in which large proportion aged between 25 and 44 years especially among males.

Part V-Incidence Tables

This part contains the following detailed tables for all newly diagnosed cancer types for the Saudis and the Non-Saudis diagnosed in 2016.

- Distribution of cancer cases among Saudis by age group and gender.
- Distribution of cancer cases among Non-Saudis by age group and gender.
- Cancer Incidence (per 100,000 populations) among Saudis by age group and gender.
- Cancer Incidence (per 100,000 populations) among Non-Saudis by age group and gender.
- Age-standardized incidence rate and relative frequencies among Saudis by cancer site, gender

Part VI- Arabic Summary

It is enclosed an Arabic summary of Cancer Statistics in Saudi Arabia for the Year 2016.



Table of contents

Introduction	05
PART I	
MATERIALS AND METHODS	
Background on Saudi Arabia	09
Saudi Cancer Registry	09
Definitions of Statistical Terms	12
PART II	
OVERVIEW OF CANCER INCIDENCE, 2016	
Cancer Incidence in Saudi Arabia, 2016	15
Cancer Distribution Among Saudi Nationals, 2016	16
Cancer Incidence Among Adults (> 14 Years), 2016	20
Childhood Cancer Reported to Saudi Cancer Registry (\leq 14 Years), 2016	21
International Comparison of Age-Standardized Incidence Rates	25
PART III	
CANCERS INCIDENCE FOR MOST COMMON SITES 2016	
Cancer Incidence for Most Common Sites, 2016	27
Female Breast Cancer (C50)	28
Colorectal Cancer (C18-C20)	30
Thyroid Cancer (C73)	32
Non- Hodgkin's Lymphoma (C82-C85; C96)	34
Leukaemia (C91-C95)	36
Hodgkin's Lymphoma (C81)	38
Corpus Uteri Cancer (C54)	40
Lung Cancer (C33-C34)	42
Liver Cancer (C22)	44
Prostate Cancer (C61)	46
PART IV	
CANCER AMONG NON-SAUDI 2016	
Cancer Incidence Among Non-Saudi Population. 2016	50
PART V	
INCIDENCE TABLES	
Table 5.1.1 Number of Cases Among Saudi Males by Primary Site And Age Groups, 2016	54
Table 5.1.2 Number of Cases Among Saudi Females by Primary Site And Age Groups, 2016	55
Table 5.1.3 Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Saudi Males (per 100,000) by Primary Site and Age groups, 2016.	56
Table 5.1.4 Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Saudi Females (per 100,000) by Primary Site and Age groups, 2016	57



Table 5.4.1	Number of Cases Among Non-Saudi Males by Primary Site And Age Groups, 2016	58
Table 5.4.2	Number of Cases Among Non-Saudi Females by Primary Site And Age Groups, 2016	59
Table 5.4.3	Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Non-Saudi Males (per 100,000) by Primary Site and Age groups, 2016	60
Table 5.4.4	Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Non-Saudi Females (per 100,000) by Primary Site and Age groups, 2016	61
	Acknowledgment	62
	Arabic Summary	63



PART I

MATERIALS AND METHODS



Background on Saudi Arabia

Saudi Arabia is a vast country extending over four-fifths of the Arabian Peninsula. It stretches from the Arabian Gulf in the east to the Red Sea in the west. It is approximately 2,149,700* square kilometers in area and is divided into 13 administrative regions **Figure 1.1**.



Figure 1.1 : Administrative regions of Saudi Arabia.

The estimated population for Saudi Arabia in 2016 was 31,787,580. Saudi nationals were estimated to be 20,081,582 of these 10,231,364 (51%) were males and 9,850,218 (49%) were females.

The Non-Saudi population was 11,705,998 of these 8,028,355 (69%) were males and 3,677,643 (31%) were females. Figures 1.2 and 1.3 show the Saudi and Non-Saudi population pyramids by gender and age group respectively.

Figure 1.2 : Population pyramids of Saudis (%) by gender and age group, 2016.

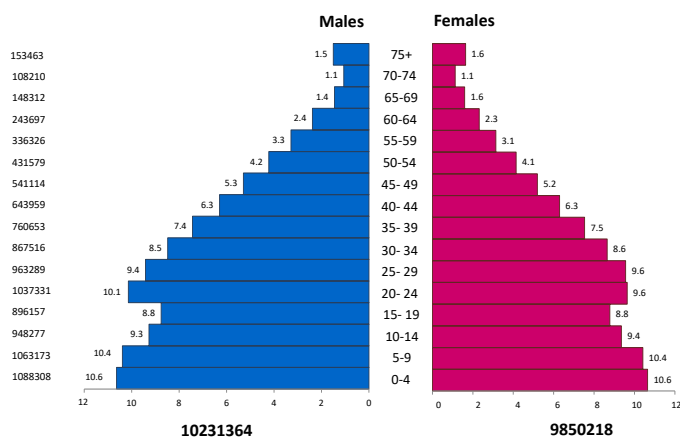
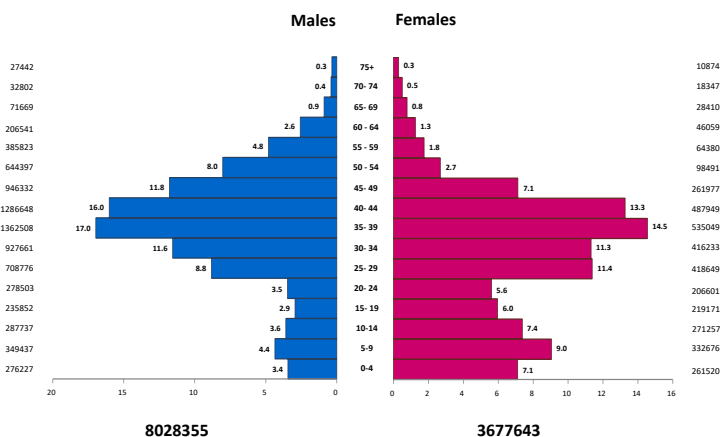


Figure 1.3 : Population pyramids of Non-Saudis (%) by gender and age group, 2016.



Saudi cancer registry.

The Saudi Cancer Registry (SCR) is a population-based registry established in 1992 under the authority of the Ministry of Health (MOH) in the premises of King Faisal Specialist Hospital and research Center in Riyadh. In 2014; SCR was moved to Saudi Health Council under the department of National Registries in National Center for Health Information.

Organizational structure.

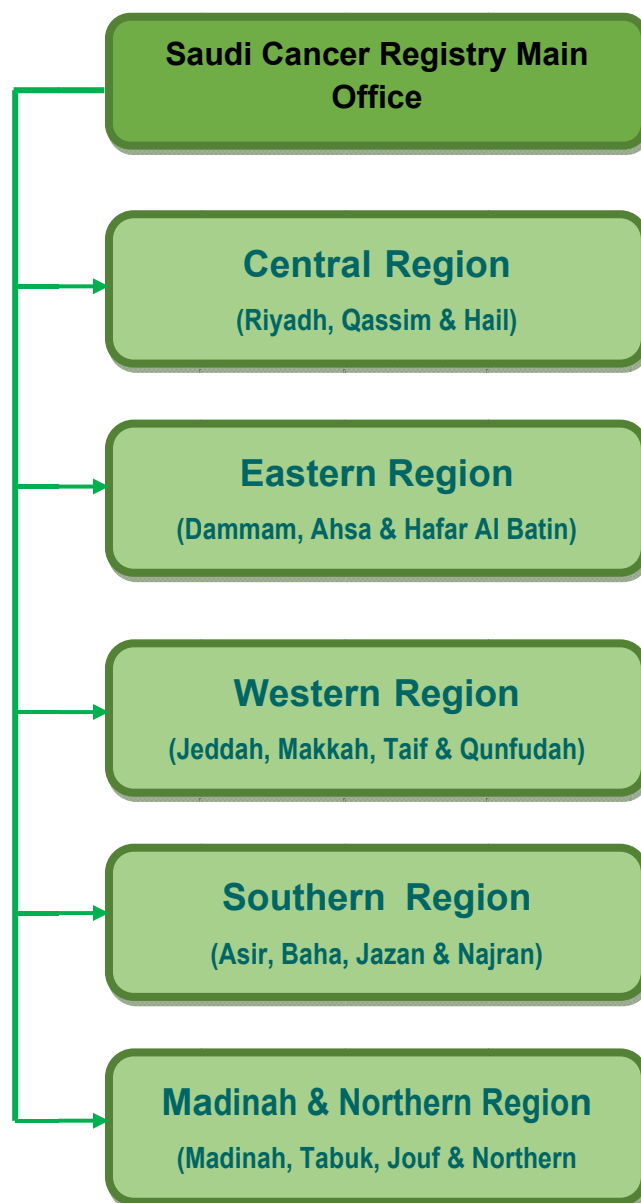
The SCR consists of the main office which oversees data collection from all over the country through five regional offices to ensure full coverage of all healthcare facilities in the Kingdom as shown in Figure 1.4. The registry is supported by registry committee.

The committee provides scientific guidance to SCR, reviews cancer statistics reports, data requests, and provides help in disseminating reliable information; In addition to ensuring data confidentiality according to national and international guidelines.



Regional Offices

Each of the SCR offices operates under a regional director who is responsible for the daily management. Staffing consists of senior and junior tumor registrars. SCR Main Office supervises regional offices to ensure accuracy and quality of data collected from all regions. Quality control processes include verification of site, morphology, staging information, case linkage (tumor and patient), and consolidation of data. The Main Office also prepares annual reports for dissemination to the medical community, government departments, international organizations and the public.





Data management

A royal decree has categorized cancer as a mandatory modifiable disease. This ensures the opportunity for comprehensive data collection. The SCR strives for full access to cancer data from all governmental and private hospitals, clinics and laboratories throughout the Kingdom.

Cancer data are abstracted from patients' medical records based on clinical and/or histopathological diagnosis by SCR trained cancer registrars. Abstracted data includes personal identifications (name, ID Number, gender, age), demographic information (address, telephone number, nationality), and tumor details (diagnosis date, primary site, histology, behavior, grade, stage, basis of diagnosis). The primary site (topography) and histology (morphology) of the malignancies are identified and coded according to the International Classification of Diseases for Oncology 3rd Edition (ICD-O-3), published by the World Health Organization (WHO), 2000. Starting from year 2001, changes were made in coding of cancer types and behaviors as well as staging according to SEER Summary Stage 2000 to increase accuracy and consistency in stage coding SEER Summary Stage Manual 2000 is available on the web.

The cases diagnosed on or after 01 January 2008 were classified according to the updated ICD-O-3. While there have not been any changes in the

primary site codes, there are significant changes regarding histology (cell types). Leukemia and lymphoma are particularly affected. Some cases that were previously considered benign are now counted as malignant. Also small number of cancers that were previously coded as borderline tumors are now considered benign. Counts of ovarian cancers, lymphoma and leukemia as well as some hematopoietic diseases will change due to changes in either the report's ability or definition. However, as with the SEER staging guidelines, the ICD-O changes reflect advances in the understanding of the pathology and behavior of cancers. It should be noted that ICD-O-3 codes are converted to ICD-10 for analysis purposes.

Since the WHO has not yet converted ICD-10 hematopoietic disease behavior changes, our software, CanReg 4.33 (developed by the International Agency for Research on Cancer (IARC), Lyon, France) cannot include these cases for analysis and they have been excluded. Every effort is made to accurately code patient and tumor information, to ensure that all data reviewed, linked, and consolidated, as appropriate, so that each malignancy is counted only once for statistical analysis. Data entry and incidence tables output were generated by CanReg software.



Notification

This report covers data that were diagnosed between January and December 2016. Incident cases identified after this date (late reporting) will be reported in subsequent incidence reports. It is anticipated that the number of late-reported cases will decrease as case ascertainment processes has improved during past years. Our aim is reduce reporting lap between year of diagnosis and year of publishing the incidence report to a maximum of 2 years while maintaining high quality and completeness of data.

Definitions of Statistical Terms Age-Specific Incidence Rate (AIR)

The number of cancer cases occurring during a specific period in a population of a specific age and gender group, divided by the number of midyear population of that age and gender group.

Age-Standardized Rate (ASR)

The Age-standardized rate is a summary measure of a rate that a population would have if it had a standard age structure. Standardization is necessary when comparing several populations that differ with respect to age structure. The most frequently used standard population is the World Standard Population (see below). The calculated incidence is known as the World Standardized Incidence Rate. The rate is expressed per 100.000 populations.

World Standard Population

Age Class	Population
0 - 4	12.000
5 - 9	10.000
10 -14	9.000
15 -19	9.000
20 - 24	8.000
25 - 29	8.000
30 - 34	6.000
35 - 39	6.000
40 - 44	6.000
45 - 49	6.000
50 - 54	5.000
55 - 59	4.000
60 - 64	4.000
66 - 69	3.000
70 - 74	2.000
75 +	2.000
Total	100.000

*Doll R. Payne P. Waterhouse J. Cancer Incidence in Five Continents Vol.I. International Union against Cancer. 1966

Crude Incidence Rate (CIR)

The crude incidence rate for a cancer site is the total number of cases registered as a proportion of the total population. It denotes the approximate number of cases occurring in each 100.000 individuals. All rates are thus, expressed as per 100.000 population. Cancer rates vary greatly with age and the crude rate is strongly influenced by the demographic structure of the population. Hence, if the population structure changes over time the crude rate over that period may be artificially altered. It is not appropriate to compare crude rates across geographical areas of cancer registries with different population age structures. Therefore, in order to assess time trends in registration data or compare incidence across geographical areas or between registries it is necessary to first standardize the rates with respect to age.



Cumulative incidence rate

Cumulative incidence rate is the probability or risk of individuals developing the disease during a specified period. For cancer, it is expressed as the number of new born children (out of 100, or 1000) who would be expected to develop a particular cancer before the age of 65 (or 70, or 75) if they had the rates of cancers currently observed. Like the age standardized rate, it permits comparison between populations of different age structures. In this report the age ranges 0-64 and 0-74 years are used. The cumulative rate is the summation of the cancer age-specific rates; which are computed for five-year age intervals.

ICD - 10

The World Health Organization's International Classification of Diseases, tenth edition.

ICD - O - 3

The World Health Organization's International Classification of Diseases for Oncology, 3rd Edition has been the standard coding system for neoplasms for over 25 years. The coding system includes a four character code for primary site, a four-digit numeric code for cell type, one-digit code for behavior and a one-digit code for tumor aggressiveness (grade).

Incidence rate

An incidence rate is defined as the rate at which a new event occurs in a population. It is calculated as the number of new cases of disease arising in a population over a defined time period, divided by the population at risk of developing that disease.

Mean

The simple mathematical average of two or more numbers.

Median

The midpoint of the range numbers that are arranged in order of value.

Metastasis

Metastasis is the distant spread of cancer from its original site to other organs of the body, including lymph nodes, skeletal and or visceral organs.

Range

It is the difference between the maximum and minimum values in a set of observations.

Rank

This measure reflects the importance of a specific cancer site relative to other sites, in terms of the number of registrations. Ranking illustrates the most and least frequent cancer sites in a population according to their frequency.

Ratio

It is the relation between two quantities. The first quantity is a numerator and the second is a denominator.

Relative frequency

This statistic is defined as the number of specific cancer cases registered relative to the total number of all cancer. It is expressed as a percentage.

Summary Stage

Staging is the grouping of cancer cases into broad categories based on the extent of the disease.



PART II

OVERVIEW OF CANCER INCIDENCE

2016



Cancer incidence in Saudi Arabia, 2016.

Between January 01 and December 31, 2016, the total number of newly diagnosed cancer cases reported to the Saudi Cancer Registry (SCR) was 17,602. Overall cancer was more among women than men; it affected 8,044 (45.7%) males and 9,558 (54.3%) females. Total of 13,562 cases were reported among Saudi nationals, 3,834 among non-Saudi, and 206 of unknown nationality.

Total of 16,859 cases were analyzed, of which 13,161 (78.1%) were Saudi nationals and 3,698 (21.9%) were Non-Saudi.

Total of 743 cases were excluded from the analysis: 206 cases of them were unknown nationalities, and 537 cases failed to be converted to ICD-10 codes. The software (CanReg-4) does not include in situ cases in the statistical analysis,

Table 2.1.

Among Saudis 5,803 (44.1%) were males and 7,358 (55.9%) were females with a male to female ratio of 100 to 126. The crude incidence rates (CIR) of all cancers were 56.6/100,000 in males and 74.5 / 100,000 in females.

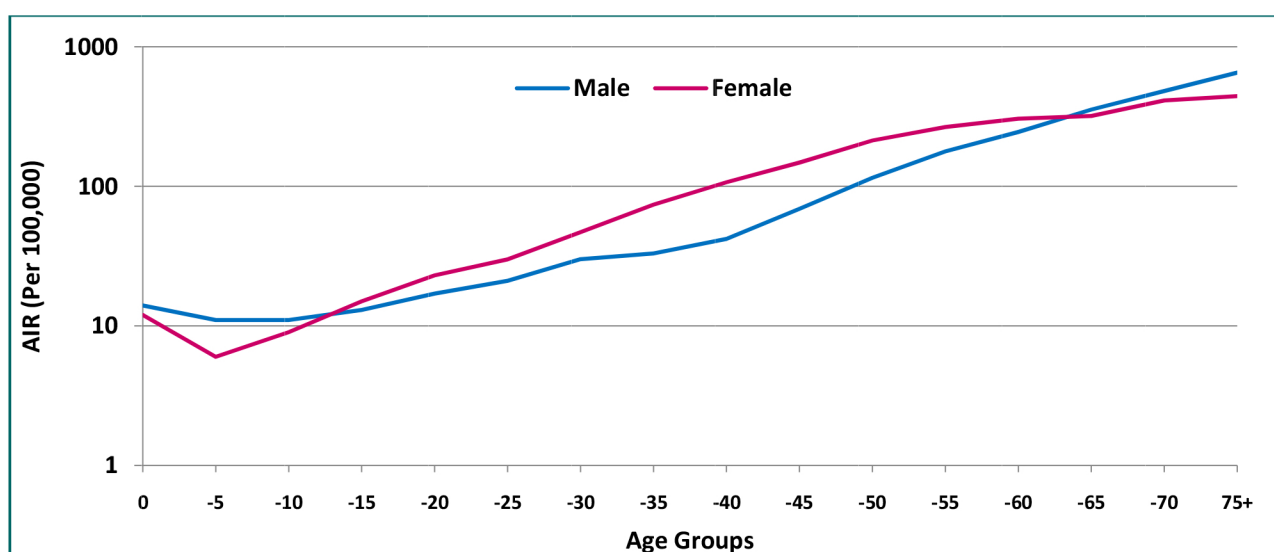
The overall age-standardized incidence rate (ASR) was 74.7/100,000 in males and 91.3/100,000 in females.

Table 2.1 : Distribution of analyzed and non-analyzed cancer cases reported to Saudi Cancer Registry by nationality and gender, 2016.

Saudis						Unknown Nationality			Non –Saudis					
Analyzed			Non Analyzed						Analyzed			Non Analyzed		
Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
5803	7358	13161	184	217	401	111	95	206	1872	1826	3698	74	62	136

The age-specific incidence rate (AIR) increased with advancing age in both genders. The median age at diagnosis was 57 years with a range of (0 -116) for males, and 51 years with a range of (0-116) for females, **Figure 2.2.**

Figure 2.2 : Age-Specific Incidence Rate (AIR) for all cancer among Saudis, 2016.





Confirmation of malignancy was based mainly on histopathology reports (87.5%), followed by hematological and cytological reports (4.9%), then histology of metastases (4.2%), then medical imaging reports (2.0%), and death certificate only (1.2%). Other sources such as surgical and clinical notes and laboratory tests for tumor markers were the source is about 0.1%, and unknown source was present in 0.2% of cases, **Table 2.3**.

Table 2.3 : Basis of diagnosis of cancer cases, 2016.

Basis of Diagnosis	No	%
Histology of primary	11521	87.5
Cytology / Haematological	645	4.9
Histology of metastases	548	4.2
Medical Imaging	259	2.0
DCO (Death Certificate Only)	154	1.2
Unknown	26	0.2
Surgical	5	0.0
Laboratory test (Tumor Markers)	2	0.0
Autopsy	1	0.0
Total	13161	100.0

Cancer Distribution among Saudi Nationals, 2016.

In females the highest number of cancer cases reported for the age group (45-59) years, with a total of 2,451 (33.3%) cancer cases. Whereas, in males the highest number of cases was reported for the age group (60-74) years, with a total of 1,649 (28.5%) cancer cases.

Figure 2.3 : Distribution of cancer cases among Saudi nationals by gender and age groups, 2016.

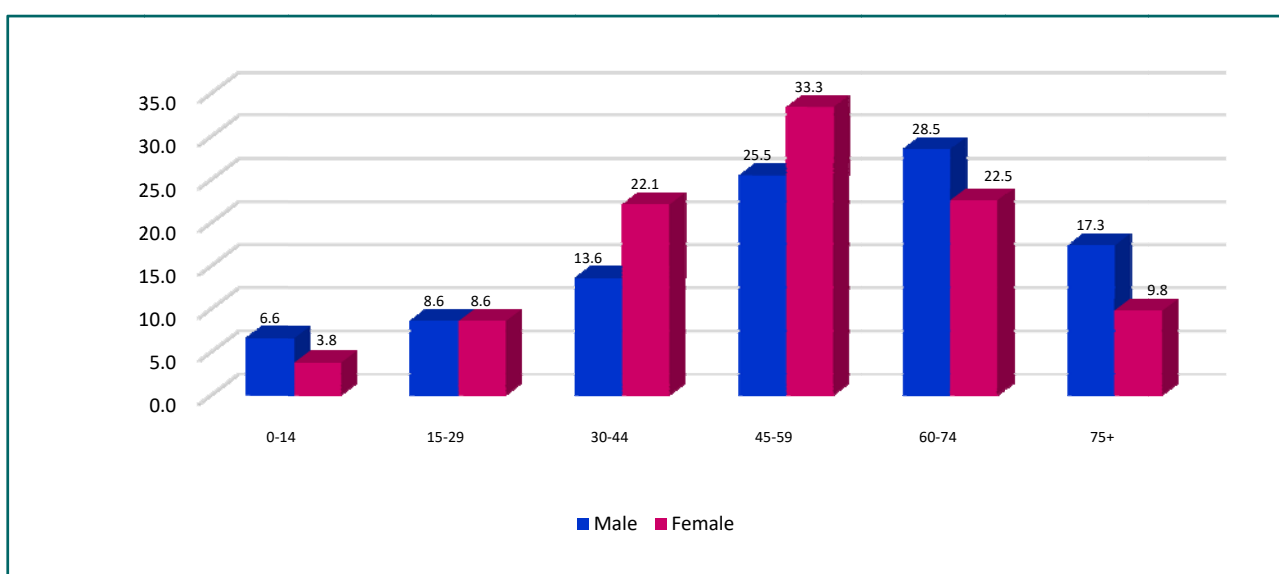
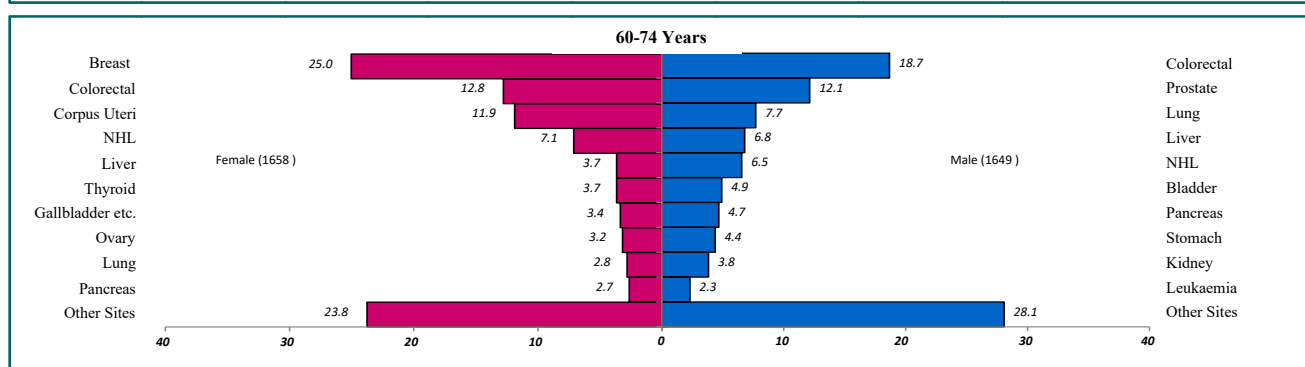
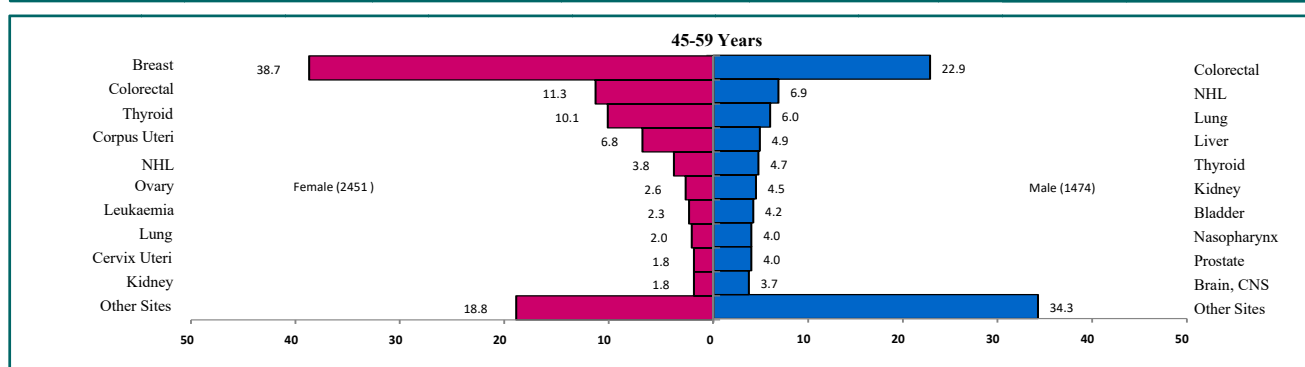
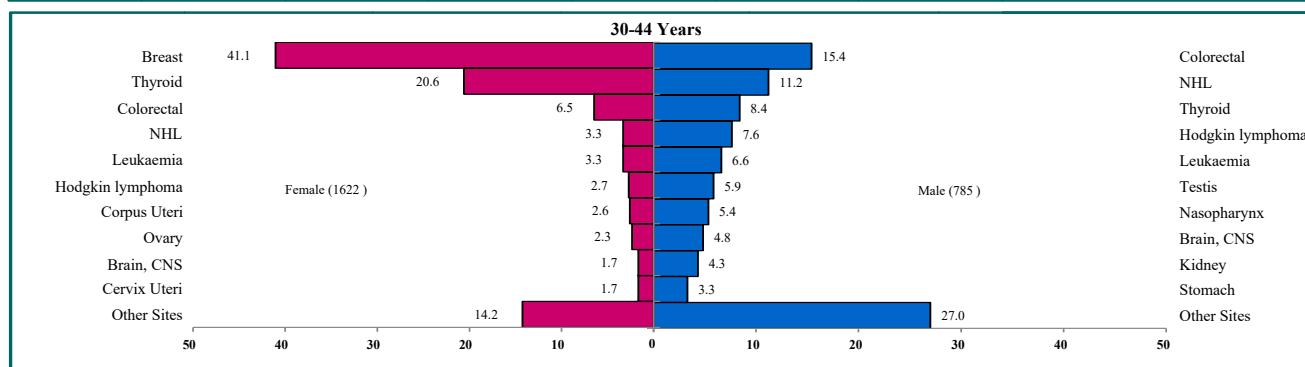
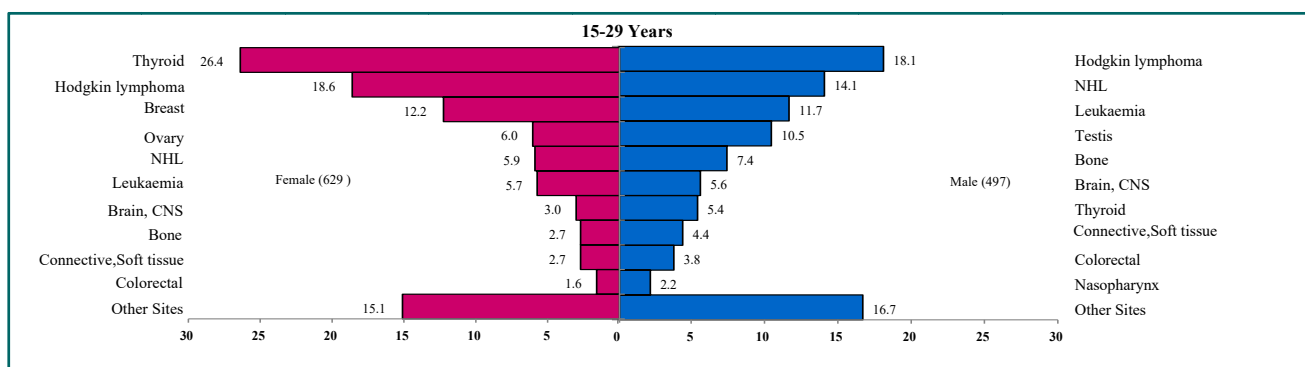
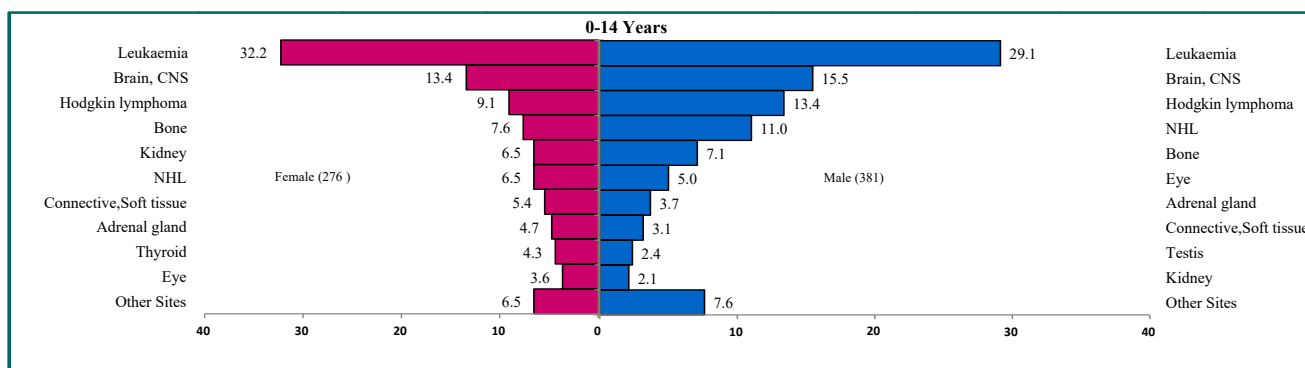




Figure 2.4 : Distributions of most frequent types of cancer among Saudi nationals by gender and age groups, 2016.



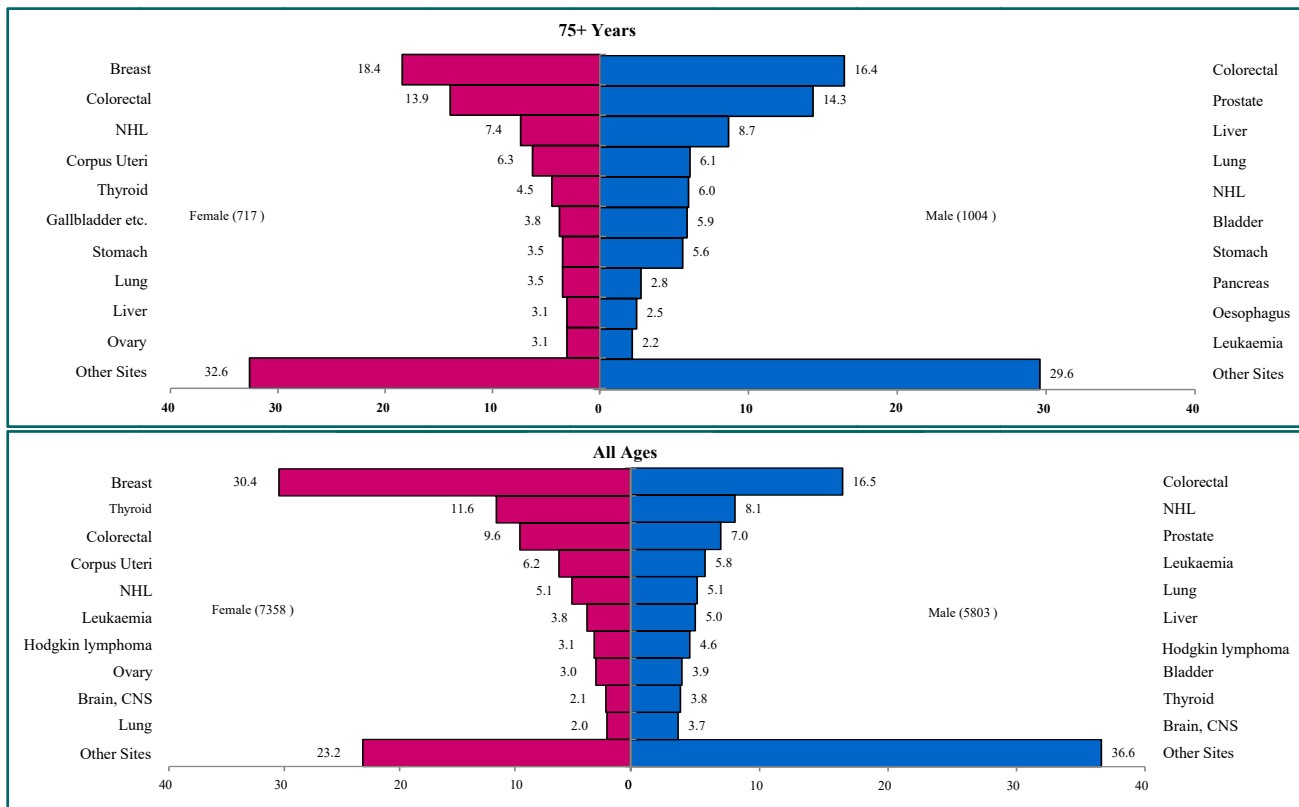


Table 2.4 : Most common cancers among Saudi nationals, 2016.

Sites	No.	%
Breast	2282	17.3
Colorectal	1659	12.6
Thyroid	1076	8.2
NHL	841	6.4
Leukaemia	610	4.6
Hodgkin's lymphoma	495	3.8
Corpus Uteri	454	3.4
Lung	446	3.4
Liver	417	3.2
Prostate	405	3.1

Table 2.5 : Most common cancers among Saudi nationals by sex, 2016.

Male	No	%	Female	No	%
Colorectal	955	16.5	Breast	2240	30.4
NHL	469	8.1	Thyroid	854	11.6
Prostate	405	7.0	Colorectal	704	9.6
Leukaemia	334	5.8	Corpus Uteri	454	6.2
Lung	298	5.1	NHL	372	5.1
Liver	290	5.0	Leukaemia	276	3.8
Hodgkin's lymphoma	265	4.6	Hodgkin's lymphoma	230	3.1
Bladder	299	3.9	Ovary	219	3.0
Thyroid	222	3.8	Brain, CNS	155	2.1
Brain, CNS	212	3.7	Lung	148	2.0

Table 2.6 : Number, percentage, CIR, ASR and Cumulative Rates (per 100,000) among Saudi Nationals by primary cancer site and gender, 2016.

ICD-10	Site	Male						Female					
		No.	%	Crude Rate	ASR World	Cumulative Rate		No.	%	Crude Rate	ASR World	Cumulative Rate	
						0-64	0-74					0-64	0-74
All	All sites Total	5803	100.00%	56.6	74.7	39.95	81.8	7358	100.00%	74.5	91.3	62.75	99.35
Not C44	All sites but C44	5596	96.40%	54.6	72	39.05	79.3	7192	97.70%	72.9	89.2	61.7	97.2
C00	Lip	16	0.30%	0.2	0.2	0.125	0.205	6	0.10%	0.1	0.1	0.025	0.055
C01-C02	Tongue	60	1.00%	0.6	0.8	0.34	1.045	47	0.60%	0.5	0.7	0.435	0.83
C03-C06	Mouth	59	1.00%	0.6	0.8	0.39	0.95	60	0.80%	0.6	0.8	0.46	0.925
C07-C08	Salivary glands	23	0.40%	0.2	0.3	0.135	0.28	30	0.40%	0.3	0.4	0.255	0.33
C09	Tonsil	3	0.10%	0	0	0.03	0.03	2	0.00%	0	0	0.005	0.05
C10	Other Oropharynx	4	0.10%	0	0.1	0.015	0.06	2	0.00%	0	0	0.015	0.015
C11	Nasopharynx	154	2.70%	1.5	1.8	1.425	1.895	59	0.80%	0.6	0.7	0.535	0.745
C12-C13	Hypopharynx	7	0.10%	0.1	0.1	0.035	0.125	14	0.20%	0.1	0.2	0.08	0.2
C14	Pharynx unspec.	2	0.00%	0	0	0.02	0.02	1	0.00%	0	0	0.01	0.01
C15	Oesophagus	78	1.30%	0.8	1.1	0.53	1.055	50	0.70%	0.5	0.7	0.275	0.69
C16	Stomach	207	3.60%	2	2.9	1.26	3.32	111	1.50%	1.1	1.5	0.765	1.615
C17	Small intestine	37	0.60%	0.4	0.5	0.27	0.645	32	0.40%	0.3	0.4	0.27	0.44
C18	Colon	581	10.00%	5.7	7.8	4.595	8.96	447	6.10%	4.5	6.1	4.09	7.13
C19-C20	Rectum	374	6.40%	3.6	5.1	2.945	6.1	257	3.50%	2.6	3.4	2.34	3.685
C21	Anus	24	0.40%	0.2	0.3	0.165	0.37	11	0.10%	0.1	0.2	0.15	0.18
C22	Liver	290	5.00%	2.8	4.2	1.805	4.885	127	1.70%	1.3	1.9	1.005	2.585
C23-C24	Gallbladder etc.	80	1.40%	0.8	1.2	0.555	1.675	113	1.50%	1.1	1.7	0.73	2.305
C25	Pancreas	170	2.90%	1.7	2.5	1.285	3.26	104	1.40%	1.1	1.5	0.71	1.985
C30-C31	Nose, sinuses etc.	18	0.30%	0.2	0.2	0.115	0.345	5	0.10%	0.1	0.1	0.055	0.1
C32	Larynx	69	1.20%	0.7	0.9	0.58	1.175	7	0.10%	0.1	0.1	0.025	0.1
C33-C34	Trachea,Bronchus,Lung	298	5.10%	2.9	4.4	2.13	5.42	148	2.00%	1.5	2	1.185	2.355
C37-C38	Other Thoracic organs	16	0.30%	0.2	0.2	0.135	0.18	10	0.10%	0.1	0.1	0.095	0.17
C40-C41	Bone	93	1.60%	0.9	0.9	0.535	0.71	53	0.70%	0.5	0.5	0.305	0.35
C43	Melanoma of Skin	14	0.20%	0.1	0.2	0.04	0.12	25	0.30%	0.3	0.3	0.125	0.28
C44	Other Skin	207	3.60%	2	2.7	0.955	2.555	166	2.30%	1.7	2.1	1	2.135
C45	Mesothelioma	11	0.20%	0.1	0.2	0.015	0.24	7	0.10%	0.1	0.1	0.085	0.085
C46	Kaposi sarcoma	27	0.50%	0.3	0.4	0.175	0.505	4	0.10%	0	0.1	0.01	0.055
C47;C49	Connective,Soft tissue	89	1.50%	0.9	1	0.57	0.925	70	1.00%	0.7	0.8	0.415	0.645
C50	Breast	42	0.70%	0.4	0.6	0.41	0.59	2240	30.40%	22.7	27.2	21.46	29.67
C51	Vulva	-	-	-	-	-	-	9	0.10%	0.1	0.1	0.1	0.145
C52	Vagina	-	-	-	-	-	-	8	0.10%	0.1	0.1	0.06	0.06
C53	Cervix Uteri	-	-	-	-	-	-	111	1.50%	1.1	1.4	0.83	1.475
C54	Corpus Uteri	-	-	-	-	-	-	454	6.20%	4.6	6.6	4.76	8.475
C55	Uterus unspec.	-	-	-	-	-	-	40	0.50%	0.4	0.5	0.345	0.605
C56	Ovary	-	-	-	-	-	-	219	3.00%	2.2	2.7	1.755	3.075
C57	Other Female Genital	-	-	-	-	-	-	18	0.20%	0.2	0.2	0.17	0.245
C58	Placenta	-	-	-	-	-	-	4	0.10%	0	0	0.02	0.02
C60	Penis	4	0.10%	0	0	0.045	0.045	-	-	-	-	-	-
C61	Prostate	405	7.00%	4	6.3	1.87	7.76	-	-	-	-	-	-
C62	Testis	123	2.10%	1.2	1.1	0.695	0.795	-	-	-	-	-	-
C63	Other male genital	3	0.10%	0	0	0.03	0.065	-	-	-	-	-	-
C64	Kidney	196	3.40%	1.9	2.6	1.635	3.065	138.0	0.0	1.4	1.8	1.16	1.89
C65	Renal Pelvis	7	0.10%	0.1	0.1	0.08	0.08	2.0	0.0	0.0	0.0	0.02	0.065
C66	Ureter	8	0.10%	0.1	0.1	0.03	0.155	0.0	0.0	0.0	0.0	0	0
C67	Bladder	229	3.90%	2.2	3.2	1.725	3.465	59.0	0.0	0.6	0.8	0.39	0.89
C68	Other Urinary organs	7	0.10%	0.1	0.1	0.065	0.1	2	0.00%	0	0	0.035	0.035
C69	Eye	30	0.50%	0.3	0.3	0.17	0.17	16	0.20%	0.2	0.2	0.095	0.14
C70-C72	Brain, Nervous system	212	3.70%	2.1	2.3	1.625	1.965	155	2.10%	1.6	1.8	1.16	1.755
C73	Thyroid	222	3.80%	2.2	2.5	1.7	2.47	854	11.60%	8.7	8.9	7.005	7.985
C74	Adrenal gland	22	0.40%	0.2	0.2	0.14	0.14	19	0.30%	0.2	0.2	0.095	0.095
C75	Other Endocrine	5	0.10%	0	0.1	0.04	0.04	6	0.10%	0.1	0.1	0.035	0.035
C81	Hodgkin disease	265	4.60%	2.6	2.6	1.675	2.135	230	3.10%	2.3	2.3	1.535	1.825
C82-C85;C96	Non-Hodgkin lymphoma	469	8.10%	4.6	5.6	3.195	5.795	372	5.10%	3.8	4.9	3.01	5.435
C88	Immunoproliferative dis.	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
C90	Multiple Myeloma	72	1.20%	0.7	1	0.505	1.165	48	0.70%	0.5	0.6	0.455	0.775
C91	Lymphoid Leukaemia	165	2.80%	1.6	1.8	0.915	1.36	105	1.40%	1.1	1.2	0.635	0.97
C92-C94	Myeloid Leukaemia	142	2.40%	1.4	1.5	1.02	1.42	158	2.10%	1.6	1.7	1.275	1.62
C95	Leukaemia unspec.	27	0.50%	0.3	0.3	0.18	0.305	13	0.20%	0.1	0.1	0.05	0.095
Other	Other & unspecified	137	2.40%	1.3	1.7	1.12	1.76	110	1.50%	1.1	1.5	0.805	1.895



Cancer Incidence among Adults (>14 years), 2016.

Between January and December 2016, the total number of cancer incidence cases reported to the Saudi Cancer registry among adults aged above 14 years was 16,776. Of those, 12,880 cancer cases were among Saudis and 3,703 were among non-Saudis, and unknown nationality was reported in 193 cases. Total of 7,566 (45.1%) cases were males and 9,210 (54.9%) were females with a male to female ratio of 100 to 121, **Table 2.7.1.**

Table 2.7.1 : Distribution of analyzed and non-analyzed adult cancer cases reported to Saudi Cancer Registry by nationality and gender, 2016.

Saudis						Unknown Nationality			Non –Saudis					
Analyzed			Non Analyzed						Analyzed			Non Analyzed		
Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
5409	7077	12486	181	213	394	103	90	193	1799	1768	3567	74	62	136

Table 2.7.2 : Most common cancers among Saudi adults, 2016.

Sites	All	%
Breast	2280	18.3
Colorectal	1653	13.2
Thyroid	1059	8.5
NHL	781	6.3
Corpus Uteri	454	3.6
Lung	445	3.6
Hodgkin's lymphoma	419	3.4
Liver	413	3.3
Leukaemia	410	3.3
Prostate	405	3.2

Table 2.7.3 : Top ten cancers reported among Saudi adults by gender, 2016.

Male	No	%
Colorectal	950	17.6
NHL	427	7.9
Prostate	405	7.5
Lung	297	5.5
Liver	287	5.3
Bladder	227	4.2
Leukaemia	223	4.1
Thyroid	219	4.0
Hodgkin's lymphoma	214	4.0
Stomach	207	3.8

Female	No	%
Breast	2238	31.6
Thyroid	840	11.9
Colorectal	703	9.9
Corpus Uteri	454	6.4
NHL	354	5.0
Ovary	215	3.0
Hodgkin's lymphoma	205	2.9
Leukaemia	187	2.6
Lung	148	2.1
Liver	126	1.8



Childhood cancers reported to Saudi Cancer registry (≤ 14 years) , 2016.

Total of 803 cancer cases were diagnosed among children aged between 0 and 14 years accounted to 4.6% of the total number of cancers reported to Saudi Cancer Registry in 2016. The reported incidents show that cancer was more common among boys than girls, 463 (57.6 %) cases were reported among boys and 340 (42.4%) were reported among girls. Total of 664 cancer cases were reported among Saudi children, 129 were among non-Saudis, and 10 cases were with unknown nationality. The total number of analyzed cases were 786 including 657 Saudis, and 129 non-Saudis. Among Saudi, 381 (58.0 %) were boys and 276 (42.0 %) were girls, **Table 2.8.1**.

Table 2.8.1 : Distribution of reported childhood cancer in Saudi Arabia by nationality and gender, 2016.

Saudis						Unknown Nationality			Non –Saudis					
Analyzed			Non Analyzed						Analyzed			Non Analyzed		
Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
381	276	657	3	4	7	7	3	10	72	57	129	0	0	0

Childhood cancers accounted for 4.9% of all cancer among Saudis. The leading cancer among Saudi children was leukemia (30.4 %), followed by brain tumors (14.6 %), then Hodgkin's lymphoma (11.6 %) and NHL (9.1%), **Table 2.8.2**.

Table 2.8.2 : Top ten Cancers among Saudi children, 2016.

Sites	No	%
Leukaemia	200	30.4
Brain CNS	96	14.6
Hodgkin's lymphoma	76	11.6
NHL	60	9.1
Bone	48	7.3
Eye	29	4.4
Connective, soft tissue	27	4.1
Adrenal,gland	27	4.1
Kidney	26	4.0
Thyroid	15	2.3

Table 2.8.3 : Distribution of top ten cancer sites by genders, 2016.

Male	No	%	Female	No	%
Leukaemia	111	29.1	Leukaemia	89	32.2
Brain, CNS	59	15.5	Brain, CNS	37	13.4
Hodgkin's lymphoma	51	13.4	Hodgkin's lymphoma	25	9.1
NHL	42	11.0	Bone	21	7.6
Bone	27	7.1	Kidney	18	6.5
Eye	19	5.0	NHL	18	6.5
Adrenal gland	14	3.7	Connective, Soft tissue	15	5.4
Connective, Soft tissue	12	3.1	Adrenal gland	13	4.7
Testis	9	2.4	Thyroid	12	4.3
Kidney	8	2.1	Eye	10	3.6



Table 2.8.4 : Distribution of morphological types for the most common cancers reported among Saudi children by gender, 2016.

Primary Site	Code	Morphology	Male	%	Female	%
Leukaemia	98363	Precursor B-cell lymphoblastic leukemia	41	36.9	41	46.1
	98353	Precursor cell lymphoblastic leukemia, NOS	24	21.6	15	16.9
	98613	Acute myeloid leukemia, NOS	11	9.9	14	15.7
	98373	Precursor T-cell lymphoblastic leukemia	8	7.2	2	2.2
	98013	Acute leukemia, NOS	6	5.4	5	5.6
	98663	Acute promyelocytic leukemia,	4	3.6	4	4.5
	98263	Burkitt cell leukemia	4	3.6	1	1.1
	98003	Leukemia, NOS	3	2.7	0	0.0
	98913	Acute monocytic leukemia	2	1.8	2	2.2
	99103	Acute megakaryoblastic leukemia	1	0.9	1	1.1
		Others	7	6.3	4	4.5
	Total	111	100.0	89	100.0	
Brain, CNS	94703	Medulloblastoma, NOS	22	37.3	10	27.0
	94403	Glioblastoma, NOS	7	11.9	6	16.2
	93803	Glioma, malignant	6	10.2	2	5.4
	93913	Ependymoma, NOS	4	6.8	0	0.0
	93923	Ependymoma, anaplastic	3	5.1	2	5.4
	94713	Desmoplastic nodular medulloblastoma	3	5.1	1	2.7
	94003	Astrocytoma, NOS	2	3.4	2	5.4
	94503	Oligodendroglioma, NOS	2	3.4	1	2.7
	94243	Pleomorphic xanthoastrocytoma	1	1.7	2	5.4
	95083	Atypical teratoid/rhabdoid tumor	0	0.0	2	5.4
		Others	9	15.3	9	24.3
	Total	59	100.0	37	100.0	
Hodgkin's lymphoma	96633	Hodgkin lymphoma, nodular sclerosis, NOS	24	47.1	16	64.0
	96523	Hodgkin lymphoma, mixed cellularity, NOS	10	19.6	5	20.0
	96593	Hodgkin lymphoma, nodular lymphocyte predominance	9	17.6	0	0.0
	96503	Hodgkin lymphoma, NOS	6	11.8	3	12.0
	96673	Hodgkin lymphoma, nodular sclerosis, grade 2	1	2.0	0	0.0
	96513	Hodgkin lymphoma, lymphocyte-rich	1	2.0	1	4.0
	Total	51	100.0	25	100.0	



Primary Site	Code	Morphology	Male	%	Female	%
NHL	96873	Burkitt lymphoma, NOS	14	33.3	7	38.9
	97293	Precursor T-cell lymphoblastic lymphoma	6	14.3	1	5.6
	97143	Anaplastic large cell lymphoma, T cell and Null cell type	5	11.9	0	0.0
	97003	Mycosis fungoides	4	9.5	1	5.6
	95913	Malignant lymphoma, non-Hodgkin, NOS	2	4.8	3	16.7
	96803	Malignant lymphoma, large B-cell, diffuse, NOS	2	4.8	3	16.7
	97543	Langerhans cell histiocytosis, disseminated	2	4.8	2	11.1
	97283	Precursor B-cell lymphoblastic lymphoma	2	4.8	1	5.6
	95903	Malignant lymphoma, NOS	2	4.8	0	0.0
	97023	Mature T-cell lymphoma, NOS	1	2.4	0	0.0
		Others	2	4.8	0	0.0
	Total	42	100.0	18	100.0	
Bone	92603	Ewing sarcoma	16	59.3	9	42.9
	91803	Osteosarcoma, NOS	5	18.5	6	28.6
	91813	Chondroblastic osteosarcoma	3	11.1	3	14.3
	92303	Chondroblastoma, malignant	1	3.7	0	0.0
	92313	Myxoid chondrosarcoma	1	3.7	0	0.0
	93703	Chordoma, NOS	1	3.7	0	0.0
	89203	Alveolar rhabdomyosarcoma	0	0.0	1	4.8
	91863	Central osteosarcoma	0	0.0	1	4.8
	92503	Giant cell tumor of bone, malignant	0	0.0	1	4.8
		Total	27	100.0	21	100.0
Eye	95103	Retinoblastoma, NOS	14	73.7	8	80.0
	95133	Retinoblastoma, diffuse	2	10.5	1	10.0
	89003	Rhabdomyosarcoma, NOS	1	5.3	0	0.0
	89103	Embryonal rhabdomyosarcoma, NOS	1	5.3	0	0.0
	89203	Alveolar rhabdomyosarcoma	1	5.3	0	0.0
	80713	Squamous cell carcinoma, keratinizing, NOS	0	0.0	1	10.0
		Total	19	100.0	10	100.0
Connective,Soft tissue	89003	Rhabdomyosarcoma, NOS	2	16.7	2	13.3
	90403	Synovial sarcoma, NOS	2	16.7	0	0.0
	89103	Embryonal rhabdomyosarcoma, NOS	1	8.3	2	13.3
	88063	Desmoplastic small round cell tumor	1	8.3	1	6.7
	89023	Mixed type rhabdomyosarcoma	1	8.3	1	6.7
	89203	Alveolar rhabdomyosarcoma	1	8.3	1	6.7
	88003	Sarcoma, NOS	1	8.3	0	0.0
	88013	Spindle cell sarcoma	1	8.3	0	0.0
	90803	Teratoma, malignant, NOS	0	0.0	2	13.3
	95003	Neuroblastoma, NOS	0	0.0	2	13.3
		Others	2	16.7	4	26.7
		Total	12	100.0	15	100.0



Primary Site	Code	Morphology	Male	%	Female	%
Adrenal gland	95003	Neuroblastoma, NOS	12	85.7	12	92.3
	94903	Ganglioneuroblastoma	2	14.3	0	0.0
	80103	Carcinoma, NOS	0	0.0	1	7.7
		Total	14	100.0	13	100.0
Kidney	89603	Nephroblastoma, NOS	7	87.5	18	100.0
	83123	Renal cell carcinoma, NOS	1	12.5	0	0.0
		Total	8	100.0	18	100.0
Thyroid	82603	Papillary adeno carcinoma, NOS	2	66.7	6	50.0
	83433	Papillary carcinoma, encapsulated	1	33.3	0	0.0
	83403	Papillary carcinoma, follicular variant	0	0.0	3	25.0
	85103	Medullary carcinoma, NOS	0	0.0	2	16.7
	80103	Carcinoma, NOS	0	0.0	1	8.3
		Total	3	100.0	12	100.0



International Comparison of Age-Standardized Incidence Rates.

Figure 2.6.1 : Comparison of ASR* for Saudi males with selected countries**

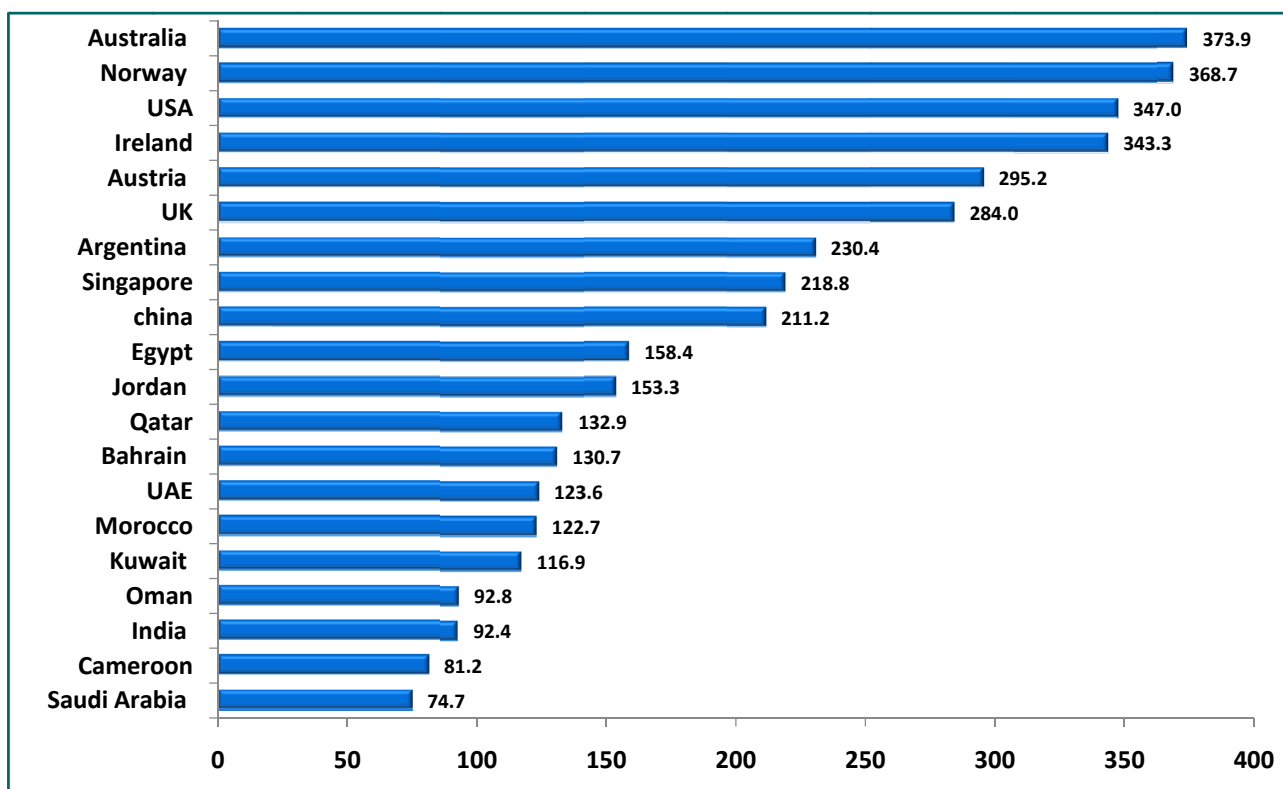
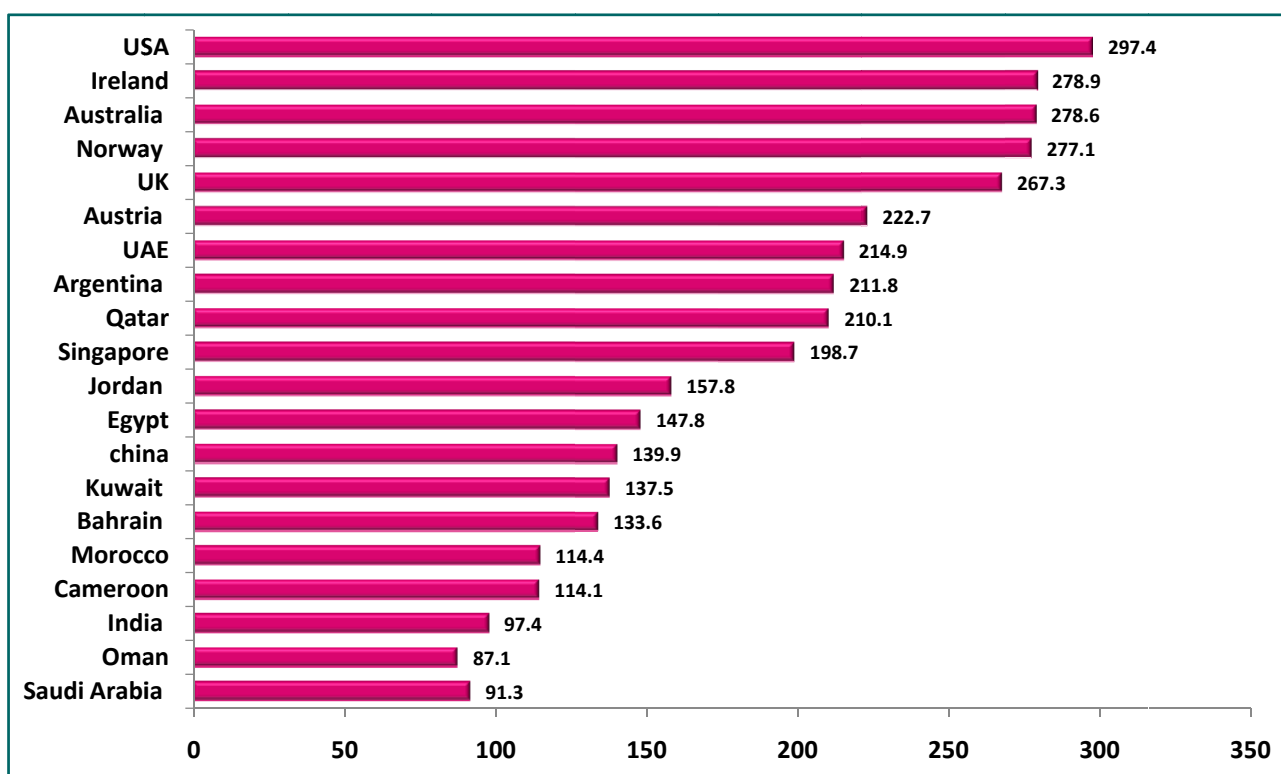
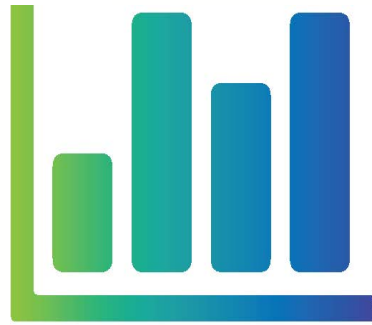


Figure 2.6.2 : Comparison of ASR* for Saudi females with selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.



PART III

INCIDENCE OF MOST COMMON CANCERS DIAGNOSED AMONG SAUDI NATIONALS,2016



Cancer Incidence for Most Common Sites among Saudi Nationals, 2016.

This section demonstrates the most common cancers diagnosed among Saudi nationals during the period between January and December 2016. It shows the distribution of the most common cancers by gender and geographical area. Data presented as absolute numbers, relative frequency, and incidence rates. It also presents comparisons of cancer incidence among Saudis with cancer incidence reported from selected developed and developing countries.

Table 3.1 : Most common cancer among Saudis by gender, 2016.

Site	Male	Female	All	%
Breast	42	2240	2282	17.3
Colorectal	955	704	1659	12.6
Thyroid	222	854	1076	8.2
NHL	469	372	841	6.4
Leukaemia	334	276	610	4.6
Hodgkin's lymphoma	265	230	495	3.8
Corpus Uteri	0	454	454	3.4
Lung	298	148	446	3.4
Liver	290	127	417	3.2
Prostate	405	0	405	3.1



Female Breast Cancer (C50).

Breast cancer was ranked First among females, between January and December 2016, there were 2,240 female breast cancer cases. Breast cancer accounted to 17.3% from all cancers reported among Saudi nationals, and 30.4% from all cancers reported among females at all ages. The ASR was 27.2/100,000 for Saudi female population. The median age at diagnosis was 50 years (ranged between 17 and 103 years).

Figure 3.1.1 : Age-Specific Incidence Rate (AIR) for breast cancer among Saudi females, 2016.

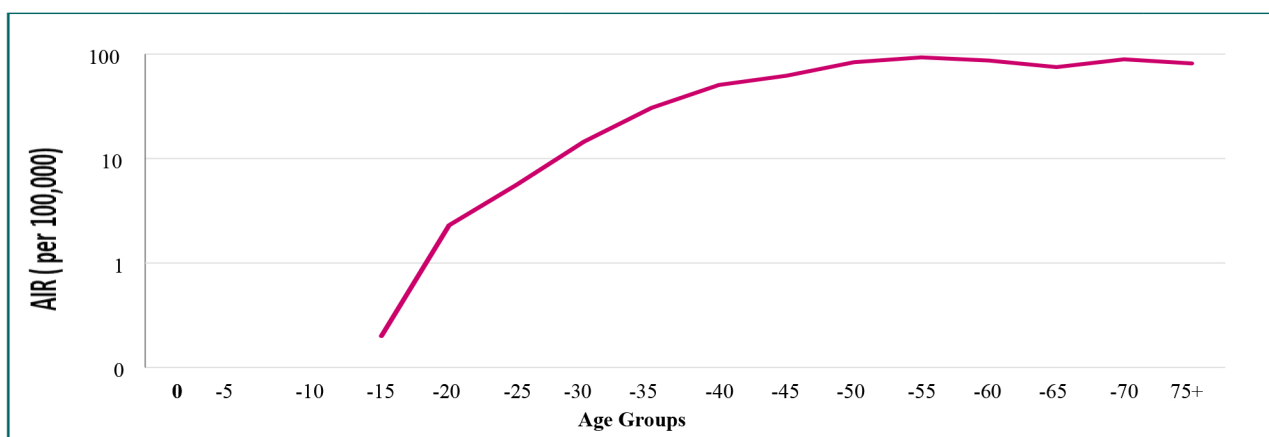


Table 3.1.1 : Morphological distribution of breast cancer among Saudi females, 2016.

ICD-O-3	Morphology	NO.	%
85003	Infiltrating duct carcinoma, NOS	1745	77.9
85203	Lobular carcinoma, NOS	139	6.2
85223	Infiltrating duct and lobular carcinoma	85	3.8
80103	Carcinoma, NOS	48	2.1
85233	Infiltrating duct mixed with other types of carcinoma	38	1.7
80003	Neoplasm, malignant	27	1.2
84803	Mucinous adenocarcinoma	22	1.0
85753	Metaplastic carcinoma, NOS	21	0.9
85103	Medullary carcinoma, NOS	20	0.9
90203	Phyllodes tumor, malignant	13	0.6
	Others	82	3.7
Total		2240	100.0

Figure 3.1.2 : Stage distribution of breast cancer among Saudi females, 2016.

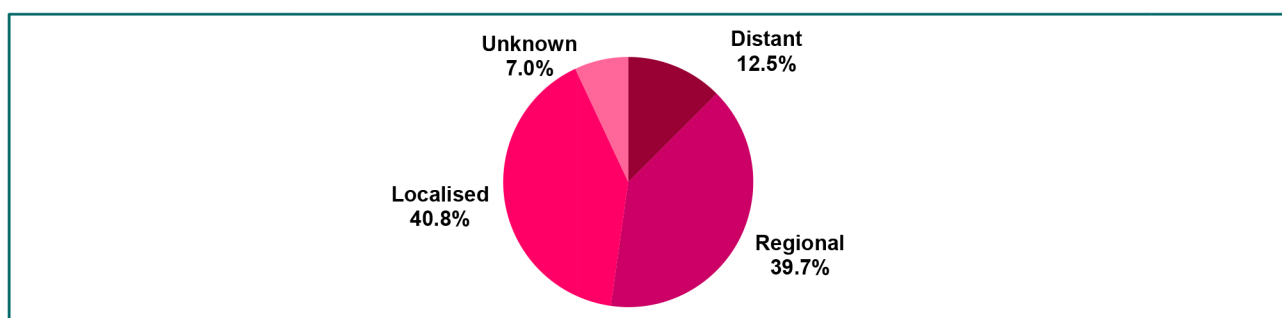
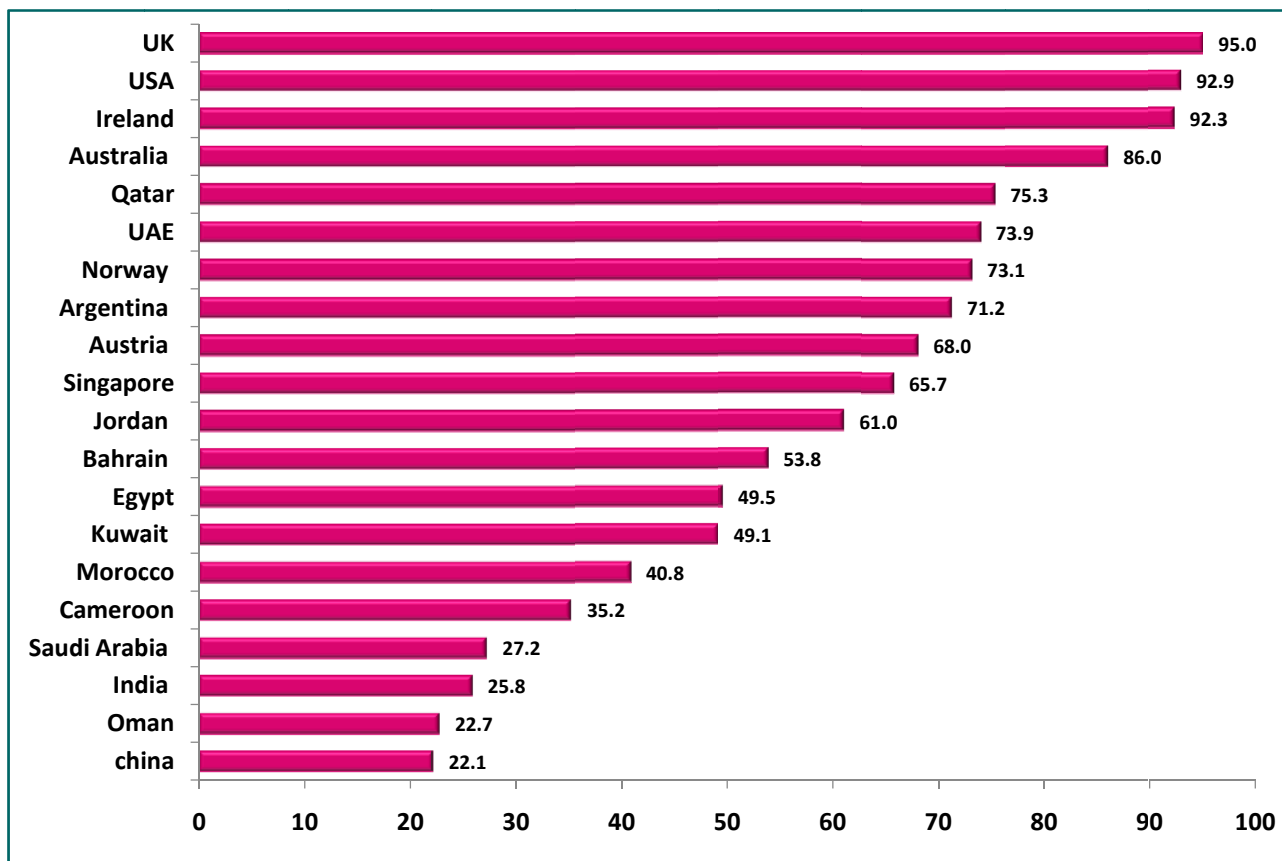




Figure 3.1.4 : Comparison of ASR* for Saudi females breast cancer with selected countries.



*ASR per 100,000

** Source for this information is summarized on page 54.



Colorectal cancer (C18-C20).

There were 1,659 cases of colorectal cancer accounting for 12.6% of all newly diagnosed cases in year 2016 among Saudi nationals. Colorectal cancer was ranked first among males and third among females. It affected 955 (57.6%) males and 704 (42.4%) females with a male to female ratio of 136:100. The ASR was 12.9/100,000 for males and 9.5/100,000 for females.

The median age at diagnosis was 59 years in males (range between 20 and 96 years) and 57 years in females (ranged between 14 and 95 years).

Figure 3.2.1 : Age-Specific Incidence Rate (AIR) for colorectal cancer among Saudi nationals, 2016.

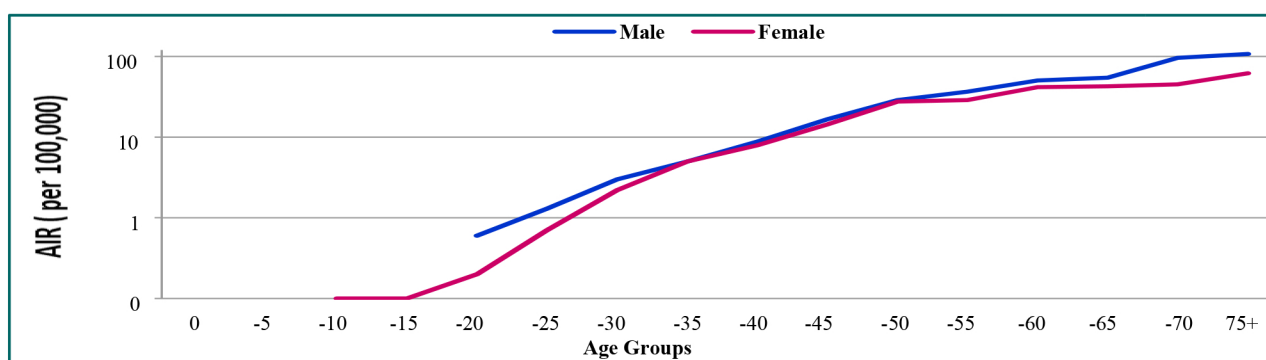


Table 3.2.1 : Morphological distribution of colorectal cancer among Saudi nationals, 2016.

Code	Morphology	Male	%	Female	%
81403	Adenocarcinoma, NOS	748	78.3	577	82.0
84803	Mucinous adenocarcinoma	61	6.4	44	6.3
84903	Signet ring cell carcinoma	27	2.8	12	1.7
82633	Adenocarcinoma in tubulovillous adenoma	25	2.6	23	3.3
82613	Adenocarcinoma in villous adenoma	18	1.9	9	1.3
80103	Carcinoma, NOS	13	1.4	8	1.1
80003	Neoplasm, malignant	11	1.2	7	1.0
81443	Adenocarcinoma, intestinal type	11	1.2	5	0.7
82463	Neuroendocrine carcinoma, NOS	9	0.9	4	0.6
82103	Adenocarcinoma in adenomatous polyp	6	0.6	6	0.9
	Others	26	2.7	9	1.3
Total		955	100	704	100

Figure 3.2.2 : Stage distribution of colorectal cancer among Saudi nationals, 2016.

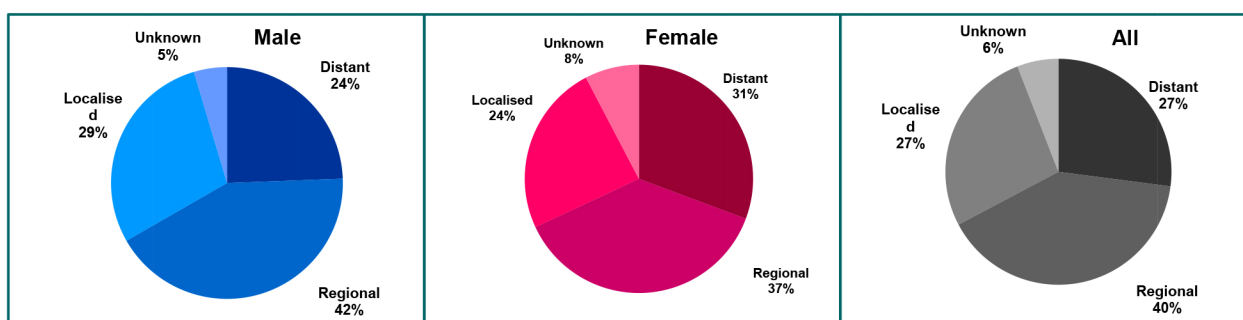
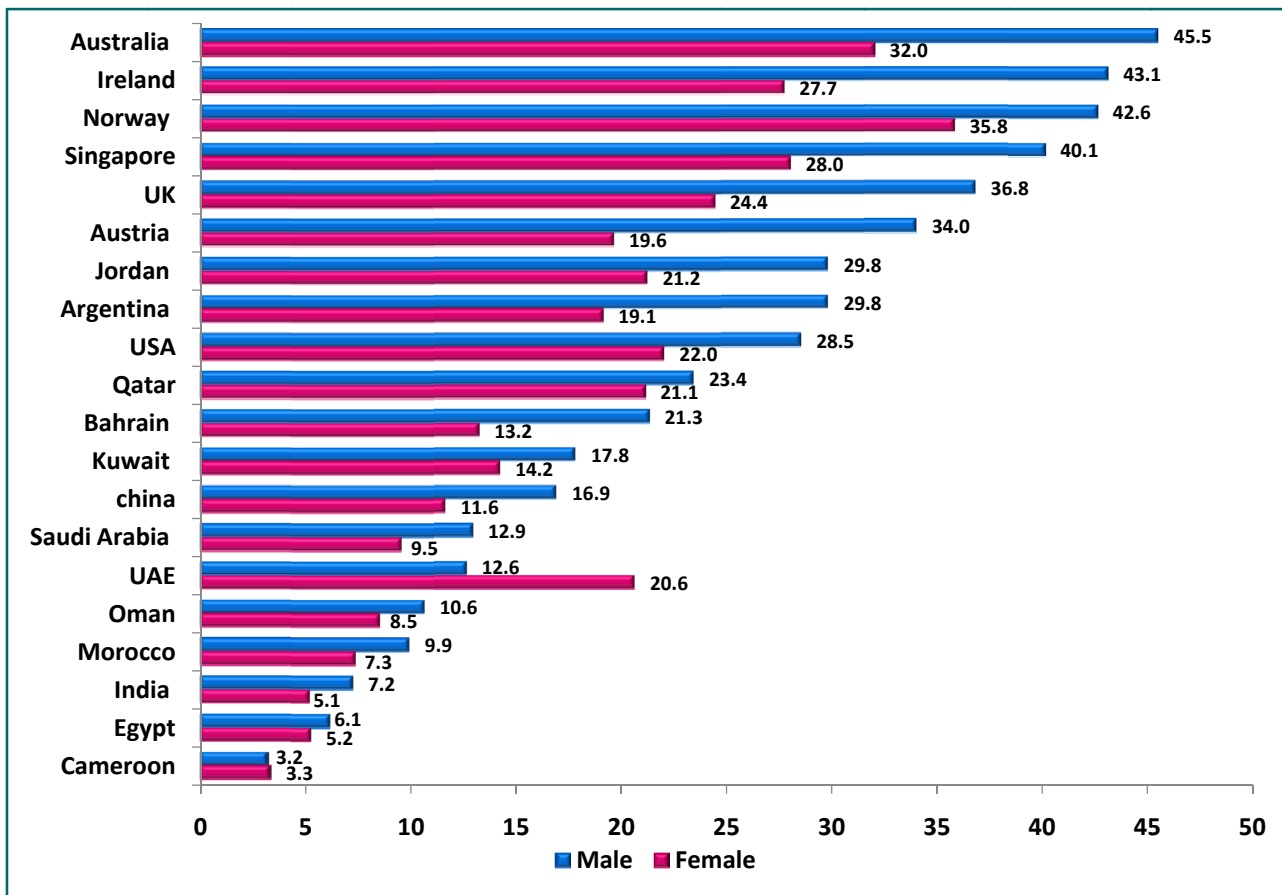




Figure 3.2.4 : Comparison of ASR* for colorectal cancer among Saudis with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.



Thyroid cancer (C73).

Thyroid cancer was ranked second among Saudi females and ninth among Saudi males. There were 1076 thyroid cancer cases accounting to 8.2% from all newly diagnosed cancers in 2016 among Saudi nationals. Thyroid cancer affected 854 (79.4%) females and 222 (20.6%) males, with a female to male ratio of 385:100. The ASR was 8.9/100,000 for females and 2.5/100,000 for males. The median age at diagnosis was 41 years in females (ranged between 3 and 93 years) and 48 years in males (ranged between 9 and 92 years).

Figure 3.3.1 : Age-Specific Incidence Rate (AIR) for thyroid cancer among Saudi nationals, 2016.

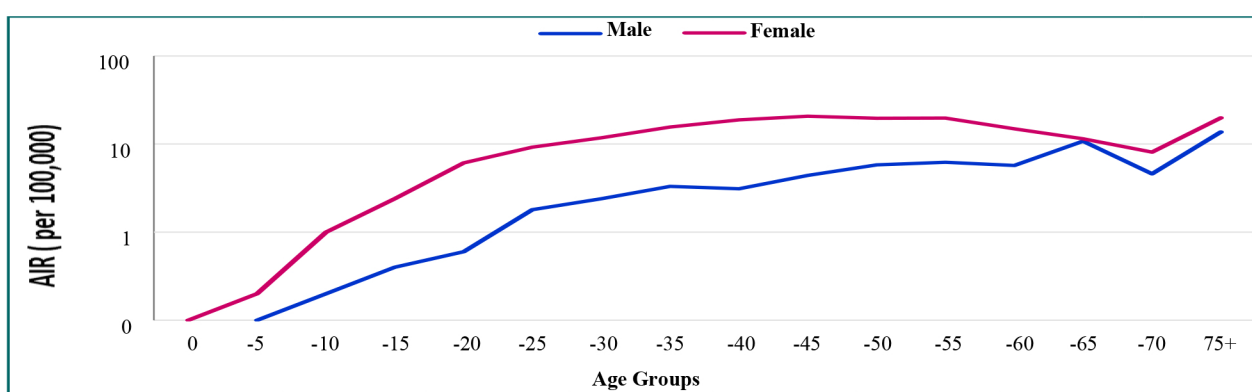


Table 3.3.1 : Morphological distribution of thyroid cancer among Saudi nationals, 2016.

Code	Morphology	Male	%	Female	%
82603	Papillary adenocarcinoma, NOS	125	56.3	438	51.3
83403	Papillary carcinoma, follicular variant	29	13.1	132	15.5
83413	Papillary microcarcinoma	18	8.1	116	13.6
83433	Papillary carcinoma, encapsulated	7	3.2	26	3.0
80503	Papillary carcinoma, NOS	4	1.8	24	2.8
83353	Follicular carcinoma, minimally invasive	5	2.3	22	2.6
83303	Follicular adenocarcinoma, NOS	6	2.7	19	2.2
85103	Medullary carcinoma, NOS	6	2.7	18	2.1
83443	Papillary carcinoma, columnar cell	10	4.5	18	2.1
82903	Oxyphilic adenocarcinoma	3	1.4	16	1.9
	Others	9	4.1	25	2.9
Total		222	100.0	854	100.0

Figure 3.3.2 : Stage distribution of thyroid cancer among Saudi nationals, 2016.

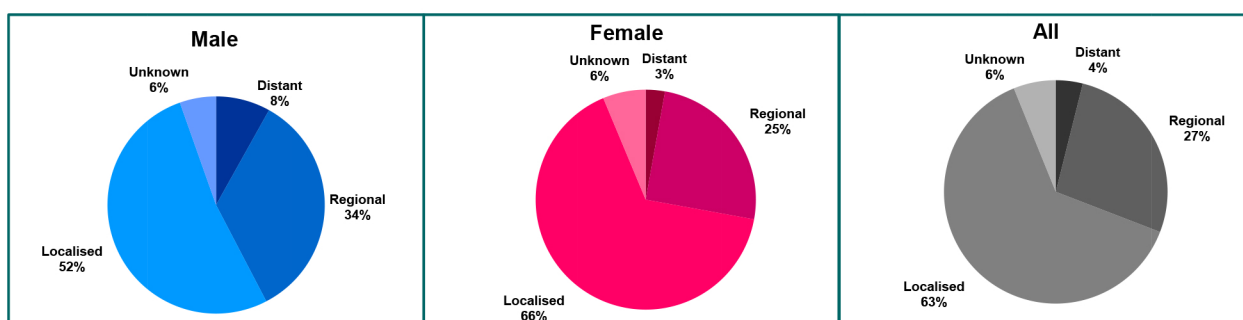
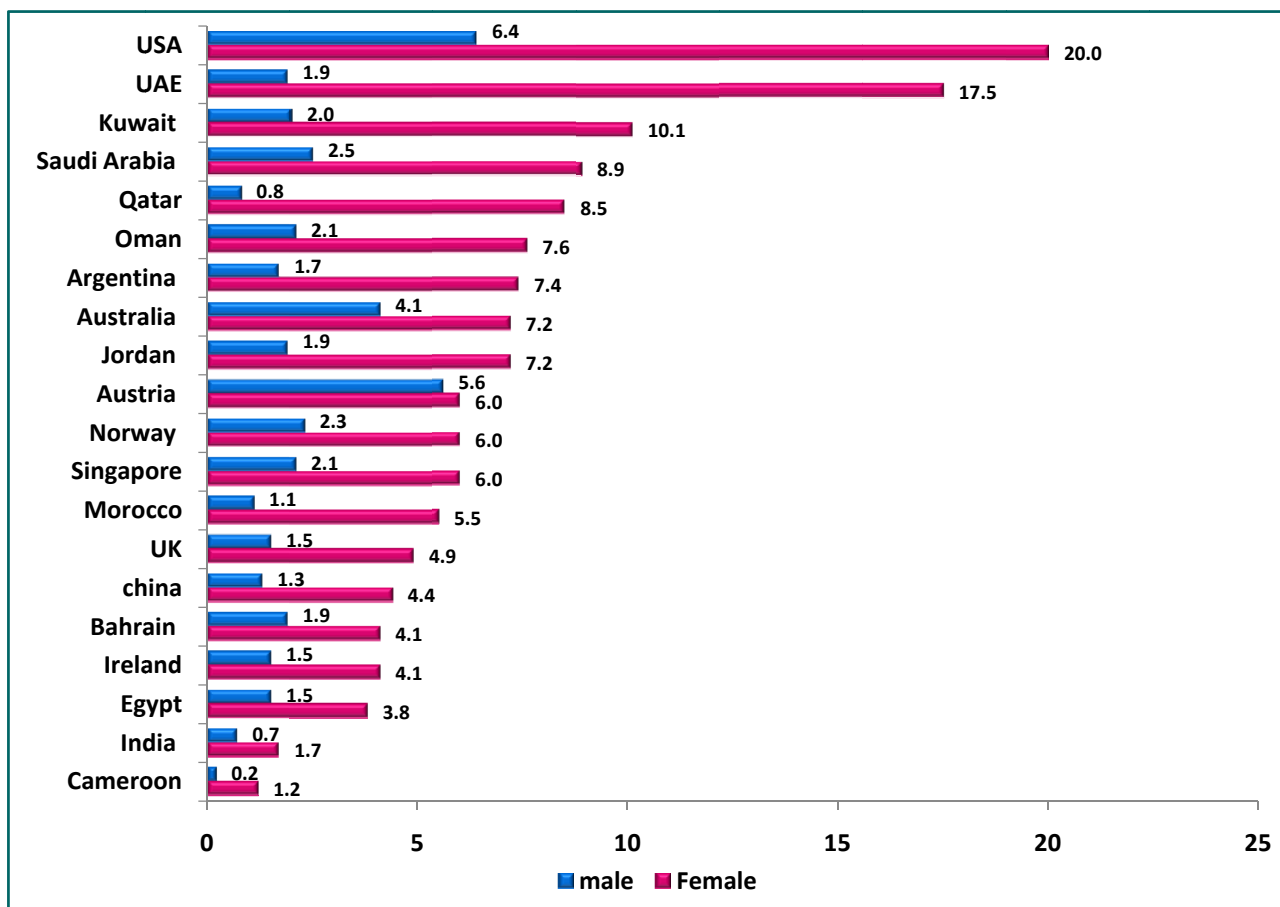




Figure 3.3.4 : Comparison of ASR* for thyroid cancer among Saudis with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.



Non-Hodgkin Lymphoma (C82-C85; C96).

Non-Hodgkin Lymphoma (NHL) was ranked second among males and fifth among females. There were 841 cases accounted to 6.4% from all cancers diagnosed among Saudi nationals in 2016. NHL affected 469 (55.8%) males, and 372 (44.2%) females, with a male to female ratio of 126:100. The ASR was 5.6/100,000 for males and 4.9/100,000 for females.

The median age at diagnosis was 50 years in males (ranged between 1 and 105 years) and 57 years in females (ranged between 1 and 115 years).

Figure 3.4.1 : Age-Specific Incidence Rate (AIR) for NHL among Saudi nationals, 2016.

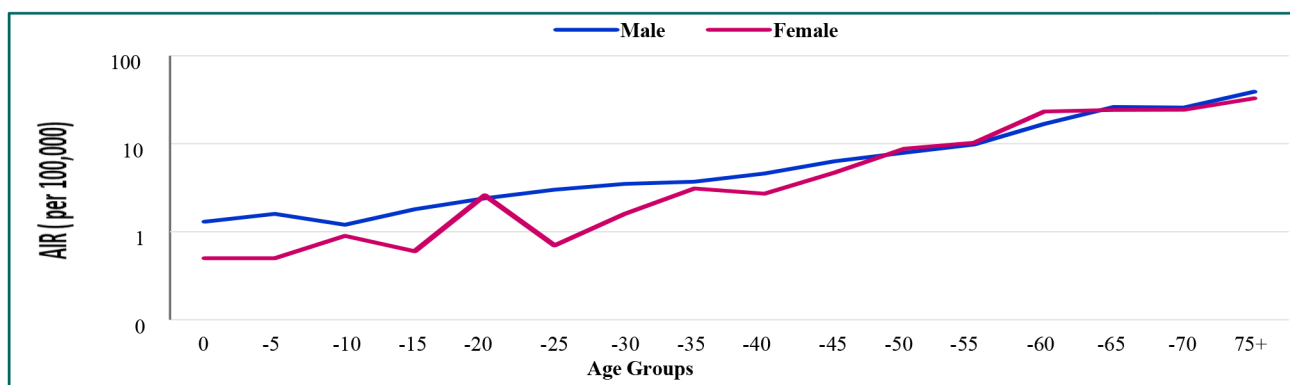


Table 3.4.1 : Morphological distribution of NHL among Saudi nationals, 2016.

Code	Morphology	Male	%	Female	%
96803	Malignant lymphoma, large B-cell, diffuse, NOS	236	50.3	211	56.7
96873	Burkitt lymphoma, NOS	31	6.6	8	2.2
95913	Malignant lymphoma, non-Hodgkin, NOS	23	4.9	26	7.0
97003	Mycosis fungoides	20	4.3	20	5.4
97143	Anaplastic large cell lymphoma, T cell and Null cell type	19	4.1	3	0.8
96913	Follicular lymphoma, grade 2	19	4.1	10	2.7
96983	Follicular lymphoma, grade 3	13	2.8	7	1.9
95903	Malignant lymphoma, NOS	12	2.6	14	3.8
96993	Marginal zone B-cell lymphoma, NOS	11	2.3	16	4.3
96903	Follicular lymphoma, NOS	10	2.1	7	1.9
	Others	75	16.0	50	13.4
Total		469	100.0	372	100.0

Figure 3.4.2 : Stage distribution of NHL among Saudi nationals, 2016.

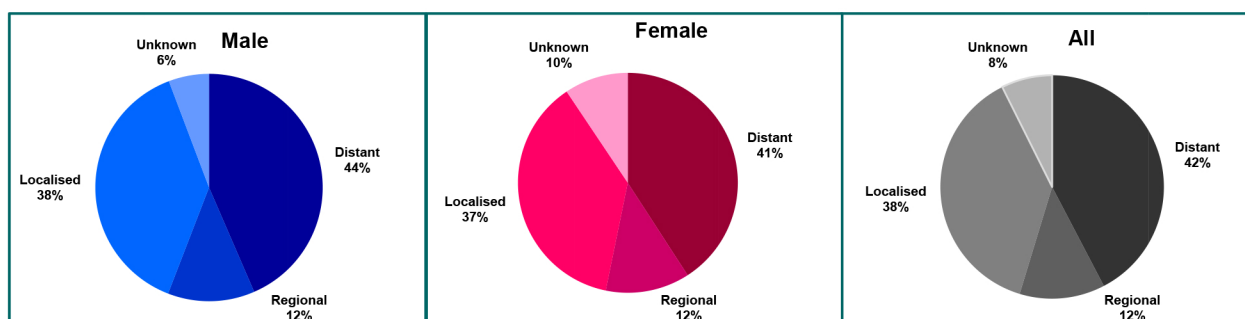
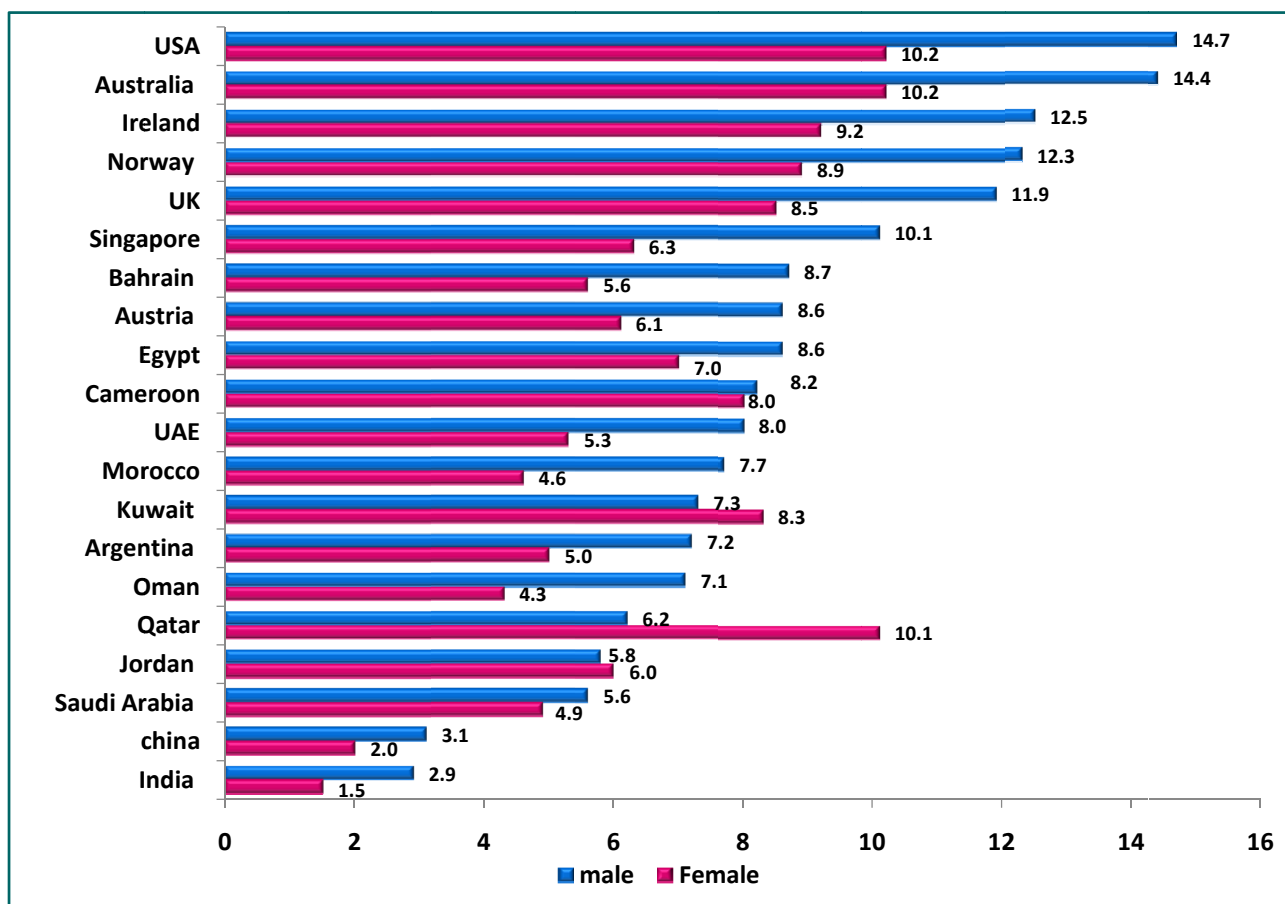




Figure 3.4.4 : Comparison of ASR* for NHL among Saudis with selected countries*



*ASR per 100,000

** Source for this information is summarized on page 54.



Leukaemia (C91-C95).

Leukaemia was ranked third among males and the sixth among females, there were 610 cases accounted to 4.6% of all cancer cases diagnosed among Saudi nationals in 2016. Leukaemia affected 334 (54.8%) males and 276 (45.2%) females with a male to female ratio of 121:100. The ASR was 3.6/100,000 for males and 3.0/100,000 for females. The median age at diagnosis was 27 years in males (ranged between 0 and 98 years) and 31 years in females (ranged between 1 and 87 years).

Figure 3.5.1 : Age-Specific Incidence Rate (AIR) for leukaemia among Saudi nationals, 2016.

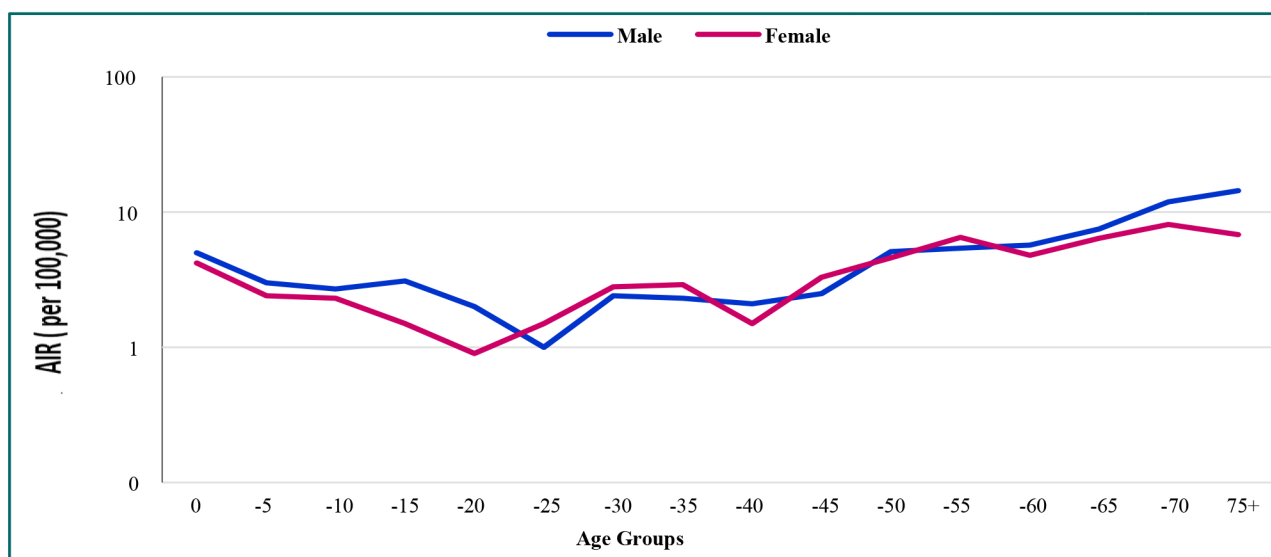
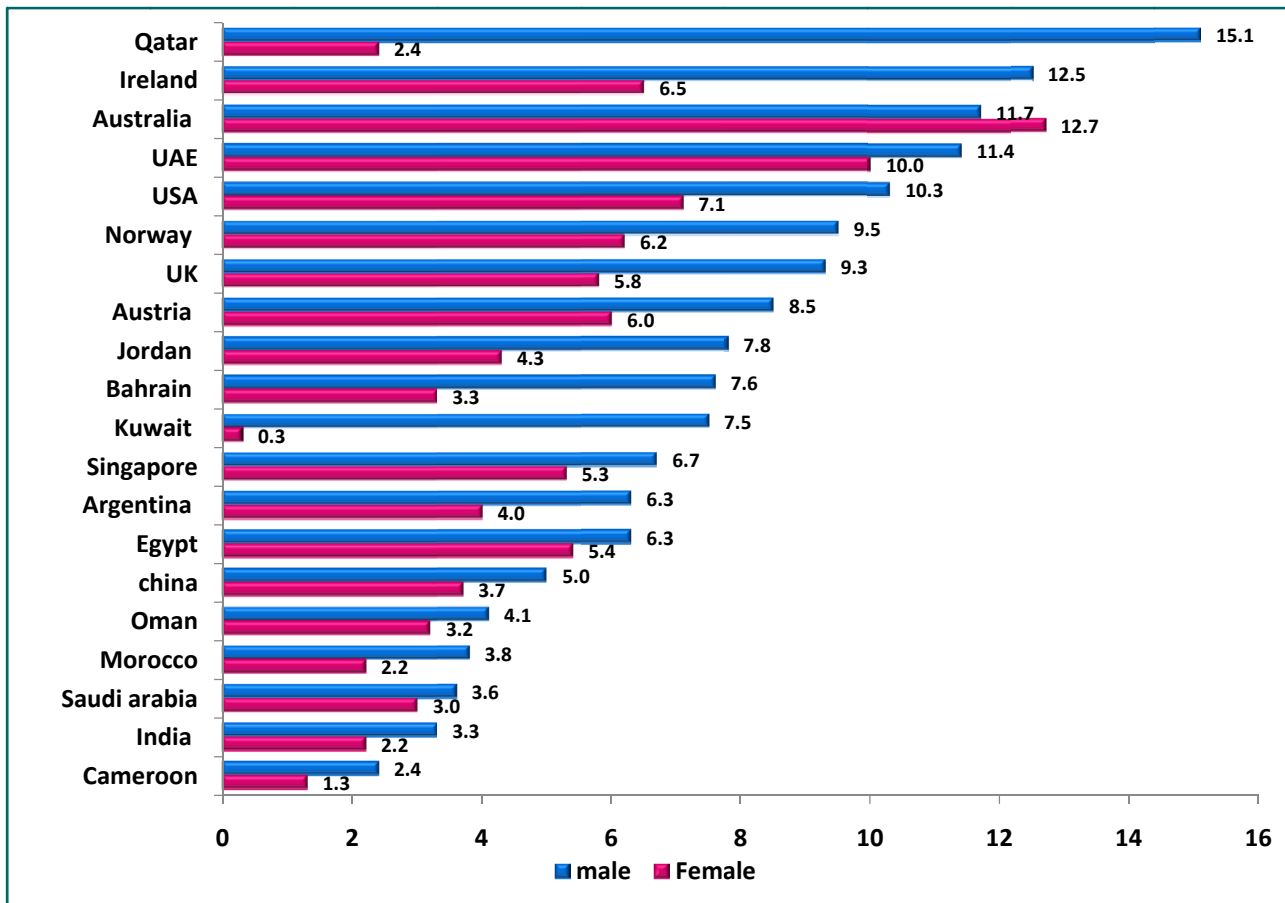


Table 3.5.1 : Morphological distribution of leukaemia among Saudi nationals, 2016.

Code	Morphology	Male	%	Female	%
98363	Precursor B-cell lymphoblastic leukemia	62	18.6	52	18.8
98613	Acute myeloid leukemia, NOS	57	17.1	70	25.4
98353	Precursor cell lymphoblastic leukemia, NOS	40	12.0	21	7.6
98233	B-cell chronic lymphocytic leukemia/small lymphocytic lymphom	37	11.1	20	7.2
98633	Chronic myeloid leukemia, NOS	37	11.1	49	17.8
98663	Acute promyelocytic leukemia, t(15;17) (q22;q11-12)	16	4.8	11	4.0
98013	Acute leukemia, NOS	14	4.2	9	3.3
98003	Leukemia, NOS	13	3.9	3	1.1
98373	Precursor T-cell lymphoblastic leukemia	11	3.3	5	1.8
99403	Hairy cell leukemia	7	2.1	2	0.7
	Others	40	12.0	34	12.3
Total		334	100.0	276	100.0



Figure 3.5.3 : Comparison of ASR* for leukaemia among Saudis with ASR in selected countries**



* ASR per 100,000

** Source for this information is summarized on page 54.



Hodgkin's Lymphoma (C 81).

Hodgkin's lymphoma was ranked the seventh among Saudi males and Saudi females. There were 495 cases of Hodgkin's lymphoma accounted to 3.8% of all cancer cases diagnosed among Saudi nationals in 2016. Hodgkin's Lymphoma affected 265 (53.5%) males and 230 (46.5%) females, with a ration of male to female of 115:100. The ASR was 2.6/100,000 for males and 2.3/100,000 for females. The median age at diagnosis was 28 years (ranged between 3 and 88 years) in males and 25 years (ranged between 4 and 90) in females.

Figure 3.6.1 : Age-Specific Incidence Rate (AIR) for Hodgkin's lymphoma among Saudi nationals, 2016.

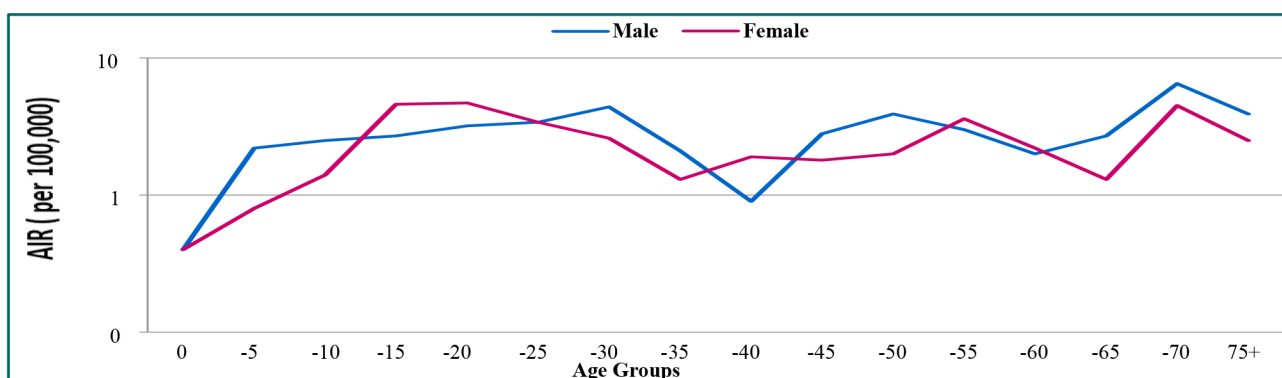


Table 3.6.1 : Morphological distribution of Hodgkin's lymphoma among Saudi nationals, 2016.

Code	Morphology	Male	%	Female	%
96633	Hodgkin lymphoma, nodular sclerosis, NOS	123	46.4	129	56.1
96503	Hodgkin lymphoma, NOS	42	15.8	48	20.9
'96593	Hodgkin lymphoma, nodular lymphocyte predominance	40	15.1	5	2.2
96523	Hodgkin lymphoma, mixed cellularity, NOS	38	14.3	33	14.3
96513	Hodgkin lymphoma, lymphocyte-rich	14	5.3	9	3.9
96673	Hodgkin lymphoma, nodular sclerosis, grade 2	3	1.1	4	1.7
96533	Hodgkin lymphoma, lymphocyte depletion, NOS	2	0.8	2	0.9
96653	Hodgkin lymphoma, nodular sclerosis, grade 1	2	0.8	0	0.0
96643	Hodgkin lymphoma, nodular sclerosis, cellular phase	1	0.4	0	0.0
Total		265	100.0	230	100.0

Figure 3.6.2 : Stage distribution of Hodgkin's lymphoma among Saudi nationals, 2016.

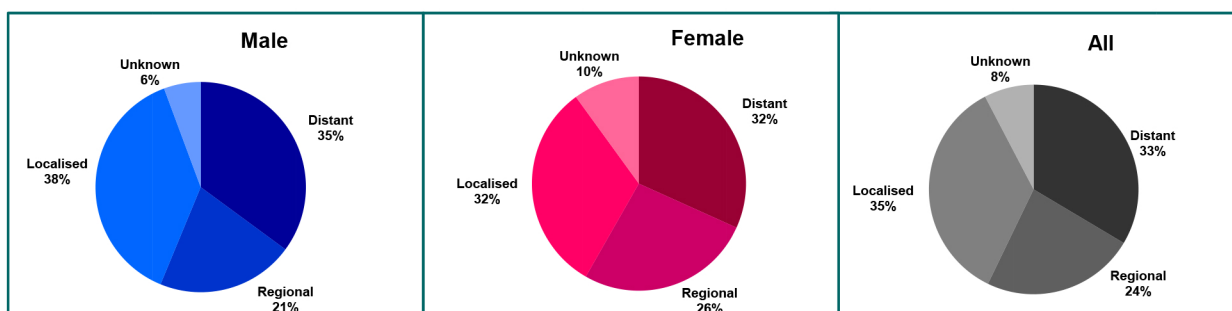
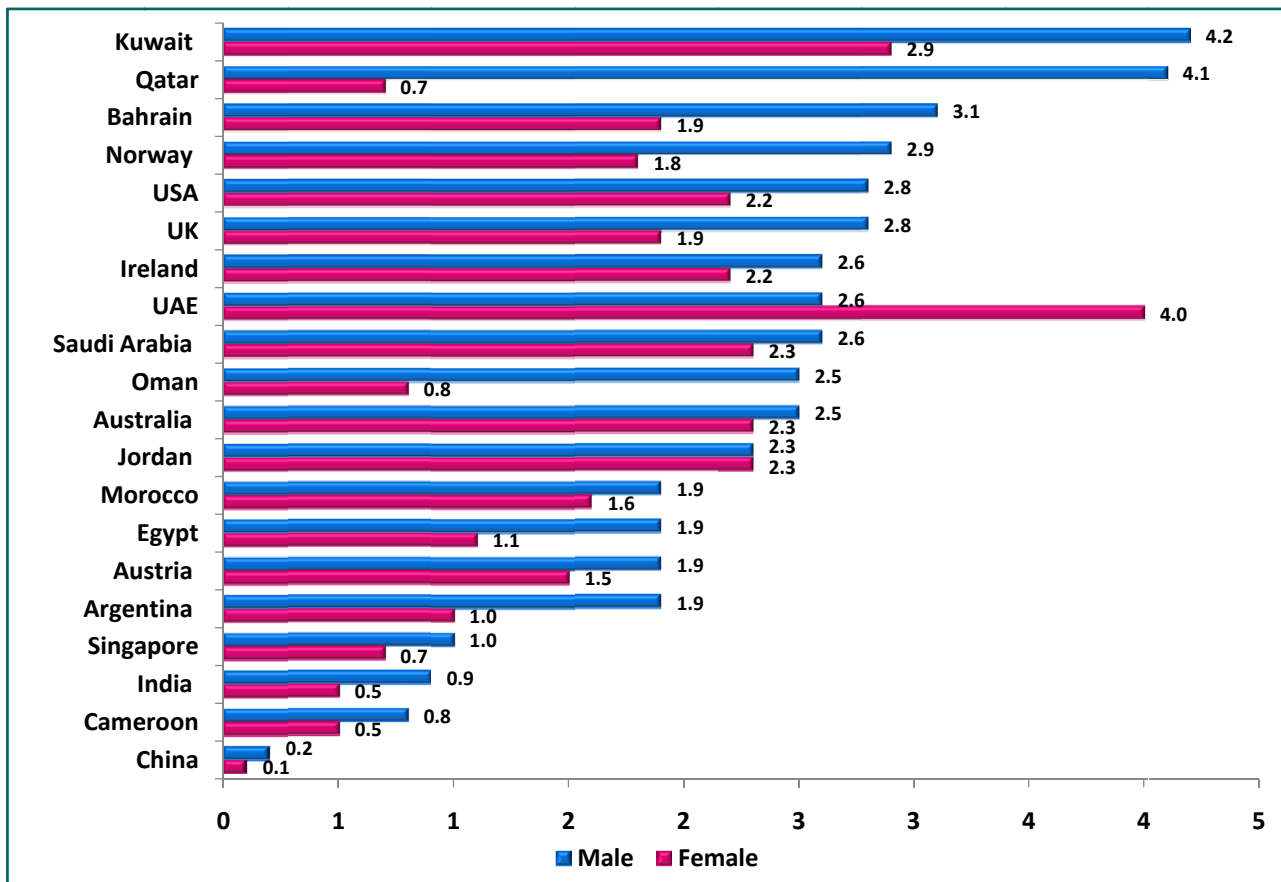




Figure 3.6.4 : Comparison of ASR* for Hodgkin’s lymphoma among Saudis with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.



Corpus Uteri Cancer (C54).

Corpus Uteri cancer was ranked fourth among Saudi females with 454 cases accounted to 6.2 % of all cancer cases diagnosed among Saudi females in 2016. The ASR was 6.6/100,000 for Saudi female population. The median age at diagnosis was 60 years (ranged between 18 and 96 years).

Figure 3.7.1 : Age-Specific Incidence Rate (AIR) for corpus uteri cancer among Saudi females, 2016.

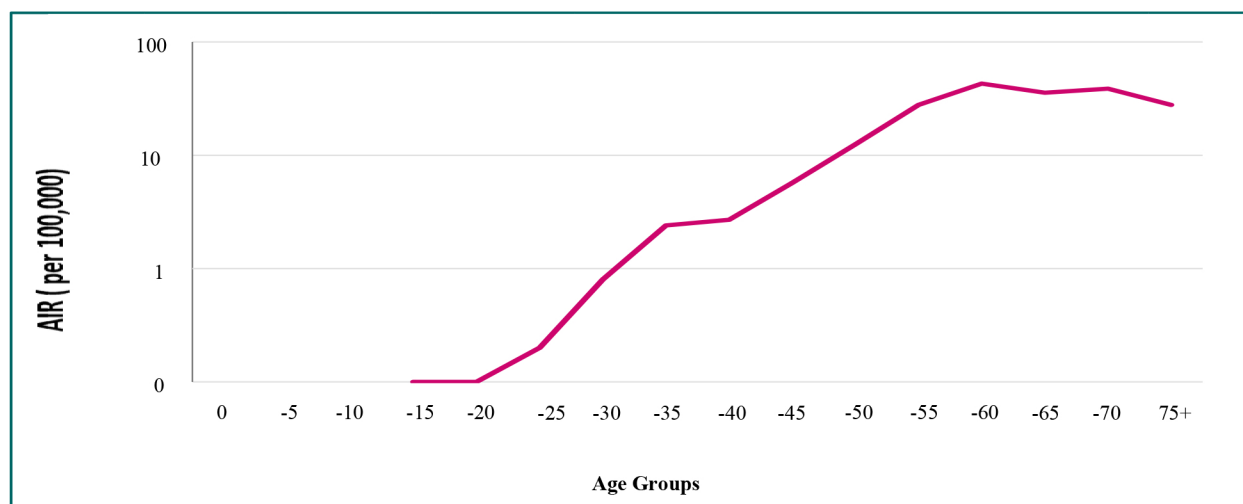


Table 3.7.1 : Morphological distribution of corpus uteri cancer among Saudi females, 2016.

Code	Morphology	No	%
83803	Endometrioid adenocarcinoma NOS	299	65.9
81403	Adenocarcinoma, NOS	44	9.7
84413	Serous cystadenocarcinoma NOS	23	5.1
80103	Carcinoma, NOS	13	2.9
89503	Mullerian mixed tumor	10	2.2
89313	Endometrial stromal sarcoma low grade	9	2.0
89803	Carcinosarcoma NOS	7	1.5
88903	Leiomyosarcoma, NOS	7	1.5
84613	Serous surface papillary carcinoma	6	1.3
80003	Neoplasm, malignant	5	1.1
	Other	31	6.8
Total		454	100.0

Figure 3.7.2 : Stage distribution of corpus uteri cancer among Saudi females, 2016.

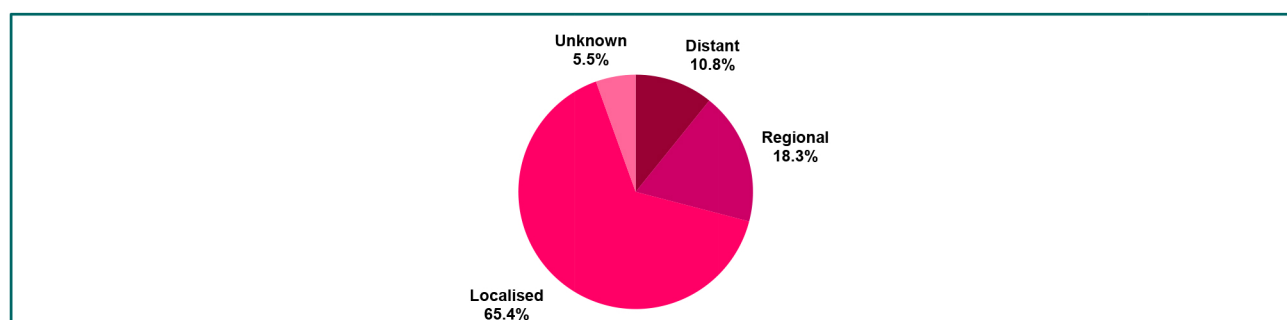
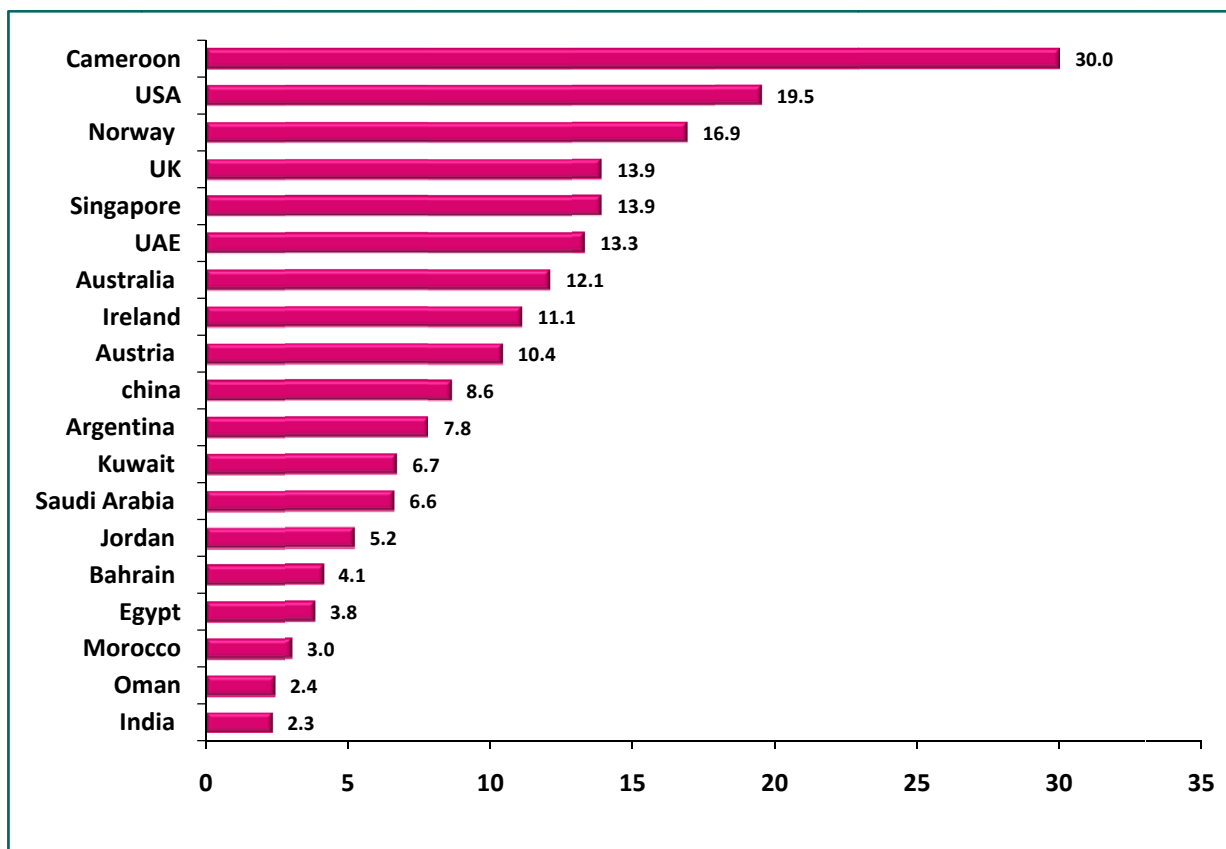




Figure 3.7.4 : Comparison of ASR* for corpus uteri cancer among Saudi females with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.



Lung Cancer (C33 - C34)

Lung cancer was ranked fifth among Saudi males and tenth among Saudi females. There were 446 cases of lung cancer accounted to 3.4 % of all newly diagnosed cases among Saudis in 2016. Lung cancer affected 298 (66.8%) males and 148 (33.2%) females with a male to female ratio of 201:100. The ASR was 4.4/100,000 for males and 2.0 /100,000 for females. The median age at diagnosis was 64 years in males (ranged between 22 and 94 years) and 59 years in females (ranged between 20 and 94 years).

Figure 3.8.1 : Age-Specific Incidence Rate (AIR) for lung cancer among Saudi nationals, 2016.

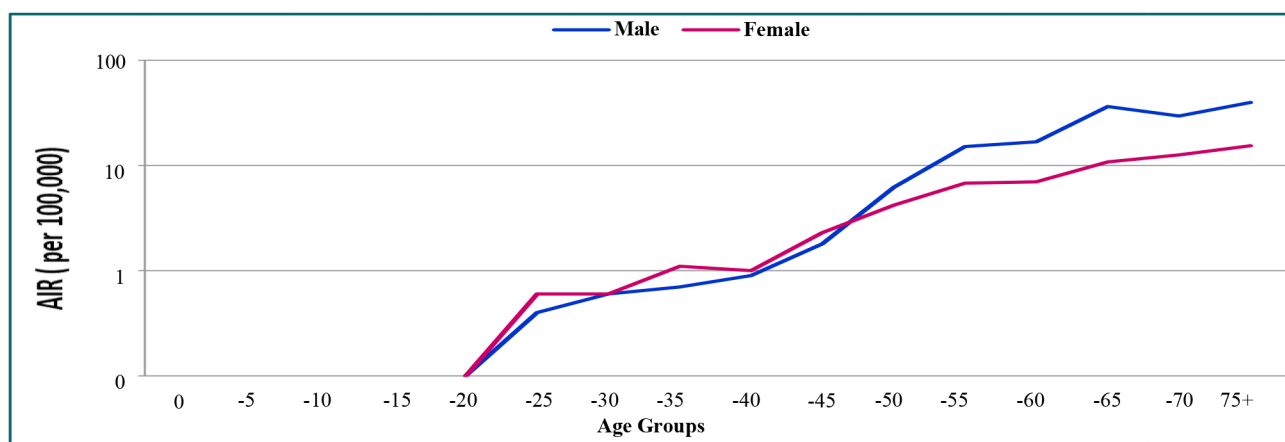


Table 3.8.1 : Morphological distribution of lung cancer among Saudi nationals, 2016.

Code	Morphology	Male	%	Female	%
81403	Adenocarcinoma, NOS	98	32.9	67	45.3
80703	Squamous cell carcinoma, NOS	51	17.1	11	7.4
80413	Small cell carcinoma, NOS	33	11.1	5	3.4
80463	Non-small cell carcinoma	25	8.4	7	4.7
80003	Neoplasm, malignant	15	5.0	14	9.5
80103	Carcinoma, NOS	14	4.7	10	6.8
85503	Acinar cell carcinoma	8	2.7	3	2.0
80723	Squamous cell carcinoma, large cell, nonkeratinizing, NOS	7	2.3	1	0.7
84803	Mucinous adenocarcinoma	6	2.0	3	2.0
85603	Adenosquamous carcinoma	5	1.7	2	1.4
	Others	36	12.1	25	16.9
Total		298	100.0	148	100.0

Figure 3.8.2 : Stage distribution of lung cancer among Saudi nationals, 2016.

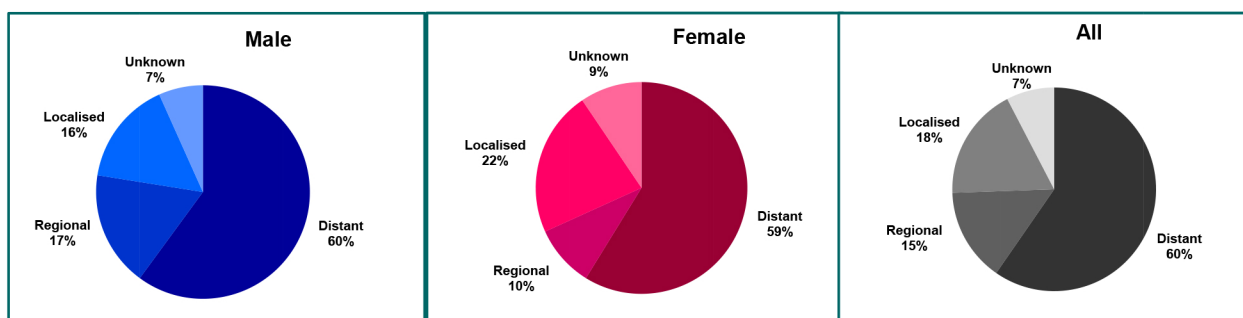
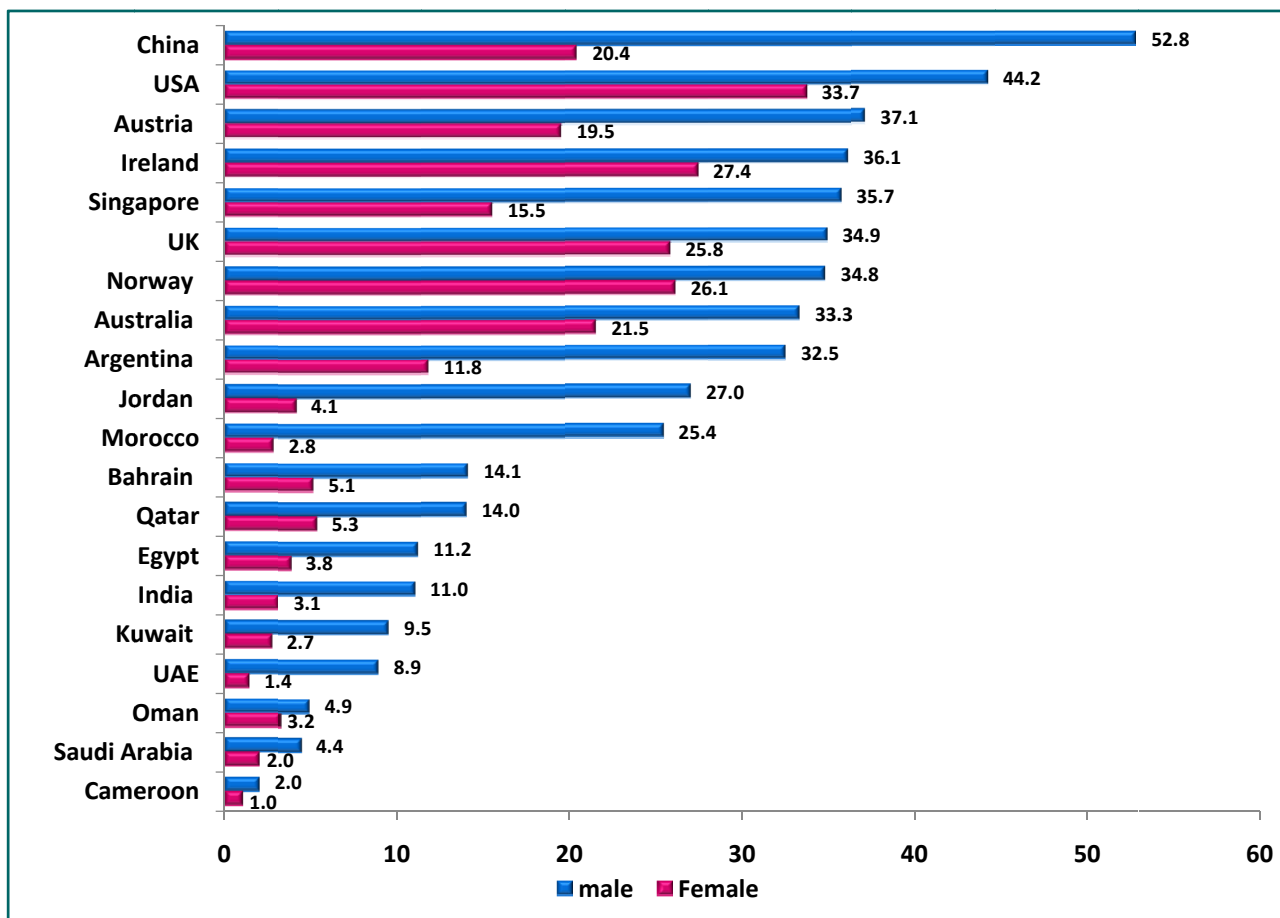




Figure 3.8.4 : Comparison of ASR* for lung cancer among Saudis with ASR in Selected Countries**



*ASR per 100,000

** Source for this information is summarized on page 54.



Liver Cancer (C22)

Liver cancer was ranked sixth among Saudi males and twelfth among Saudi females. There were 417 liver cancer cases accounted to 3.2% of all cancer cases diagnosed among Saudi nationals in 2016. Liver cancer affected 290 (69.5%) males and 127 (30.5%) females with a male to female ratio of 228:100. The ASR was 4.2/100,000 for males and 1.9/100,000 for females. The median age at diagnosis was 67 years in males (ranged between 0 and 116 years) and 64 years in females (ranged between 8 and 100 years).

Figure 3.9.1 : Age-Specific Incidence Rate (AIR) for liver cancer among Saudi nationals, 2016

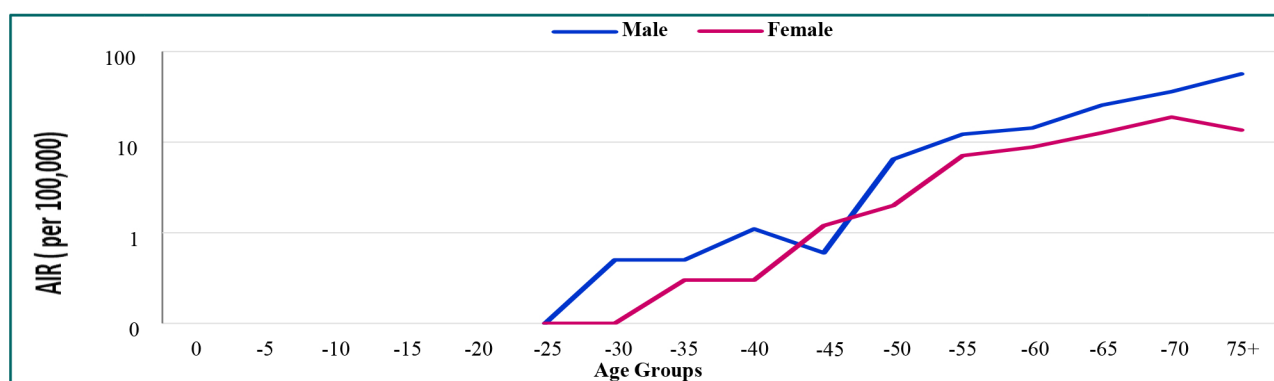


Table 3.9.1 : Morphological distribution of liver cancer among Saudi nationals, 2016

Code	Morphology	Male	%	Female	%
81703	Hepatocellular carcinoma, NOS	220	75.9	82	64.6
80003	Neoplasm, malignant	30	10.3	6	4.7
81603	Cholangiocarcinoma	15	5.2	19	15.0
81723	Hepatocellular carcinoma, scirrhous	12	4.1	2	1.6
81403	Adenocarcinoma, NOS	3	1.0	6	4.7
19703	Hepatoblastoma	3	1.0	0	0.0
91203	Hemangiosarcoma	2	0.7	0	0.0
82463	Neuroendocrine carcinoma, NOS	2	0.7	3	2.4
85503	Acinar cell carcinoma	1	0.3	0	0.0
88943	Angiomyosarcoma	1	0.3	0	0.0
	Others	1	0.3	9	7.1
Total		290	100.0	127	100.0

Figure 3.9.2 : Stage distribution of liver cancer among Saudi nationals, 2016

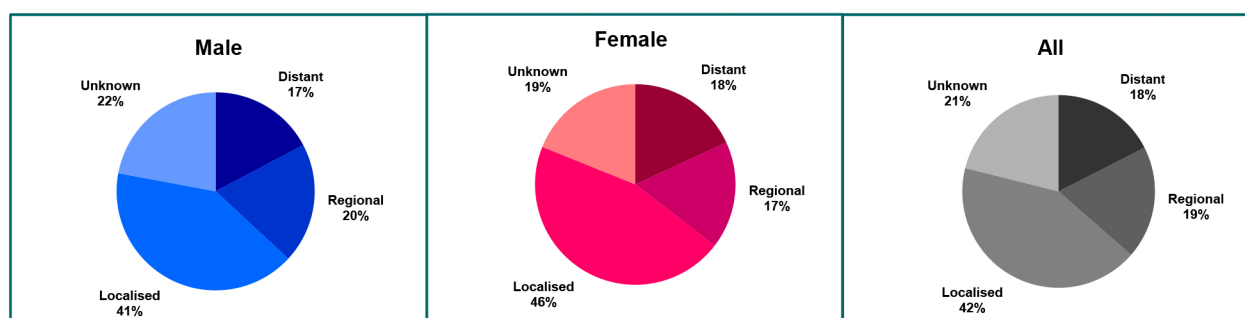
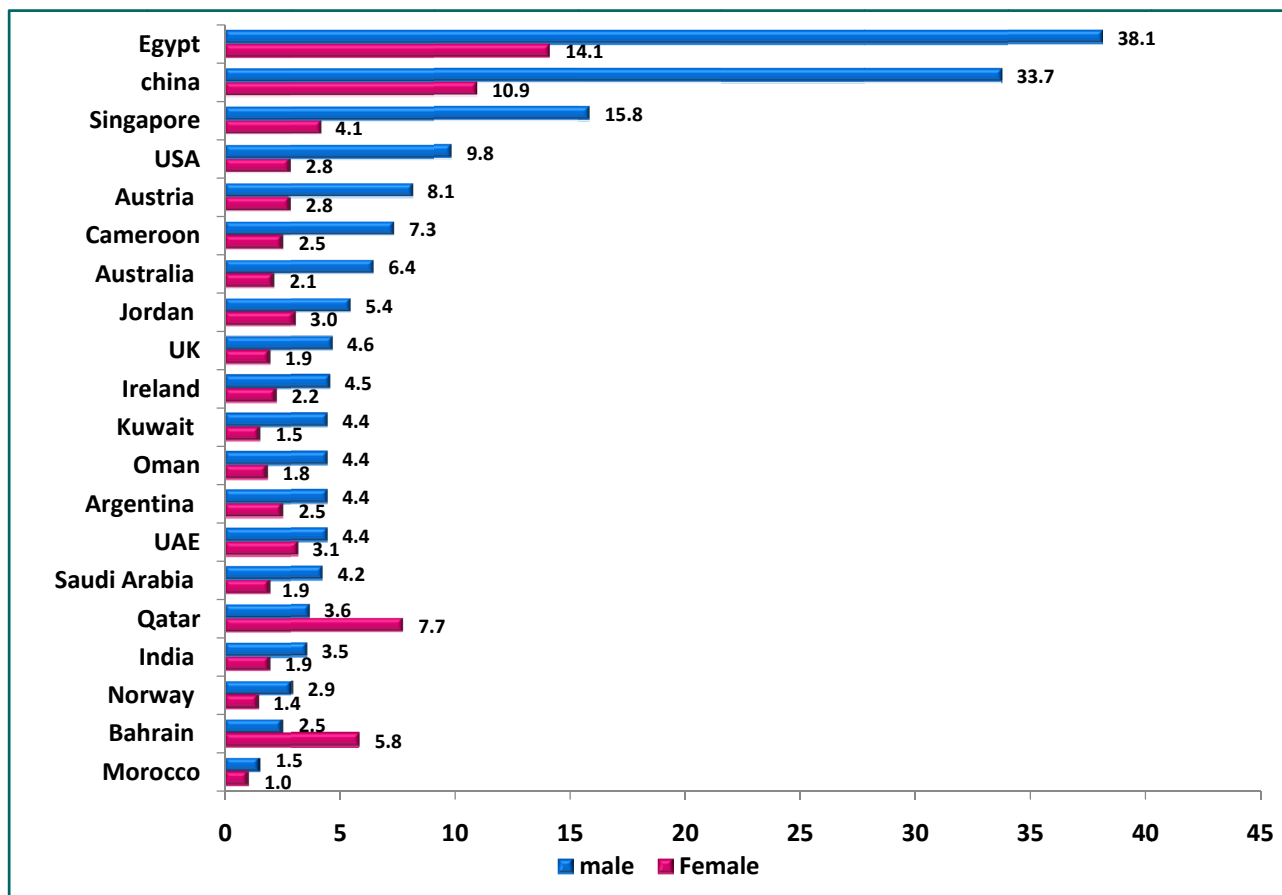




Figure 3.9.4 : Comparison of ASR* for liver cancer among Saudis with ASR in selected countries**



* ASR per 100,000

** Source for this information is summarized on page 54.



Prostate Cancer (C61)

Prostate cancer was ranked the tenth among Saudi males with 405 cases accounted to 3.1% of all cancers cases diagnosed among Saudi Males in 2016. The ASR was 6.3/100,000 for Saudi male population. The median age at diagnosis was 70 years (ranged between 15 and 101 years).

Figure 3.10.1 : Age-Specific Incidence Rate (AIR) prostate cancer among Saudi nationals, 2016.

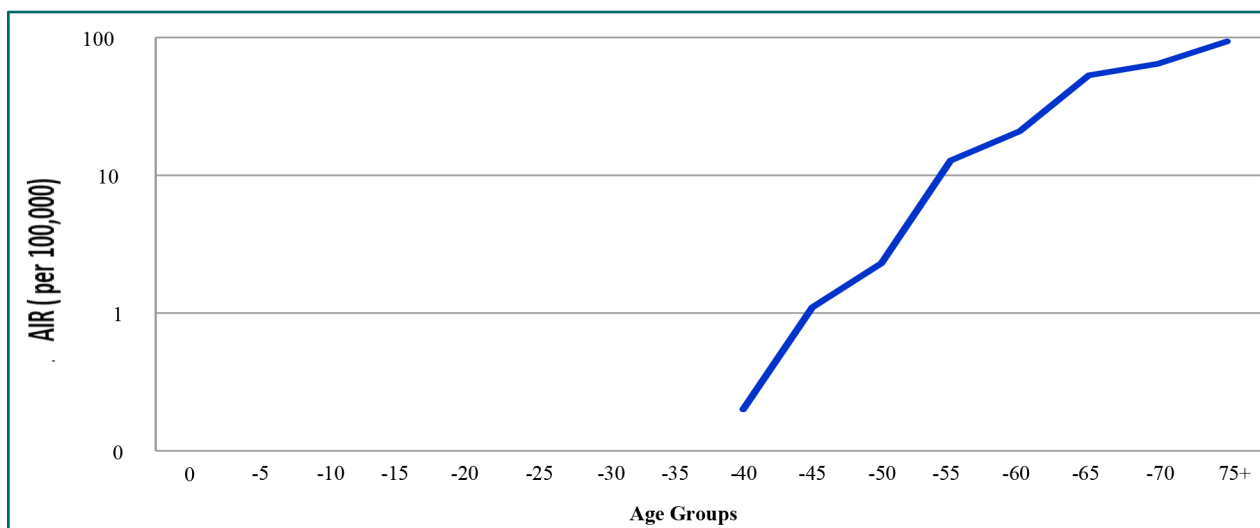


Table 3.10.1 : Morphological distribution of prostate cancers among Saudi nationals, 2016

Code	Morphology	NO.	%
81403	Adenocarcinoma, NOS	367	90.6
85503	Acinar cell carcinoma	18	4.4
80003	Neoplasm, malignant	9	2.2
80103	Carcinoma, NOS	7	1.7
84803	Mucinous adenocarcinoma	2	0.5
89103	Embryonal rhabdomyosarcoma, NOS	1	0.2
84903	Signet ring cell carcinoma	1	0.2
Total		405	100.0

Figure 3.10.2 : Stage distribution of prostate cancers among Saudi nationals, 2016.

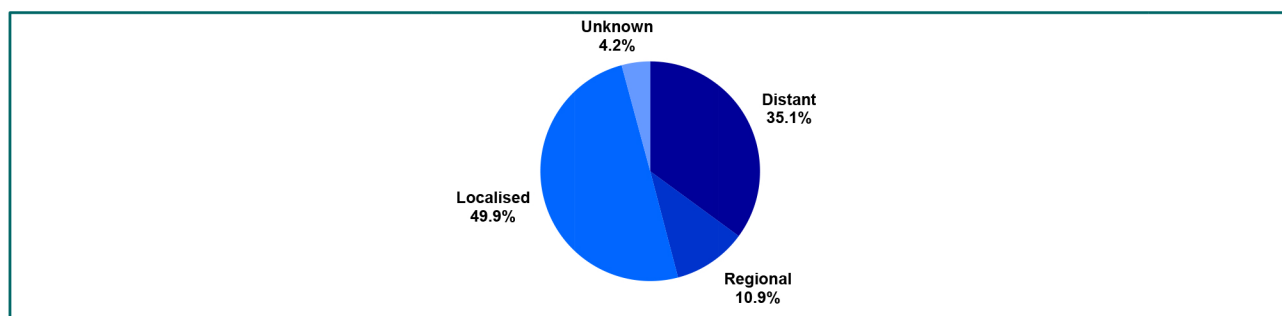
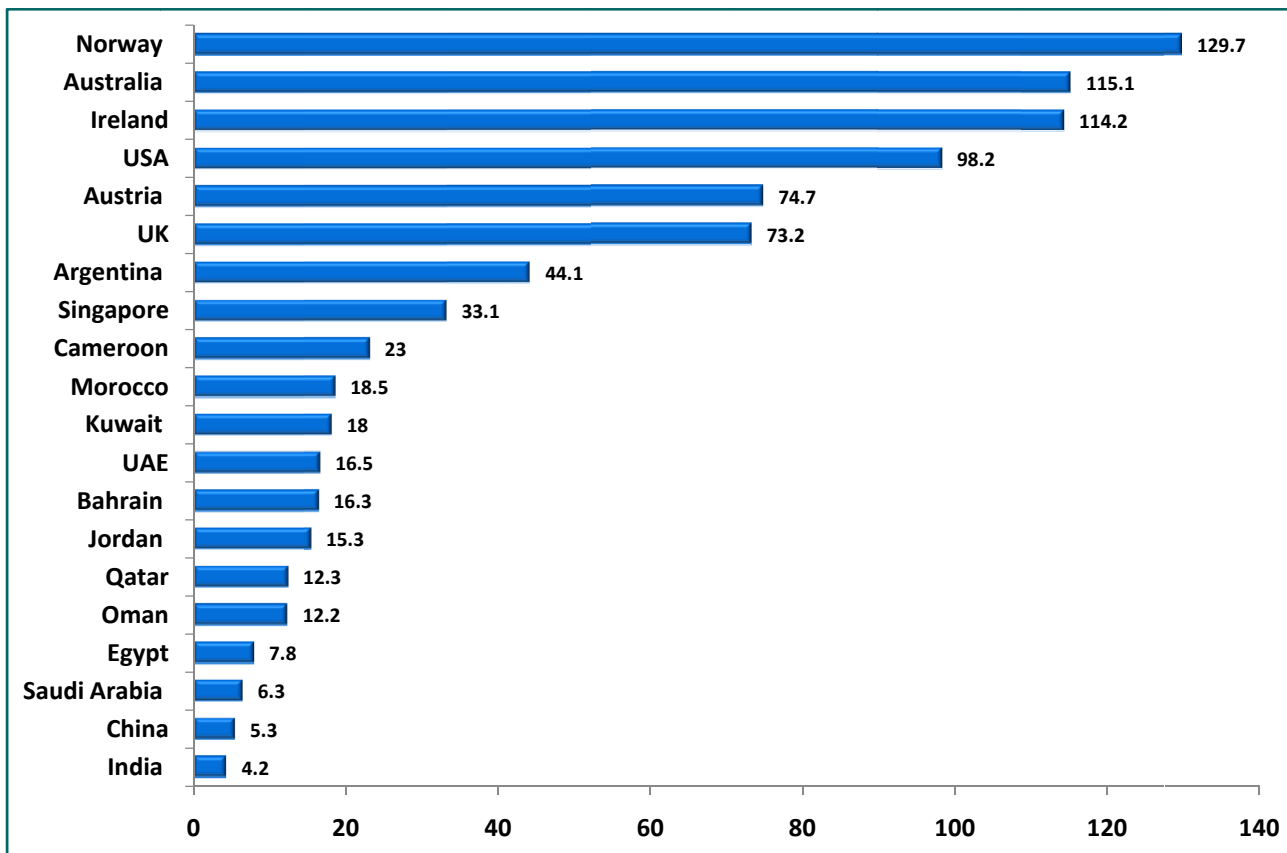




Figure 3.10.4 : Comparison of ASR* for of prostate cancers among Saudi nationals with ASR in Selected Countries**



*ASR per 100,000

** Source for this information is summarized on page 54.



References :

1. GLOBOCAN 2012, Cancer Incidence and Mortality Worldwide, IARC, Lyon: International agency for Research on Cancer. Available from: <http://globocan.iarc.fr/Pages/online.aspx>
2. 15- Year Cancer Incidence among Nationals of the GCC States, 1998-2012
<http://ghc.sa/ar-sa/Documents/GCCCP/GCCCP%20-%20Report%20-%20Pages.pdf>



PART IV

CANCER INCIDENCE AMONG NON-SAUDIS

2016



Cancer Incidence Among Non-Saudi Population, 2016.

Between January and December 2016, a total of 3,845 cancer cases were reported among the Non-Saudi population, 147 cases were excluded from analysis due to In Situ and mismatch between ICD-O-3 and ICD-10 codes. Therefore, the total number of cases analyzed was 3,698. Out of this 1,872 (48.6 %) were males and 1,826 (51.4 %) were females.

The ratio of male to female was 102:100. Taking into consideration the population structure of non-Saudis and the fact that cancer is primarily a disease of the elderly; the pattern of cancer had some significant differences. Those who were under 15 represented 15.2% of the population, those aged 60 years and above represented 3.8%, and the 15 to 59 age group represented 81% of Non-Saudi population.

During 2016, approximately 3.5 % of all cancers occurred before the age of 15, 29.4% occurred between the ages 15 to 39 years, 55.9% were between the ages 40-64, and 11.2 % occurred after the age of 64. The median age at diagnosis was 54 years in males (ranged between 0 and 103 years) and 49 years in females (ranged between 0 and 106).

Table 4.1 : Ten most common cancers among Non-Saudi population, 2016.

Site	NO.	%
Breast	807	21.8
Colorectal	421	11.4
Thyroid	214	5.8
NHL	198	5.4
Skin	171	4.6
Lung	157	4.2
Prostate	144	3.9
Leukaemia	133	3.6
Kidney	115	3.1
Stomach	112	3.0
Total	3698	100.0



Table 4.2 : Distribution of cancer cases among Non-Saudi by nationality and gender, 2016.

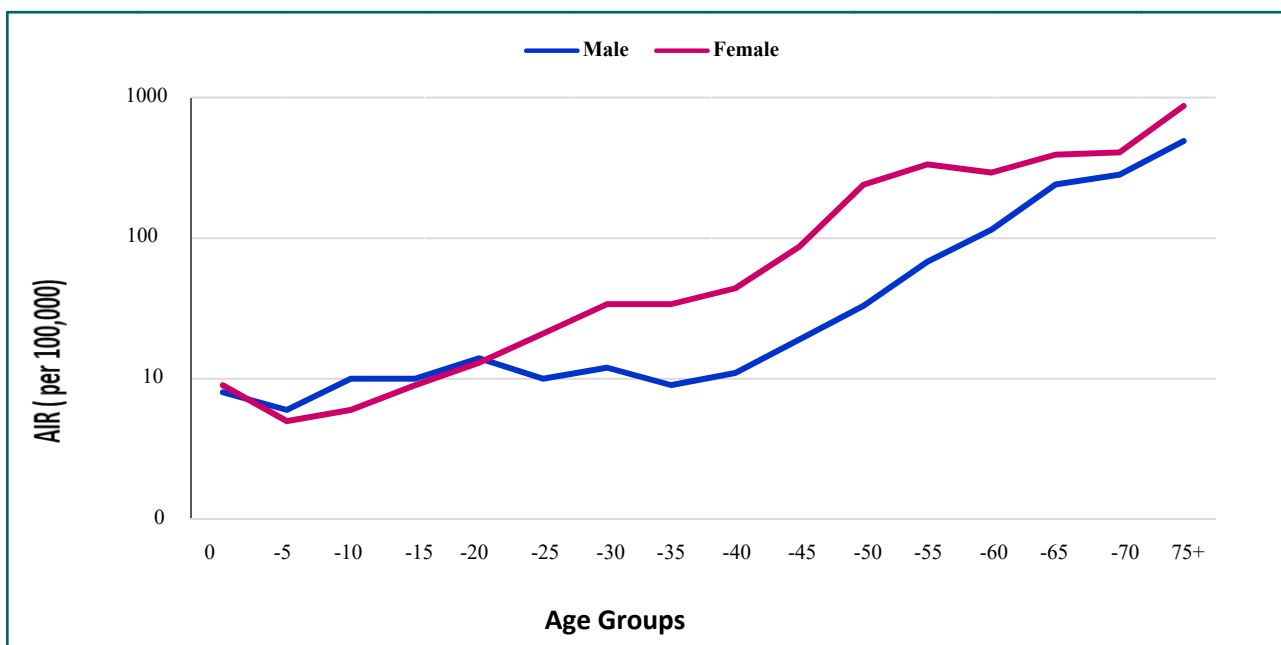
Nationality	Male	%	Female	%	Total	%
Yemen	391	20.9	334	18.3	725	19.6
Syrian Arab Republic	227	12.1	218	11.9	445	12.0
Egypt	228	12.2	209	11.4	437	11.8
Sudan	198	10.6	165	9.0	363	9.8
Philippines	129	6.9	226	12.4	355	9.6
Pakistan	106	5.7	82	4.5	188	5.1
Gaza Strip(Palestine)	82	4.4	72	3.9	154	4.2
India	84	4.5	55	3.0	139	3.8
Jordan	49	2.6	51	2.8	100	2.7
Bangladesh	58	3.1	16	0.9	74	2.0
Eritrea	19	1.0	39	2.1	58	1.6
Indonesia	12	0.6	40	2.2	52	1.4
Myanmar	22	1.2	29	1.6	51	1.4
United States of America	42	2.2	9	0.5	51	1.4
Ethiopia	14	0.7	33	1.8	47	1.3
Non-Saudi, NOS	17	0.9	22	1.2	39	1.1
Lebanon	17	0.9	14	0.8	31	0.8
United Kingdom	21	1.1	10	0.5	31	0.8
Afghanistan	11	0.6	18	1.0	29	0.8
Bahrain	11	0.6	17	0.9	28	0.8
Sri Lanka	12	0.6	13	0.7	25	0.7
Morocco	7	0.4	17	0.9	24	0.6
Somalia	9	0.5	0	0.0	19	0.5
Canada	10	0.5	7	0.4	17	0.5
Chad	6	0.3	10	0.5	16	0.4
Others Nationalities	90	4.8	120	6.6	200	5.4
TOTAL	1872	100	1826	100	3698	100

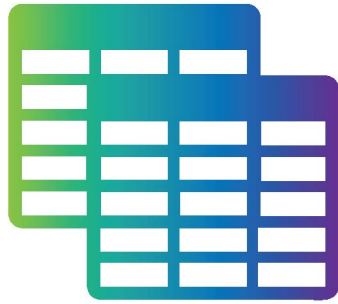


Table 4.3 : Most common cancers among Non-Saudi population by gender, 2016.

Male	1872	%	Female	1826	%
Colorectal	299	15.9	Breast	787	43.1
Prostate	144	7.7	Thyroid	146	8
Skin	135	7.2	Colorectal	122	6.6
NHL	133	7.1	Corpus Uteri	78	4.3
Lung	124	6.6	Ovary	77	4.2
Bladder	92	4.9	NHL	65	3.6
Kidney	89	4.8	Cervix Uteri	51	2.8
Leukemia	84	4.5	Leukemia	49	2.7
Stomach	73	3.9	Stomach	39	2.1
Brain,CNS	73	3.9	Skin	36	2

Figure 4.1 : Age-Specific Incidence Rate (AIR) for all cancers among Non-Saudi population, 2016.





PART V

INCIDENCE TABLES



Table 5.1.1 : Number Of Cases Among Saudi Males by Primary Site And Age Groups, 2016.

ICD (10th)	Site	All Ages	Age unk	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	16	0	0	0	1	0	0	0	0	0	0	0	1	6	1	1	1	5	0.30%
C01-C02	Tongue	60	0	0	0	0	0	0	1	1	4	4	3	6	5	5	10	8	13	1.00%
C03-C06	Mouth	59	0	1	0	1	0	2	1	1	1	5	2	7	6	6	3	10	13	1.00%
C07-C08	Salivary glands	23	0	0	0	0	0	4	4	3	1	1	0	1	1	2	3	1	2	0.40%
C09	Tonsil	3	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0.10%
C10	Other Oropharynx	4	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	1	0.10%
C11	Nasopharynx	154	0	0	0	4	4	4	3	12	13	17	25	19	15	19	3	8	8	2.70%
C12-C13	Hypopharynx	7	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3	0.10%
C14	Pharynx unspec.	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0.00%
C15	Oesophagus	78	1	0	0	0	0	0	1	2	0	2	5	11	7	11	6	7	25	1.30%
C16	Stomach	207	0	0	0	0	1	3	2	8	10	8	7	14	26	22	20	30	56	3.60%
C17	Small intestine	37	0	0	0	0	0	0	1	0	1	2	3	4	3	6	7	3	7	0.60%
C18	Colon	581	5	0	0	0	0	5	7	16	20	33	56	77	74	76	42	64	106	10.00%
C19-C20	Rectum	374	0	0	0	0	0	1	6	10	18	24	34	47	49	47	39	40	59	6.40%
C21	Anus	24	0	0	0	1	0	0	0	0	0	3	3	1	1	4	2	3	6	0.40%
C22	Liver	290	0	3	0	0	0	0	1	4	4	7	3	28	41	35	38	39	87	5.00%
C23-C24	Gallbladder etc.	80	0	0	0	0	0	1	0	0	1	3	8	9	9	10	10	17	12	1.40%
C25	Pancreas	170	1	0	0	0	0	0	5	2	2	8	12	15	20	29	19	29	28	2.90%
C30-C31	Nose, sinuses etc.	18	0	0	0	0	0	1	2	1	0	3	0	1	0	3	0	5	2	0.30%
C32	Larynx	69	0	0	0	0	0	0	1	0	2	4	7	10	15	6	8	7	9	1.20%
C33-C34	Trachea,Bronchus,Lung	298	1	0	0	0	0	1	4	5	5	6	10	27	51	41	54	32	61	5.10%
C37-C38	Other Thoracic organs	16	0	1	0	0	0	3	1	0	3	0	1	2	1	2	0	1	1	0.30%
C40-C41	Bone	93	1	4	10	13	20	11	6	6	4	3	6	1	1	2	1	3	1	1.60%
C43	Melanoma of Skin	14	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	9	0.20%
C44	Other Skin	207	1	1	1	1	1	6	9	7	10	9	8	13	16	11	16	23	74	3.60%
C45	Mesothelioma	11	0	0	0	0	0	0	0	1	0	0	0	1	0	0	4	2	3	0.20%
C46	Kaposi sarcoma	27	0	0	0	0	0	0	0	0	2	0	0	2	5	3	3	5	7	0.50%
C47;C49	Connective,Soft tissue	89	1	5	2	5	2	11	9	6	8	4	5	7	4	5	5	4	6	1.50%
C50	Breast	42	0	0	0	0	0	1	2	0	2	2	8	3	2	11	4	1	6	0.70%
C60	Penis	4	0	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	0.10%
C61	Prostate	405	0	0	0	0	1	0	0	0	0	1	6	10	43	51	79	70	144	7.00%
C62	Testis	123	1	6	1	2	12	17	23	32	6	8	4	4	0	1	3	0	3	2.10%
C63	Other male genital	3	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0.10%
C64	Kidney	196	0	4	3	1	0	0	8	6	12	16	24	18	24	26	22	15	17	3.40%
C65	Renal Pelvis	7	0	0	0	0	0	0	0	0	0	0	1	0	2	2	0	0	2	0.10%
C66	Ureter	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	2	3	0.10%
C67	Bladder	229	0	2	0	0	0	0	1	3	8	13	11	14	37	36	27	18	59	3.90%
C68	Other Urinary organs	7	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	0	2	0.10%
C69	Eye	30	0	18	1	0	1	1	0	0	1	0	0	1	1	2	0	0	4	0.50%
C70-C72	Brain, Nervous system	212	0	24	23	12	2	16	10	14	15	9	16	17	22	14	6	3	9	3.70%
C73	Thyroid	222	0	0	1	2	4	6	17	21	25	20	24	25	21	14	16	5	21	3.80%
C74	Adrenal gland	22	0	12	1	1	2	1	1	0	0	1	0	1	1	1	0	0	0	0.40%
C75	Other Endocrine	5	0	0	0	2	0	1	1	0	0	0	0	0	0	1	0	0	0	0.10%
C81	Hodgkin disease	265	0	4	23	24	24	33	33	38	16	6	15	17	10	5	4	7	6	4.60%
C82-C85;C96	Non-Hodgkin lymphoma	469	0	14	17	11	16	25	29	30	28	30	34	34	33	41	39	28	60	8.10%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C90	Multiple Myeloma	72	0	0	0	0	0	0	0	5	3	3	3	4	10	10	10	7	17	1.20%
C91	Lymphoid Leukaemia	165	0	36	23	19	15	8	3	5	4	1	3	10	6	5	5	6	16	2.80%
C92-C94	Myeloid Leukaemia	142	0	14	5	5	11	12	7	14	13	11	9	12	10	6	5	5	3	2.40%
C95	Leukaemia unspec.	27	0	4	3	2	2	0	0	2	1	1	1	0	2	3	1	2	3	0.50%
Other	Other & unspecified	137	1	5	1	1	1	4	1	5	5	6	13	20	18	16	8	8	24	2.40%
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All	All sites Total	5803	13	158	115	108	119	178	200	261	250	274	374	499	601	599	527	523	1004	100.00%
Not C44	All sites but C44	5596	12	157	114	107	118	172	191	254	240	265	366	486	585	588	511	500	930	96.40%

Table 5.1.2 : Number Of Cases Among Saudi Females by Primary Site And Age Groups, 2016

ICD (10th)	Site	All Ages	Age unk	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	6	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	3	0.10%
C01-C02	Tongue	47	0	0	0	0	1	0	2	0	0	2	6	7	8	6	4	6	5	0.60%
C03-C06	Mouth	60	0	0	0	0	0	0	0	3	1	2	6	5	9	7	9	4	14	0.80%
C07-C08	Salivary glands	30	1	0	0	0	2	3	1	2	2	1	3	3	5	2	1	1	3	0.40%
C09	Tonsil	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.00%
C10	Other Oropharynx	2	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0.00%
C11	Nasopharynx	59	0	1	0	0	2	4	2	3	8	4	9	9	6	4	1	4	2	0.80%
C12-C13	Hypopharynx	14	0	0	0	0	0	0	1	0	1	0	3	1	2	0	1	2	3	0.20%
C14	Pharynx unspec.	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.00%
C15	Oesophagus	50	0	0	0	0	0	0	1	7	0	2	0	6	2	5	6	5	16	0.70%
C16	Stomach	111	0	0	0	0	0	2	2	3	5	14	5	13	9	10	14	9	25	1.50%
C17	Small intestine	32	0	0	0	1	0	0	2	1	1	2	4	3	4	4	4	1	5	0.40%
C18	Colon	447	0	0	0	1	1	1	3	11	21	31	41	70	60	63	46	35	63	6.10%
C19-C20	Rectum	257	0	0	0	0	0	1	4	8	16	18	33	43	29	32	21	15	37	3.50%
C21	Anus	11	0	0	0	0	0	0	0	0	0	0	3	2	3	2	1	0	0	0.10%
C22	Liver	127	0	0	1	0	1	0	1	1	2	2	6	8	22	20	20	21	22	1.70%
C23-C24	Gallbladder etc.	113	0	0	0	0	0	2	0	0	1	1	6	7	13	16	17	23	27	1.50%
C25	Pancreas	104	0	0	0	0	0	0	2	3	4	6	10	7	11	11	16	17	17	1.40%
C30-C31	Nose, sinuses etc.	5	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	1	1	0.10%
C32	Larynx	7	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	3	0.10%
C33-C34	Trachea,Bronchus,Lung	148	0	0	0	0	0	1	6	5	8	6	12	17	21	16	17	14	25	2.00%
C37-C38	Other Thoracic organs	10	0	1	0	0	0	1	0	0	1	1	0	1	1	2	1	1	0	0.10%
C40-C41	Bone	53	0	1	6	14	7	4	6	2	5	1	1	1	2	0	0	1	2	0.70%
C43	Melanoma of Skin	25	0	0	1	0	1	0	1	1	2	4	0	1	2	1	2	2	7	0.30%
C44	Other Skin	166	0	0	0	1	2	0	8	15	6	6	16	9	16	11	13	16	47	2.30%
C45	Mesothelioma	7	0	0	0	0	0	1	0	0	0	1	1	2	1	1	0	0	0	0.10%
C46	Kaposi sarcoma	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0.10%
C47;C49	Connective,Soft tissue	70	0	11	1	3	7	9	1	8	1	4	4	8	1	1	3	3	5	1.00%
C50	Breast	2240	2	0	0	0	2	22	53	124	227	315	319	341	288	198	118	99	132	30.40%
C51	Vulva	9	0	0	0	0	0	1	0	0	1	0	0	1	1	3	0	1	1	0.10%
C52	Vagina	8	0	2	0	0	0	1	0	0	1	0	0	1	2	0	0	0	1	0.10%
C53	Cervix Uteri	111	0	0	0	0	0	4	3	5	9	10	14	20	11	3	9	8	15	1.50%
C54	Corpus Uteri	454	0	0	0	0	1	1	2	7	18	17	29	51	86	98	56	43	45	6.20%
C55	Uterus unspec.	40	0	0	0	0	0	0	2	0	2	5	3	9	6	2	4	3	4	0.50%
C56	Ovary	219	0	2	1	1	8	14	16	9	8	21	20	19	25	19	16	18	22	3.00%
C57	Other Female Genital	18	0	0	0	0	2	1	0	0	0	3	4	2	0	3	1	1	1	0.20%
C58	Placenta	4	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0.10%
C64	Kidney	138	0	15	2	1	2	1	1	5	7	12	17	16	12	15	6	12	14	1.90%
C65	Renal Pelvis	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0.00%
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C67	Bladder	59	0	0	0	0	1	1	1	4	0	6	2	5	4	7	3	9	16	0.80%
C68	Other Urinary organs	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.00%
C69	Eye	16	0	7	1	2	0	1	0	0	0	1	0	1	0	1	0	1	1	0.20%
C70-C72	Brain, Nervous system	155	0	15	13	9	6	4	9	7	11	9	15	14	12	8	6	9	8	2.10%
C73	Thyroid	854	2	1	2	9	21	58	87	101	116	117	106	80	61	34	18	9	32	11.60%
C74	Adrenal gland	19	0	12	1	0	0	2	0	2	1	0	0	1	0	0	0	0	0	0.30%
C75	Other Endocrine	6	0	0	0	0	1	1	1	1	0	0	0	0	1	0	0	0	1	0.10%
C81	Hodgkin disease	230	0	4	8	13	40	45	32	22	10	12	9	8	11	5	2	5	4	3.10%
C82-C85;C96	Non-Hodgkin lymphoma	372	0	5	5	8	5	25	7	14	23	17	24	36	32	53	38	27	53	5.10%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C90	Multiple Myeloma	48	0	0	0	0	0	0	0	1	7	2	3	11	6	6	3	5	4	0.70%
C91	Lymphoid Leukaemia	105	0	33	14	13	5	3	2	4	2	1	4	3	3	5	2	6	5	1.40%
C92-C94	Myeloid Leukaemia	158	0	10	7	7	5	5	12	19	19	8	13	16	17	6	8	2	4	2.10%
C95	Leukaemia unspec.	13	0	1	3	1	3	1	0	1	0	0	0	0	0	0	0	1	2	0.20%
Other	Other & unspecified	110	0	4	0	0	0	2	7	4	3	1	7	9	15	12	13	15	18	1.50%
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All	All sites Total	7358	5	126	66	84	126	223	280	405	551	666	760	869	822	697	502	459	717	100.00%
Not C44	All sites but C44	7192	5	126	66	83	124	223	272	390	545	660	744	860	806	686	489	443	670	97.70%

Table 5.1.3 : Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Saudi Males (per 100,000) by Primary Site and Age groups, 2016.

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World	
C00	Lip	16	0	0	0	0.1	0	0	0	0	0	0	0	0.2	1.8	0.4	0.7	0.9	3.3	0.2	0.2	
C01-C02	Tongue	60	0	0	0	0	0	0	0.1	0.1	0.5	0.6	0.6	1.4	1.5	2	6.7	7.4	8.5	0.6	0.8	
C03-C06	Mouth	59	0	0.1	0	0.1	0	0.2	0.1	0.1	0.1	0.8	0.4	1.6	1.8	2.5	2	9.2	8.5	0.6	0.8	
C07-C08	Salivary glands	23	0	0	0	0	0	0.4	0.4	0.3	0.1	0.2	0	0.2	0.3	0.8	2	0.9	1.3	0.2	0.3	
C09	Tonsil	3	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0.4	0	0	0.7	0	0	
C10	Other Oropharynx	4	0	0	0	0	0	0	0	0	0.1	0	0.2	0	0	0	0	0.9	0.7	0	0.1	
C11	Nasopharynx	154	0	0	0	0.4	0.4	0.4	0.3	1.4	1.7	2.6	4.6	4.4	4.5	7.8	2	7.4	5.2	1.5	1.8	
C12-C13	Hypopharynx	7	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	0	1.8	2	0.1	0.1	
C14	Pharynx unspec.	2	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0	0	
C15	Oesophagus	78	1	0	0	0	0	0	0.1	0.2	0	0.3	0.9	2.5	2.1	4.5	4	6.5	16.3	0.8	1.1	
C16	Stomach	207	0	0	0	0	0.1	0.3	0.2	0.9	1.3	1.2	1.3	3.2	7.7	9	13.5	27.7	36.4	2	2.9	
C17	Small intestine	37	0	0	0	0	0	0	0.1	0	0.1	0.3	0.6	0.9	0.9	2.5	4.7	2.8	4.6	0.4	0.5	
C18	Colon	581	5	0	0	0	0	0.5	0.7	1.8	2.6	5.1	10.3	17.8	22	31.1	28.3	59	68.9	5.7	7.8	
C19-C20	Rectum	374	0	0	0	0	0	0.1	0.6	1.2	2.4	3.7	6.3	10.9	14.5	19.2	26.2	36.9	38.4	3.6	5.1	
C21	Anus	24	0	0	0	0.1	0	0	0	0	0	0.5	0.6	0.2	0.3	1.6	1.3	2.8	3.9	0.2	0.3	
C22	Liver	290	0	0.3	0	0	0	0	0.1	0.5	0.5	1.1	0.6	6.5	12.2	14.3	25.6	36	56.6	2.8	4.2	
C23-C24	Gallbladder etc.	80	0	0	0	0	0	0.1	0	0	0.1	0.5	1.5	2.1	2.7	4.1	6.7	15.7	7.8	0.8	1.2	
C25	Pancreas	170	1	0	0	0	0	0	0.5	0.2	0.3	1.2	2.2	3.5	5.9	11.9	12.8	26.7	18.2	1.7	2.5	
C30-C31	Nose, sinuses etc.	18	0	0	0	0	0	0.1	0.2	0.1	0	0.5	0	0.2	0	1.2	0	4.6	1.3	0.2	0.2	
C32	Larynx	69	0	0	0	0	0	0	0.1	0	0.3	0.6	1.3	2.3	4.5	2.5	5.4	6.5	5.9	0.7	0.9	
C33-C34	Trachea,Bronchus,Lung	298	1	0	0	0	0	0.1	0.4	0.6	0.7	0.9	1.8	6.2	15.1	16.8	36.3	29.5	39.7	2.9	4.4	
C37-C38	Other Thoracic organs	16	0	0.1	0	0	0	0.3	0.1	0	0.4	0	0.2	0.5	0.3	0.8	0	0.9	0.7	0.2	0.2	
C40-C41	Bone	93	1	0.4	0.9	1.4	2.2	1.1	0.6	0.7	0.5	0.5	1.1	0.2	0.3	0.8	0.7	2.8	0.7	0.9	0.9	
C43	Melanoma of Skin	14	0	0	0	0	0	0	0	0.1	0	0	0	0	0.3	0.4	0.7	0.9	5.9	0.1	0.2	
C44	Other Skin	207	1	0.1	0.1	0.1	0.1	0.6	0.9	0.8	1.3	1.4	1.5	3	4.7	4.5	10.8	21.2	48.1	2	2.7	
C45	Mesothelioma	11	0	0	0	0	0	0	0	0.1	0	0	0	0.2	0	0	2.7	1.8	2	0.1	0.2	
C46	Kaposi sarcoma	27	0	0	0	0	0	0	0	0	0.3	0	0	0.5	1.5	1.2	2	4.6	4.6	0.3	0.4	
C47;C49	Connective,Soft tissue	89	1	0.5	0.2	0.5	0.2	1.1	0.9	0.7	1	0.6	0.9	1.6	1.2	2	3.4	3.7	3.9	0.9	1	
C50	Breast	42	0	0	0	0	0	0.1	0.2	0	0.3	0.3	1.5	0.7	0.6	4.5	2.7	0.9	3.9	0.4	0.6	
C60	Penis	4	0	0	0	0	0	0	0	0	0.1	0	0.2	0.2	0	0.4	0	0	0	0	0	
2	Prostate	405	0	0	0	0	0.1	0	0	0	0	0.2	1.1	2.3	12.8	20.9	53.2	64.6	93.6	4	6.3	
C62	Testis	123	1	0.6	0.1	0.2	1.3	1.6	2.4	3.7	0.8	1.2	0.7	0.9	0	0.4	2	0	2	1.2	1.1	
C63	Other male genital	3	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0.4	0.7	0	0	0	0	
C64	Kidney	196	0	0.4	0.3	0.1	0	0	0.8	0.7	1.6	2.5	4.4	4.2	7.1	10.6	14.8	13.8	11.1	1.9	2.6	
C65	Renal Pelvis	7	0	0	0	0	0	0	0	0	0	0	0.2	0	0.6	0.8	0	0	1.3	0.1	0.1	
C66	Ureter	8	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0.4	0.7	1.8	2	0.1	0.1	
C67	Bladder	229	0	0.2	0	0	0	0	0.1	0.3	1	2	2	3.2	11	14.7	18.2	16.6	38.4	2.2	3.2	
C68	Other Urinary organs	7	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	0.8	0.7	0	1.3	0.1	0.1	
C69	Eye	30	0	1.7	0.1	0	0.1	0.1	0	0	0.1	0	0	0.2	0.3	0.8	0	0	2.6	0.3	0.3	
C70-C72	Brain, Nervous system	212	0	2.2	2.2	1.3	0.2	1.5	1	1.6	2	1.4	3	3.9	6.5	5.7	4	2.8	5.9	2.1	2.3	
C73	Thyroid	222	0	0	0.1	0.2	0.4	0.6	1.8	2.4	3.3	3.1	4.4	5.8	6.2	5.7	10.8	4.6	13.7	2.2	2.5	
C74	Adrenal gland	22	0	1.1	0.1	0.1	0.2	0.1	0.1	0	0	0.2	0	0.2	0.3	0.4	0	0	0	0.2	0.2	
C75	Other Endocrine	5	0	0	0	0.2	0	0.1	0.1	0	0	0	0	0	0	0.4	0	0	0	0	0.1	
C81	Hodgkin disease	265	0	0.4	2.2	2.5	2.7	3.2	3.4	4.4	2.1	0.9	2.8	3.9	3	2	2.7	6.5	3.9	2.6	2.6	
C82-C85;C96	Non-Hodgkin lymphoma	469	0	1.3	1.6	1.2	1.8	2.4	3	3.5	3.7	4.6	6.3	7.9	9.8	16.8	26.2	25.8	39	4.6	5.6	
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C90	Multiple Myeloma	72	0	0	0	0	0	0	0	0.6	0.4	0.5	0.6	0.9	3	4.1	6.7	6.5	11.1	0.7	1	
C91	Lymphoid Leukaemia	165	0	3.3	2.2	2	1.7	0.8	0.3	0.6	0.5	0.2	0.6	2.3	1.8	2	3.4	5.5	10.4	1.6	1.8	
C92-C94	Myeloid Leukaemia	142	0	1.3	0.5	0.5	1.2	1.2	0.7	1.6	1.7	1.7	1.7	2.8	3	2.5	3.4	4.6	2	1.4	1.5	
C95	Leukaemia unspec.	27	0	0.4	0.3	0.2	0.2	0	0	0.2	0.1	0.2	0.2	0	0.6	1.2	0.7	1.8	2	0.3	0.3	
Other	Other & unspecified	137	1	0.5	0.1	0.1	0.1	0.4	0.1	0.6	0.7	0.9	2.4	4.6	5.3	6.6	5.4	7.4	15.6	1.3	1.7	
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All	All sites Total	5803	13	14	11	11	13	17	21	30	33	42	69	115	178	245	355	482	653	56.6	74.7	
Not C44	All sites but C44	5596	12	14	11	11	13	17	20	29	31	41	67	112	174	241	344	461	605	54.6	72	

Table 5.1.4 : Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Saudi Females (per 100,000) by Primary Site and Age groups, 2016

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World	
C00	Lip	6	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0.4	0.6	0	1.9	0.1	0.1	
C01-C02	Tongue	47	0	0	0	0	0.1	0	0.2	0	0	0.3	1.2	1.7	2.6	2.6	2.5	5.4	3.1	0.5	0.7	
C03-C06	Mouth	60	0	0	0	0	0	0	0	0.4	0.1	0.3	1.2	1.2	2.9	3.1	5.7	3.6	8.7	0.6	0.8	
C07-C08	Salivary glands	30	1	0	0	0	0.2	0.3	0.1	0.2	0.3	0.2	0.6	0.7	1.6	0.9	0.6	0.9	1.9	0.3	0.4	
C09	Tonsil	2	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	0	0	0	
C10	Other Oropharynx	2	0	0	0	0	0	0.1	0	0	0	0	0.2	0	0	0	0	0	0	0	0	
C11	Nasopharynx	59	0	0.1	0	0	0.2	0.4	0.2	0.4	1.1	0.6	1.8	2.2	1.9	1.8	0.6	3.6	1.2	0.6	0.7	
C12-C13	Hypopharynx	14	0	0	0	0	0	0	0.1	0	0.1	0	0.6	0.2	0.6	0	0.6	1.8	1.9	0.1	0.2	
C14	Pharynx unspec.	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	
C15	Oesophagus	50	0	0	0	0	0	0	0.1	0.8	0	0.3	0	1.5	0.6	2.2	3.8	4.5	9.9	0.5	0.7	
C16	Stomach	111	0	0	0	0	0	0.2	0.2	0.4	0.7	2.3	1	3.2	2.9	4.4	8.9	8.1	15.4	1.1	1.5	
C17	Small intestine	32	0	0	0	0.1	0	0	0.2	0.1	0.1	0.3	0.8	0.7	1.3	1.8	2.5	0.9	3.1	0.3	0.4	
C18	Colon	447	0	0	0	0.1	0.1	0.1	0.3	1.3	2.8	5	8	17.1	19.4	27.6	29.3	31.5	38.9	4.5	6.1	
C19-C20	Rectum	257	0	0	0	0	0	0.1	0.4	0.9	2.2	2.9	6.4	10.5	9.4	14	13.4	13.5	22.9	2.6	3.4	
C21	Anus	11	0	0	0	0	0	0	0	0	0	0	0.6	0.5	1	0.9	0.6	0	0	0.1	0.2	
C22	Liver	127	0	0	0.1	0	0.1	0	0.1	0.1	0.3	0.3	1.2	2	7.1	8.8	12.7	18.9	13.6	1.3	1.9	
C23-C24	Gallbladder etc.	113	0	0	0	0	0	0.2	0	0	0.1	0.2	1.2	1.7	4.2	7	10.8	20.7	16.7	1.1	1.7	
C25	Pancreas	104	0	0	0	0	0	0	0.2	0.4	0.5	1	2	1.7	3.6	4.8	10.2	15.3	10.5	1.1	1.5	
C30-C31	Nose, sinuses etc.	5	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0.9	0	0.9	0.6	0.1	0.1	
C32	Larynx	7	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	0	0.6	0.9	1.9	0.1	0.1	
C33-C34	Trachea, Bronchus Lung	148	0	0	0	0	0	0.1	0.6	0.6	1.1	1	2.3	4.2	6.8	7	10.8	12.6	15.4	1.5	2	
C37-C38	Other Thoracic organs	10	0	0.1	0	0	0	0.1	0	0	0.1	0.2	0	0.2	0.3	0.9	0.6	0.9	0	0.1	0.1	
C40-C41	Bone	53	0	0.1	0.6	1.5	0.8	0.4	0.6	0.2	0.7	0.2	0.2	0.2	0.6	0	0	0.9	1.2	0.5	0.5	
C43	Melanoma of Skin	25	0	0	0.1	0	0.1	0	0.1	0.1	0.3	0.6	0	0.2	0.6	0.4	1.3	1.8	4.3	0.3	0.3	
C44	Other Skin	166	0	0	0	0.1	0.2	0	0.8	1.8	0.8	1	3.1	2.2	5.2	4.8	8.3	14.4	29	1.7	2.1	
C45	Mesothelioma	7	0	0	0	0	0	0.1	0	0	0	0.2	0.2	0.5	0.3	0.4	0	0	0	0.1	0.1	
C46	Kaposi sarcoma	4	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0.9	1.2	0	0.1	
C47;C49	Connective, Soft tissue	70	0	1	0.1	0.3	0.8	0.9	0.1	0.9	0.1	0.6	0.8	2	0.3	0.4	1.9	2.7	3.1	0.7	0.8	
C50	Breast	2240	2	0	0	0	0.2	2.3	5.6	14.5	30.5	50.7	62.2	83.5	93	86.7	75.1	89.1	81.6	22.7	27.2	
C51	Vulva	9	0	0	0	0	0	0.1	0	0	0.1	0	0	0.2	0.3	1.3	0	0.9	0.6	0.1	0.1	
C52	Vagina	8	0	0.2	0	0	0	0.1	0	0	0.1	0	0	0.2	0.6	0	0	0	0.6	0.1	0.1	
C53	Cervix Uteri	111	0	0	0	0	0	0.4	0.3	0.6	1.2	1.6	2.7	4.9	3.6	1.3	5.7	7.2	9.3	1.1	1.4	
C54	Corpus Uteri	454	0	0	0	0	0.1	0.1	0.2	0.8	2.4	2.7	5.7	12.5	27.8	42.9	35.6	38.7	27.8	4.6	6.6	
C55	Uterus unspec.	40	0	0	0	0	0	0	0.2	0	0.3	0.8	0.6	2.2	1.9	0.9	2.5	2.7	2.5	0.4	0.5	
C56	Ovary	219	0	0.2	0.1	0.1	0.9	1.5	1.7	1.1	1.1	3.4	3.9	4.7	8.1	8.3	10.2	16.2	13.6	2.2	2.7	
C57	Other Female Genital	18	0	0	0	0	0.2	0.1	0	0	0	0.5	0.8	0.5	0	1.3	0.6	0.9	0.6	0.2	0.2	
C58	Placenta	4	0	0	0	0	0	0	0.1	0.2	0.1	0	0	0	0	0	0	0	0	0	0	
C64	Kidney	138	0	1.4	0.2	0.1	0.2	0.1	0.1	0.6	0.9	1.9	3.3	3.9	3.9	6.6	3.8	10.8	8.7	1.4	1.8	
C65	Renal Pelvis	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0.9	0	0	0	
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C67	Bladder	59	0	0	0	0	0.1	0.1	0.1	0.5	0	1	0.4	1.2	1.3	3.1	1.9	8.1	9.9	0.6	0.8	
C68	Other Urinary organs	2	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	0	0	0	0	0	
C69	Eye	16	0	0.7	0.1	0.2	0	0.1	0	0	0	0.2	0	0.2	0	0.4	0	0.9	0.6	0.2	0.2	
C70-C72	Brain, Nervous system	155	0	1.4	1.3	1	0.7	0.4	1	0.8	1.5	1.4	2.9	3.4	3.9	3.5	3.8	8.1	4.9	1.6	1.8	
C73	Thyroid	854	2	0.1	0.2	1	2.4	6.1	9.2	11.8	15.6	18.8	20.7	19.6	19.7	14.9	11.5	8.1	19.8	8.7	8.9	
C74	Adrenal gland	19	0	1.1	0.1	0	0	0.2	0	0.2	0.1	0	0	0.2	0	0	0	0	0	0.2	0.2	
C75	Other Endocrine	6	0	0	0	0	0.1	0.1	0.1	0.1	0	0	0	0	0.3	0	0	0	0.6	0.1	0.1	
C81	Hodgkin disease	230	0	0.4	0.8	1.4	4.6	4.7	3.4	2.6	1.3	1.9	1.8	2	3.6	2.2	1.3	4.5	2.5	2.3	2.3	
C82-C85;C96	Non-Hodgkin lymphoma	372	0	0.5	0.5	0.9	0.6	2.6	0.7	1.6	3.1	2.7	4.7	8.8	10.3	23.2	24.2	24.3	32.8	3.8	4.9	
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C90	Multiple Myeloma	48	0	0	0	0	0	0	0	0.1	0.9	0.3	0.6	2.7	1.9	2.6	1.9	4.5	2.5	0.5	0.6	
C91	Lymphoid Leukaemia	105	0	3.1	1.4	1.4	0.6	0.3	0.2	0.5	0.3	0.2	0.8	0.7	1	2.2	1.3	5.4	3.1	1.1	1.2	
C92-C94	Myeloid Leukaemia	158	0	1	0.7	0.8	0.6	0.5	1.3	2.2	2.6	1.3	2.5	3.9	5.5	2.6	5.1	1.8	2.5	1.6	1.7	
C95	Leukaemia unspec.	13	0	0.1	0.3	0.1	0.3	0.1	0	0.1	0	0	0	0	0	0	0	0.9	1.2	0.1	0.1	
Other	Other & unspecified	110	0	0.4	0	0	0	0.2	0.7	0.5	0.4	0.2	1.4	2.2	4.8	5.3	8.3	13.5	11.1	1.1	1.5	
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All	All sites Total	7358	5	12	6	9	15	23	30	47	74	107	148	213	266	305	319	413	443	74.5	91.3	
Not C44	All sites but C44	7192	5	12	6	9	14	23	29	46	73	106	145	211	260	300	311	399	414	72.9	89.2	

Table 5.4.1 : Number Of Cases Among Non-Saudi Males by Primary Site And Age Groups, 2016.

ICD (10th)	Site	All Ages	Age unk	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	4	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	1	0.20%	
C01-C02	Tongue	33	0	0	0	0	0	1	1	1	5	4	6	6	2	4	0	1	2	1.80%	
C03-C06	Mouth	24	0	0	0	0	0	0	1	2	2	1	6	3	3	2	0	1	3	1.30%	
C07-C08	Salivary glands	8	0	0	0	0	0	0	1	3	0	0	2	0	2	0	0	0	0	0.40%	
C09	Tonsil	2	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0.10%	
C10	Other Oropharynx	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.10%	
C11	Nasopharynx	32	0	0	0	1	1	3	2	4	3	2	3	5	3	4	1	0	0	1.70%	
C12-C13	Hypopharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
C14	Pharynx unspec.	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.10%	
C15	Oesophagus	25	0	0	0	0	0	1	0	1	1	5	2	3	3	3	3	1	2	1.30%	
C16	Stomach	73	0	0	0	0	0	0	1	3	6	8	9	10	14	7	6	2	7	3.90%	
C17	Small intestine	18	0	0	0	0	0	0	0	1	0	3	3	3	3	3	0	1	1	1.00%	
C18	Colon	173	0	0	0	0	0	2	2	5	16	14	19	24	21	27	21	10	12	9.20%	
C19-C20	Rectum	126	0	0	0	0	0	0	1	7	7	14	18	21	19	11	17	6	5	6.70%	
C21	Anus	10	0	0	0	0	0	0	0	1	1	0	0	1	1	2	3	1	0	0.50%	
C22	Liver	42	0	0	0	0	0	0	0	1	1	2	3	5	6	13	3	4	4	2.20%	
C23-C24	Gallbladder etc.	11	0	0	0	0	0	0	0	0	0	2	2	1	1	2	2	1	0	0.60%	
C25	Pancreas	33	0	0	0	0	0	0	0	0	1	5	7	5	8	3	2	1	1	1.80%	
C30-C31	Nose, sinuses etc.	11	0	0	0	1	0	1	0	1	0	0	5	0	2	0	1	0	0	0.60%	
C32	Larynx	28	0	0	0	0	0	0	0	0	0	2	2	3	5	6	6	2	2	1.50%	
C33-C34	Trachea,Bronchus,Lung	124	0	0	0	1	1	0	1	4	2	4	12	10	22	22	21	10	14	6.60%	
C37-C38	Other Thoracic organs	9	0	0	0	0	0	1	4	1	1	0	1	0	1	0	0	0	0	0.50%	
C40-C41	Bone	31	0	0	2	9	1	5	2	0	1	4	1	1	1	4	0	0	0	1.70%	
C43	Melanoma of Skin	11	0	0	0	0	0	0	1	1	1	3	0	3	0	2	0	0	0	0.60%	
C44	Other Skin	135	0	2	0	0	1	1	4	7	5	8	10	16	29	15	11	9	17	7.20%	
C45	Mesothelioma	5	0	0	0	0	1	0	0	0	0	0	2	1	0	0	1	0	0	0.30%	
C46	Kaposi sarcoma	5	0	0	0	0	0	0	0	0	1	2	0	0	0	0	2	0	0	0.30%	
C47;C49	Connective,Soft tissue	33	0	1	2	0	1	1	3	5	2	4	3	2	4	3	2	0	0	1.80%	
C50	Breast	20	0	0	0	0	0	1	1	0	1	1	6	3	5	1	0	1	0	1.10%	
C60	Penis	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0.10%	
C61	Prostate	144	0	0	0	0	0	0	0	0	1	1	1	7	27	30	33	22	22	7.70%	
C62	Testis	29	0	0	0	0	1	4	6	6	5	2	1	2	0	2	0	0	0	1.50%	
C63	Other male genital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
C64	Kidney	89	0	0	0	0	0	0	1	3	4	8	14	15	17	12	5	4	6	4.80%	
C65	Renal Pelvis	2	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0.10%	
C66	Ureter	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.10%	
C67	Bladder	92	1	0	0	0	0	0	5	2	5	2	3	12	13	16	13	6	14	4.90%	
C68	Other Urinary organs	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.10%	
C69	Eye	3	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.20%	
C70-C72	Brain, Nervous system	73	0	8	2	2	2	6	6	7	10	6	3	8	6	4	1	1	1	3.90%	
C73	Thyroid	68	0	0	0	0	0	1	6	12	10	5	7	9	6	5	2	0	5	3.60%	
C74	Adrenal gland	5	0	0	0	0	0	0	0	1	1	0	1	0	1	1	0	0	0	0.30%	
C75	Other Endocrine	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.10%	
C81	Hodgkin disease	43	0	1	2	5	5	2	7	8	3	3	3	1	0	2	0	1	0	2.30%	
C82-C85;C96	Non-Hodgkin lymphoma	133	0	3	4	6	5	4	7	10	10	13	16	13	11	12	9	3	7	7.10%	
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
C90	Multiple Myeloma	15	0	0	0	0	0	0	0	0	1	1	1	2	5	2	2	0	1	0.80%	
C91	Lymphoid Leukaemia	39	0	4	6	3	3	0	3	1	3	3	2	1	4	0	2	2	2	2.10%	
C92-C94	Myeloid Leukaemia	42	0	2	2	1	0	3	1	2	7	4	3	4	2	8	0	0	3	2.20%	
C95	Leukaemia unspec.	3	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0.20%	
Other	Other & unspecified	57	0	0	0	0	0	1	1	6	3	4	6	8	16	6	3	1	2	3.00%	
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All	All sites Total	1872	1	23	20	29	23	38	68	109	123	143	184	210	263	237	173	93	135	100.00%	
Not C44	All sites but C44	1737	1	21	20	29	22	37	64	102	118	135	174	194	234	222	162	84	118	92.80%	

Table 5.4.2 : Number Of Cases Among Non-Saudi Females by Primary Site And Age Groups, 2016.

ICD (10th)	Site	All Ages	Age unk	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	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.10%
C01-C02	Tongue	11	0	0	0	0	0	0	2	1	1	1	0	1	1	1	1	0	2	0.60%
C03-C06	Mouth	12	0	0	0	0	0	0	0	0	0	1	2	0	0	2	3	2	2	0.70%
C07-C08	Salivary glands	2	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0.10%
C09	Tonsil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C10	Other Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C11	Nasopharynx	8	0	0	0	0	0	1	1	1	1	0	1	1	0	2	0	0	0	0.40%
C12-C13	Hypopharynx	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.10%
C14	Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C15	Oesophagus	6	0	0	0	0	0	0	0	0	0	1	1	1	1	0	3	0	0	0.30%
C16	Stomach	39	0	0	0	0	0	2	2	2	2	7	3	6	3	1	5	3	3	2.10%
C17	Small intestine	8	0	0	0	0	0	0	0	2	0	2	0	1	0	1	1	1	0	0.40%
C18	Colon	83	0	0	0	0	1	1	0	2	7	9	6	14	10	7	12	6	8	4.50%
C19-C20	Rectum	39	0	0	0	0	0	1	0	1	7	4	2	4	8	4	3	1	4	2.10%
C21	Anus	7	0	0	0	0	0	0	0	0	0	1	1	1	3	0	0	0	1	0.40%
C22	Liver	15	0	0	1	0	0	0	1	0	1	1	1	1	2	1	2	3	1	0.80%
C23-C24	Gallbladder etc.	16	0	0	0	0	0	0	0	1	0	0	3	0	1	3	2	1	5	0.90%
C25	Pancreas	22	0	0	0	0	0	0	0	2	2	2	0	3	3	5	1	1	3	1.20%
C30-C31	Nose, sinuses etc.	2	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0.10%
C32	Larynx	2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.10%
C33-C34	Trachea,Bronchus,Lung	33	0	0	0	0	1	0	3	1	1	2	3	7	4	6	0	2	3	1.80%
C37-C38	Other Thoracic organs	2	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.10%
C40-C41	Bone	13	0	0	1	2	1	2	1	2	0	0	0	0	2	0	0	0	2	0.70%
C43	Melanoma of Skin	4	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0.20%
C44	Other Skin	36	0	0	0	1	0	0	3	2	3	0	3	3	4	4	6	3	4	2.00%
C45	Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C46	Kaposi sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C47;C49	Connective,Soft tissue	27	0	5	2	2	0	1	1	4	1	1	2	1	2	0	3	1	1	1.50%
C50	Breast	787	0	0	0	0	0	2	31	53	102	123	130	116	96	53	37	22	22	43.10%
C51	Vulva	3	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0.20%
C52	Vagina	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.10%
C53	Cervix Uteri	51	0	0	0	0	0	0	3	4	11	5	6	5	5	5	1	1	5	2.80%
C54	Corpus Uteri	78	0	0	0	0	0	1	1	3	3	6	9	14	14	13	7	4	3	4.30%
C55	Uterus unspec.	13	0	0	0	0	0	0	0	0	0	2	4	2	2	1	1	0	1	0.70%
C56	Ovary	77	0	0	0	1	3	3	4	6	2	9	9	6	15	7	4	4	4	4.20%
C57	Other Female Genital	3	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0.20%
C58	Placenta	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.10%
C64	Kidney	26	0	0	2	0	0	0	0	2	2	3	4	3	2	4	1	2	1	1.40%
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.10%
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C67	Bladder	18	0	0	0	0	0	0	0	1	1	0	0	3	2	3	1	4	3	1.00%
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C69	Eye	4	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.20%
C70-C72	Brain, Nervous system	31	0	2	4	2	3	1	4	1	0	5	1	2	3	0	1	1	1	1.70%
C73	Thyroid	146	0	0	0	0	1	6	16	27	21	22	18	11	7	4	4	6	3	8.00%
C74	Adrenal gland	2	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.10%
C75	Other Endocrine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C81	Hodgkin disease	31	1	1	0	1	0	3	7	6	5	1	2	0	3	1	0	0	0	1.70%
C82-C85;C96	Non-Hodgkin lymphoma	65	0	1	0	0	6	3	3	11	2	3	5	8	6	4	4	3	6	3.60%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C90	Multiple Myeloma	10	0	0	0	0	0	0	0	0	1	0	0	2	4	0	2	0	1	0.50%
C91	Lymphoid Leukaemia	22	0	5	5	4	0	0	0	1	1	0	0	1	1	0	2	1	1	1.20%
C92-C94	Myeloid Leukaemia	22	0	0	1	3	1	0	3	1	3	1	4	2	0	0	1	0	2	1.20%
C95	Leukaemia unspec.	5	0	0	0	1	1	0	0	0	0	1	0	0	0	1	0	1	0	0.30%
Other	Other & unspecified	40	0	4	0	0	0	0	1	2	1	1	5	11	8	0	4	1	2	2.20%
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All	All sites Total	1826	1	23	17	17	19	27	88	140	182	213	229	237	216	135	112	75	95	100.00%
Not C44	All sites but C44	1790	1	23	17	16	19	27	85	138	179	213	226	234	212	131	106	72	91	98.00%



Table 5.4.3 : Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Non-Saudi Males (per 100,000) by Primary Site and Age groups, 2016.

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World
C00	Lip	4	0	0	0	0	0	0	0	0.1	0	0.2	0	0	0	0	0	0	3.6	0	0.1
C01-C02	Tongue	33	0	0	0	0	0	0.4	0.1	0.1	0.4	0.3	0.6	0.9	0.5	1.9	0	3	7.3	0.4	0.5
C03-C06	Mouth	24	0	0	0	0	0	0	0.1	0.2	0.1	0.1	0.6	0.5	0.8	1	0	3	10.9	0.3	0.4
C07-C08	Salivary glands	8	0	0	0	0	0	0	0.1	0.3	0	0	0.2	0	0.5	0	0	0	0	0.1	0.1
C09	Tonsil	2	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0.5	0	0	0	0	0
C10	Other Oropharynx	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0
C11	Nasopharynx	32	0	0	0	0.3	0.4	1.1	0.3	0.4	0.2	0.2	0.3	0.8	0.8	1.9	1.4	0	0	0.4	0.4
C12-C13	Hypopharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C14	Pharynx unspec.	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0
C15	Oesophagus	25	0	0	0	0	0	0.4	0	0.1	0.1	0.4	0.2	0.5	0.8	1.4	4.2	3	7.3	0.3	0.5
C16	Stomach	73	0	0	0	0	0	0	0.1	0.3	0.4	0.6	0.9	1.5	3.6	3.4	8.4	6.1	25.5	0.9	1.4
C17	Small intestine	18	0	0	0	0	0	0	0	0.1	0	0.2	0.3	0.5	0.8	1.4	0	3	3.6	0.2	0.3
C18	Colon	173	0	0	0	0	0	0.7	0.3	0.5	1.2	1.1	2	3.7	5.4	13	29.2	30.4	43.6	2.2	3.7
C19-C20	Rectum	126	0	0	0	0	0	0	0.1	0.8	0.5	1.1	1.9	3.3	4.9	5.3	23.7	18.3	18.2	1.6	2.3
C21	Anus	10	0	0	0	0	0	0	0	0.1	0.1	0	0	0.2	0.3	1	4.2	3	0	0.1	0.3
C22	Liver	42	0	0	0	0	0	0	0	0.1	0.1	0.2	0.3	0.8	1.6	6.3	4.2	12.2	14.5	0.5	1.1
C23-C24	Gallbladder etc.	11	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.3	1	2.8	3	0	0.1	0.2
C25	Pancreas	33	0	0	0	0	0	0	0	0	0.1	0.4	0.7	0.8	2.1	1.4	2.8	3	3.6	0.4	0.5
C30-C31	Nose, sinuses etc.	11	0	0	0	0.3	0	0.4	0	0.1	0	0	0.5	0	0.5	0	1.4	0	0	0.1	0.2
C32	Larynx	28	0	0	0	0	0	0	0	0	0	0.2	0.2	0.5	1.3	2.9	8.4	6.1	7.3	0.3	0.7
C33-C34	Trachea,Bronchus, Lung	124	0	0	0	0.3	0.4	0	0.1	0.4	0.1	0.3	1.3	1.5	5.7	10.6	29.2	30.4	50.9	1.5	3.4
C37-C38	Other Thoracic organs	9	0	0	0	0	0	0.4	0.6	0.1	0.1	0	0.1	0	0.3	0	0	0	0	0.1	0.1
C40-C41	Bone	31	0	0	0.6	3.1	0.4	1.8	0.3	0	0.1	0.3	0.1	0.2	0.3	1.9	0	0	0	0.4	0.7
C43	Melanoma of Skin	11	0	0	0	0	0	0	0.1	0.1	0.1	0.2	0	0.5	0	1	0	0	0	0.1	0.1
C44	Other Skin	135	0	0.7	0	0	0.4	0.4	0.6	0.8	0.4	0.6	1.1	2.5	7.5	7.2	15.3	27.4	61.8	1.7	3.3
C45	Mesothelioma	5	0	0	0	0	0.4	0	0	0	0	0	0.2	0.2	0	0	1.4	0	0	0.1	0.1
C46	Kaposi sarcoma	5	0	0	0	0	0	0	0	0	0.1	0.2	0	0	0	0	2.8	0	0	0.1	0.1
C47;C49	Connective,Soft tissue	33	0	0.4	0.6	0	0.4	0.4	0.4	0.5	0.1	0.3	0.3	0.3	1	1.4	2.8	0	0	0.4	0.5
C50	Breast	20	0	0	0	0	0	0.4	0.1	0	0.1	0.1	0.6	0.5	1.3	0.5	0	3	0	0.2	0.2
C60	Penis	2	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
C61	Prostate	144	0	0	0	0	0	0	0	0	0.1	0.1	0.1	1.1	7	14.5	46	66.9	80	1.8	5.2
C62	Testis	29	0	0	0	0	0.4	1.4	0.8	0.6	0.4	0.2	0.1	0.3	0	1	0	0	0	0.4	0.4
C63	Other male genital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C64	Kidney	89	0	0	0	0	0	0	0.1	0.3	0.3	0.6	1.5	2.3	4.4	5.8	7	12.2	21.8	1.1	1.6
C65	Renal Pelvis	2	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0.5	0	0	0	0	0
C66	Ureter	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4	3	0	0	0.1
C67	Bladder	92	1	0	0	0	0	0	0.7	0.2	0.4	0.2	0.3	1.9	3.4	7.7	18.1	18.3	50.9	1.1	2.6
C68	Other Urinary organs	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3.6	0	0.1
C69	Eye	3	0	0.7	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1
C70-C72	Brain, Nervous system	73	0	2.9	0.6	0.7	0.8	2.1	0.8	0.8	0.7	0.5	0.3	1.2	1.6	1.9	1.4	3	3.6	0.9	1.3
C73	Thyroid	68	0	0	0	0	0	0.4	0.8	1.3	0.7	0.4	0.7	1.4	1.6	2.4	2.8	0	18.2	0.8	1
C74	Adrenal gland	5	0	0	0	0	0	0	0	0.1	0.1	0	0.1	0	0.3	0.5	0	0	0	0.1	0
C75	Other Endocrine	1	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
C81	Hodgkin disease	43	0	0.4	0.6	1.7	2.1	0.7	1	0.9	0.2	0.2	0.3	0.2	0	1	0	3	0	0.5	0.8
C82-C85;C96	Non-Hodgkin lymphoma	133	0	1.1	1.1	2.1	2.1	1.4	1	1.1	0.7	1	1.7	2	2.8	5.8	12.5	9.1	25.5	1.7	2.6
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C90	Multiple Myeloma	15	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.3	1.3	1	2.8	0	3.6	0.2	0.3
C91	Lymphoid Leukaemia	39	0	1.4	1.7	1	1.3	0	0.4	0.1	0.2	0.2	0.2	0.2	1	0	2.8	6.1	7.3	0.5	1
C92-C94	Myeloid Leukaemia	42	0	0.7	0.6	0.3	0	1.1	0.1	0.2	0.5	0.3	0.3	0.6	0.5	3.9	0	0	10.9	0.5	0.8
C95	Leukaemia unspec.	3	0	0	0	0	0.4	0	0	0	0.1	0	0.1	0	0	0	0	0	0	0	0
Other	Other & unspecified	57	0	0	0	0	0	0.4	0.1	0.6	0.2	0.3	0.6	1.2	4.1	2.9	4.2	3	7.3	0.7	0.8
All	All sites Total	1872	1	8	6	10	10	14	10	12	9	11	19	33	68	115	241	283	491	23.3	39.9
Not C44	All sites but C44	1737	1	8	6	10	9	13	9	11	9	10	18	30	61	107	226	256	429	21.6	36.6

Table 5.4.4 : Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Non-Saudi Females (per 100,000) by Primary Site and Age groups, 2016.

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World
C00	Lip	1	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0
C01-C02	Tongue	11	0	0	0	0	0	0	0.5	0.2	0.2	0.2	0	1	1.6	2.2	3.5	0	18.4	0.3	0.7
C03-C06	Mouth	12	0	0	0	0	0	0	0	0	0	0.2	0.8	0	0	4.3	10.5	10.9	18.4	0.3	1.1
C07-C08	Salivary glands	2	0	0	0	0	0	0	0	0	0	0	0	1	0	2.2	0	0	0	0.1	0.1
C09	Tonsil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C10	Other Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C11	Nasopharynx	8	0	0	0	0	0	0.5	0.2	0.2	0.2	0	0.4	1	0	4.3	0	0	0	0.2	0.3
C12-C13	Hypopharynx	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.1
C14	Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C15	Oesophagus	6	0	0	0	0	0	0	0	0	0	0	0.4	1	1.6	0	10.5	0	0	0.2	0.5
C16	Stomach	39	0	0	0	0	0	1	0.5	0.5	0.4	1.4	1.1	6.1	4.7	2.2	17.6	16.3	27.5	1.1	2.3
C17	Small intestine	8	0	0	0	0	0	0	0	0.5	0	0.4	0	1	0	2.2	3.5	5.4	0	0.2	0.4
C18	Colon	83	0	0	0	0	0.5	0.5	0	0.5	1.3	1.8	2.3	14.2	15.5	15.2	42.2	32.6	73.4	2.3	5.8
C19-C20	Rectum	39	0	0	0	0	0	0.5	0	0.2	1.3	0.8	0.8	4.1	12.4	8.7	10.5	5.4	36.7	1.1	2.4
C21	Anus	7	0	0	0	0	0	0	0	0	0	0.2	0.4	1	4.7	0	0	0	9.2	0.2	0.5
C22	Liver	15	0	0	0.3	0	0	0	0.2	0	0.2	0.2	0.4	1	3.1	2.2	7	16.3	9.2	0.4	1.1
C23-C24	Gallbladder etc.	16	0	0	0	0	0	0	0	0.2	0	0	1.1	0	1.6	6.5	7	5.4	45.9	0.4	1.6
C25	Pancreas	22	0	0	0	0	0	0	0	0.5	0.4	0.4	0	3	4.7	10.8	3.5	5.4	27.5	0.6	1.6
C30-C31	Nose, sinuses etc.	2	0	0	0	0	0	0	0.2	0	0	0	0	0	1.6	0	0	0	0	0.1	0.1
C32	Larynx	2	0	0	0	0	0	0	0	0	0	0	0.4	1	0	0	0	0	0	0.1	0.1
C33-C34	Trachea,Bronchus,Lung	33	0	0	0	0	0.5	0	0.7	0.2	0.2	0.4	1.1	7.1	6.2	13	0	10.9	27.5	0.9	2.1
C37-C38	Other Thoracic organs	2	0	0.4	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0.1	0.1
C40-C41	Bone	13	0	0	0.3	0.7	0.5	1	0.2	0.5	0	0	0	0	3.1	0	0	0	18.4	0.4	0.8
C43	Melanoma of Skin	4	0	0	0	0	0	0	0	0	0	0	0	1	1.6	2.2	0	5.4	0	0.1	0.3
C44	Other Skin	36	0	0	0	0.4	0	0	0.7	0.5	0.6	0	1.1	3	6.2	8.7	21.1	16.3	36.7	1	2.7
C45	Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C46	Kaposi sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C47;C49	Connective,Soft tissue	27	0	1.9	0.6	0.7	0	0.5	0.2	1	0.2	0.2	0.8	1	3.1	0	10.5	5.4	9.2	0.7	1.3
C50	Breast	787	0	0	0	0	0	1	7.4	12.7	19	25.2	49.5	117.5	148.8	114.8	130	119.7	201.9	21.4	33.8
C51	Vulva	3	0	0	0	0	0	0	0	0	0	0	0.4	1	1.6	0	0	0	0	0.1	0.1
C52	Vagina	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.2	0	0.2
C53	Cervix Uteri	51	0	0	0	0	0	0	0.7	1	2.1	1	2.3	5.1	7.8	10.8	3.5	5.4	45.9	1.4	2.6
C54	Corpus Uteri	78	0	0	0	0	0	0.5	0.2	0.7	0.6	1.2	3.4	14.2	21.7	28.2	24.6	21.8	27.5	2.1	4.8
C55	Uterus unspec.	13	0	0	0	0	0	0	0	0	0	0.4	1.5	2	3.1	2.2	3.5	0	9.2	0.4	0.7
C56	Ovary	77	0	0	0	0.4	1.4	1.4	1	1.4	0.4	1.8	3.4	6.1	23.3	15.2	14.1	21.8	36.7	2.1	4.2
C57	Other Female Genital	3	0	0	0	0	0	0	0	0	0	0	0.4	2	0	0	0	0	0	0.1	0.1
C58	Placenta	1	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C64	Kidney	26	0	0	0.6	0	0	0	0	0.5	0.4	0.6	1.5	3	3.1	8.7	3.5	10.9	9.2	0.7	1.4
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	1.6	0	0	0	0	0	0.1
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C67	Bladder	18	0	0	0	0	0	0	0	0.2	0.2	0	0	3	3.1	6.5	3.5	21.8	27.5	0.5	1.7
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C69	Eye	4	0	1.1	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
C70-C72	Brain, Nervous system	31	0	0.8	1.2	0.7	1.4	0.5	1	0.2	0	1	0.4	2	4.7	0	3.5	5.4	9.2	0.8	1.3
C73	Thyroid	146	0	0	0	0	0.5	2.9	3.8	6.5	3.9	4.5	6.9	11.1	10.9	8.7	14.1	32.6	27.5	4	4.8
C74	Adrenal gland	2	0	0.4	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0.1	0.1
C75	Other Endocrine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C81	Hodgkin disease	31	1	0.4	0	0.4	0	1.4	1.7	1.4	0.9	0.2	0.8	0	4.7	2.2	0	0	0	0.8	0.8
C82-C85;C9	Non-Hodgkin lymphoma	65	0	0.4	0	0	2.7	1.4	0.7	2.6	0.4	0.6	1.9	8.1	9.3	8.7	14.1	16.3	55.1	1.8	3.8
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C90	Multiple Myeloma	10	0	0	0	0	0	0	0	0	0.2	0	0	2	6.2	0	7	0	9.2	0.3	0.8
C91	Lymphoid Leukaemia	22	0	1.9	1.5	1.5	0	0	0	0.2	0.2	0	0	1	1.6	0	7	5.4	9.2	0.6	1.2
C92-C94	Myeloid Leukaemia	22	0	0	0.3	1.1	0.5	0	0.7	0.2	0.6	0.2	1.5	2	0	0	3.5	0	18.4	0.6	1
C95	Leukaemia unspec.	5	0	0	0	0.4	0.5	0	0	0	0	0.2	0	0	0	2.2	0	5.4	0	0.1	0.3
Other	Other & unspecified	40	0	1.5	0	0	0	0	0.2	0.5	0.2	0.2	1.9	11.1	12.4	0	14.1	5.4	18.4	1.1	2.3
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All	All sites Total	1826	1	9	5	6	9	13	21	34	34	44	87	240	335	293	393	408	872	49.5	92.1
Not C44	All sites but C44	1790	1	9	5	6	9	13	20	33	33	44	86	237	329	284	372	392	835	48.6	89.4



Acknowledgment

We would like to express our deepest gratitude to the members of SCR committee and staff of the registry for their invaluable contribution and support.

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Cancer Incidence Report
Saudi Arabia
2016



السرطانات العشرة الأكثر شيوعاً بين السعوديين لكلا الجنسين

احتل سرطان الثدي المرتبة الأولى (٢٢٨٢ حالة) بنسبة ١٧.٣٪ تلاه سرطان القولون والمستقيم (١٦٥٩ حالة) بنسبة ١٢.٦٪ ثم سرطان الغدة الدرقية (١٠٧٦ حالة) بنسبة ٨.٢٪ ثم السرطان اللمفاوي اللاهودجكن (٨٤١ حالة) بنسبة ٦.٤٪ ثم سرطان ابيضاض الدم (٦١٠ حالة) بنسبة ٤.٦٪ يليه السرطان اللمفاوي هودجكن (٤٩٥ حالة) بنسبة ٣.٨٪ ثم سرطان الرحم (٤٥٤ حالة) بنسبة ٣.٤٪ يليه سرطان الرئة (٤٤٦ حالة) بنسبة ٣.٤٪ ثم سرطان الكبد (٤١٧ حالة) بنسبة ٣.٢٪ وأخيراً سرطان البروستات (٤٠٥ حالة) بنسبة ٣.١٪.

السرطانات العشرة الأكثر شيوعاً بين الأطفال السعوديين لكلا الجنسين

احتل سرطان ابيضاض الدم المرتبة الأولى (٢٠٠ حالة) بنسبة ٣٠.٤٪ تلاه سرطان الدماغ والجهاز العصبي (٩٦ حالة) بنسبة ١٤.٦٪ ثم السرطان اللمفاوي هودجكن (٧٦ حالة) بنسبة ١١.٦٪ ثم السرطان اللمفاوي اللاهودجكن (٦٠ حالة) بنسبة ٩.١٪ ثم سرطان العظام (٤٨ حالة) بنسبة ٧.٣٪، يليه سرطان العين (٢٩ حالة) بنسبة ٤.٤٪، ثم سرطان الغدة الكظرية والأنسجة الضامة (٢٧ حالة) بنسبة ٤.١٪ لكل منهما، ثم سرطان الكلى (٢٦ حالة) بنسبة ٤.٠٪، وأخيراً سرطان الغدة الدرقية (١٥ حالة) بنسبة ٢.٣٪.

السرطانات العشرة الأكثر شيوعاً بين السعوديين لكلا الجنسين

الاناث	٧٣٥٨	٪	الذكور	٥٨٠٣	٪
الثدي	٢٢٤٠	٣٠.٤	القولون والمستقيم	٩٥٥	١٦.٥
الغدة الدرقية	٨٥٤	١١.٦	الليمفاوي اللاهودجكن	٤٦٩	٨.١
القولون والمستقيم	٧٠٤	٩.٦	البروستات	٤٠٥	٧.٠
الرحم	٤٥٤	٦.٢	ابيضاض الدم	٣٣٤	٥.٨
الليمفاوي اللاهودجكن	٣٧٢	٥.١	الرئة	٢٩٨	٥.١
ابيضاض الدم	٢٧٦	٣.٨	الكبد	٢٩٠	٥.٠
الليمفاوي هودجكن	٢٣٠	٣.١	الليمفاوي هودجكن	٢٦٥	٤.٦
المبيض	٢١٩	٣.٠	المثانة	٢٢٩	٣.٩
الدماغ والجهاز العصبي	١٥٥	٢.١	الغدة الدرقية	٢٢٢	٣.٨
الرئة	١٤٨	٢.٠	الدماغ والجهاز العصبي	٢١٢	٣.٧

السرطانات العشرة الأكثر شيوعاً بين الأطفال السعوديين لكلا الجنسين

الاناث	٢٧٦	٪	الذكور	٣٨١	٪
ابيضاض الدم	٨٩	٣٢.٢	ابيضاض الدم	١١١	٢٩.١
الدماغ والجهاز العصبي	٣٧	١٣.٤	الدماغ والجهاز العصبي	٥٩	١٥.٥
الليمفاوي هودجكن	٢٥	٩.١	الليمفاوي هودجكن	٥١	١٣.٤
العظام	٢١	٧.٦	الليمفاوي اللاهودجكن	٤٢	١١.٠
الكلى	١٨	٦.٥	العظام	٢٧	٧.١
الليمفاوي اللاهودجكن	١٨	٦.٥	العين	١٩	٥.٠
الأنسجة الضامة	١٥	٥.٤	الغدة الكظرية	١٤	٣.٧
الغدة الكظرية	١٣	٤.٧	الأنسجة الضامة	١٢	٣.١
الغدة الدرقية	١٢	٤.٣	الخصية	٩	٢.٤
العين	١٠	٣.٦	الكلى	٨	٢.١

إحصائيات السرطان في المملكة العربية السعودية لعام 2016

السجل السعودي للأورام

أنشئ السجل السعودي للأورام في عام ١٤١٢ هـ (١٩٩٢م) بمستشفى الملك فيصل التخصصي ومركز الأبحاث تحت إشراف وزارة الصحة وبمشاركة من القطاعات الصحية الحكومية. يضم السجل خمسة فروع في مناطق المملكة بالإضافة إلى وجود مكاتب في عدد من القطاعات الصحية. بدأ السجل نشاطه في جمع المعلومات من شهر يناير في عام ١٩٩٤ م، حيث يتم جمع وترميز البيانات وتدخل حسب النظام المعتمد من منظمة الصحة العالمية وتحلل البيانات بشكل دوري. يقوم السجل بتزويد الجهات المختصة والباحثين بمعلومات إحصائية وفق نموذج خاص على صفحة السجل في الموقع الرسمي للمجلس الصحي السعودي:

<https://nhic.gov.sa/eServices/Pages/TumorRegistration.aspx>

إحصائيات السرطان لعام ٢٠١٦

بلغ إجمالي عدد حالات السرطان المكتشفة في عام ٢٠١٦ و المسجلة من مختلف المرافق الصحية الحكومية والخاصة بالمملكة العربية السعودية ١٦٨٥٩ حالة ، من بين هذه الحالات ١٣١٦١ سعوديين بنسبة ٧٨.١ ٪ وغير سعوديين ٣٦٩٨ بنسبة ٢١.٩ ٪. وكان عدد حالات السرطان لدى السعوديين الذكور ٥٨٠٣ حالة بنسبة أجمالية قدرها ٤٤.١ ٪ بينما بلغ عدد الحالات لدى الإناث السعوديات ٧٣٥٨ حالة بنسبة إجمالية قدرها ٥٥.٩ ٪.

غير سعوديين		سعوديين			المجموع الكلي
المجموع	أنثى	ذكر	المجموع	أنثى	ذكر
٣٦٩٨	١٨٢٦	١٨٧٢	١٣١٦١	٧٣٥٨	٥٨٠٣

بلغ المعدل المعياري للإصابة بالسرطان بين الرجال ٧٤.٧ حالة لكل ١٠٠٠٠٠ نسمة ، وبين النساء ٩١.٣

حالة لكل ١٠٠٠٠٠ نسمة

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

الحمد لله رب العالمين ، والصلاة والسلام على أشرف الأنبياء والمرسلين ، نبينا محمد وعلى آله وصحبه أجمعين، وبعد،،

يسر المجلس الصحي السعودي ممثلاً في المركز الوطني للمعلومات الصحية أن يضع بين أيديكم التقرير السنوي لأعمال السجل السعودي للأورام لعام ٢٠١٦م، الذي يحتوي على أحدث إنجازات السجل وأنشطته وبرامجه التي تمت مؤخراً ، وتمثلت في رصد وتسجيل حالات السرطان كافة من مختلف المرافق الصحية الحكومية والخاصة في المملكة ، التي بلغت (١٦٨٥٩) حالة، من بينها "١٣١٦١" حالة (من السعوديين)، بنسبة بلغت ٧٨.١٪، و"٣٦٩٨" حالة (من غير السعوديين)، بنسبة بلغت ٢١.٩٪.

وكان عدد حالات السرطان لدى السعوديين الذكور "٥٨٠٣" حالات، بنسبة إجمالية قدرها ٤٤.١٪، بينما بلغ عدد الحالات لدى الإناث السعوديات "٧٣٥٨" حالة بنسبة إجمالية قدرها ٥٥.٩٪.

وقد ساعدت الإحصائيات الصادرة عن "السجل" على دعم الجهود التوعوية وبرامج التثقيف الصحي، وتزويد الباحثين والمختصين في مجال السرطان في المملكة، بالبيانات الدقيقة التي تعكس الوضع الحقيقي للسرطان في المملكة، وتحديد أكثر أنواع السرطان شيوعاً حسب النوع والعمر والموقع الجغرافي.

وأود أن أنوه بأن المجلس الصحي السعودي قام بالإشراف على تنفيذ إستراتيجية وطنية طويلة المدى لعلاج ومكافحة السرطان ، وتطوير وتحسين مستويات الرعاية الصحية المقدمة لمرضى السرطان وتبادل الخبرات بين المراكز الطبية في القطاعات الحكومية المختلفة.

إنّ ما نراه من تطور ملموس في المجال الصحي في بلادنا جاء بفضل من الله تعالى ثم بدعم حكومتنا الرشيدة وعلى رأسها خادم الحرمين الشريفين وسمو ولي عهده الأمين - أيدهما الله -، وكذلك بجهود منسوبي القطاع الصحي والهيئات والمؤسسات الذي أولوا مرض السرطان عناية كبيرة وقاموا بإعداد البرامج العلاجية والتوعوية للوقاية منه.

وفي الختام..

هذا التقرير تحقق نتيجة العمل الدؤوب والجهد المستمر الذي قام به الزملاء في "السجل السعودي للأورام" مشكورين، لتحقيق رسالته وأهدافه لتسجيل حالات السرطان كافة في المملكة.

الأمين العام

د. نهاربن مزكي العازمي



المجلس الصحي السعودي
Saudi Health Council



المجلس الصحي السعودي
Saudi Health Council

المملكة العربية السعودية
المجلس الصحي السعودي
المركز الوطني للمعلومات الصحية
السجل السعودي للأورام

تقرير معدل الإصابة بمرض السرطان

٢٠١٦

حرر في يوليو 2019