



Republic of Health
Ministry of Health\Environment
Iraqi Cancer Board



Annual Report
Iraqi Cancer Registry
2015



Republic of Iraq
Ministry of Health\Environment
Iraqi Cancer Board

Annual Report
Iraqi Cancer Registry
2015

Email: Iraqicancerboard@yahoo.com

Copyrights © 2018

The preface of Minister of Health



Cancer is a significant health problem that accounts for the second leading cause of death in Iraq according to the Ministry of Health statistics in 2016. Its social, economical and health burden is increasing with time in parallel with the increasing average of life expectancy of our population. It disrupts the individual's functional performance and baffles the community with its burden. For decades, the Ministry of Health in Iraq has exerted great efforts to confront cancer so as to minimize its risk and limit its detrimental effect on the society by backing up screening and early detection programs, encouraging preventive measures and awareness among people, and providing cancer care service via comprehensive cancer centers fully equipped with diagnostic and therapeutic modalities.

Cancer registration is considered as the cornerstone for setting our cancer control plan and programs. Our cancer registry program includes electronic registration of data in all departments of cancer registry all over the country, which are connected with the Central Registration Department of the Ministry of Health where all data are processed and issued as a final annual report. This report contains comprehensive and accurate data necessary for setting cancer control plan. It is the essential reference for the ministry in the estimation of the need of labor force, medical and technical equipments and cancer medications needed to cover all parts of the country. Many cancer centers in Baghdad and other provinces have been successfully established depending on the data collected by our cancer registry program.

Worthy still to mention that cancer registry is a very important resource for scientific studies and researches. These researches and studies are crucial resources to improve our cancer control plan hence better cancer prevention, screening and cancer care services in Iraq. Thereby, our ultimate goal can be achieved in reducing cancer incidence and mortality and increasing survival with better quality of life.

Last but not least, it would be worthy to appreciate all those sincere efforts exerted in the preparation of this annual report, and Allah is All the Success – Giver.



Minister of Health
Doctor Adela Hmood Hussein
Head Iraqi Cancer Board

Acknowledgments

First and foremost, we would like to express our deepest thanks to the staff of clinics, hospitals, pathology laboratories, and cancer control units in each health directorates for their effort of collecting and entering of data.

*A special word of gratitude we should give to
WHO Office in Iraq
for their ongoing technical support.*

Iraqi Cancer Registry Team

Dr. Hayder H. Obeyed	Specialist Radiology/Secretary General of Iraqi Cancer Board
Dr. Raad H. Ibrahim	Specialist Medicine/Executive Manager of Iraqi Cancer Board
Dr. Khitam M. Ali	Specialist Epidemiology/Manager of Iraqi Cancer Registry Section
Dr. Rayed M. Abdo-Alkareem	General Practitioner Oncology/Assistant the Manager of Iraqi Cancer Registry Section
Athraa H. Hasan	Senior Head of Statisticians
Lamia M. Nasser	Senior Head of Statisticians
Khitam J. Selman	Senior Head of Statisticians
Menal H. Mola Mohamed	Senior Statisticians
Joolan S. Mehidy	Deputy Manager
Ahmed F. Juad	Senior Statisticians
Saif A. Jasem	Technician Observer
Khalid H. Hady	Senior Head Laboratory Assistant
Shaker H. Hady	Senior Medical Assistant
Redhab M. Sahib	Programmer Senior
Malath K. Jabber	Accounting Director
Nadia A. Abo-Khdeef	Observer Assistant
Samra N. Alwan	Programmer
Ali H. Kamil	Associate Researcher

Checking and Review Team

Dr. Hayder H. Obeyed	Specialist Radiology/Secretary General of Iraqi Cancer Board	Chief
Dr. Raad H. Ibrahim	Specialist Medicine/Executive Manager of Iraqi Cancer Board	Member
Dr. Manahil M. Abbas	Adjective/Member Iraqi Cancer Board	Member
Dr. Ahlam H. Mohamed	Specialist Oncology/Member Iraqi Cancer Board	Member
Dr. Fawaz S. Abd-Aljabar	Specialist Oncology/Manager of Center Therapeutic Section	Member
Dr. Khitam M. Ali	Specialist Epidemiology/Manager of Iraqi Cancer Registry Section	Member
Lamia M. Nasser	Senior Head of Statisticians	Member
Khitam J. Selman	Senior Head of Statisticians	Member

List of Contents

Contents	Page No.
Preface of Minister of Health	I
Acknowledgements	III
Team Work, Checking and Review Team	IV
List of Tables	VII
List of Figures	XI

Contents	Page No.
Summary	1
Introduction	2
1. Iraqi Cancer Registry (ICR)	
1.1. Description of ICR	3
1.2. History of ICR	3
1.3. Publication of ICR	3
1.4. Source of information	3
1.5. Information recorded	3
1.6. Data collection and techniques of system	3
1.7. Objectives	4
1.8. Vision	4
1.9. Mission	4
1.10. Difficulties	4
2. Iraqi Geography and Population	
2.1. Geography	6
2.2. Populations	6
3. Results	
3.1. Cancer cases 1994-2015	
3.1.1. Distribution of cancer cases for the period from 1994 to 2015	9
3.1.2. Trend of incidence rate of cases of cancer 2006-2015	10
3.2. Cancer cases in 2015	
3.2.1. Distribution of new cases of cancer in 2015	11
3.2.2. Trend of incidence rate of new cases by age group in 2015	13
3.2.3. Distribution and the incidence rate of new cases of cancer by provinces stratified by gender in 2015	14
3.2.4. Distribution and the incidence rate of crud cancer by site and gender	16
3.3. Top ten cancer in 2015	

3.3.1.	Distribution and the incidence rate of new cases of cancer for the year 2015	25
<hr/>		
Contents		Page No.
3.3.2.	Distribution and the incidence rate of top ten cancers in 2015 in male	27
3.3.3.	Distribution and the incidence rate of top ten cancers in 2015 in female	29
3.3.4.	Trend incidence rate of top ten cancer for the last 5 years from 2011 to 2015	31
3.3.5.	Number of top ten cancer by age group in 2015	36
3.3.6.	Incidence rate of top ten cancer by age group in 2015	37
3.3.7.	Distribution and the trend incidence rate of new cases of cancer in each provinces and the distribution of new cases of cancer by each district of province in 2015	38
3.4.	Morphology of top ten cancer in 2015	110
3.5.	Child cancer 0-14 years	
3.5.1.	Distribution and the incidence rate of Top Ten Cancer in Children	120
3.5.2.	Distribution of crude child cancer by site and gender	122
3.5.3.	Number of cancer in children by provinces stratified by age group and gender	125
3.6.	Cancer mortality	
3.6.1.	Distribution and incidence rate of the top ten cause of mortality by cancer	126
3.6.2.	Distribution and incidence rate of the top ten cause of mortality by cancer in male	128
3.6.3.	Distribution and incidence rate of the top ten cause of mortality by cancer in female	130
3.6.4.	Distribution and incidence rate of the top ten cause of mortality by Provinces	132
4.	Recommendations	134
	Annex: CanReg form	135
	Summary in Arabic	136
	Preface of Minister of Health in Arabic	137

List of Tables

Table No.	Table Title	Page No.
1	Top 20 Leading Cause of Death in the Eastern Mediterranean Region, Estimated Number, 2015 - 2030	2
2	Top 10 Leading Cause of Death in Iraq, 2015	3
3	Estimated Number and Percentage of Iraq's Population by Gender and Age Group, 2015	6
4	Estimated Number of Iraq's Population by Provinces, 2015	7
5	Distribution of Cancer Cases by Gender, Iraq, 1994-2015	9
6	Distribution of New Cases of Cancer by Age Group and Gender, Iraq, 2015	11
7	Distribution of New Cases of Cancer by Provinces Stratified by Gender, Iraq, 2015	14
8	Distribution and Incidence Rate (Per100, 000Population) of Crude Cancer by Site and Gender, Iraq, 2015	16
9	Distribution of Crude Cancer by Site and Age Group in Male, Iraq, 2015	19
10	Distribution of Crude Cancer by Site and Age Group in Female, Iraq, 2015	22
11	Distribution of Top Ten Cancer, Iraq, 2015	25
12	Distribution of Top Ten Cancer in Male, Iraq, 2015	27
13	Distribution of Top Ten Cancer in Females, Iraq, 2015	29
14	Number of Top Ten Cancer by Age Group, Iraq, 2015	36
15	Incidence Rate (Per 100,000Population) of Top Ten Cancer by Age Group, Iraq, 2015	37
16	Distribution of Top Ten Cancer in Kerbala, Iraq, 2015	38
17	Distribution of Top Ten Cancer by Districts in Kerbala, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	40
18	Distribution of Top Ten Cancer by Districts in Kerbala, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	41
19	Distribution of Top Ten Cancer in Baghdad, Iraq, 2015	42
20	Distribution of Top Ten Cancer by Districts in Baghdad, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	44
21	Distribution of Top Ten Cancer by Districts in Baghdad, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	45
22	Distribution of Top Ten Cancer in Najaf, Iraq, 2015	46

Table No.	Table Title	Page No.
23	Distribution of Top Ten Cancer by Districts in Najaf, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	48
24	Distribution of Top Ten Cancer by Districts in Najaf, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	49
25	Distribution of Top Ten Cancer in Babil, Iraq, 2015	50
26	Distribution of Top Ten Cancer by Districts in Babil, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	52
27	Distribution of Top Ten Cancer by Districts in Babil, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	53
28	Distribution of Top Ten Cancer in Nineveh, Iraq, 2015	54
29	Distribution of Top Ten Cancer by Districts in Nineveh, Iraq, 2015(Percentage of Each Type of Cancer Out of All)	56
30	Distribution of Top Ten Cancer by Districts in Nineveh, Iraq, 2015(Percentage of Each Type of Cancer from the Same Type)	57
31	Distribution of Top Ten Cancer in Basra, Iraq, 2015	58
32	Distribution of Top Ten Cancer by Districts in Basra, Iraq, 2015(Percentage of Each Type of Cancer Out of All)	60
33	Distribution of Top Ten Cancer by Districts in Basra, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	61
34	Distribution of Top Ten Cancer in Erbil, Iraq, 2015	62
35	Distribution of Top Ten Cancer by Districts in Erbil, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	64
36	Distribution of Top Ten Cancer by Districts in Erbil, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	65
37	Distribution of Top Ten Cancer in Dyala, Iraq, 2015	66
38	Distribution of Top Ten Cancer by Districts in Dyala, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	68
39	Distribution of Top Ten Cancer by Districts in Dyala, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	69
40	Distribution of Top Ten Cancer in Duhok, Iraq, 2015	70
41	Distribution of Top Ten Cancer by Districts in Duhok, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	72
42	Distribution of Top Ten Cancer by Districts in Duhok, Iraq, 2015 (Percentage of Each Type of Cancer from	73

Table No.	Table Title	Page No.
	the Same Type)	
43	Distribution of Top Ten Cancer in Thiqr, Iraq, 2015	74
44	Distribution of Top Ten Cancer by Districts in Thiqr, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	76
45	Distribution of Top Ten Cancer by Districts in Thiqr, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	77
46	Distribution of Top Ten Cancer in Wasit, Iraq, 2015	78
47	Distribution of Top Ten Cancer by Districts in Wasit, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	80
48	Distribution of Top Ten Cancer by Districts in Wasit, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	81
49	Distribution of Top Ten Cancer by District in Diwanya, Iraq, 2015	82
50	Distribution of Top Ten Cancer by Districts in Diwanya, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	84
51	Distribution of Top Ten Cancer by Districts in Diwanya, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	85
52	Distribution of Top Ten Cancer in Kirkuk, Iraq, 2015	86
53	Distribution of Top Ten Cancer by Districts in Kirkuk, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	88
54	Distribution of Top Ten Cancer by Districts in Kirkuk, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	89
55	Distribution of Top Ten Cancer in Sulaimaniya, Iraq, 2015	90
56	Distribution of Top Ten Cancer by Districts in Sulaimaniya, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	92
57	Distribution of Top Ten Cancer by Districts in Sulaimaniya, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	93
58	Distribution of Top Ten Cancer in Misan, Iraq, 2015	94
59	Distribution of Top Ten Cancer by Districts in Misan, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	96
60	Distribution of Top Ten Cancer by Districts in Misan, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	97
61	Distribution of Top Ten Cancer in Muthana, Iraq, 2015	98

Table No.	Table Title	Page No.
62	Distribution of Top Ten Cancer by Districts in Muthana, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	100
63	Distribution of Top Ten Cancer by Districts in Muthana, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	101
64	Distribution of Top Ten Cancer in Salah Al-Deen, Iraq, 2015	102
65	Distribution of Top Ten Cancer by Districts in Salah Al-Deen, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	104
66	Distribution of Top Ten Cancer by Districts in Salah Al-Deen, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	105
67	Distribution of Top Ten Cancer in Anbar, Iraq, 2015	106
68	Distribution of Top Ten Cancer by Districts in Anbar, Iraq, 2015 (Percentage of Each Type of Cancer Out of All)	108
69	Distribution of Top Ten Cancer by Districts in Anbar, Iraq, 2015 (Percentage of Each Type of Cancer from the Same Type)	109
70	Distribution of Top Ten Cancer in Children by Gender, Iraq, 2015	120
71	Distribution of Crude Child Cancer by Site and Gender, Iraq, 2015	122
72	Number of Cancer in Children by Provinces Stratified by Age Group and Gender, Iraq, 2015	125
73	Distribution of Top Ten Cause of Mortality by Cancer, Iraq, 2015	126
74	Distribution of Top Ten Cause of Mortality by Cancer in Male, Iraq, 2015	128
75	Distribution of Top Ten Cause of Mortality by Cancer in Female, Iraq, 2015	130
76	Distribution of Cancer Mortality by Provinces Stratified by Gender, Iraq, 2015	132

List of Figures

Figure No.	Figure Title	Page No.
1	Map of Iraqi Provinces	8
2	Trend Incidence Rate (Per 100,000Population) of New Cases of Cancer, Iraq, from 2006 – 2015	10
3	Distribution of New Cases of Cancer by Age Group and Gender, Iraq, 2015	12
4	Trend Incidence Rate (Per 100,000Population) of New Cases of Cancer by Age Group, Iraq, 2015	13
5	Incidence Rate (Per 100,000Population) of New Cases of Cancer by Provinces, Iraq, 2015	15
6	Incidence Rate (Per 100,000Population) of Top Ten Cancer, Iraq, 2015	26
7	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Male, Iraq, 2015	28
8	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Female, Iraq, 2015	30
9	Trend Incidence Rate (Per 100,000Population) of New Cases of Breast Cancer, Iraq, from 2011 – 2015	31
10	Trend Incidence Rate (Per 100,000Population) of New Cases of Bronchus and Lung Cancer, Iraq, from 2011 – 2015	31
11	Trend Incidence Rate (Per 100,000Population) of New Cases of Leukemia, Iraq, from 2011 – 2015	32
12	Trend Incidence Rate (Per 100,000Population) of New Cases of Brain and other CNS, Iraq, from 2011 – 2015	32
13	Trend Incidence Rate (Per 100,000Population) of New Cases of Colorectal, Iraq, from 2011 – 2015	33
14	Trend Incidence Rate (Per 100,000Population) of New Cases of Urinary Bladder, Iraq, from 2011 – 2015	33
15	Trend Incidence Rate (Per 100,000Population) of New Cases of Non-Hodgkin Lymphomas, Iraq, from 2011 – 2015	34
16	Trend Incidence Rate (Per 100,000Population) of New Cases of Thyroid Gland Cancer, Iraq, from 2011 – 2015	34
17	Trend Incidence Rate (Per 100,000Population) of New Cases of Skin Cancer, Iraq, from 2011 – 2015	35
18	Trend Incidence Rate (Per 100,000Population) of New Cases of Stomach Cancer, Iraq, from 2011 – 2015	35
19	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Kerbala, Iraq, 2015	39
20	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Baghdad, Iraq, 2015	43

Figure No.	Figure Title	Page No.
21	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Najaf, Iraq, 2015	47
22	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Babil, Iraq, 2015	51
23	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Nineveh, Iraq, 2015	55
24	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Basra, Iraq, 2015	59
25	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Erbil, Iraq, 2015	63
26	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Dyala, Iraq, 2015	67
27	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Duhok, Iraq, 2015	71
28	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Thiqr, Iraq, 2015	75
29	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Wasit, Iraq, 2015	79
30	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Diwanyia, Iraq, 2015	83
31	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Kirkuk, Iraq, 2015	87
32	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Sulaimaniya, Iraq, 2015	91
33	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Misan, Iraq, 2015	95
34	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Muthana, Iraq, 2015	99
35	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Salah Al-Deen, Iraq, 2015	103
36	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Anbar, Iraq, 2015	107
37	Breast Cancer by the Type of Morphology, Iraq, 2015	110
38	Bronchus and Lung Cancer by the Type of Morphology, Iraq, 2015	111
39	Leukemia by the Type of Morphology, Iraq, 2015	112
40	Brain Tumor by the Type of Morphology, Iraq, 2015	113
41	Colorectal Cancer by the Type of Morphology, Iraq, 2015	114
42	Urinary Bladder Cancer by the Type of Morphology, Iraq, 2015	115
43	Non- Hodgkin Lymphoma by the Type of Morphology, Iraq, 2015	116
44	Thyroid Cancer by the Type of Morphology, Iraq, 2015	117
45	Skin Cancer by the Type of Morphology, Iraq, 2015	118
46	Stomach Cancer by the Type of Morphology, Iraq, 2015	119

Figure No.	Figure Title	Page No.
47	Incidence Rate (Per 100,000Population) of Top Ten Cancer in Children, Iraq, 2015	121
48	Incidence Rate (Per 100,000Population) of Top Ten Cause of Mortality by Cancer, Iraq, 2015	127
49	Incidence Rate (Per 100,000Population) of Top Ten Cause of Mortality by Cancer in Male, Iraq, 2015	129
50	Incidence of Mortality Rate (Per 100,000Population) of Top Ten Cause of Mortality by Cancer in Female, Iraq, 2015	131
51	Incidence Rate (Per 100,000Population), of Cancers Mortality by Provinces, Iraq, 2015	133

Summary:

Iraqi Cancer Registry Annual Report provides information about cancer, new cases of cancer and mortality. The data are collected from hospitals and laboratories (public and private) in all directorates of health in Iraq by CanReg 4 program.

The total number of new cases of cancer during the year 2015 was 25,269 with male to female ratio 0.8:1. The most affected age group was 70 +years, and the incidence increased with age. The highest incidence was recorded in Kerbala province (98.7/100,000 population) and the lowest was in Anbar province (26.1/100,000 populations).

The top ten cancers were breast (19.1%), bronchus & lung (8.1%), leukemia (6.3%), brain & other central nervous system (CNS) (6.1%), colorectal (5.7%), urinary bladder (5.1%), Non-Hodgkin lymphomas (4.3%), thyroid gland (3.8%), skin (3.2%), and stomach (3.2%). The highest incidence of cancer in males was bronchus & lung cancer (6.7/100,000 males population), while in females was breast cancer (25.8/100,000 females population).

The incidence of breast, bronchus & lung, brain & other CNS, colorectal, thyroid gland, and stomach cancer increased for the last 5 years (2011-2015). But the incidence of leukemia, lymphoma, and urinary bladder cancer decreased for the last 5 years (2011-2015). While the incidence of skin cancer not change.

The total number of new cases of cancer in children (0-14 years) was 1,556 out of the 25,269 (total number of new cases of cancer of all age group). The highest incidence of cancer in children was leukemia (3/100,000 children 0-14 years populations) with male to female ratio 1.4:1.

The total number of cancer mortality during the year 2015 was 8,825. About equal male to female ratio. The highest incidence of cancer mortality was bronchus & lung cancer (7.3/100,000 populations) followed by breast cancer (2.7/100,000 populations). And the highest incidence of cancer mortality was recorded in Najaf province (41.7/100,000 populations) and the lowest was in Anbar province (5.2/100/000 populations).

Introduction:

Cancer is one of the leading causes of morbidity and mortality worldwide, it's the second leading cause of death globally, and was responsible for 8.8 million deaths in 2015. The most common causes of cancer death are cancers of: lung, Liver, Colorectal, Stomach, and Breast. Globally, nearly 1 in 6 deaths is due to cancer. Approximately 70% of deaths from cancer occur in low- and middle-income countries. Around one third of deaths from cancer are due to the 5 leading behavioral and dietary risks: high body mass index, low fruit and vegetable intake, lack of physical activity, tobacco use, and alcohol use. Between 30–50% of cancers can currently be prevented by avoiding risk factors and implementing existing evidence-based prevention strategies. The cancer burden can also be reduced through early detection of cancer and management of patients who develop cancer. Many cancers have a high chance of cure if diagnosed early and treated adequately ^[1].

Global trends suggest that the burden of cancer is increasing in the Eastern Mediterranean Region, Table No.; (1).

Table No.; (1) Top 20 Leading Cause of Death in the Eastern Mediterranean Region, Estimated Number, 2015 - 2030 ^[2]

Rank	2015	Rank	2030
1	Ischemic heart disease	1	Ischemic heart disease
2	Stroke	2	Stroke
3	Lower respiratory infection	3	Chronic obstructive pulmonary disease
4	Chronic obstructive pulmonary disease	4	Lower respiratory infection
5	Diarrheal disease	5	Diarrheal disease
6	HIV/AIDS	6	Trachea, bronchus, lung cancers
7	Trachea, bronchus, lung cancers	7	Road injury
8	Lower respiratory infection	8	HIV/AIDS
9	Road injury	9	Diarrheal disease
10	Hypertensive heart disease	10	Hypertensive heart disease
11	Preterm birth complications	11	Cirrhosis of the liver
12	Cirrhosis of the liver	12	Liver cancer
13	Tuberculosis	13	Kidney diseases
14	Kidney diseases	14	Stomach cancer
15	Self-harm	15	Colon and rectum cancer
16	Liver cancer	16	Self-harm
17	Stomach cancer	17	Fall
18	Birth asphyxia and birth trauma	18	Alzheimer's disease and other dementias
19	Colon and rectum cancer	19	Preterm birth complications
20	Fall	20	Breast cancer

In Iraq malignant neoplasm's represented the second leading cause of death.

Table No.; (2) Top 10 Leading Cause of Death in Iraq, 2015 ^[2]

Rank	2015
1	Cerebrovascular diseases
2	Malignant neoplasm's
3	Ischemic heart disease
4	Heart failure
5	Hypertensive disease
6	Renal failure
7	Respiratory and cardiovascular disorders specific to the per-natal period
8	Operation of war
9	Transport accidents
10	Diabetes mellitus

¹Source: WHO/ Cancer. Fact sheet, February 2018:
<http://www.who.int/mediacentre/factsheets/fs297/en/>

²Global Health Estimates 2015

³Planning and Resources Enhancement Office/Health Statistical Section/ Ministry of Health,
Iraq/Annual Statistical Report 2015

1. Iraqi Cancer Registry:

1.1. Description of ICR: The ICR is responsible for collecting information relating to every new cancer patient in all governorates of Iraq. The cancer registration scheme is primarily concerned with malignant neoplasm's, but some benign, in-situ, uncertain and specified tumors are required to be registered.

1.2. History of ICR: ICR was established in 1974 through close cooperation of Ministry of Health and the Iraqi Cancer Society. It began operation in 1975 and was located in the Central Public Health Laboratory. The forms were prepared with kind help of the International Agency of Research on Cancer in Lyon France.

1.3. Publication of ICR: Since 1976 we published many reports of the ICR [(1976–1985), (1986–1988), (1989–1991), (1992–1994), (1995–1997), (1998–1999)]. We also published the annual report of ICR from 2000 to 2014.

1.4. Source of information: The cancer registry collects data from medical record departments of all hospitals in all governorates of Iraq. All the sources of information for the registry are to be found in the hospital inpatients and outpatients departments and its laboratories. Most cancer cases are admitted or treated at the hospital for radiotherapy and nuclear medicine; these cancer cases are usually found to be previously registered elsewhere.

1.5. Information recorded: The form is distributed to all hospitals (public and private) in all governorates and all cancer patients are registered. The registry staff directly supervises registration in the hospitals, in addition to public and private labs.

1.6. Data collection and techniques of system:

- Data are registered by well trained staff instructed to copy certain items from hospital records, and from radiotherapy and pathology departments by CanReg 4(annex). Registration is also obtained from private laboratories on cases of cancer which have been diagnosed in private hospitals in all governorates.
- The completed forms are sent every 3 months to the central registry at the Ministry of Health where they checked for accuracy and completeness, listing or a card made for the registry for each reportable case.
- The completed records are entered into "Alphabetical Index" to prevent duplication.
- All incoming forms are checked and filled by name, registry number, and the ICD-O code (International Classification of Diseases for Oncology), and histology is coded by the ICD.O System third edition.

1.7. Objectives: The objectives of the ICR are:

- To estimate the incidence rate of cancer.
- To describe the epidemiological characteristic of cancer.
- To define the size of the cancer problem and pattern of cancer occurrence in Iraq for planning, organizing, and monitoring of services for treatment and prevention.
- To carry out epidemiological research.

1.8. Vision: To meet the highest attainable international standards in cancer registration, surveillance and control.

1.9. Mission: To register all cancer cases reported in various health institutions in Iraq and to avail the data and /or information gathered for policy development and support in cancer research, treatment, control ,prevention, and surveillance.

1.10. Difficulties:

- ❖ Complete coverage is found to be extremely difficult.
- ❖ Information forms distributed to medical and health institutions will always include incomplete fields or sections.
- ❖ No follow up for patients is registered.

2. Iraqi Geography and Populations:

2.1. Geography:

The republic of Iraq is located in the south-west of Asia, to the north-east of the Arab Homeland, bounded on the north by Turkey, on the east by Iran, on the south by Arab Gulf, Kuwait & Saudi Arabia, and on the west by Syria, Jordan & Saudi Arabia. The highest the proportion of the length of Iraq's borders with neighboring countries is with Iran about (37.6%) followed by Saudi Arabia about (23.5%).

Iraq has occupied an area of 435,052 square kilometers, the province of Anbar the highest area, reaching to 31.7%, followed by Muthana province by 11.9% of the area of Iraq and Nineveh province reaching 8.6% of the area of Iraq.

The surface section of Iraq consist of deserts which is about 38,7% ,then the plains including (marshes and lakes) include about 30,5% of the area, mountains which is occupied about 21,1% of the area and terrain lands which occupies about 9,7% of the surface area of Iraq (Source: Environmental Statistics in Iraq Report 2009).

2.2. Populations: Below the estimated number of Iraq's population in 2015 by gender and age group (Source: Ministry of planning / Central Statistic Organization).

Table No.; (3) Estimated Number and Percentage of Iraq's Population by Gender and Age Group, 2015

Age group	Male		Female		Total	
	N.	%	N.	%	N.	%
0 - 4	2,831,569	7.6	2,679,178	7.3	5,510,747	14.9
5 - 9	2,546,148	6.9	2,401,607	6.6	4,947,755	13.5
10-14	2,263,354	6.1	2,129,320	5.8	4,392,674	11.9
15-19	1,993,598	5.4	1,883,491	5.2	3,877,089	10.6
20-24	1,716,645	4.6	1,636,619	4.5	3,353,264	9.1
25-29	1,482,225	4.1	1,435,204	3.9	2,917,429	8
30-34	1,255,078	3.4	1,250,533	3.5	2,505,611	6.9
35-39	1,066,221	2.8	1,083,350	2.9	2,149,571	5.7
40-44	893,809	2.4	926,878	2.6	1,820,687	5
45-49	733,133	1.9	772,821	2.1	1,505,954	4
50-45	568,716	1.5	611,714	1.6	1,180,430	3.1
55-59	441,351	1.2	480,746	1.3	922,097	2.5
60-64	324,031	0.8	356,416	0.9	680,447	1.7
65-69	230,275	0.6	253,860	0.7	484,135	1.3
70 +	313,420	0.8	372,404	1	685,824	1.8
Total	18,659,573	50.1%	18,274,141	49.9%	36,933,714	100%

Table No.; (4) Estimated Number of Iraq's Population by Provinces, 2015

Provinces	Population No.
Baghdad	7,877,888
Nineveh	3,612,339
Basra	2,818,804
Sulaimaniya	2,095,851
Thiqar	2,029,345
Babil	1,999,034
Erbil	1,797,708
Anbar	1,715,149
Dyala	1,584,948
Kirkuk	1,548,212
Salah Al-Deen	1,544,081
Najaf	1,425,723
Wasit	1,335,230
Duhok	1,252,343
Diwanyia	1,250,166
Kerbala	1,180,545
Misan	1,078,086
Muthana	788,262
Total	36,933,714

Figure No.; (1) Map of Iraqi Provinces



3. Results:

3.1. Cancer cases 1994-2015:

3.1.1. Distribution of cancer cases for the period from 1994 to 2015:

Table No.; (5) shows the distribution of new cases of cancer in Iraq for the period from 1994 to 2015, which shows that the number of new cases of cancer was increased with time for both gender.

Table No.; (5) Distribution of Cancer Cases by Gender, Iraq, 1994-2015

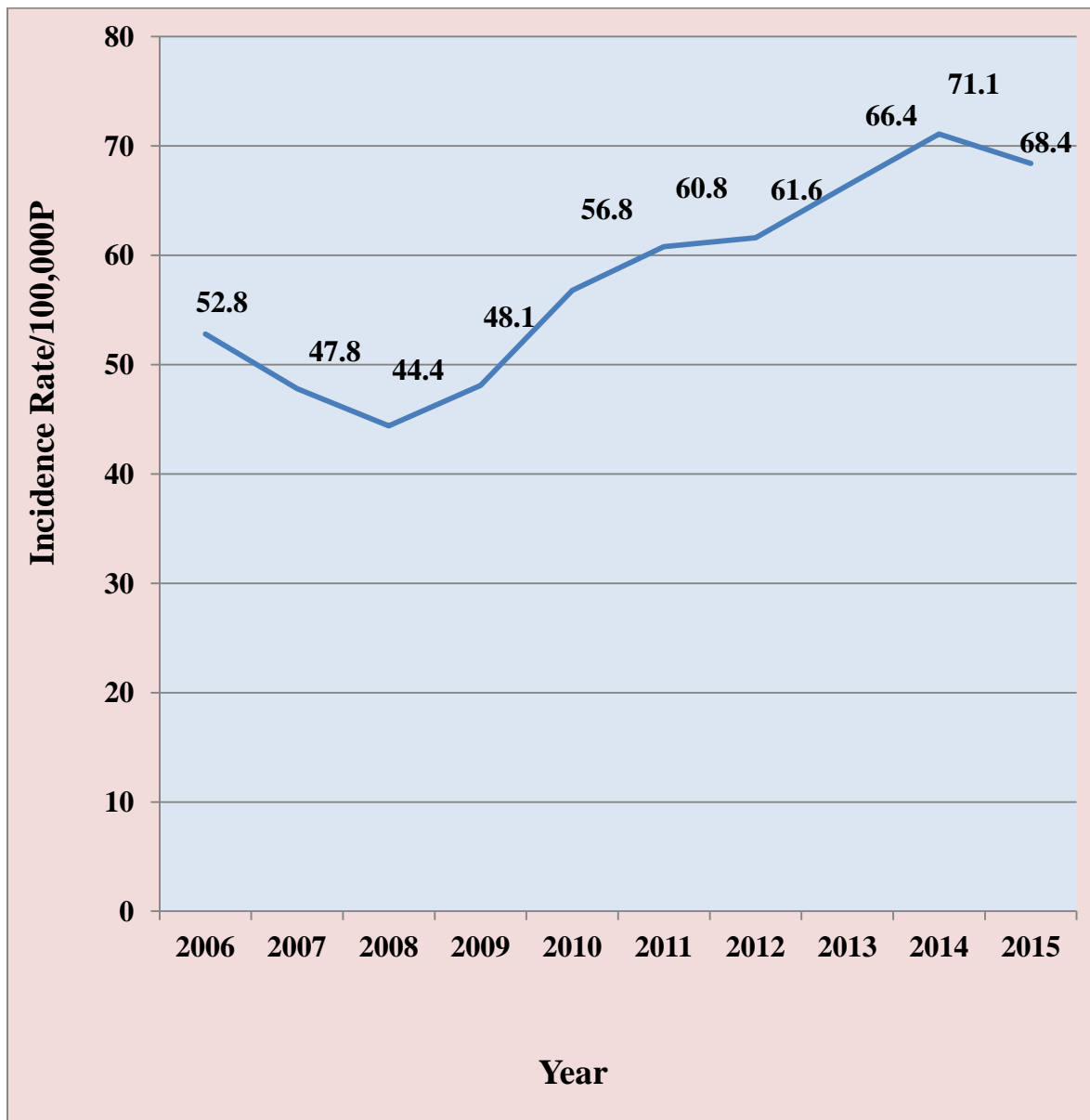
Year	Male		Female		Total	
	No.	%	No.	%	No.	%
1994	4,230	54.4	3,555	45.6	7,785	100%
1995	4,344	54.7	3,604	45.3	7,948	100%
1996	4,466	53.5	3,894	46.5	8,360	100%
1997	4,521	52.7	4,071	47.3	8,592	100%
1998	4,774	52.9	4,259	47.1	9,033	100%
1999	4,556	50.9	4,380	49.1	8,936	100%
2000	5,376	49.4	5,512	50.6	10,888	100%
2001	6,758	50.6	6,574	49.4	13,332	100%
2002	6,964	49.8	7,021	50.2	13,985	100%
2003	5,698	50.6	5,550	49.4	11,248	100%
2004	7,525	51.8	6,995	48.2	14,520	100%
2005	7,505	49.5	7,667	50.5	15,172	100%
2006	7,377	48.5	7,849	51.5	15,226	100%
2007	6,656	46.8	7,557	53.2	14,213	100%
2008	6,589	46.5	7,591	53.5	14,180	100%
2009	7,201	47.3	8,050	52.7	15,251	100%
2010	8,544	46.3	9,938	53.7	18,482	100%
2011	9,352	46.2	10,926	53.8	20,278	100%
2012	9,268	43.9	11,833	56.1	21,101	100%
2013	10,568	45.4	12,740	54.6	23,308	100%
2014	11,411	44.5	14,187	55.5	25,598	100%
2015	11,205	44.4	14,064	55.6	25,269	100%

Note: From 1995 till 2004 without Kurdistan region.

3.1.2. Trend of incidence rate of cases of cancer 2006-2015:

Figure No.; (2) shows the trend incidence rate of new cases of cancer in Iraq for the last 10 years, which shows that the trend increased from 2006 to 2015.

Figure No.; (2) Trend Incidence Rate (Per 100,000Population) of New Cases of Cancer, Iraq, 2006 – 2015



3.2. Cancer cases in 2015:

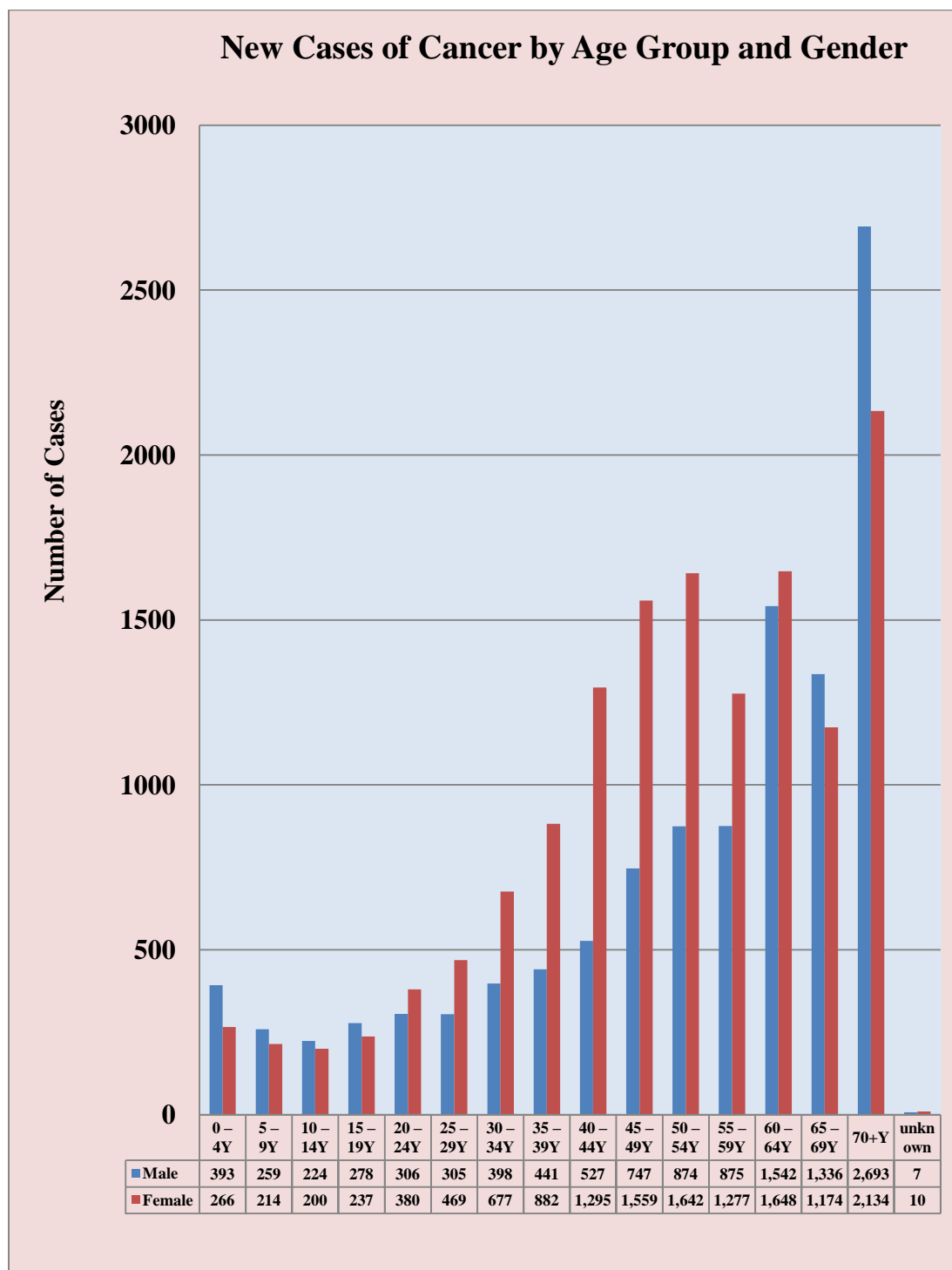
3.2.1. Distribution of new cases of cancer in 2015:

Table No.; (6), Figure No.; (3) shows that the total number of new cases of cancer was 25,269, and the highest percentage was among the age group 70 and more years, and it was in male more than in female. Male to female ratio was 0.8:1

Table No.; (6) Distribution of New Cases of Cancer by Age Group and Gender, Iraq, 2015

Age Group	Male		Female		Total	
	No.	%	No.	%	No.	%
0 - 4	393	1.5	266	1	659	2.5
5 - 9	259	1	214	0.8	473	1.8
10 - 14	224	0.8	200	0.7	424	1.5
15 - 19	278	1.1	237	0.9	515	2
20 - 24	306	1.2	380	1.5	686	2.7
25 - 29	305	1.2	469	1.9	774	3.1
30 - 34	398	1.5	677	2.7	1,075	4.2
35 - 39	441	1.7	882	3.5	1,323	5.2
40 - 44	527	2	1,295	5.1	1,822	7.1
45 - 49	747	2.9	1,559	6.2	2,306	9.1
50 - 54	874	3.4	1,642	6.5	2,516	9.9
55 - 59	875	3.5	1,277	5.1	2,152	8.6
60 - 64	1,542	6.1	1,648	6.5	3,190	12.6
65 - 69	1,336	5.8	1,174	4.7	2,510	10.5
70+	2,693	10.7	2,134	8.5	4,827	19.2
unknown	7	0.02	10	0.03	17	0.05
Total	11,205	44.4%	14,064	55.6%	25,269	100%

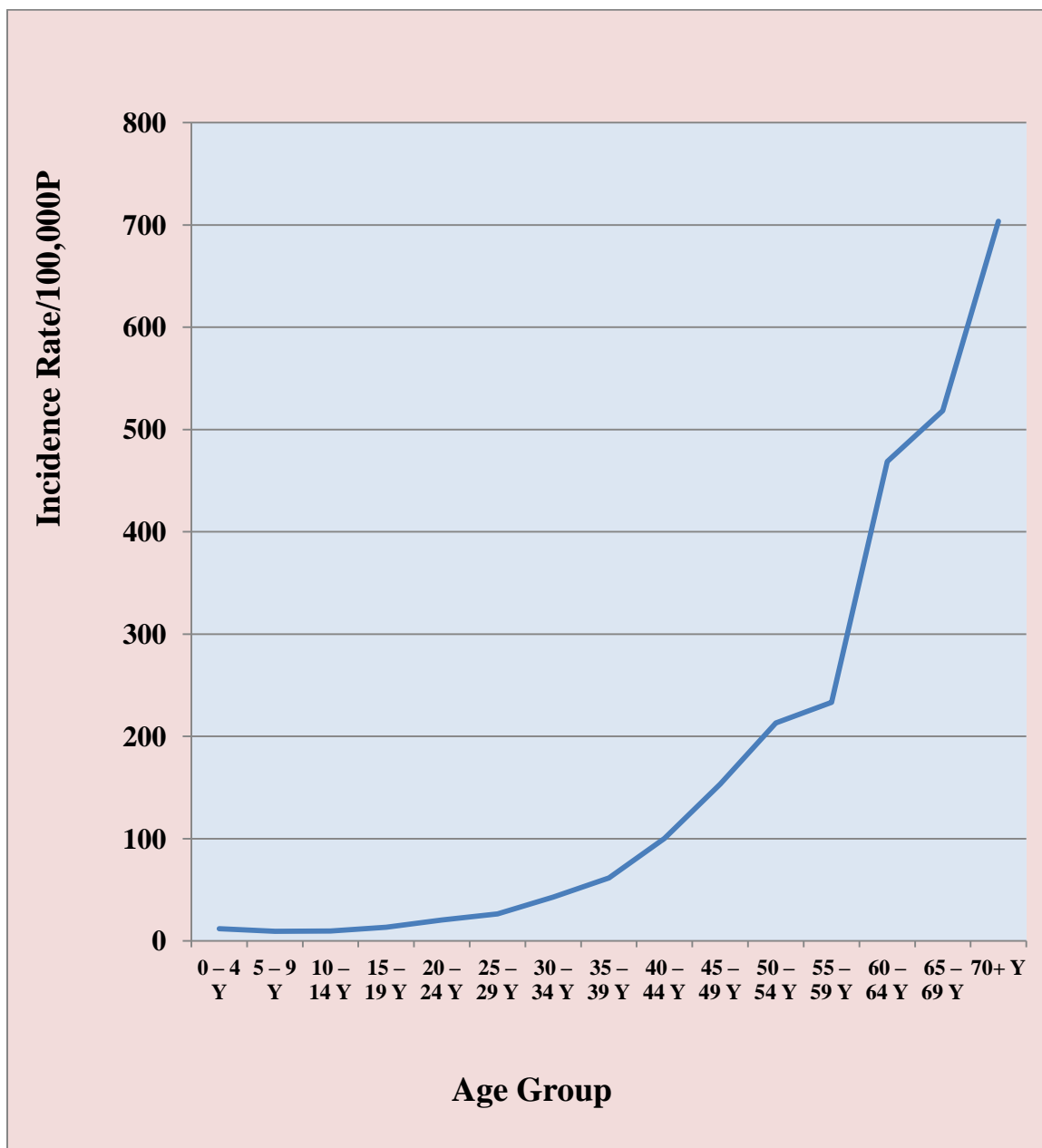
Figure No.; (3) Distribution of New Cases of Cancer by Age Group and Gender, Iraq, 2015



3.2.2. Trend of incidence rate of new cases by age group in 2015:

Figure No.; (4) shows the trend incidence rate of new cases of cancer by age group, which shows that the incidence increased with age.

Figure No.; (4) Trend Incidence Rate (Per 100,000Population) of New Cases of Cancer by Age Group, Iraq, 2015



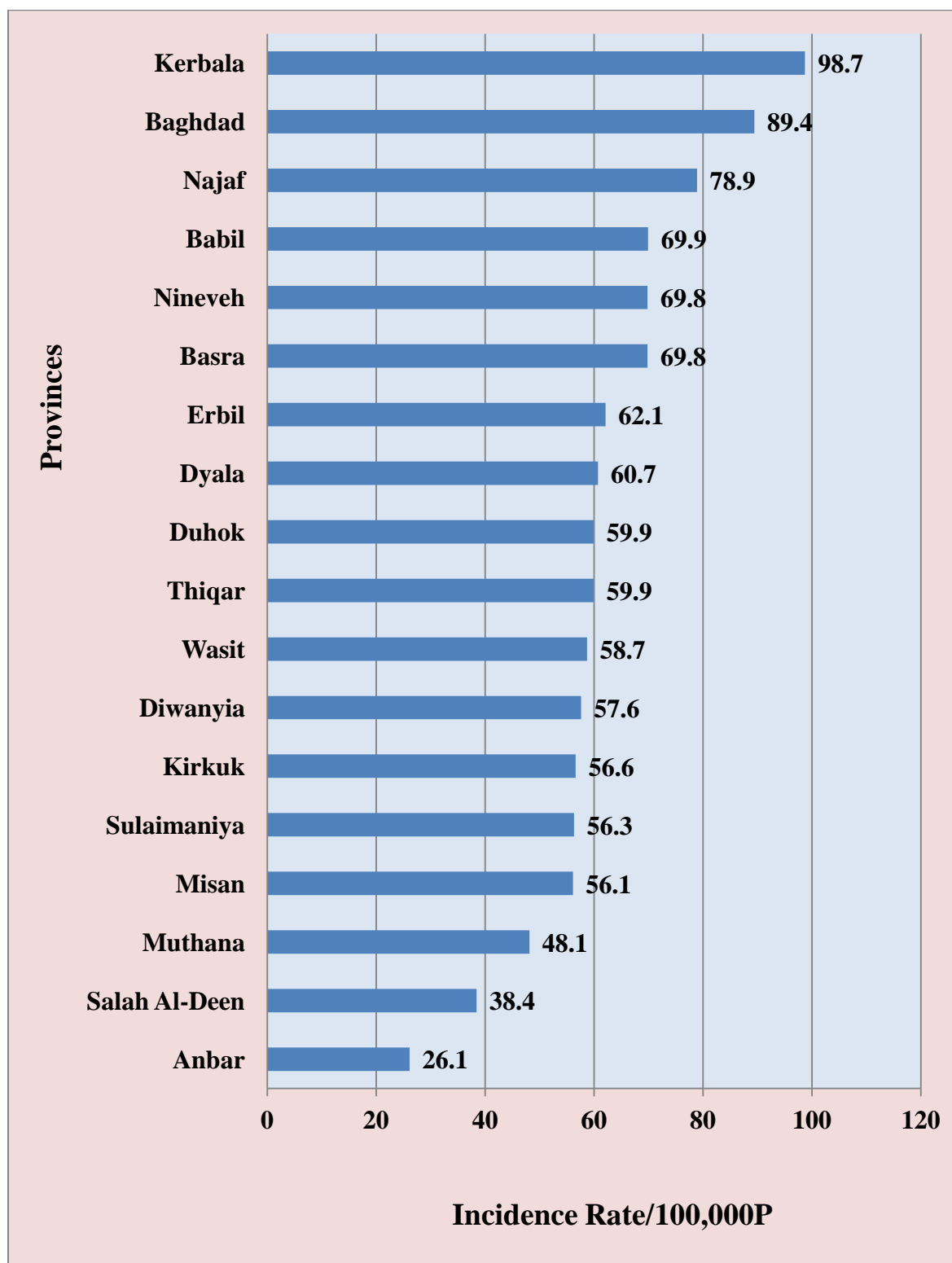
3.2.3. Distribution and the incidence rate of new cases of cancer by provinces stratified by gender in 2015:

Table No.; (7), Figure No.; (5) shows the highest percentage was in Baghdad and the lowest was in Muthana, while the highest incidence was in Kerbala and the lowest in Anbar.

Table No.; (7) Distribution of New Cases of Cancer by Provinces Stratified by Gender, Iraq, 2015

Provinces	Male		Female		Total	
	No.	%	No.	%	No.	%
Baghdad	2,915	11.5	4,129	16.4	7,044	27.9
Basra	905	3.6	1,064	4.2	1,969	7.8
Nineveh	750	3	873	3.5	1,623	6.5
Babil	634	2.5	764	3	1,398	5.5
Thiqr	587	2.3	629	2.5	1,216	4.8
Sulaimaniya	574	2.3	607	2.4	1,181	4.7
Kerbala	480	1.9	686	2.7	1,166	4.6
Erbil	507	2	609	2.4	1,116	4.4
Najaf	505	2	621	2.4	1,126	4.4
Dyala	440	1.7	523	2.1	963	3.8
Kirkuk	387	1.5	490	1.9	877	3.4
Wasit	351	1.4	433	1.7	784	3.1
Duhok	380	1.5	386	1.6	766	3.1
Diwanyia	344	1.4	377	1.5	721	2.9
Misan	275	1.1	330	1.3	605	2.4
Salah Al-Deen	245	1	348	1.3	593	2.3
Anbar	202	0.8	245	1	447	1.8
Muthana	170	0.7	209	0.8	379	1.5
Unknown address	554	2.2	741	2.9	1,295	5.1
Total	11,205	44.4%	14,064	55.6%	25,269	100%

Figure No.; (5) Incidence Rate (Per 100,000Population) of New Cases of Cancer by Provinces, Iraq, 2015



3.2.4. Distribution and the incidence rate of crud cancer by site and gender:

Table No.; (8) Distribution and Incidence Rate (Per100, 000Population) of Crude Cancer by Site and Gender, Iraq, 2015

Site	ICD-O	Male	Female	Incidence rate
Lip	C00	18	11	0.08
Tongue- base	C01	11	7	0.05
Tongue- other	C02	39	27	0.18
Gum	C03	4	3	0.02
Mouth- floor	C04	5	2	0.02
Mouth-palate	C05	4	13	0.05
Mouth-other	C06	17	7	0.06
Parotid gland	C07	35	25	0.16
Salivary glands-other	C08	22	19	0.11
Tonsil	C09	5	5	0.03
Oropharynx	C10	12	9	0.06
Nasopharynx	C11	92	37	0.35
Pyriform Sinus	C12	4	7	0.03
Hypo-pharynx	C13	7	18	0.07
Other lip, oral & pharynx	C14	14	8	0.06
Esophagus	C15	94	83	0.48
Stomach	C16	448	360	2.19
Small intestine	C17	64	44	0.29
Colon	C18	501	443	2.56
Recto-sigmoid junction	C19	31	20	0.14
Rectum	C20	234	192	1.15
Anus & anal canal	C21	20	13	0.09
Liver & bile ducts	C22	327	267	1.61
Gall bladder	C23	45	79	0.34
Biliary tract-other	C24	39	44	0.22
Pancreas	C25	308	231	1.46
Other digestive organs	C26	48	47	0.26
Nasal cavity& middle ear	C30	33	26	0.16
Accessory sinuses	C31	10	10	0.05
Larynx	C32	315	93	1.10
Trachea	C33	1	0	0
Bronchus & lung	C34	1428	599	5.49
Thymus	C37	14	12	0.07
Heart, Mediastinum & pleura	C38	31	32	0.17
Other respiratory & thoracic	C39	4	1	0.01
Bone, cartilage, & limbs	C40	75	50	0.34

Site	ICD-O	Male	Female	Incidence rate
Bone & cartilage-other	C41	141	124	0.72
Bone marrow	C42	1	0	0
Skin- other	C44	445	366	2.20
Nerves, peripheral & autonomic nervous system	C47	14	14	0.08
Peritoneum & retroperitoneal	C48	32	22	0.15
Other connective soft tissue	C49	200	162	0.98
Breast	C50	104	4720	13.06
Vulva	C51	0	14	0.07
Vagina	C52	0	10	0.05
Cervix uteri	C53	0	221	1.20
Corpus uteri	C54	0	260	1.42
Uterus unspecified	C55	0	336	1.83
Ovary	C56	0	564	3.08
Female genital-other	C57	0	9	0.05
Placenta	C58	0	132	0.72
Penis	C60	5	0	0.02
Prostate	C61	737	0	3.94
Testis	C62	164	0	0.87
Male genital-other	C63	4	0	0.002
Kidney, not renal pelvis	C64	366	254	1.68
Renal Pelvis	C65	2	2	0.01
Ureter	C66	4	1	0.01
Bladder	C67	941	319	3.41
Urinary organs-other	C68	4	2	0.02
Eye & Adnexa	C69	34	33	0.18
Meninges	C70	38	91	0.35
Brain	C71	673	614	3.48
Nervous system-other	C72	25	31	0.15
Thyroid gland	C73	264	708	2.63
Adrenal gland	C74	40	27	0.18
Endocrine glands-other	C75	39	42	0.22
Unspecified sites	C76	70	76	0.40
Lymph nodes	C77	0	0	0
Unknown primary site	C80	323	357	1.84

Malignant tumors by morphology	Male	Female	Incidence rate
Non-Hodgkin lymphomas	588	513	2.98
Hodgkin disease	368	310	1.84
Plasma cell tumor	177	131	0.83
Mast cell tumor	0	0	0
Immunoproliferative diseases	0	0	0
Leukemia	930	654	4.29
Chronic Myeloproliferative disorders	62	57	0.32
Myelodys plastic syndromes	51	44	0.26

Table No.; (9) Distribution of Crude Cancer by Site and Age Group in Male, Iraq, 2015

Site	ICDO	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+	Un.	All	%
Lip	C00						1	1			1	3	0	1	4	7		18	0.16
Tongue - base	C01							1	1	1	1	1	2	2	2			11	0.10
Tongue - other	C02						1	1	4	5	2	5	7	4	6	4		39	0.35
Gum	C03	1					1						1		1			4	0.04
Mouth - floor	C04	1						1				1			1	1		5	0.04
Mouth - palate	C05								1					1	1	1		4	0.04
Mouth - other	C06		1					1			1	1	1	4	4	4		17	0.15
Parotid gland	C07			1			2		2	3	2	2	3	5	4	11		35	0.31
Salivary gland	C08			1			1			4	1	2	2	2	2	7		22	0.20
Tonsils	C09			1							1	1	0			2		5	0.04
Oropharynx	C10					1				1	2		2	4		2		12	0.11
Nasopharynx	C11			3	5	5	5	3	7	8	15	10	8	12	7	4		92	0.82
Pyriform sinus	C12									1				1	1	1		4	0.04
Hypo pharynx	C13				1	1			1			1			1	2		7	0.06
Pharynx	C14					2	2			2			1	1		6		14	0.12
Esophagus	C15					1	4	3	3	4	8	6	8	17	14	26		94	0.84
Stomach	C16	1	0	1	2	6	4	14	17	32	35	46	38	73	54	125		448	4.00
Small intestine	C17					1	0	3	4	4	7	7	5	12	5	16		64	0.57
Colon	C18				1	14	16	32	25	42	39	58	49	68	67	90		501	4.47
Recto - sigmoid junction	C19					2	1	0	0	3	3	7	3	6	1	5		31	0.28
Rectum	C20					7	7	10	19	13	24	23	21	32	29	49		234	2.09
Anus	C21							1	1	0	3	2	3	3	4	3		20	0.18
Liver	C22	8	1	3	1	0	0	7	5	13	21	14	33	64	44	113		327	2.92
Gall bladder	C23					1	0	0	1	1	2	4	3	12	12	9		45	0.40
Bile tract	C24									1	4	7	4	9	5	9		39	0.35

Site	ICDO	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+	Un.	All	%
Pancreas	C25						3	5	12	14	30	29	37	48	50	80		308	2.75
Other digestive organ	C26							4	3	5	4	4	2	10	5	11		48	0.43
Ear/Nose	C30		1	1	0	0	2	3	0	4	0	6	1	3	1	11		33	0.29
Accessory sinus	C31						2	0	1	2	0	0	2	1	1	1		10	0.09
Glottis / larynx	C32	2	1	0	0	0	3	4	4	6	22	28	52	54	51	88		315	2.81
Trachea	C33															1		1	0.01
Bronchus & lung	C34			2	1	5	4	5	14	32	69	93	122	268	274	538	1	1428	12.74
Thymus	C37					1	1	1	3	0	3	0	1	3	0	1		14	0.12
Heart & Mediastinum	C38	1				1	2	1	2	2	3	2	3	4	1	9		31	0.28
Other respiratory tract	C39											2	1	1				4	0.04
Bones - limbs	C40	2	7	12	18	14	4	4	6	2	0	1	2	1	1	1		75	0.67
Bones - other	C41	7	4	13	25	8	4	6	6	7	6	10	5	17	6	17		141	1.26
Bone marrow	C42														1			1	0.01
Skin	C44	4	4	3	5	14	8	10	16	14	34	47	31	61	62	132		445	3.97
Nerves	C47	8	3				1					1				1		14	0.12
Peritoneum	C48	4		1	1	2	2	0	1	1	3	2	4	3	3	5		32	0.29
Soft Tissues	C49	11	8	12	18	16	10	9	15	13	10	11	15	15	20	17		200	1.78
Breast	C50					2	2	7	13	6	10	8	12	13	12	18	1	104	0.93
Penis	C60							2					1	1		1		5	0.04
Prostate	C61						1			3	9	31	41	119	140	392	1	737	6.58
Testis	C62	6	1	4	5	22	32	30	16	18	5	8	4	4	4	5		164	1.46

Site	ICDO	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+	Un.	All	%
Male gen -other	C63					1	2	1										4	0.04
Kidney	C64	37	11	1	2	1	8	14	16	22	32	41	34	49	40	58		366	3.27
Renal pelvis	C65								1				1					2	0.02
Ureter	C66											2	1			1		4	0.04
Bladder	C67	1	2	2	5	3	4	4	19	28	45	70	86	153	162	357		941	8.40
Other urinary organs	C68											1	1			2		4	0.04
Eye	C69	19	4		1			1		1	1	0	1	2	1	3		34	0.30
Meninges	C70	1			1	5	1	3	2	1	5	2	5	5	2	5		38	0.34
Brain	C71	52	51	27	25	26	31	38	43	39	62	58	43	80	37	61		673	6.01
Nervous system	C72		2	0	1	2	1	4	1	0	2	2	1	4	2	3		25	0.22
Thyroid	C73	0	0	3	5	8	24	36	34	29	36	22	18	15	13	21		264	2.36
Adrenal gland	C74	22	2	2	0	0	1	0	2	1	1	3	1	2	0	3		40	0.36
Endocrine - other	C75				1	3	1	5	2	4	7	5	3	4	1	3		39	0.35
Not otherwise specified	C76	6	4	2	2	2	4	6	3	2	4	5	5	8	6	11		70	0.62
Lymph nodes	C77																		0.00
Unknown	C80	6	3	3	4	4	8	8	14	15	26	36	24	63	39	68	2	323	2.88
Non-Hodgkin lymphoma		37	46	21	17	21	18	22	25	39	56	39	33	76	44	93	1	588	5.25
Hodgkin's disease		24	33	34	37	45	41	39	22	14	15	17	16	15	9	7		368	3.28
Plasma cell tumor		1			1	3	1	0	4	7	18	28	18	28	23	45		177	1.58
Leukemia		131	70	69	87	52	26	41	47	51	48	51	44	63	45	104	1	930	5.25
Chronic Myeloproliferative disorders				1	0	1	6	4	2	5	6	4	6	10	6	11		62	0.55
Myelodysplastic syndromes				1	6	3	2	3	1	2	3	4	4	6	5	11		51	0.46
Total		393	259	224	278	306	305	398	441	527	747	874	875	1,542	1,336	2,693	7	11,205	100%

Table No.; (10) Distribution of Crude Cancer by Site and Age Group in Female, Iraq, 2015

Site	ICDO	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+	Un.	All	%
Lip	C00	0	1	0	1	0	1	0	1	1	0	1	0	1	1	3	0	11	0.08
Tongue - base	C01										3	2	0	0	0	2	0	7	0.05
Tongue - other	C02				2	0	0	0	2	2	2	6	2	3	3	5	0	27	0.19
Gum	C03							1	0	0	0	0	0	0	1	1	0	3	0.02
Mouth - floor	C04	1							1									2	0.01
Mouth - palate	C05				2					2	1	2	0	3	0	3		13	0.09
Mouth - other	C06													2	2	3		7	0.05
Parotid gland	C07			1	0	2	0	1	1	2	3	3	5	5	1	1		25	0.18
Salivary gland	C08					2	1	1	1	0	1	3	5	3	1	1		19	0.14
Tonsils	C09								1	0	1	0	1	0	2	0	0	5	0.04
Oropharynx	C10					1	0	1	0	0	1	2	0	2	1	1	0	9	0.06
Nasopharynx	C11	0	1	1	4	0	0	1	3	3	6	3	4	2	2	7	0	37	0.26
Pyriform sinus	C12		1					1	1	0	1	1	1	1				7	0.05
Hypo pharynx	C13	0	0	1	0	1	0	0	2	0	2	3	3	1	3	2		18	0.13
Pharynx	C14					1	0	1	1					1	1	3		8	0.06
Esophagus	C15					1	3	2	3	6	12	5	7	13	9	22		83	0.59
Stomach	C16	0	1	2	0	4	6	15	21	30	43	36	37	36	30	98	1	360	2.56
Small intestine	C17					5	3	1	2	2	3	4	6	4	4	10		44	0.31
Colon	C18				0	8	15	14	19	28	47	50	38	66	55	103		443	3.15
Recto sigmoid junction	C19					1	0	0	0	1	1	2	4	6	3	2		20	0.14
Rectum	C20					7	5	9	12	19	20	24	24	25	16	31		192	1.37
Anus	C21					2	0	1	0	1	2	1	1	0	1	4		13	0.09
Liver	C22	8	2	3	2	2	9	4	7	6	13	22	24	32	42	91		267	1.90
Gall bladder	C23								1	1	6	5	11	8	14	33		79	0.56
Bile tract	C24					1	0	2	1	1	3	3	2	6	6	19		44	0.31
Pancreas	C25			1	0	3	2	1	2	9	14	27	17	41	29	85		231	1.64
Other digestive organ	C26	1	0	0	1	0	1	1	1	4	4	3	4	5	8	14		47	0.33

Site	ICDO	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+	Un.	All	%
Ear / nose	C30					1	1	0	1	0	2	0	2	4	5	10		26	0.18
Accessory sinus	C31	1	1						1	1	0	0	3	0	0	3		10	0.07
Glottis / larynx	C32			1	0	0	1	1	4	2	7	9	11	22	7	28		93	0.66
Trachea	C33																	0	0.00
Bronchus & lung	C34					6	4	2	10	17	26	52	65	112	89	216		599	4.26
Thymus	C37						2	0	0	0	1	4	2	0	0	3		12	0.09
Heart & Mediastinum	C38	1						3	1	0	4	9	4	3	3	4		32	0.23
Other respiratory tract	C39															1		1	0.01
Bones - limbs	C40	2	3	6	9	7	4	2	2	0	5	1	1	2	4	2		50	0.36
Bones - other	C41	3	10	10	10	8	11	5	1	6	10	9	7	10	12	12		124	0.88
Bone marrow	C42																	0	0.00
Skin	C44	2	1	1	4	8	6	13	20	22	21	52	27	49	33	106	1	366	2.60
Nerves	C47	8	0	1			1	1			2	1						14	0.10
Peritoneum	C48	2	1	0	0	0	2	0	0	1	1	2	3	4	1	5		22	0.16
Soft tissues	C49	4	9	14	9	11	9	12	13	15	9	8	9	8	13	19		162	1.15
Breast	C50					31	91	232	388	673	783	744	487	550	320	415	6	4720	33.56
Vulva	C51										2	0	2	3	2	5		14	0.10
Vagina	C52	1			1	1	0	1				2	1	1	1	1		10	0.07
Cervix	C53					3	5	10	11	34	33	38	21	25	18	23		221	1.57
Corpus uteri	C54					2	2	2	7	18	27	27	46	58	34	37		260	1.85
Uterus Unspecified	C55					4	14	16	15	21	30	52	41	46	36	60	1	336	2.39
Ovary	C56	4	1	10	19	22	27	28	35	51	79	71	53	71	28	65		564	4.01
Female genital	C57				2	0	1				3	1	1	1				9	0.06
Placenta	C58				15	29	18	24	18	14	11	3						132	0.94
Kidney	C64	32	13	7	1	1	2	7	11	24	18	20	23	38	11	46		254	1.81
Renal pelvis	C65													1		1		2	0.01

Site	ICDO	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+	Un.	All	%
Ureter	C66											1						1	0.01
Bladder	C67	1	0	0	4	3	3	2	6	7	8	20	18	40	73	134		319	2.27
Other urinary organs	C68											1				1		2	0.01
Eye & Adnexa	C69	16	4	2		1			1	1	0	2	0	1	0	5		33	0.23
Meninges	C70	1	1	2	1	3	4	3	9	11	13	12	10	13	3	5		91	0.65
Brain	C71	36	48	34	21	27	18	41	39	48	36	43	52	54	42	75		614	4.37
Nervous system other	C72	3	1	0	1	2	3	2	1	1	6	4	1	2	1	3		31	0.22
Thyroid gland	C73	0	0	2	16	59	79	100	103	64	72	77	43	31	29	33		708	5.03
Adrenal gland	C74	12	3	4							1	1	1	3	2			27	0.19
Endocrine glands, other	C75	1	2	2	1	4	5	4	3	6	6	2	4	1	0	1		42	0.30
Not otherwise specified	C76	7	5	6	2	3	3	3	4	6	5	4	4	9	3	12		76	0.54
Lymph nodes	C77																	0	0.00
Unknown primary site	C80	7	7	5	3	7	6	6	14	33	32	41	43	61	39	53		357	2.54
Non-Hodgkin's lymphoma		19	16	8	14	10	26	24	22	25	48	52	37	73	60	78	1	513	3.65
Hodgkin's disease		9	20	29	40	47	35	37	21	15	9	15	5	11	7	10		310	2.20
Plasma cell tumor			1	1	1	1	0	2	2	6	8	19	10	22	22	36		131	0.93
Leukemia		84	60	39	48	36	33	31	29	50	42	26	36	43	33	64		654	4.65
Chronic Myeloproliferative disorders			1	1	0	2	3	3	3	5	8	5	6	9	5	6		57	0.41
Myelodysplastic syndromes				6	3	0	4	3	4	0	2	4	2	1	3	12		44	0.31
Total		266	214	200	237	380	469	677	882	1,295	1,559	1,642	1,277	1,648	1,174	2,134	10	14,064	100%

3.3. Top ten cancers in 2015:

3.3.1. Distribution and the incidence rate of new cases of cancer for the year 2015:

Table No.; (11), Figure No.; (6) shows the top ten cancers in 2015, which shows that the highest percentage and incidence was among the breast cancer and the lowest was among the stomach cancer.

Table No.; (11) Distribution of Top Ten Cancer, Iraq, 2015

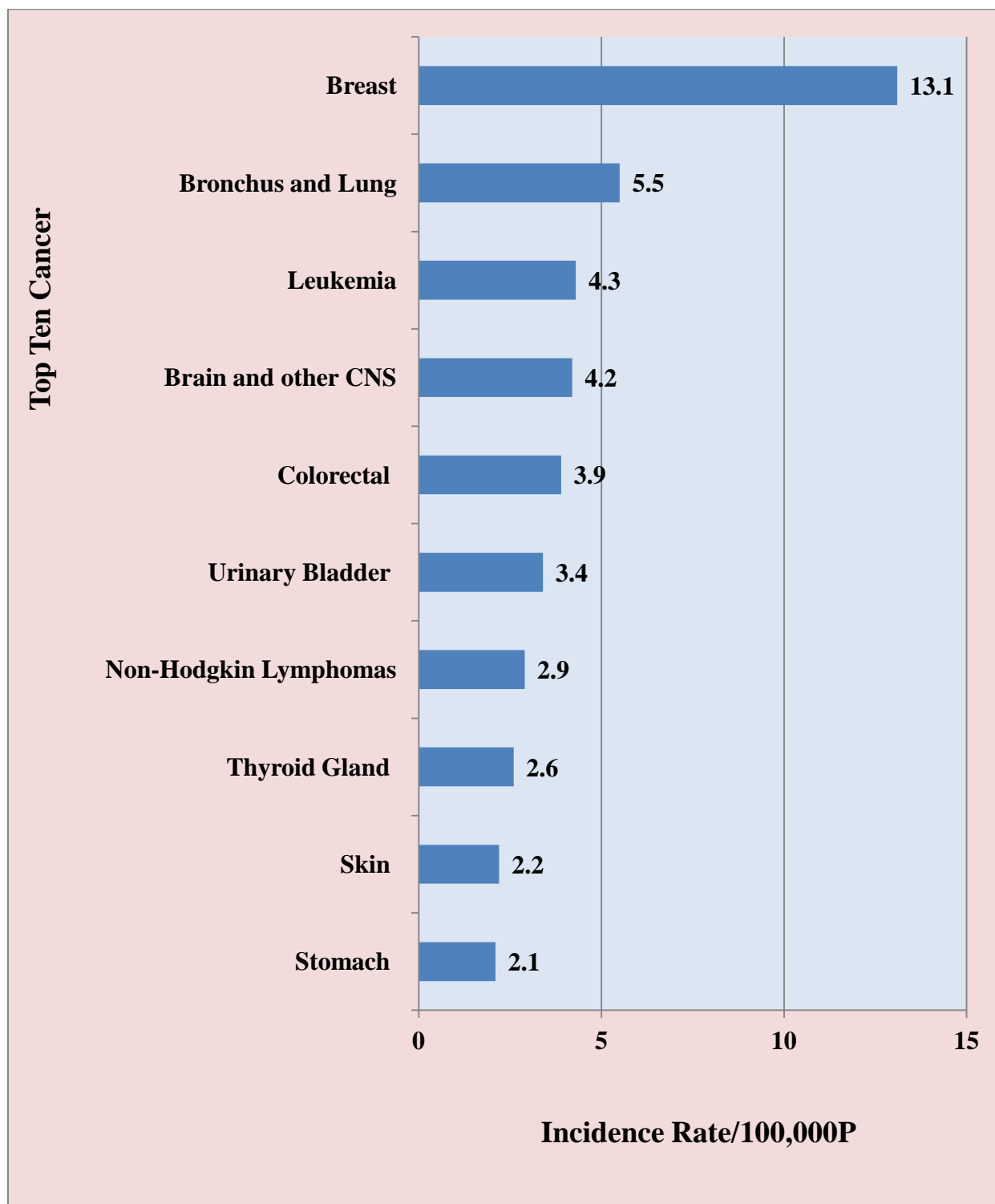
Top ten cancer	No.	%
Breast	4,824	19.1
Bronchus & lung	2,027	8.1
Leukemia*	1,584	6.3
Brain & other CNS**	1,542	6.1
Colorectal	1,454	5.7
Urinary bladder	1,260	5.1
Non-Hodgkin lymphomas***	1,101	4.3
Thyroid gland	972	3.8
Skin	811	3.2
Stomach	808	3.2
Total other site cancer	8,886	35.1
Total cancer	25,269	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

**Figure No.; (6) Incidence Rate (Per 100,000Population) of Top Ten Cancer,
Iraq, 2015**



3.3.2. Distribution and the incidence rate of top ten cancers in 2015 in male:

Table No.; (12), Figure No.; (7) shows the top ten cancers in 2015 in male, which shows that the highest percentage and incidence was among the bronchus and lung cancer and the lowest was among the Hodgkin lymphoma.

Table No.; (12) Distribution of Top Ten Cancer in Male, Iraq, 2015

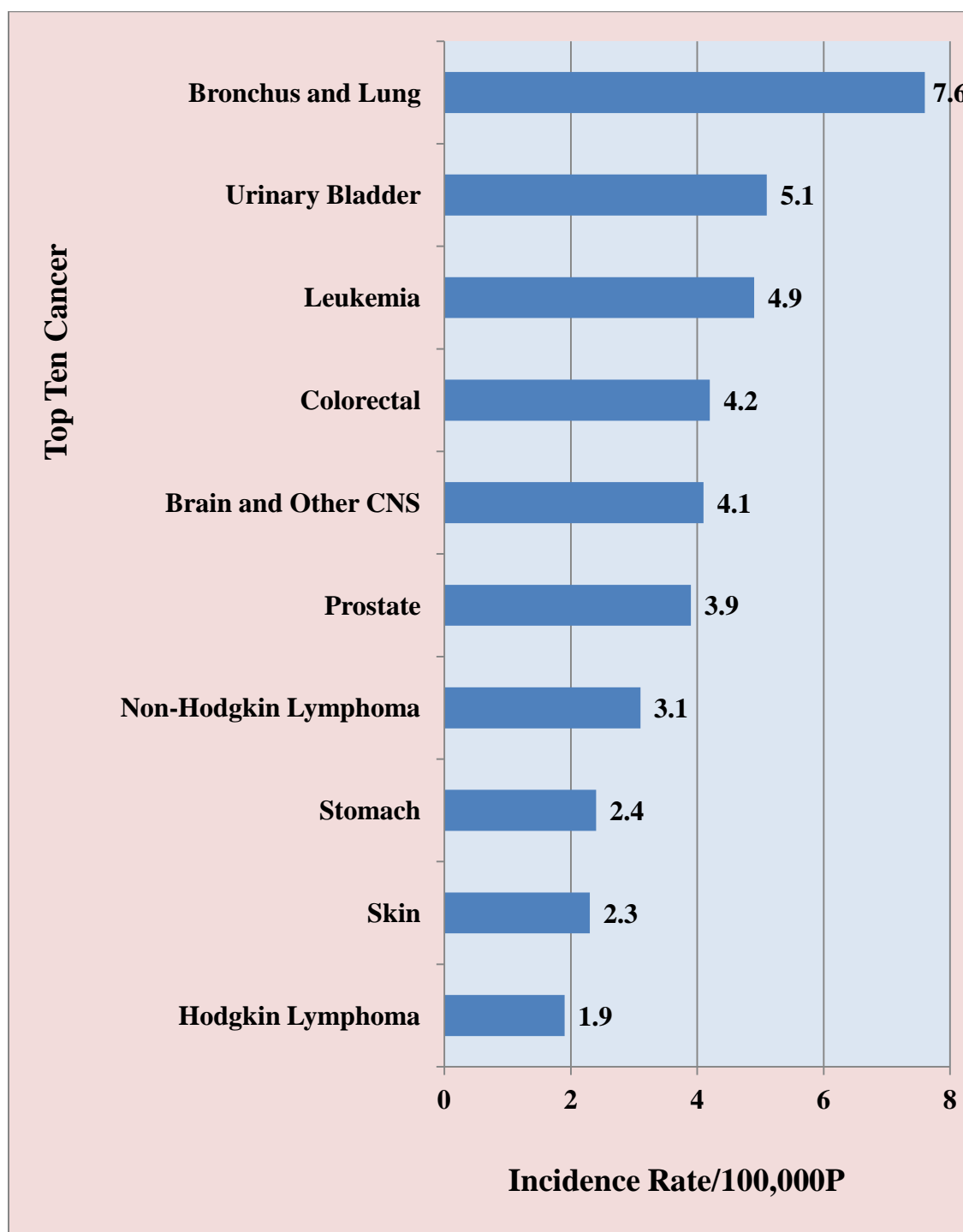
Top ten cancer	No.	%
Bronchus & lung	1,428	12.7
Urinary bladder	941	8.4
Leukemia*	930	8.3
Colorectal	786	7.1
Brain & other CNS**	769	6.9
Prostate	737	6.5
Non-Hodgkin lymphoma***	588	5.2
Stomach	448	3.9
Skin	445	3.9
Hodgkin lymphoma	368	3.3
Total other site cancer in Male	3,765	33.8
Total cancer in males	11,205	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (7) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Male, Iraq, 2015



3.3.3. Distribution and the incidence rate of top ten cancers in 2015 in female:

Table No.; (13), Figure No.; (8) shows the top ten cancers in 2015 in female, which shows that the highest percentage and incidence was among the breast cancer and the lowest was among the stomach cancer.

Table No.; (13) Distribution of Top Ten Cancer in Females, Iraq, 2015

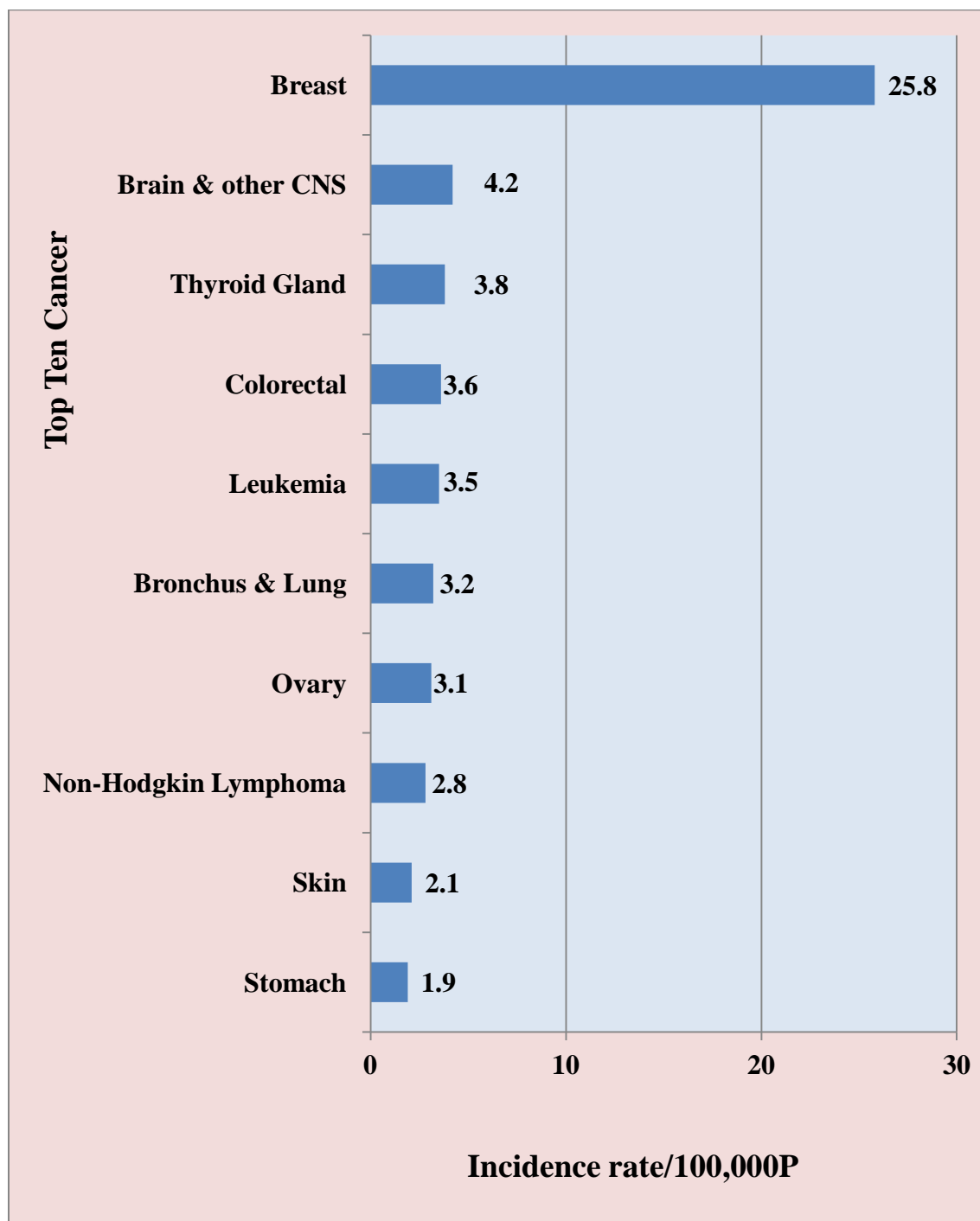
Top ten cancer	No.	%
Breast	4,720	33.5
Brain & other CNS*	773	5.5
Thyroid Gland	708	5.1
Colorectal	668	4.7
Leukemia**	654	4.6
Bronchus & lung	599	4.2
Ovary	564	4.1
Non-Hodgkin lymphoma***	513	3.6
Skin	366	2.6
Stomach	360	2.5
Total other site cancer in females	4,139	29.6
Total cancers in females	14,064	100%

*Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

**Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (8) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Female, Iraq, 2015



3.3.4. Trend incidence rate of top ten cancers for the last 5 years from 2011 to 2015:

Figure No.; (9) Trend Incidence Rate (Per 100,000Population) of New Cases of Breast Cancer, Iraq, from 2011 – 2015

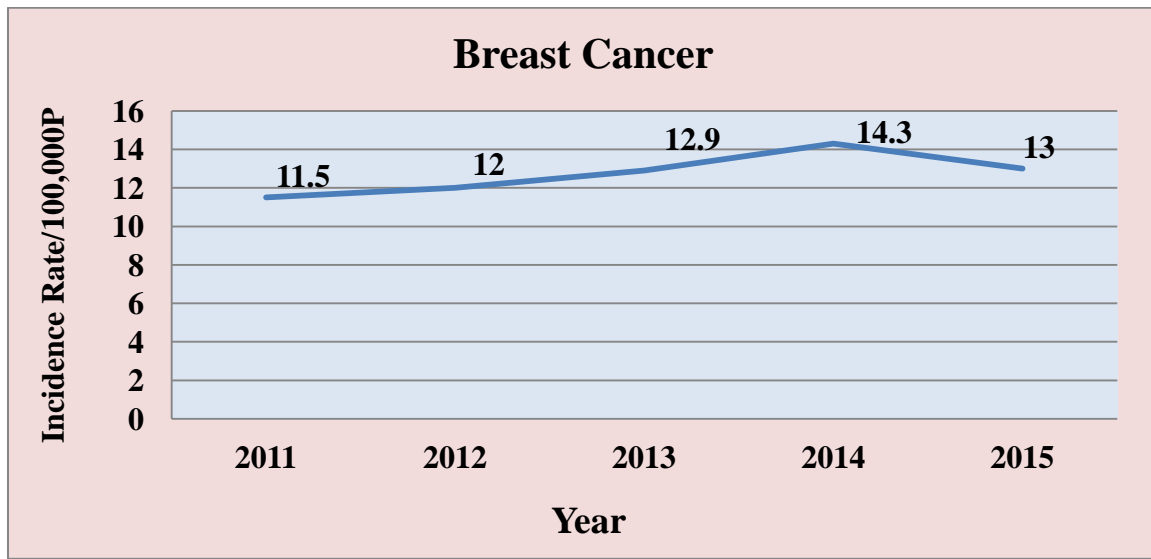


Figure No.; (10) Trend Incidence Rate (Per 100,000Population) of New Cases of Bronchus and Lung Cancer, Iraq, from 2011 – 2015

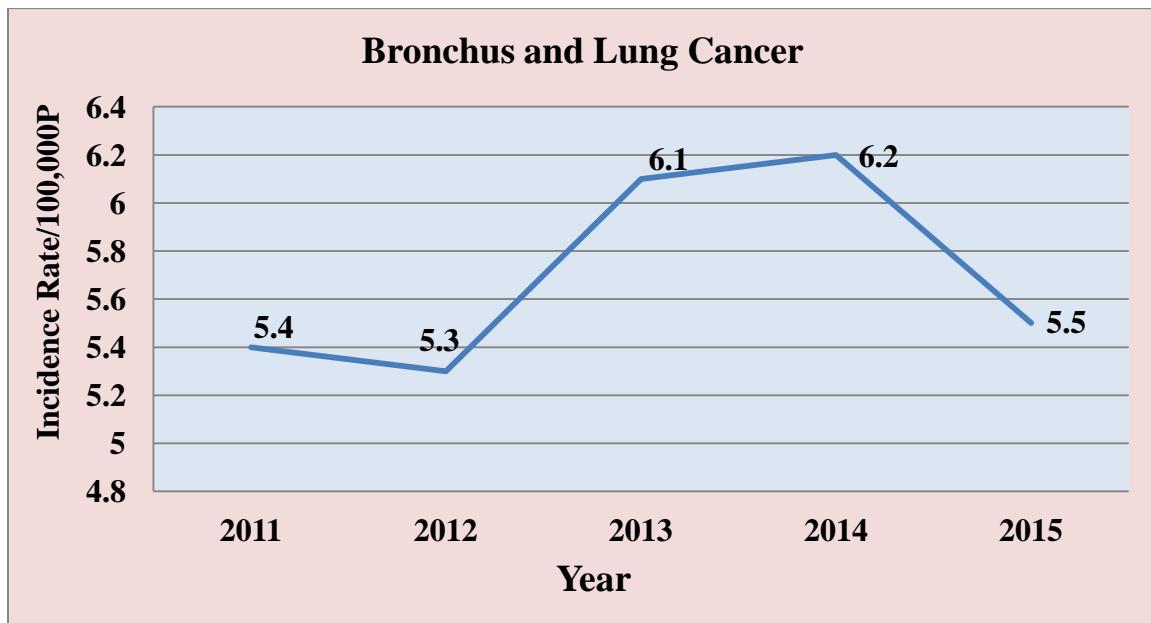


Figure No.; (11) Trend Incidence Rate (Per 100,000Population) of New Cases of Leukemia, Iraq, from 2011 – 2015

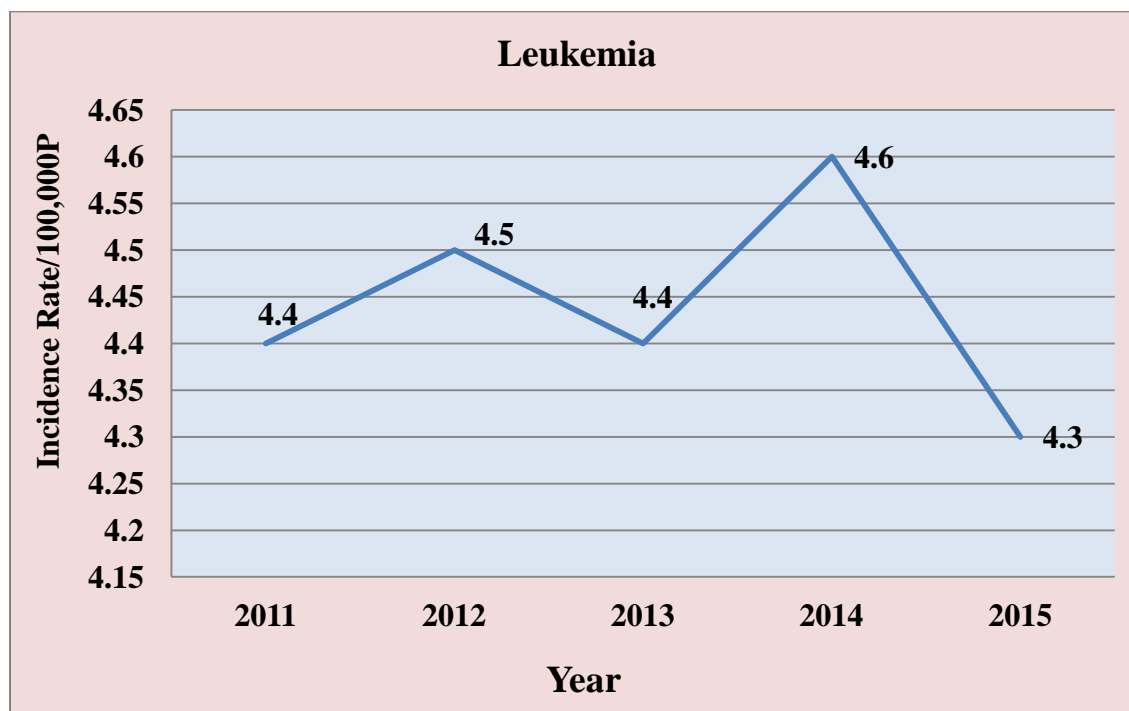


Figure No.; (12) Trend Incidence Rate (Per 100,000Population) of New Cases of Brain and other CNS Tumor, Iraq, from 2011 – 2015

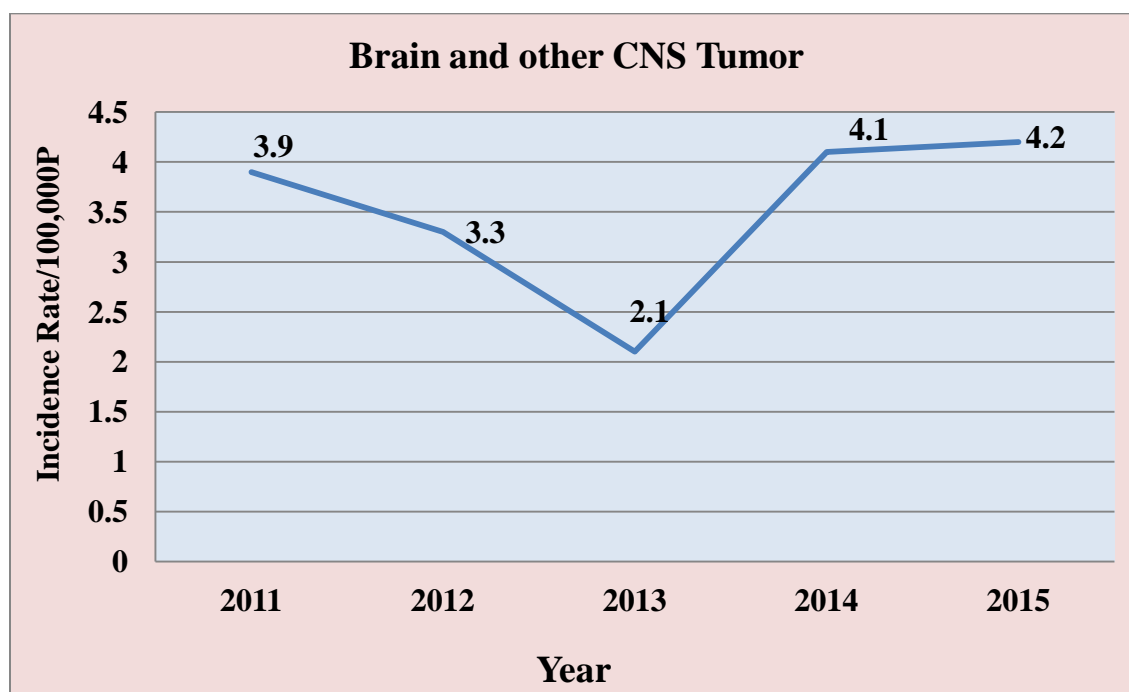


Figure No.; (13) Trend Incidence Rate (Per 100,000Population) of New Cases of Colorectal Cancer, Iraq, from 2011 – 2015

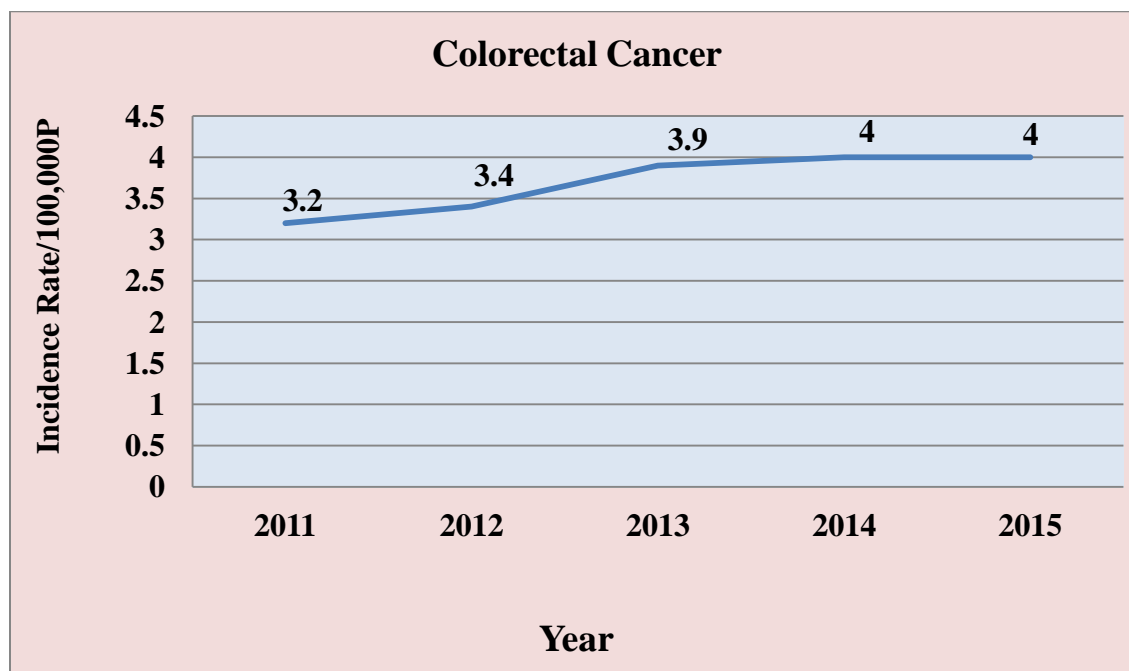


Figure No.; (14) Trend Incidence Rate (Per 100,000Population) of New Cases of Urinary Bladder Cancer, Iraq, from 2011 – 2015

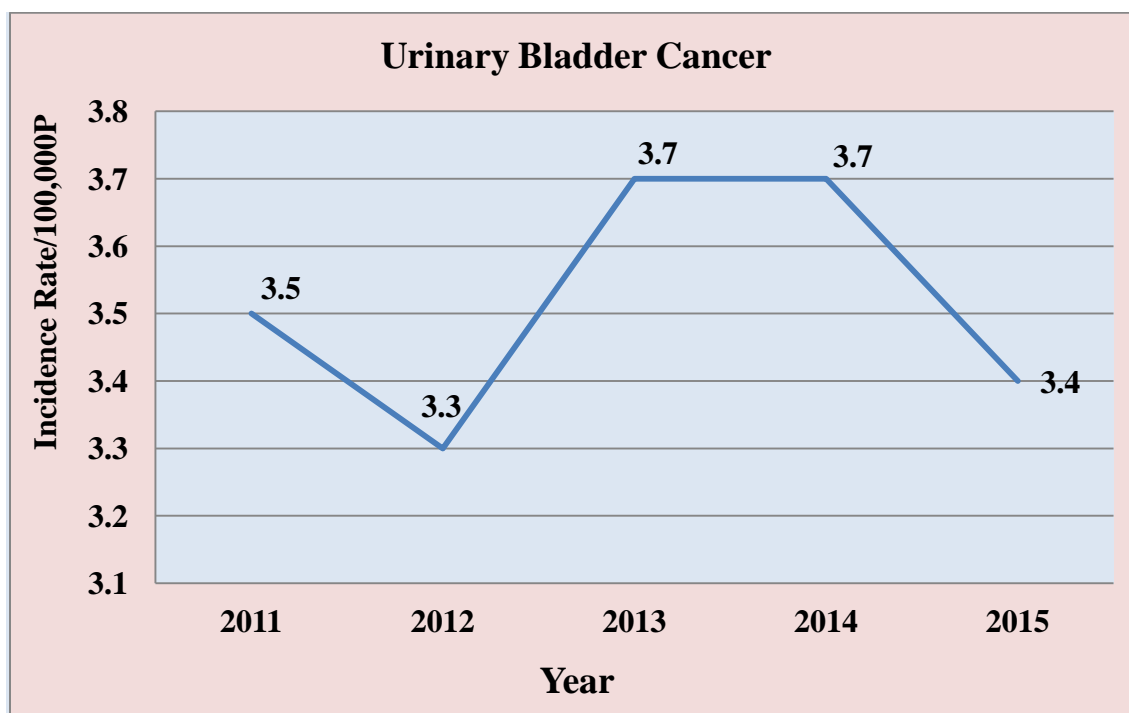


Figure No.; (15) Trend Incidence Rate (Per 100,000Population) of New Cases of Non-Hodgkin Lymphomas, Iraq, from 2011 – 2015

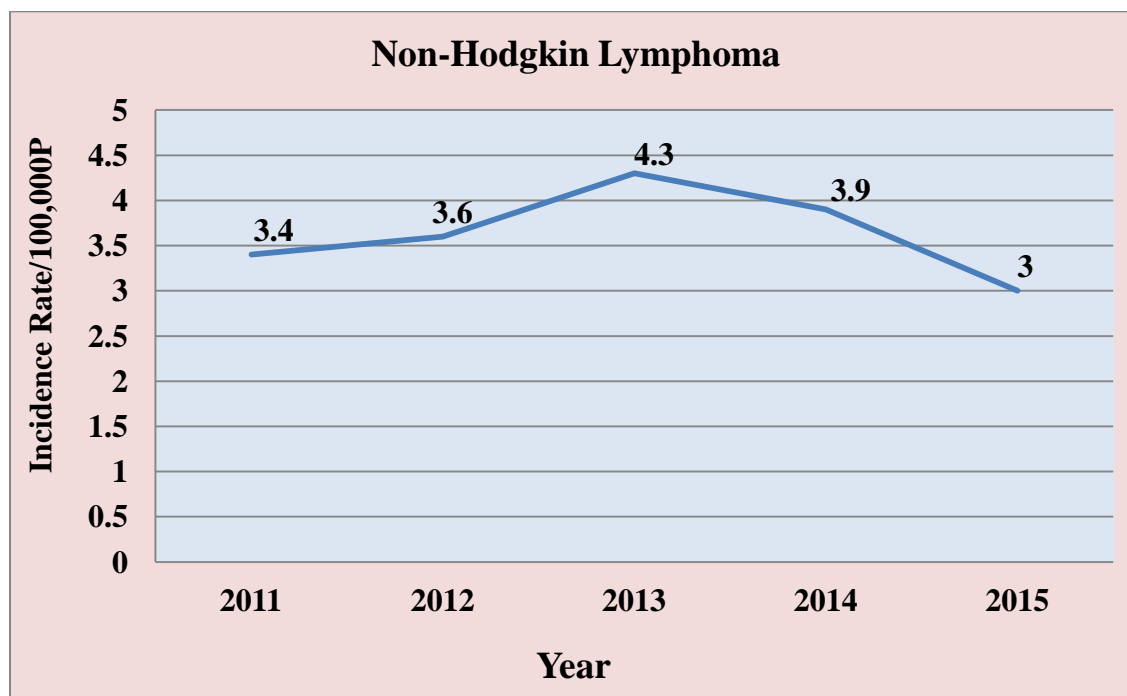


Figure No.; (16) Trend Incidence Rate (Per 100,000Population) of New Cases of Thyroid Gland Cancer, Iraq, from 2011 – 2015

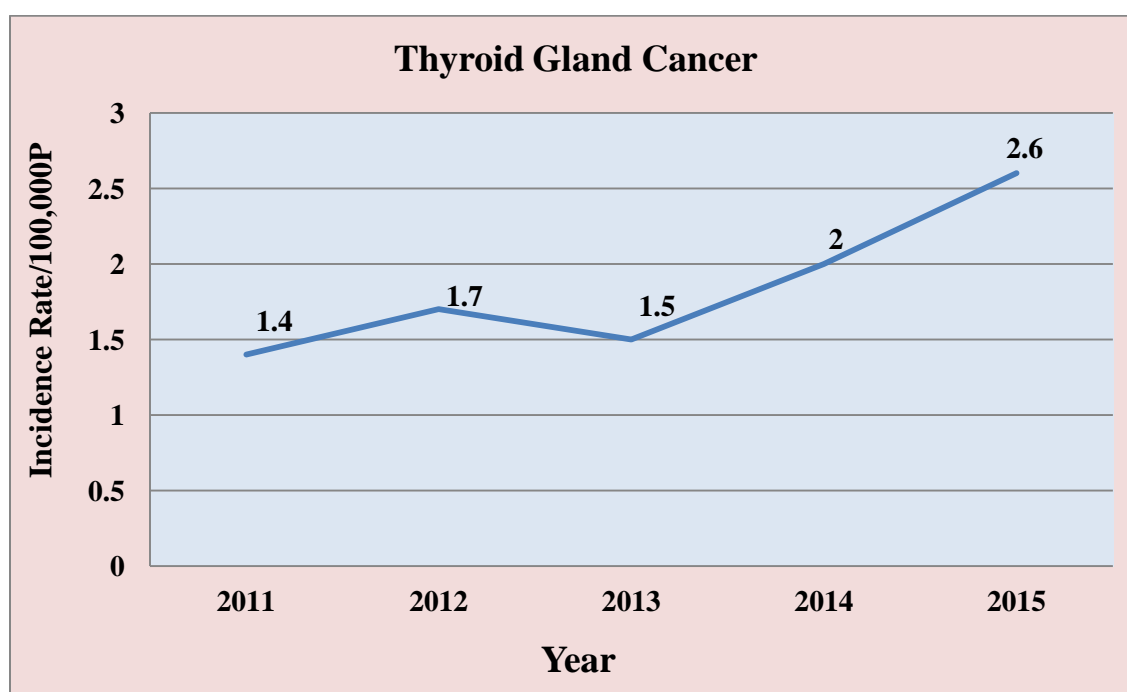


Figure No.; (17) Trend Incidence Rate (Per 100,000Population) of New Cases of Skin Cancer, Iraq, from 2011 – 2015

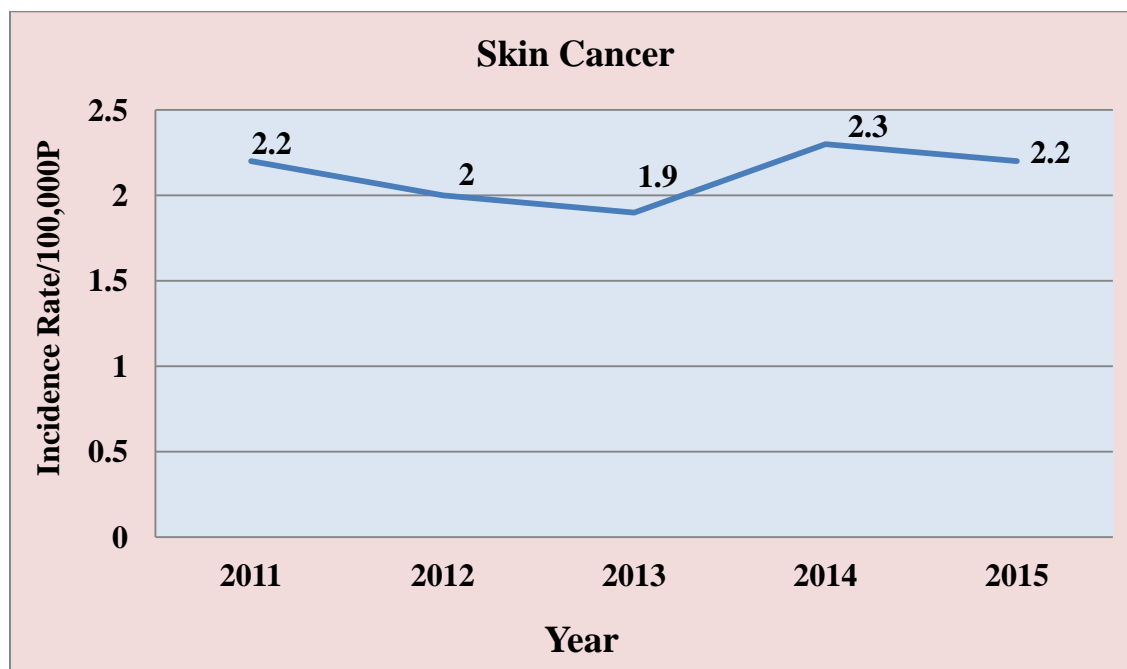
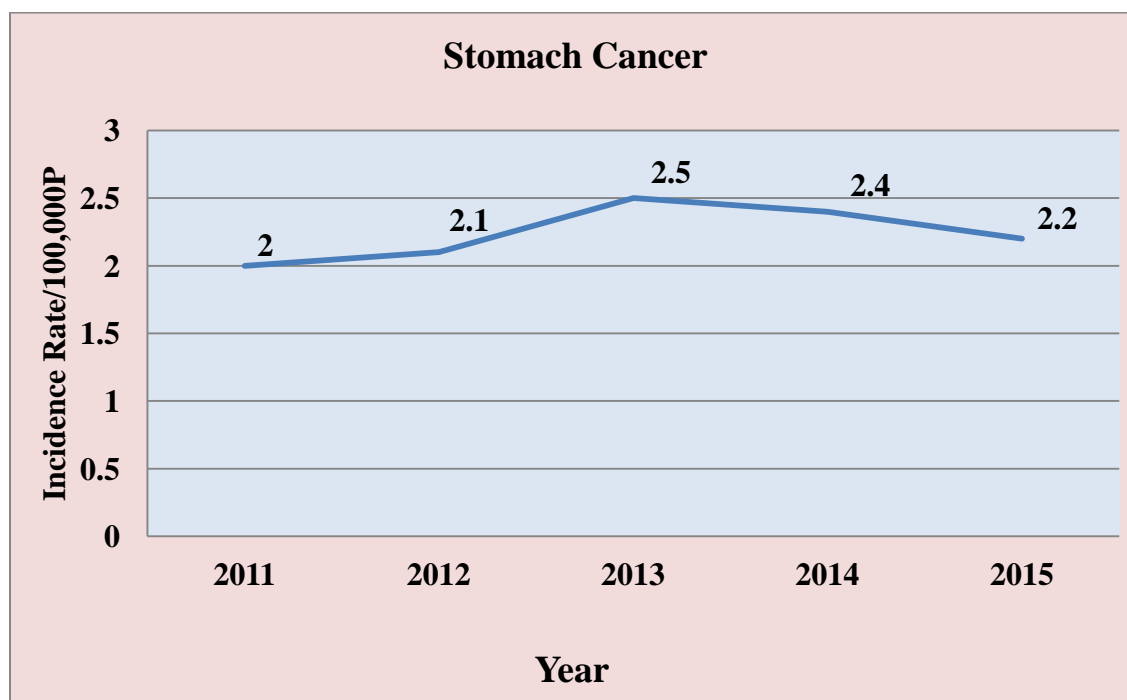


Figure No.; (18) Trend Incidence Rate (Per 100,000Population) of New Cases of Stomach Cancer, Iraq, from 2011 – 2015



3.3.5. Number of top ten cancer by age group in 2015:

Table No.; (14) Number of Top Ten Cancer by Age Group, Iraq, 2015

Top ten	0-4Y	5-9Y	10-14Y	15-19Y	20-24Y	25-29Y	30-34Y	35-39Y	40-44Y	45-49Y	50-54Y	55-59Y	60-64Y	65-69Y	70+Y	Unknown	Total
Breast	0	0	0	0	33	93	239	401	679	793	752	499	563	332	433	7	4,824
Bronchus & lung	0	0	2	1	11	8	7	24	49	95	145	187	380	363	754	1	2,027
Leukemia	215	130	108	135	88	59	72	76	101	90	77	80	106	78	168	1	1,584
Brain & other CNS	93	105	65	51	71	64	98	99	109	137	128	118	163	88	153	0	1,542
Colorectal	0	0	0	1	41	44	67	76	107	139	167	143	206	176	287	0	1,454
Urinary bladder	2	2	2	9	6	7	6	25	35	53	90	104	193	235	491	0	1,260
Non-Hodgkin lymphoma	56	62	29	31	31	44	46	47	64	104	91	70	149	104	171	2	1,101
Thyroid	0	0	5	21	67	103	136	137	93	108	99	61	46	42	54	0	972
Skin	6	5	4	9	22	14	23	36	36	55	99	58	110	95	238	1	811
Stomach	1	1	3	2	10	10	29	38	62	78	82	75	109	84	223	1	808
Total	373	305	218	260	380	446	723	959	1,335	1,652	1,730	1,395	2,025	1,597	2,972	13	16,383

3.3.6. Incidence rate of top ten cancers by age group in 2015:

Table No.; (15) Incidence Rate (Per 100,000Population) of Top Ten Cancer by Age Group, Iraq, 2015

Top Ten	0-4Y	5-9Y	10-14Y	15-19Y	20-24Y	25-29Y	30-34Y	35-39Y	40-44Y	45-49Y	50-54Y	55-59Y	60-64Y	65-69Y	70+Y
Breast	0	0	0	0	2.01	6.5	19.1	37	73.3	102.6	123	104	158.3	131.2	117.2
Bronchus & lung	0	0	0.09	0.05	0.6	0.5	0.5	2.2	5.4	12.7	24.8	41.1	114.1	154	229.6
Leukemia	7.7	5.2	4.8	6.9	5.2	4.05	5.7	7	11.1	11.9	13.2	17.4	31.5	32.5	50.4
Brain & other CNS	3.3	4.2	2.9	2.6	4.2	4.4	7.8	9.2	11.9	18.2	21.7	25.5	48.3	36.3	44.6
Colorectal	0	0	0	0.05	2.4	3.01	5.3	7	11.7	18.4	28.4	31.1	60.8	73.4	84.5
Urinary bladder	0.08	0.08	0.09	0.4	0.3	0.5	0.5	2.3	3.89	7.2	15.6	23.2	58.4	99.1	149.8
Non-Hodgkin lymphoma	2.02	2.5	1.3	1.6	1.8	3.02	3.7	4.4	7	13.8	15.3	15.2	43.9	42.7	50.6
Thyroid	0	0	0.2	1.1	4.07	7.1	10.9	12.7	10.1	14.2	16.4	13	13.3	17	15.5
Skin	0.2	0.2	0.2	0.4	1.3	0.9	1.8	3.3	3.9	7.3	16.7	12.6	32.6	39.9	70.6
Stomach	0.04	0.04	0.1	0.1	0.6	0.7	2.3	3.5	6.8	10.3	13.9	16.3	32.6	35.3	66.2

3.3.7. Distribution and the trend incidence rate of new cases of cancer in each provinces and the distribution of new cases of cancer by each district of province in 2015:

Table No.; (16) Distribution of Top Ten Cancer in Kerbala, Iraq, 2015

Top ten cancer	No.	%
Breast	237	20.4
Bronchus & lung	109	9.4
Urinary bladder	84	7.2
Leukemia*	79	6.8
Brain & other CNS**	68	5.8
Colorectal	65	5.5
Thyroid	55	4.7
Stomach	41	3.5
Skin	37	3.2
Non-Hodgkin lymphoma***	36	3.1
Total other site cancer	355	30.4
Total cancers in Kerbala	1,166	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

**Figure No.; (19) Incidence Rate (Per 100,000Population) of Top Ten Cancer in
Kerbala, Iraq, 2015**

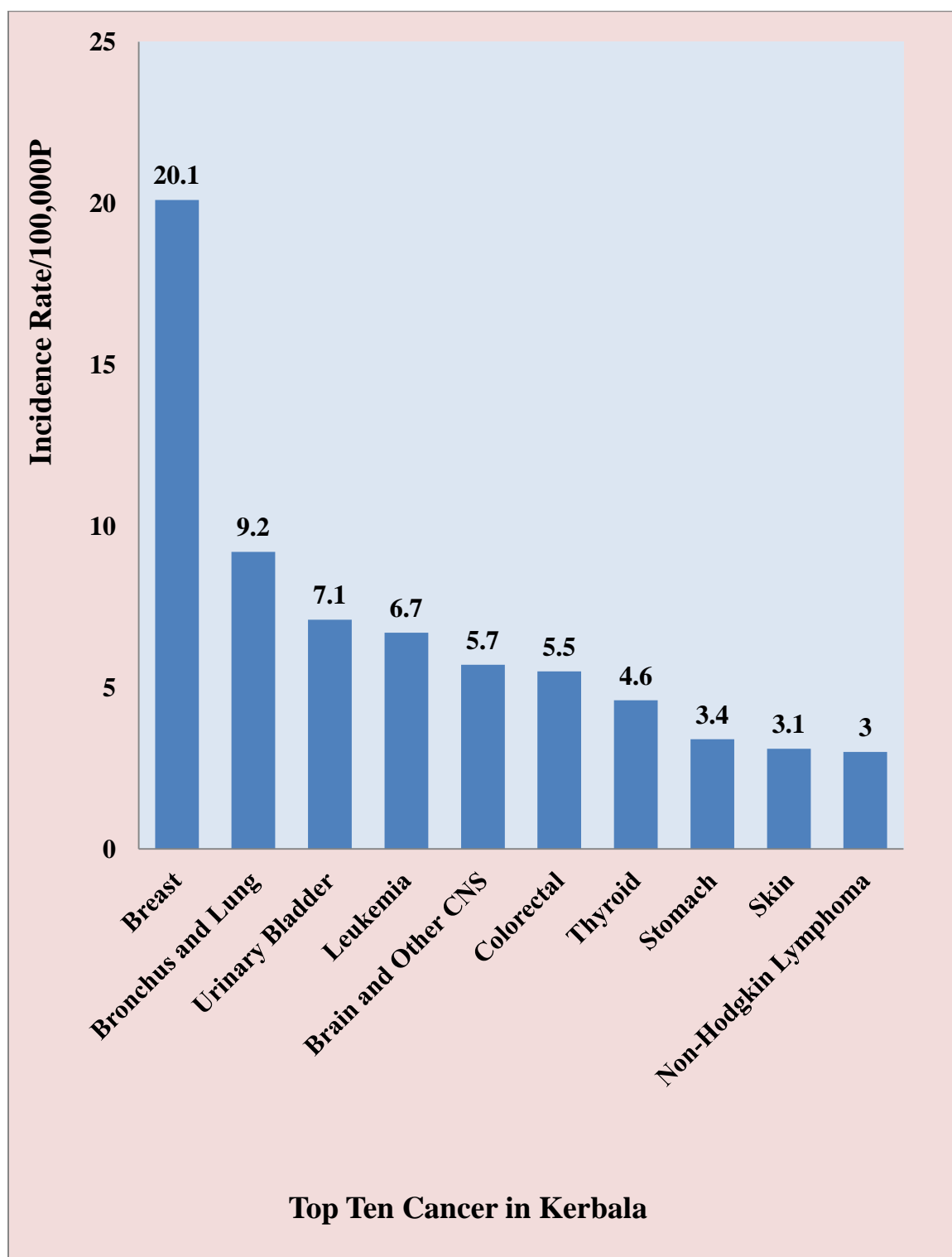


Table No.; (17) Distribution of Top Ten Cancer by Districts in Kerbala, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Kerbala		Ain-Tamour		Hindia		Total	
	N.	%	N.	%	N.	%	N.	%
Breast	206	25.5	5	0.6	26	3.2	237	29.3
Bronchus & lung	76	9.5	4	0.5	29	3.6	109	13.6
Urinary bladder	66	8.2	0	0	18	2.2	84	10.4
Leukemia	68	8.5	10	1.2	1	0.1	79	9.8
Brain & other CNS	59	7.3	2	0.2	7	0.9	68	8.4
Colorectal	48	6	3	0.3	14	1.7	65	8
Thyroid	47	5.8	0	0	8	0.9	55	6.7
Stomach	30	3.7	1	0.1	10	1.2	41	5
Skin	32	3.9	1	0.1	4	0.5	37	4.5
Non-Hodgkin lymphoma	33	4	1	0.1	2	0.2	36	4.3
Total	665	82.4	27	3.1	119	14.5	811	100%

Table No.; (18) Distribution of Top Ten Cancer by Districts in Kerbala, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Kerbala		Ain-Tamour		Hindia		Total	
	N.	%	N.	%	N.	%	N.	%
Breast	206	87	5	2.1	26	10.9	237	100%
Bronchus & lung	76	69.7	4	3.7	29	26.6	109	100%
Urinary bladder	66	78.6	0	0	18	21.4	84	100%
Leukemia	68	86.1	10	12.6	1	1.3	79	100%
Brain & other CNS	59	86.8	2	2.9	7	10.3	68	100%
Colorectal	48	73.9	3	4.6	14	21.5	65	100%
Thyroid	47	85.4	0	0	8	14.5	55	100%
Stomach	30	73.2	1	2.4	10	24.4	41	100%
Skin	32	86.5	1	2.7	4	10.8	37	100%
Non-Hodgkin lymphoma	33	91.6	1	2.8	2	5.6	36	100%
Total	665	82	27	3.3	119	14.7	811	100%

Table No.; (19) Distribution of Top Ten Cancer in Baghdad, Iraq, 2015

Top ten cancer	No.	%
Breast	1,496	21.2
Brain & other CNS*	496	7.1
Bronchus & lung	447	6.3
Colorectal	429	6.1
Leukemia**	347	4.9
Non-Hodgkin lymphoma***	342	4.8
Thyroid	317	4.5
Urinary bladder	282	4.1
Skin	216	3.1
Stomach	214	3.1
Total other site cancer	2,458	34.8
Total cancers in Baghdad	7,044	100%

*Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

**Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (20) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Baghdad, Iraq, 2015

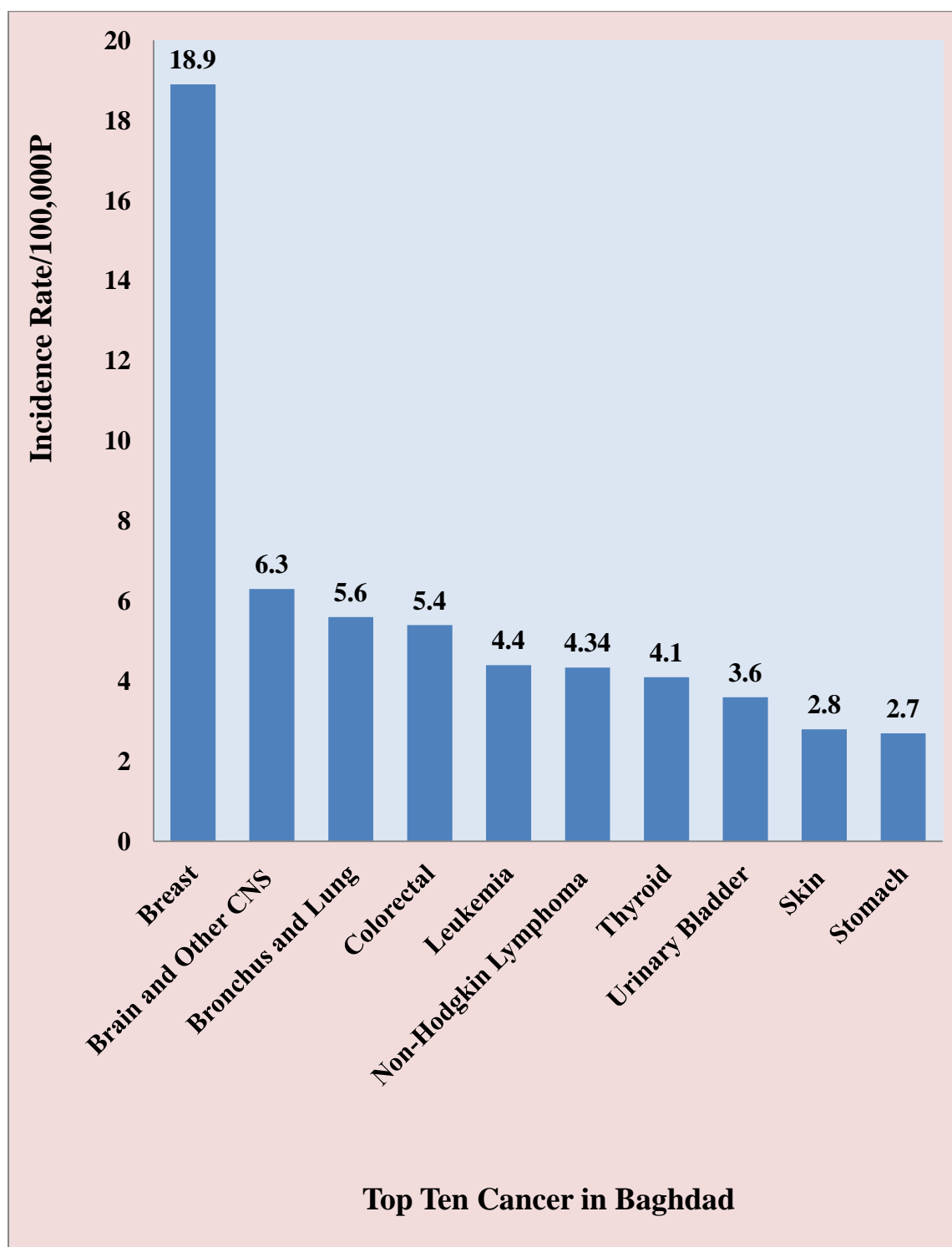


Table No.; (20) Distribution of Top Ten Cancer by Districts in Baghdad, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Rusafa		Addhamiya		Sader		Karhk		Kadimya		Mahmodia		Abu-Grape		Madigan		Tarmeyeh		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	497	11	211	5.1	218	5.1	391	8.9	100	2.5	28	0.6	18	0.3	32	0.6	1	0.03	1,496	34.1
Brain & other CNS	126	2.9	72	1.5	86	1.9	98	2.2	58	1.3	21	0.4	15	0.3	18	0.3	2	0.04	496	10.8
Bronchus & lung	124	2.8	52	1.2	77	1.7	90	1.9	53	1.2	19	0.4	13	0.2	17	0.3	2	0.04	447	9.7
Colorectal	120	2.6	80	1.8	59	1.3	98	2.1	41	0.9	6	0.01	10	0.2	13	0.2	2	0.04	429	9.1
Leukemia	79	1.7	33	0.7	73	1.6	79	1.7	33	0.7	15	0.3	12	0.2	21	0.4	2	0.04	347	7.3
Non-Hodgkin lymphoma	86	1.9	54	1.1	54	1.1	71	1.6	35	0.7	14	0.3	9	0.1	17	0.3	2	0.04	342	7.1
Thyroid	84	1.8	38	0.9	47	1.1	86	1.9	23	0.5	13	0.2	15	0.3	11	0.2	0	0	317	6.8
Urinary bladder	75	1.6	44	0.9	57	1.2	58	1.3	23	0.5	10	0.2	2	0.04	11	0.2	2	0.04	282	5.9
Skin	72	1.5	32	0.6	38	0.8	44	0.9	18	0.3	4	0.08	5	0.1	3	0.06	0	0	216	4.3
Stomach	61	1.3	34	0.7	39	0.8	51	1.1	16	0.3	3	0.06	2	0.04	7	0.1	1	0.03	214	4.4
Total	1,324	29.1	650	14.5	748	16.6	1,066	23.6	400	8.9	133	2.55	101	1.78	150	2.66	14	0.3	4,586	100%

Table No.; (21) Distribution of Top Ten Cancer by Districts in Baghdad, Iraq, 201
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Rusafa		Addhamiya		Sader		Karhk		Kadimya		Mahmodia		Abu-Grape		Madigan		Tarmeyeh		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	497	33.5	211	14.1	218	14.5	391	26.1	100	6.6	28	1.8	18	1.2	32	2.1	1	0.1	1,496	100%
Brain & other CNS	126	25.7	72	14.5	86	17.3	98	19.7	58	11.6	21	4.2	15	3	18	3.6	2	0.4	496	100%
Bronchus & lung	124	28	52	11.6	77	17.2	90	20.1	53	11.8	19	4.2	13	2.9	17	3.8	2	0.4	447	100%
Colorectal	120	28.2	80	18.6	59	13.7	98	22.8	41	9.5	6	1.4	10	2.3	13	3	2	0.5	429	100%
Leukemia	79	22.9	33	9.5	73	21.0	79	22.7	33	9.5	15	4.3	12	3.4	21	6.1	2	0.6	347	100%
Non-Hodgkin lymphoma	86	25.5	54	15.7	54	15.7	71	20.7	35	10.2	14	4.1	9	2.6	17	4.9	2	0.6	342	100%
Thyroid	84	26.8	38	11.9	47	14.8	86	27.1	23	7.2	13	4.1	15	4.7	11	3.4	0	0	317	100%
Urinary bladder	75	26.8	44	15.6	57	20.2	58	20.5	23	8.1	10	3.5	2	0.7	11	3.9	2	0.7	282	100%
Skin	72	33.6	32	14.8	38	17.5	44	20.3	18	8.3	4	1.8	5	2.3	3	1.4	0	0	216	100%
Stomach	61	28.7	34	15.8	39	18.2	51	23.8	16	7.4	3	1.4	2	0.9	7	3.3	1	0.5	214	100%
Total	1,324	28.8	650	14.1	748	16.3	1,066	23.2	400	8.7	133	2.9	101	2.2	150	3.3	14	0.31	4,586	100%

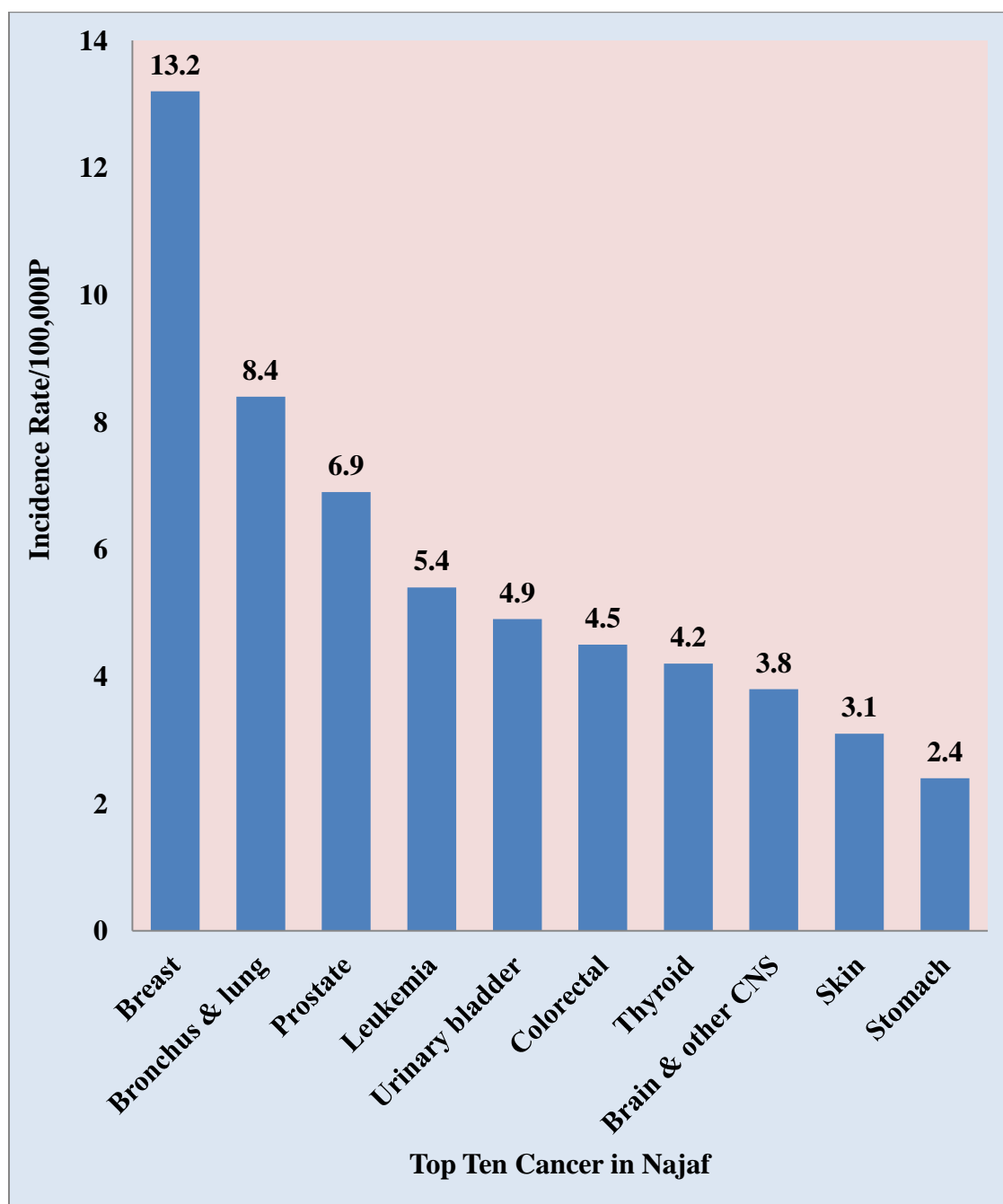
Table No.; (22) Distribution of Top Ten Cancer in Najaf, Iraq, 2015

Top ten cancer	No.	%
Breast	189	16.8
Bronchus & lung	120	10.7
Leukemia*	77	6.8
Urinary bladder	70	6.3
Colorectal	65	5.7
Thyroid	60	5.3
Brain & other CNS**	54	4.8
Prostate	50	4.4
Skin	44	3.9
Stomach	34	3.1
Total other site cancer	363	32.2
Total cancers in Najaf	1,126	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

Figure No.; (21) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Najaf, Iraq, 2015



Note: Incidence rate of all top ten cancers /100,000 total population
except for prostate cancer incidence rate /100,000 male populations

Table No.; (23) Distribution of Top Ten Cancer by Districts in Najaf, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Najaf		Kufa		Manathera		Total	
	N.	%	N.	%	N.	%	N.	%
Breast	136	17.9	33	4.3	20	2.7	189	24.9
Bronchus & lung	65	8.7	44	5.7	11	1.4	120	15.8
Leukemia	57	7.6	13	1.7	7	0.9	77	10.2
Urinary bladder	45	5.9	17	2.2	8	1	70	9.1
Colorectal	38	4.9	21	2.7	6	0.7	65	8.3
Thyroid	43	5.8	8	1	9	1.2	60	8
Brain & other CNS	35	4.6	14	1.8	5	0.6	54	7
Prostate	38	4.9	5	0.6	7	0.9	50	6.4
Skin	29	3.9	11	1.4	4	0.5	44	5.8
Stomach	20	2.7	4	0.5	10	1.3	34	4.5
Total	506	66.9	170	21.9	87	11.2	763	100%

Table No.; (24) Distribution of Top Ten Cancer by Districts in Najaf, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Najaf		Kufa		Manathera		Total	
	N.	%	N.	%	N.	%	N.	%
Breast	136	72	33	17.4	20	10.6	189	100%
Bronchus & lung	65	54.2	44	36.6	11	9.2	120	100%
Leukemia	57	74.1	13	16.8	7	9.1	77	100%
Urinary bladder	45	64.3	17	24.3	8	11.4	70	100%
Colorectal	38	58.5	21	32.3	6	9.2	65	100%
Thyroid	43	71.7	8	13.3	9	15	60	100%
Brain & other CNS	35	64.9	14	25.9	5	9.2	54	100%
Prostate	38	76	5	10	7	14	50	100%
Skin	29	65.9	11	25	4	9.1	44	100%
stomach	20	58.9	4	11.7	10	29.4	34	100%
Total	506	66.3	170	22.3	87	11.4	763	100%

Table No.; (25) Distribution of Top Ten Cancer in Babil, Iraq, 2015

Top ten cancer	No.	%
Breast	225	16.1
Bronchus & lung	196	14.1
Brain & other CNS*	91	6.5
Leukemia**	77	5.5
Colorectal	69	4.9
Urinary bladder	66	4.7
Pancreas	60	4.3
Non-Hodgkin lymphoma***	56	4.1
Thyroid	54	3.8
Stomach	43	3.1
Total other site cancer	461	32.9
Total cancers in Babil	1,398	100%

*Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

**Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (22) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Babil, Iraq, 2015

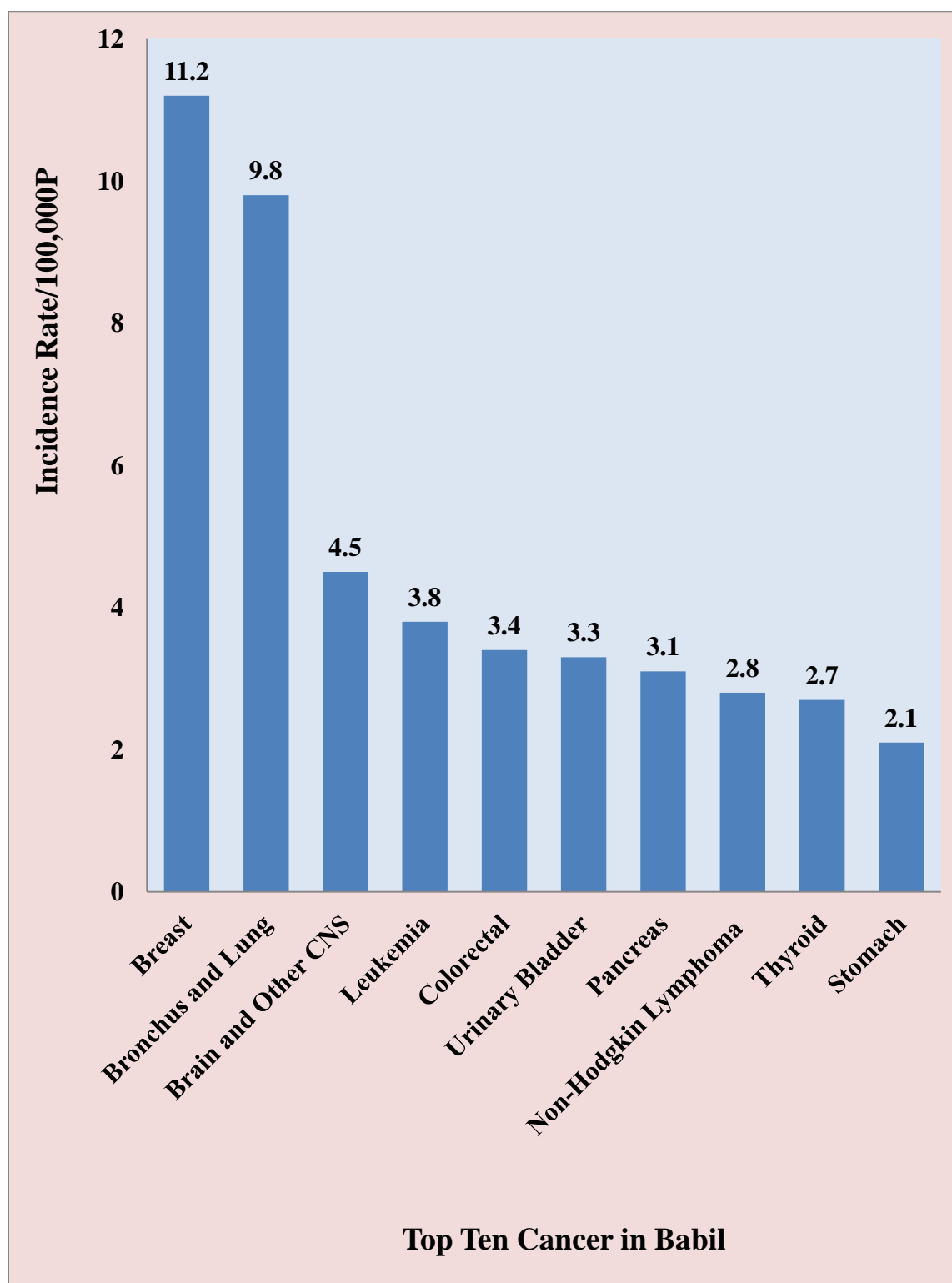


Table No.; (26) Distribution of Top Ten Cancer by Districts in Babil, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Hilla		Mahaweel		Hashmiya		Missiyab		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	142	15.3	25	2.6	30	3.4	28	2.9	225	24.2
Bronchus & lung	96	10.4	27	2.8	48	5.1	25	2.6	196	20.9
Brain & other CNS	55	5.9	8	0.9	18	1.9	10	1	91	9.7
Leukemia	49	5.4	6	0.6	10	1	12	1.2	77	8.2
Colorectal	44	4.8	2	0.2	11	1.1	12	1.2	69	7.3
Urinary bladder	41	4.5	4	0.4	11	1.1	10	1	66	7
Pancreas	30	3.4	10	1	12	1.2	8	0.9	60	6.5
Non-Hodgkin lymphoma	33	3.7	6	0.6	11	1.1	6	0.6	56	6
Thyroid	37	3.9	3	0.3	7	0.7	7	0.7	54	5.6
Stomach	14	1.7	10	1	7	0.7	12	1.2	43	4.6
Total	541	59	101	10.4	165	17.3	130	13.3	937	100%

Table No.; (27) Distribution of Top Ten Cancer by Districts in Babil, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Hilla		Mahaweel		Hashmiya		Missiyab		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	142	63.2	25	11.1	30	13.3	28	12.4	225	100%
Bronchus & lung	96	49	27	13.8	48	24.5	25	12.7	196	100%
Brain & other CNS	55	60.5	8	8.8	18	19.8	10	10.9	91	100%
Leukemia	49	63.7	6	7.8	10	12.9	12	15.6	77	100%
Colorectal	44	63.8	2	2.9	11	15.9	12	17.4	69	100%
Urinary bladder	41	62.2	4	6.1	11	16.6	10	15.1	66	100%
Pancreas	30	50	10	16.6	12	20	8	13.3	60	100%
Non-Hodgkin lymphoma	33	59	6	10.7	11	19.6	6	10.7	56	100%
Thyroid	37	68.7	3	5.5	7	12.9	7	12.9	54	100%
Stomach	14	32.6	10	23.2	7	16.3	12	27.9	43	100%
Total	541	57.9	101	10.7	165	17.6	130	13.8	937	100%

Table No.; (28) Distribution of Top Ten Cancer in Nineveh, Iraq, 2015

Top Ten Cancer	No.	%
Breast	325	20.1
Bronchus & lung	132	8.1
Colorectal	119	7.3
Brain & other CNS*	110	6.7
Leukemia**	105	6.5
Non-Hodgkin Lymphoma***	68	4.3
Stomach	67	4.1
Hodgkin lymphoma	57	3.5
Urinary bladder	56	3.4
Liver	47	2.9
Total other site cancer	537	33.1
Total cancers in Nineveh	1,623	100%

*Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

**Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (23) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Nineveh, Iraq, 2015

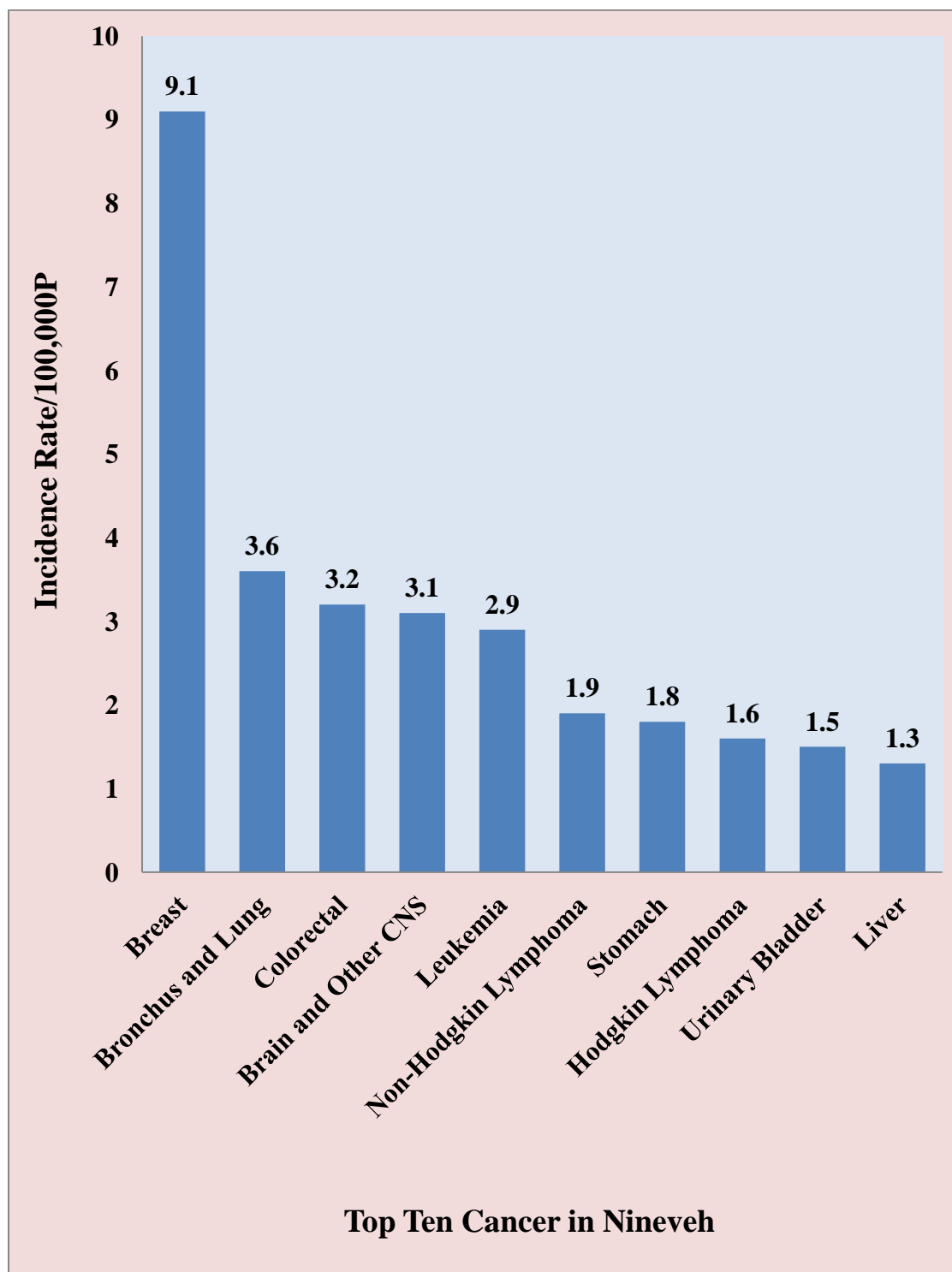


Table No.; (29) Distribution of Top Ten Cancer by Districts in Nineveh, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Mousel		Hamdaniya		Telkeif		Sin jar		Tel Afar		Shikhan		Hider		Aqraa		Baaj		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	266	25.4	16	1.4	5	0.4	7	0.6	15	1.3	5	0.4	3	0.2	5	0.4	3	0.2	325	30.3
Bronchus & lung	96	9.8	8	0.7	2	0.1	10	0.9	10	0.9	3	0.2	0	0	3	0.2	0	0	132	12.8
Colorectal	88	8.6	3	0.2	1	0.09	9	0.8	9	0.8	1	0.09	0	0	2	0.1	6	0.5	119	11.2
Brain & other CNS	79	7.7	7	0.6	0	0	9	0.8	8	0.7	0	0	1	0.09	4	0.3	2	0.1	110	10.3
Leukemia	73	6.8	1	0.09	4	0.3	8	0.7	10	0.9	2	0.1	1	0.09	2	0.1	4	0.3	105	9.3
Non-Hodgkin lymphoma	45	4.3	5	0.4	0	0	2	0.1	10	0.9	0	0	1	0.09	1	0.09	4	0.3	68	6.2
Stomach	50	4.6	1	0.09	3	0.2	6	0.5	5	0.4	1	0.09	0	0	1	0.09	0	0	67	5.9
Hodgkin lymphoma	39	3.5	3	0.2	1	0.09	6	0.5	5	0.4	2	0.1	0	0	1	0.09	0	0	57	4.9
Urinary bladder	43	3.9	2	0.1	0	0	3	0.2	6	0.5	0	0	0	0	2	0.1	0	0	56	4.8
Liver	40	3.6	0	0	0	0	1	0.09	6	0.5	0	0	0	0	0	0	0	0	47	4.2
Total	819	78.2	46	3.8	16	1.2	61	5.2	84	7.3	14	0.9	6	0.5	21	1.4	19	1.4	1,086	100%

Table No.; (30) Distribution of Top Ten Cancer by Districts in Nineveh, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Mousel		Hamdaniya		Telkeif		Sin jar		Tel Afar		Shikhan		Hider		Aqraa		Baaj		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	266	82.1	16	4.9	5	1.5	7	2.1	15	4.6	5	1.5	3	0.9	5	1.5	3	0.9	325	100%
Bronchus & lung	96	72.7	8	6.1	2	1.5	10	7.6	10	7.6	3	2.2	0	0	3	2.3	0	0	132	100%
Colorectal	88	74.2	3	2.5	1	0.8	9	7.5	9	7.5	1	0.8	0	0	2	1.7	6	5	119	100%
Brain & other CNS	79	71.9	7	6.3	0	0	9	8.2	8	7.3	0	0	1	0.9	4	3.6	2	1.8	110	100%
Leukemia	73	69.7	1	0.9	4	3.8	8	7.6	10	9.5	2	1.9	1	0.9	2	1.9	4	3.8	105	100%
Non-Hodgkin lymphoma	45	66.3	5	7.3	0	0	2	2.9	10	14.7	0	0	1	1.5	1	1.4	4	5.9	68	100%
Stomach	50	74.7	1	1.5	3	4.5	6	8.9	5	7.5	1	1.5	0	0	1	1.4	0	0	67	100%
Hodgkin lymphoma	39	68.7	3	5.2	1	1.7	6	10.5	5	8.7	2	3.5	0	0	1	1.7	0	0	57	100%
Urinary bladder	43	76.9	2	3.5	0	0	3	5.3	6	10.7	0	0	0	0	2	3.6	0	0	56	100%
Liver	40	85.2	0	0	0	0	1	2.1	6	12.7	0	0	0	0	0	0	0	0	47	100%
Total	819	75.5	46	4.2	16	1.5	61	5.6	84	7.7	14	1.3	6	0.5	21	1.9	19	1.7	1,086	100%

Table No.; (31) Distribution of Top Ten Cancer in Basra, Iraq, 2015

Top ten cancer	No.	%
Breast	383	19.5
Bronchus & lung	139	7.2
Leukemia*	137	6.9
Colorectal	120	6.2
Urinary bladder	113	5.7
Brain & other CNS**	103	5.3
Non-Hodgkin lymphoma***	102	5.1
Stomach	66	3.3
Pancreas	61	3.1
Kidney	56	2.8
Total other site cancer	689	34.9
Total cancers in Basra	1,969	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (24) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Basra, Iraq, 2015

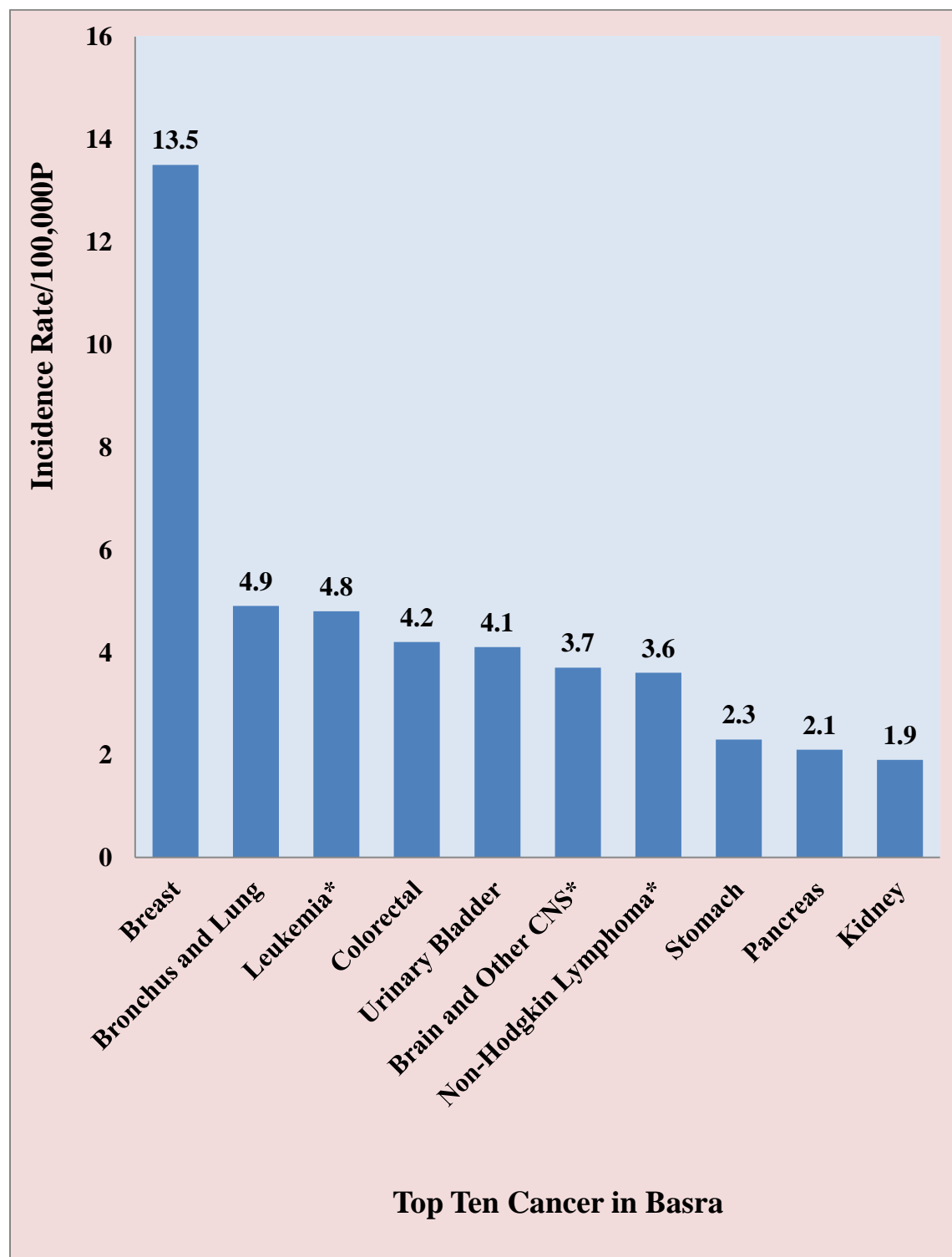


Table No.; (32) Distribution of Top Ten Cancer by Districts in Basra, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Basra		Abu-Alkhasseb		Zubair		Qoorna		Faw		Shatt Al-Arab		Almdainah		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	233	18.8	36	2.8	57	4.4	21	1.6	4	0.3	20	1.5	12	0.9	383	30.3
Bronchus & lung	80	6.8	10	0.7	28	2.2	7	0.5	1	0.07	3	0.2	10	0.7	139	11.2
Leukemia	74	5.9	11	0.8	24	1.8	15	1.1	3	0.2	3	0.2	7	0.5	137	10.5
Colorectal	68	5.5	6	0.4	19	1.4	7	0.5	2	0.1	8	0.6	10	0.7	120	9.2
Urinary bladder	64	5.3	6	0.4	15	1.1	6	0.4	4	0.3	10	0.7	8	0.6	113	8.8
Brain & other CNS	57	4.6	6	0.4	18	1.4	10	0.7	2	0.1	5	0.3	5	0.3	103	7.8
Non-Hodgkin lymphoma	57	4.6	11	0.8	14	1.1	5	0.3	0	0	8	0.6	7	0.5	102	7.9
Stomach	34	2.9	6	0.4	12	0.9	2	0.1	2	0.1	9	0.7	1	0.07	66	5.2
Pancreas	28	2.4	3	0.2	14	1.1	4	0.3	1	0.07	3	0.2	8	0.6	61	4.8
Kidney	28	2.4	3	0.2	11	0.8	5	0.3	0	0	3	0.2	6	0.4	56	4.3
Total	723	59.2	98	7.1	212	16.2	82	5.8	19	1.2	72	5.2	74	5.2	1,280	100%

Table No.; (33) Distribution of Top Ten Cancer by Districts in Basra, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Basra		Abu-Alkhasseb		Zubair		Qoorna		Faw		Shatt Al-Arab		Almdainah		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	233	61	36	9.4	57	14.8	21	5.5	4	1	20	5.2	12	3.1	383	100%
Bronchus & lung	80	57.6	10	7.2	28	20.1	7	5	1	0.7	3	2.2	10	7.2	139	100%
Leukemia	74	54.2	11	8	24	17.5	15	10.9	3	2.2	3	2.1	7	5.1	137	100%
Colorectal	68	56.9	6	5	19	15.8	7	5.8	2	1.6	8	6.6	10	8.3	120	100%
Urinary bladder	64	56.7	6	5.3	15	13.3	6	5.3	4	3.5	10	8.8	8	7.1	113	100%
Brain & other CNS	57	55.5	6	5.8	18	17.5	10	9.7	2	1.9	5	4.8	5	4.8	103	100%
Non-Hodgkin lymphoma	57	56	11	10.8	14	13.7	5	4.9	0	0	8	7.8	7	6.8	102	100%
Stomach	34	51.6	6	9.1	12	18.2	2	3	2	3	9	13.6	1	1.5	66	100%
Pancreas	28	46.1	3	4.9	14	22.9	4	6.5	1	1.6	3	4.9	8	13.1	61	100%
Kidney	28	50.2	3	5.3	11	19.6	5	8.9	0	0	3	5.3	6	10.7	56	100%
Total	723	56.5	98	7.6	212	16.5	82	6.4	19	1.5	72	5.6	74	5.8	1280	100%

Table No.; (34) Distribution of Top Ten Cancer in Erbil, Iraq, 2015

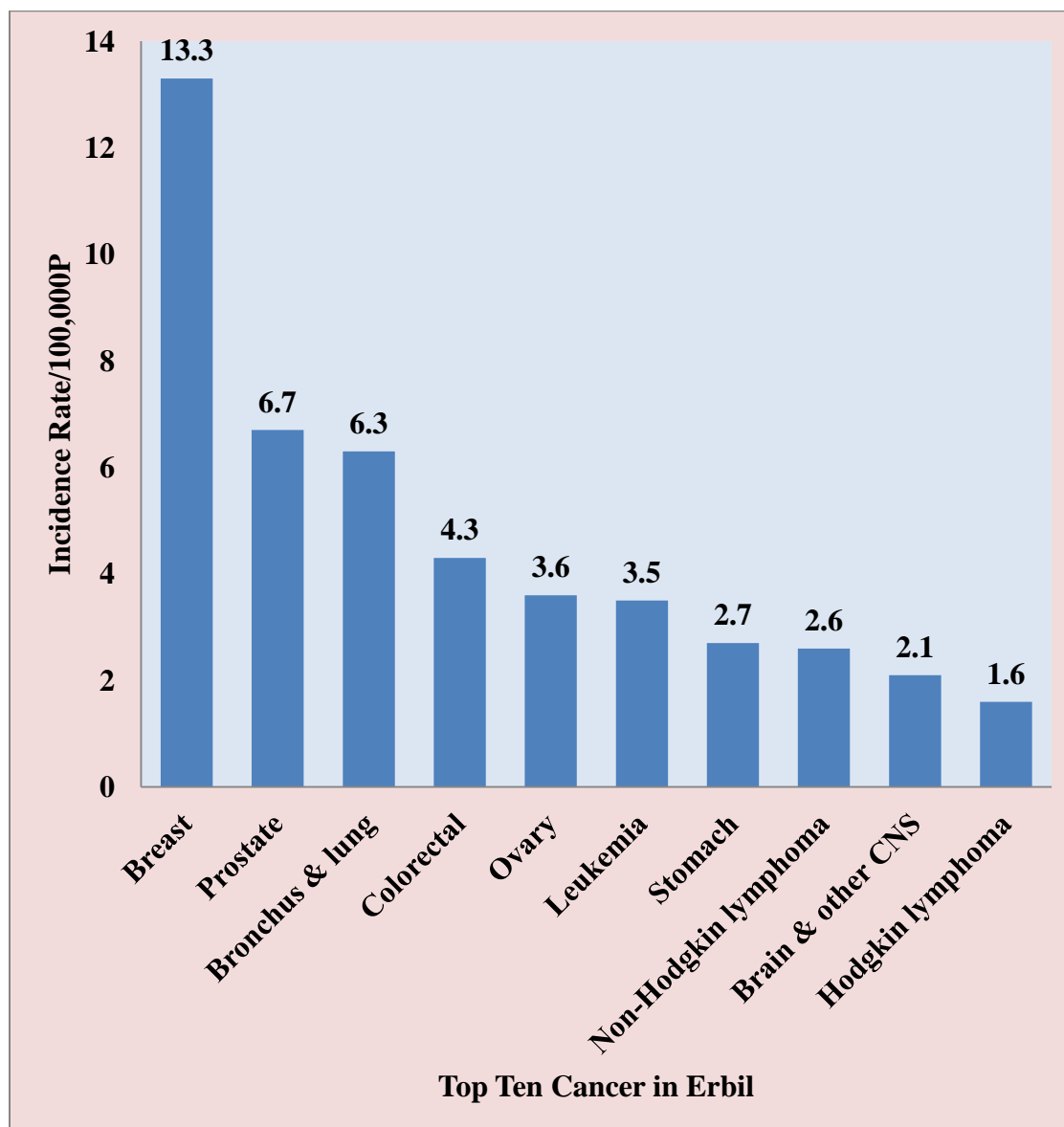
Top ten cancer	No.	%
Breast	240	21.5
Bronchus & lung	113	10.2
Colorectal	78	6.9
Leukemia*	63	5.6
Prostate	61	5.5
Stomach	50	4.5
Non-Hodgkin lymphoma**	48	4.4
Brain & other CNS***	39	3.5
Ovary	32	2.8
Hodgkin lymphoma	30	2.7
Total other site cancer	362	32.4
Total cancers in Erbil	1,116	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

***Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

Figure No.; (25) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Erbil, Iraq, 2015



Note: Incidence rate of all top ten cancers /100,000 total population except for prostate cancer incidence rate /100,000 male populations and for ovary cancer incidence rate /100,000 female populations

Table No.; (35) Distribution of Top Ten Cancer by Districts in Erbil, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Erbil		Khabat		Makhmoor		Sooran		Kweisengek		Shaqlawawa		Deshtirbil		Meirgehsor		Rawandooza		Choman		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	181	24.8	5	0.7	4	0.5	7	0.9	10	1.3	16	2.1	6	0.7	4	0.5	4	0.5	3	0.4	240	32.4
Bronchus & lung	75	9.9	2	0.2	3	0.4	6	0.7	2	0.2	12	1.6	6	0.7	2	0.2	0	0	5	0.7	113	14.6
Colorectal	56	7.9	5	0.7	8	1	3	0.4	1	0.1	1	0.1	3	0.4	0	0	0	0	1	0.1	78	10.7
Leukemia	42	5.9	2	0.2	1	0.1	8	1	4	0.5	4	0.5	1	0.1	1	0.1	0	0	0	0	63	8.7
Prostate	48	6.1	1	0.1	1	0.1	5	0.7	3	0.4	0	0	3	0.4	0	0	0	0	0	0	61	7.8
Stomach	36	4.9	1	0.1	1	0.1	6	0.7	2	0.2	2	0.2	1	0.1	0	0	0	0	1	0.1	50	6.4
Non Hodgkin lymphoma	30	3.9	3	0.4	1	0.1	3	0.4	2	0.2	3	0.4	4	0.5	0	0	1	0.1	1	0.1	48	6.1
Brain & other CNS	26	3.8	1	0.1	2	0.2	2	0.2	2	0.2	4	0.5	2	0.2	0	0	0	0	0	0	39	4.9
Ovary	22	3.2	0	0	1	0.1	2	0.2	3	0.3	4	0.5	0	0	0	0	0	0	0	0	32	4.3
Hodgkin lymphoma	22	3.2	0	0	0	0	2	0.2	0	0	1	0.1	1	0.1	0	0	4	0.5	0	0	30	4.1
Total	538	73.6	20	2.5	22	2.6	44	5.4	29	3.4	47	6	27	3.2	7	0.8	9	1.1	11	1.4	754	100%

Table No.; (36) Distribution of Top Ten Cancer by Districts in Erbil, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Erbil		Khabat		Makhmoor		Sooran		Kweisengek		Shaqlawat		Deshtirbil		Meirgehsor		Rawandooza		Choman		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	181	75.8	5	2.1	4	1.6	7	2.9	10	4.1	16	6.6	6	2.5	4	1.6	4	1.6	3	1.2	240	100%
Bronchus & lung	75	66.3	2	1.7	3	2.6	6	5.3	2	1.7	12	11	6	5.3	2	1.7	0	0	5	4.4	113	100%
Colorectal	56	72.1	5	6.4	8	10	3	3.8	1	1.3	1	1.3	3	3.8	0	0	0	0	1	1.3	78	100%
Leukemia	42	66.5	2	3.2	1	1.6	8	13	4	6.3	4	6.3	1	1.6	1	1.5	0	0	0	0	63	100%
Prostate	48	78.8	1	1.6	1	1.6	5	8.2	3	4.9	0	0	3	4.9	0	0	0	0	0	0	61	100%
Stomach	36	72	1	2	1	2	6	12	2	4	2	4	1	2	0	0	0	0	1	2	50	100%
Non-Hodgkin lymphoma	30	62.6	3	6.2	1	2.1	3	6.2	2	4.2	3	6.2	4	8.3	0	0	1	2.1	1	2.1	48	100%
Brain & other CNS	26	67.1	1	2.5	2	5.1	2	5.1	2	5.1	4	10	2	5.1	0	0	0	0	0	0	39	100%
Ovary	22	68.1	0	0	1	3.3	2	6.2	3	9.4	4	13	0	0	0	0	0	0	0	0	32	100%
Hodgkin lymphoma	22	73.5	0	0	0	0	2	6.6	0	0	1	3.3	1	3.3	0	0	4	13.3	0	0	30	100%
Total	538	71.5	20	2.6	22	2.9	44	5.8	29	3.8	47	6.2	27	3.6	7	0.9	9	1.2	11	1.5	754	100%

Table No.; (37) Distribution of Top Ten Cancer in Dyala, Iraq, 2015

Top ten cancer	No.	%
Breast	175	18.2
Leukemia*	79	8.3
Brain & other CNS**	68	7.1
Bronchus & lung	63	6.6
Skin	40	4.2
Stomach	38	3.9
Colorectal	37	3.8
Liver	36	3.7
Urinary bladder	34	3.5
Non-Hodgkin lymphoma***	34	3.5
Total other site cancer	359	37.2
Total cancers in Dyala	963	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (26) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Dyala, Iraq, 2015

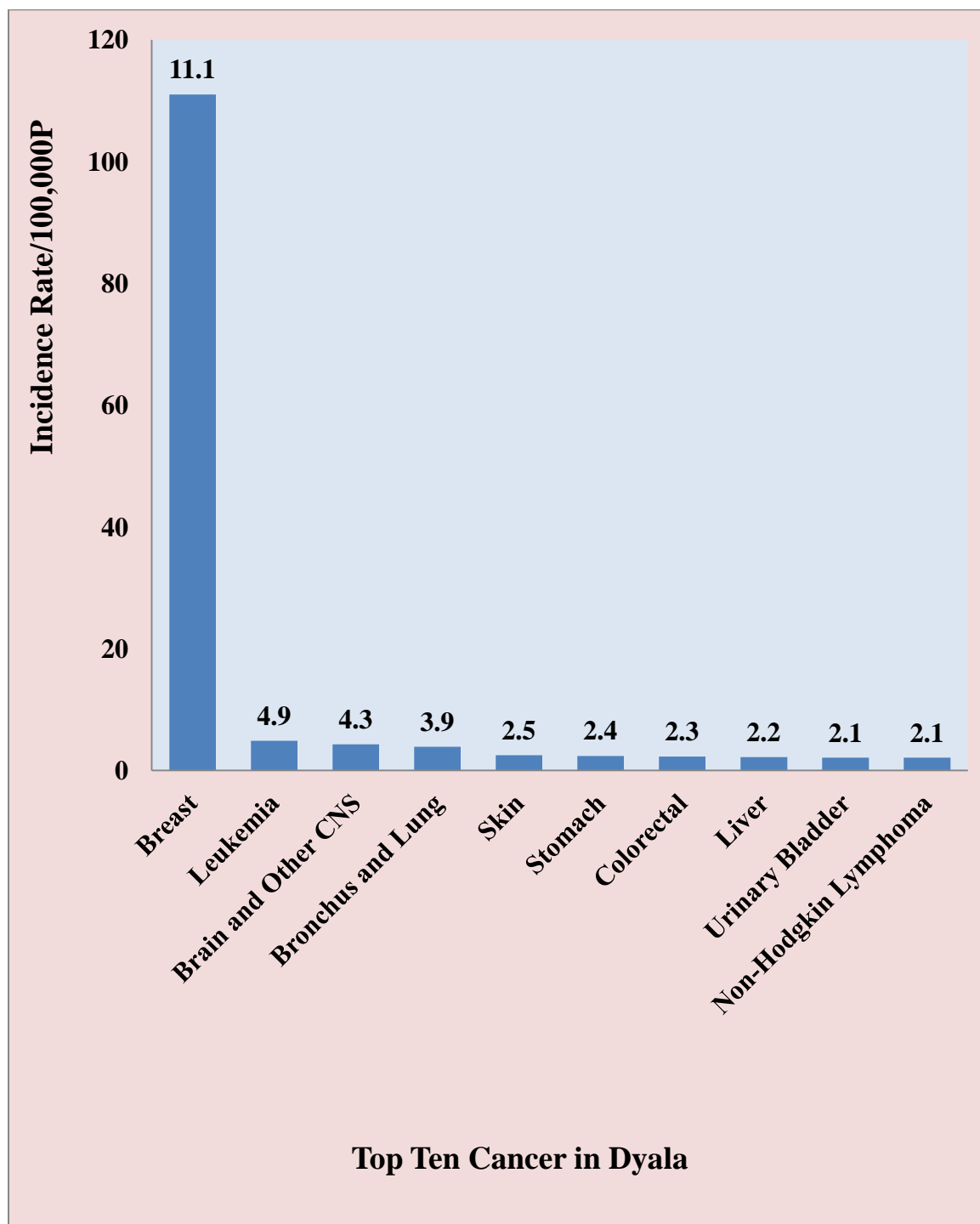


Table No.; (38) Distribution of Top Ten Cancer by Districts in Dyala, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Bakooba		Al-Moqdadia		Al-Khalis		Baladrooze		Khanakeen		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	108	17.9	15	2.5	20	3.3	14	2.3	18	3	175	29
Leukemia	45	7.6	9	1.5	18	3	0	0	7	1.1	79	13.2
Brain & other CNS	40	6.8	6	0.9	12	2	5	0.8	5	0.8	68	11.3
Bronchus & lung	40	6.8	4	0.6	12	2	2	0.3	5	0.8	63	10.5
Skin	24	4.3	4	0.6	4	0.6	5	0.8	3	0.5	40	6.8
Stomach	20	3.5	4	0.6	6	0.9	3	0.5	5	0.8	38	6.3
Colorectal	22	3.7	2	0.3	7	1.1	2	0.3	4	0.6	37	6
Liver	17	2.8	5	0.8	9	1.5	2	0.3	3	0.5	36	5.9
Urinary bladder	18	3	5	0.8	6	0.9	2	0.3	3	0.5	34	5.5
Non-Hodgkin lymphoma	22	3.6	3	0.5	5	0.8	2	0.3	2	0.3	34	5.5
Total	356	60	57	9.1	99	16.1	37	5.9	55	8.9	604	100%

Table No.; (39) Distribution of Top Ten Cancer by Districts in Dyala, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Bakooba		Al-Moqdadia		Al-Khalis		Baladrooze		Khanakeen		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	108	61.7	15	8.6	20	11.4	14	8	18	10.3	175	100%
Leukemia	45	57.1	9	11.4	18	22.7	0	0	7	8.8	79	100%
Brain & other CNS	40	59	6	8.8	12	17.6	5	7.3	5	7.3	68	100%
Bronchus & lung	40	63.5	4	6.3	12	19.1	2	3.2	5	7.9	63	100%
Skin	24	60	4	10	4	10	5	12.5	3	7.5	40	100%
Stomach	20	52.8	4	10.5	6	15.7	3	7.9	5	13.1	38	100%
Colorectal	22	59.5	2	5.4	7	18.9	2	5.4	4	10.8	37	100%
Liver	17	47.3	5	13.9	9	25	2	5.5	3	8.3	36	100%
Urinary bladder	18	53.1	5	14.7	6	17.6	2	5.8	3	8.8	34	100%
Non-Hodgkin lymphoma	22	64.4	3	8.8	5	14.2	2	5.8	2	5.8	34	100%
Total	356	59	57	9.4	99	16.4	37	6.1	55	9.1	604	100%

Table No.; (40) Distribution of Top Ten Cancer in Duhok, Iraq, 2015

Top ten cancer	No.	%
Breast	108	14.1
Skin	83	10.8
Bronchus & lung	60	7.8
Leukemia*	58	7.6
Colorectal	49	6.4
Brain & other CNS**	42	5.5
Non-Hodgkin lymphoma***	36	4.7
Urinary bladder	31	4.1
Hodgkin lymphoma	26	3.4
Ear/nose	25	3.2
Total other site cancer	248	32.4
Total cancers in Duhok	766	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (27) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Duhok, Iraq, 2015

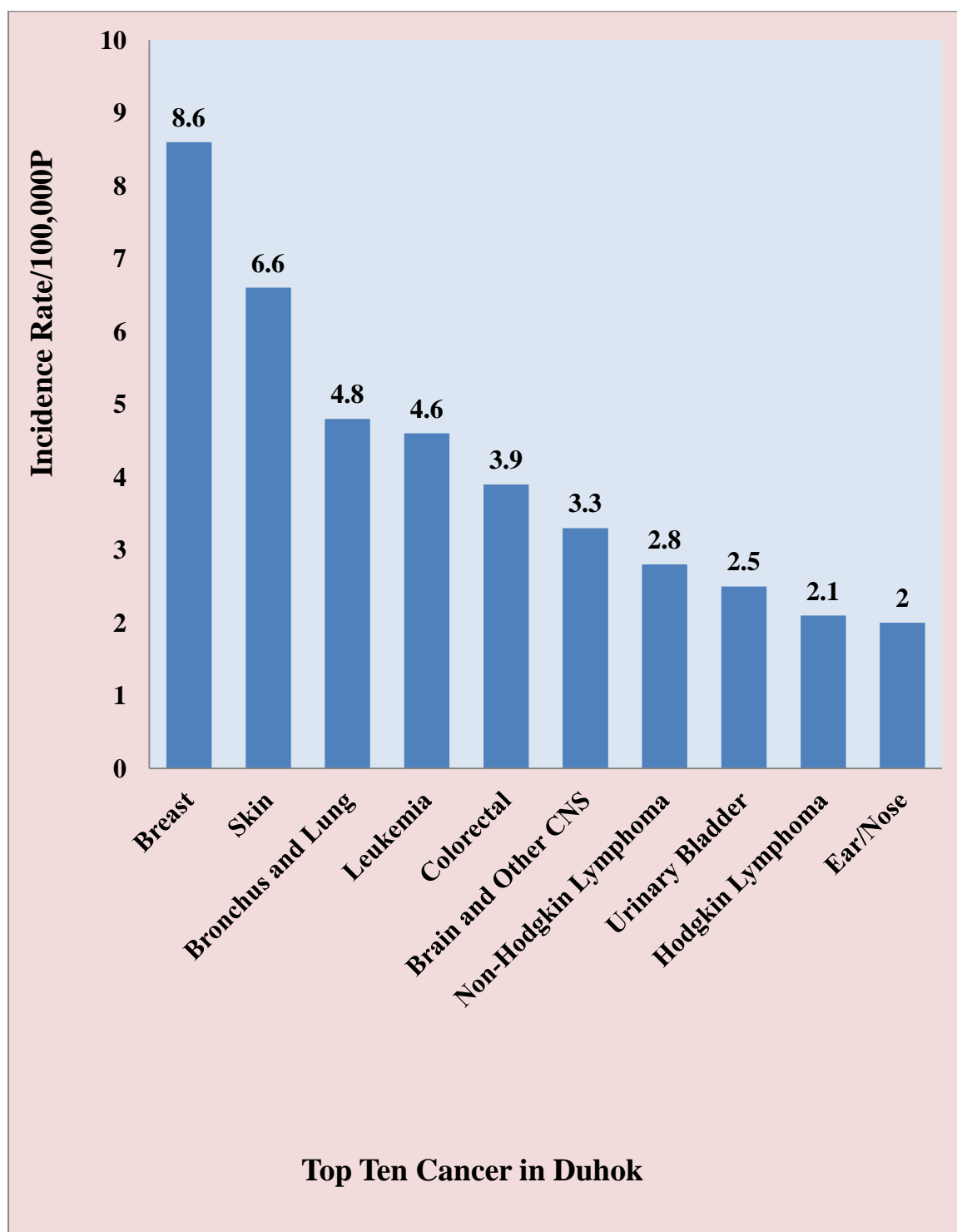


Table No.; (41) Distribution of Top Ten Cancer by Districts in Duhok, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Duhok		Al-Amadyia		Zakho		Shaikhan		Aqreh		Berdehresh		Smeel		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	69	13.2	0	0	23	4.4	2	0.4	6	1.2	5	0.9	3	0.6	108	20.7
Skin	62	11.9	0	0	13	2.5	0	0	1	0.2	0	0	7	1.4	83	16
Bronchus & lung	41	7.9	1	0.2	10	1.9	1	0.2	3	0.6	0	0	4	0.8	60	11.6
Leukemia	32	6.1	3	0.6	12	2.3	1	0.2	4	0.8	0	0	6	1.2	58	11.2
Colorectal	32	6.1	0	0	13	2.5	0	0	2	0.4	1	0.2	1	0.2	49	9.4
Brain & other CNS	31	6	0	0	10	1.9	0	0	0	0	1	0.2	0	0	42	8.1
Non-Hodgkin lymphoma	25	5	1	0.2	3	0.6	1	0.2	1	0.2	1	0.2	4	0.8	36	7.2
Urinary bladder	21	4	1	0.2	4	0.8	0	0	1	0.2	1	0.2	3	0.6	31	6
Hodgkin lymphoma	20	3.9	0	0	5	0.9	0	0	0	0	0	0	1	0.2	26	5
Ear/nose	21	4	0	0	2	0.4	0	0	0	0	0	0	2	0.4	25	4.8
Total	354	68.1	6	1.2	95	18.2	5	1	18	3.6	9	1.7	31	6.2	518	100%

Table No.; (42) Distribution of Top Ten Cancer by Districts in Duhok, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Duhok		Al-Amadyia		Zakho		Shaikhan		Aqreh		Berdehresh		Smeel		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	69	63.9	0	0	23	21.3	2	1.85	6	5.5	5	4.6	3	2.8	108	100%
Skin	62	74.8	0	0	13	15.6	0	0	1	1.2	0	0	7	8.4	83	100%
Bronchus & lung	41	68.6	1	1.6	10	16.6	1	1.6	3	5	0	0	4	6.6	60	100%
Leukemia	32	55.2	3	5.2	12	20.7	1	1.7	4	6.9	0	0	6	10.3	58	100%
Colorectal	32	65.4	0	0	13	26.5	0	0	2	4.1	1	2	1	2	49	100%
Brain & other CNS	31	73.8	0	0	10	23.8	0	0	0	0	1	2.4	0	0	42	100%
Non-Hodgkin lymphoma	25	69.4	1	2.8	3	8.3	1	2.8	1	2.8	1	2.8	4	11.1	36	100%
Urinary bladder	21	67.8	1	3.2	4	12.9	0	0	1	3.2	1	3.2	3	9.7	31	100%
Hodgkin lymphoma	20	77	0	0	5	19.2	0	0	0	0	0	0	1	3.8	26	100%
Ear/nose	21	84	0	0	2	8	0	0	0	0	0	0	2	8	25	100%
Total	354	68.6	6	1.1	95	18.3	5	0.9	18	3.5	9	1.7	31	5.9	518	100%

Table No.; (43) Distribution of Top Ten Cancer in Thiqr, Iraq, 2015

Top ten cancer	No.	%
Bronchus & lung	145	11.9
Breast	143	11.7
Brain & other CNS*	108	8.9
Urinary bladder	101	8.4
Leukemia**	75	6.2
Thyroid	73	6.1
Non-Hodgkin lymphoma***	43	3.5
Colorectal	39	3.2
Hodgkin lymphoma	39	3.2
Liver	35	2.8
Total other site cancer	415	34.1
Total cancers in Thiqr	1,216	100%

*Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

**Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (28) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Thiqar, Iraq, 2015

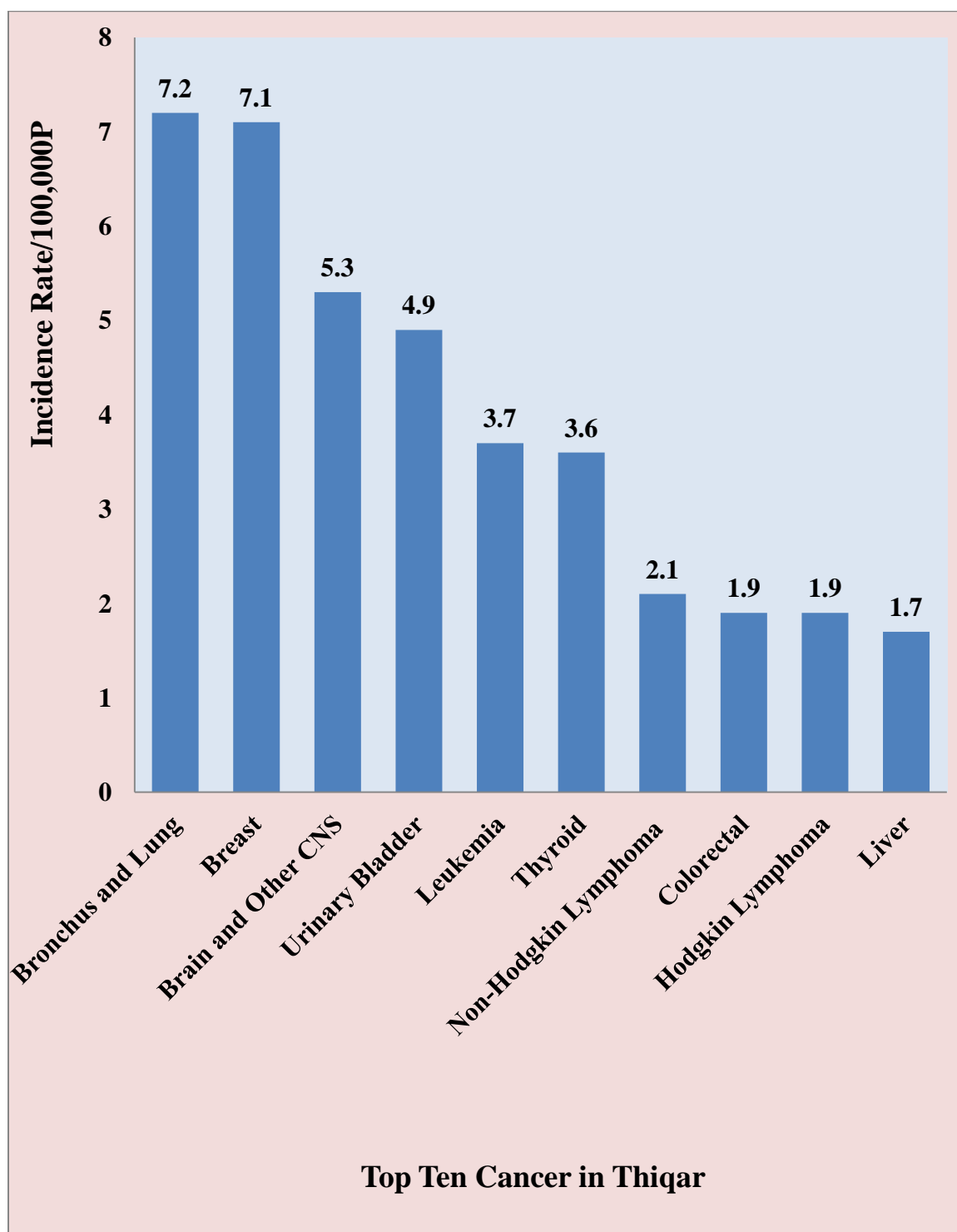


Table No.; (44) Distribution of Top Ten Cancer by Districts in Thiqr, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Nassiryiah		Riffaey		Sook Al-Shiookh		Jabaish		Shatter		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Bronchus &lung	93	11.7	14	1.8	14	1.8	1	0.1	23	2.9	145	18.3
Breast	84	10.5	13	1.7	13	1.7	4	0.4	29	3.8	143	18.1
Brain & other CNS	72	8.9	13	1.7	12	1.6	2	0.2	9	1.1	108	13.5
Urinary bladder	60	7.7	11	1.4	15	1.9	3	0.3	12	1.6	101	12.9
Leukemia	44	5.6	6	0.6	8	0.9	2	0.2	15	1.9	75	9.2
Thyroid	48	5.9	11	1.4	5	0.6	0	0	9	1.1	73	9
Non-Hodgkin lymphoma	23	2.9	8	0.9	1	0.1	5	0.6	6	0.7	43	5.2
Colorectal	17	2.2	8	0.9	7	0.8	1	0.1	6	0.7	39	4.7
Hodgkin lymphoma	22	2.9	6	0.7	5	0.6	0	0	6	0.7	39	4.9
Liver	21	2.7	8	0.9	1	0.1	1	0.1	4	0.4	35	4.2
Total	484	61	98	12	81	10.1	19	2	119	14.9	801	100%

Table No.; (45) Distribution of Top Ten Cancer by Districts in Thiqr, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Nassiryiah		Riffaey		Sook Al-Shiookh		Jabaish		Shatter		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Bronchus & lung	93	64.3	14	9.6	14	9.6	1	0.7	23	15.8	145	100%
Breast	84	58.7	13	9.1	13	9.1	4	2.8	29	20.3	143	100%
Brain & other CNS	72	66.8	13	12	12	11.1	2	1.8	9	8.3	108	100%
Urinary bladder	60	59.7	11	10.9	15	14.6	3	2.9	12	11.9	101	100%
Leukemia	44	58.8	6	8	8	10.6	2	2.6	15	20	75	100%
Thyroid	48	65.8	11	15.1	5	6.8	0	0	9	12.3	73	100%
Non-Hodgkin lymphoma	23	53.6	8	18.6	1	2.3	5	11.6	6	13.9	43	100%
Colorectal	17	43.7	8	20.5	7	17.9	1	2.5	6	15.4	39	100%
Hodgkin lymphoma	22	56.4	6	15.4	5	12.8	0	0	6	15.4	39	100%
Liver	21	60.2	8	22.8	1	2.8	1	2.8	4	11.4	35	100%
Total	484	60.6	98	12.2	81	10.1	19	2.3	119	14.8	801	100%

Table No.; (46) Distribution of Top Ten Cancer in Wasit, Iraq, 2015

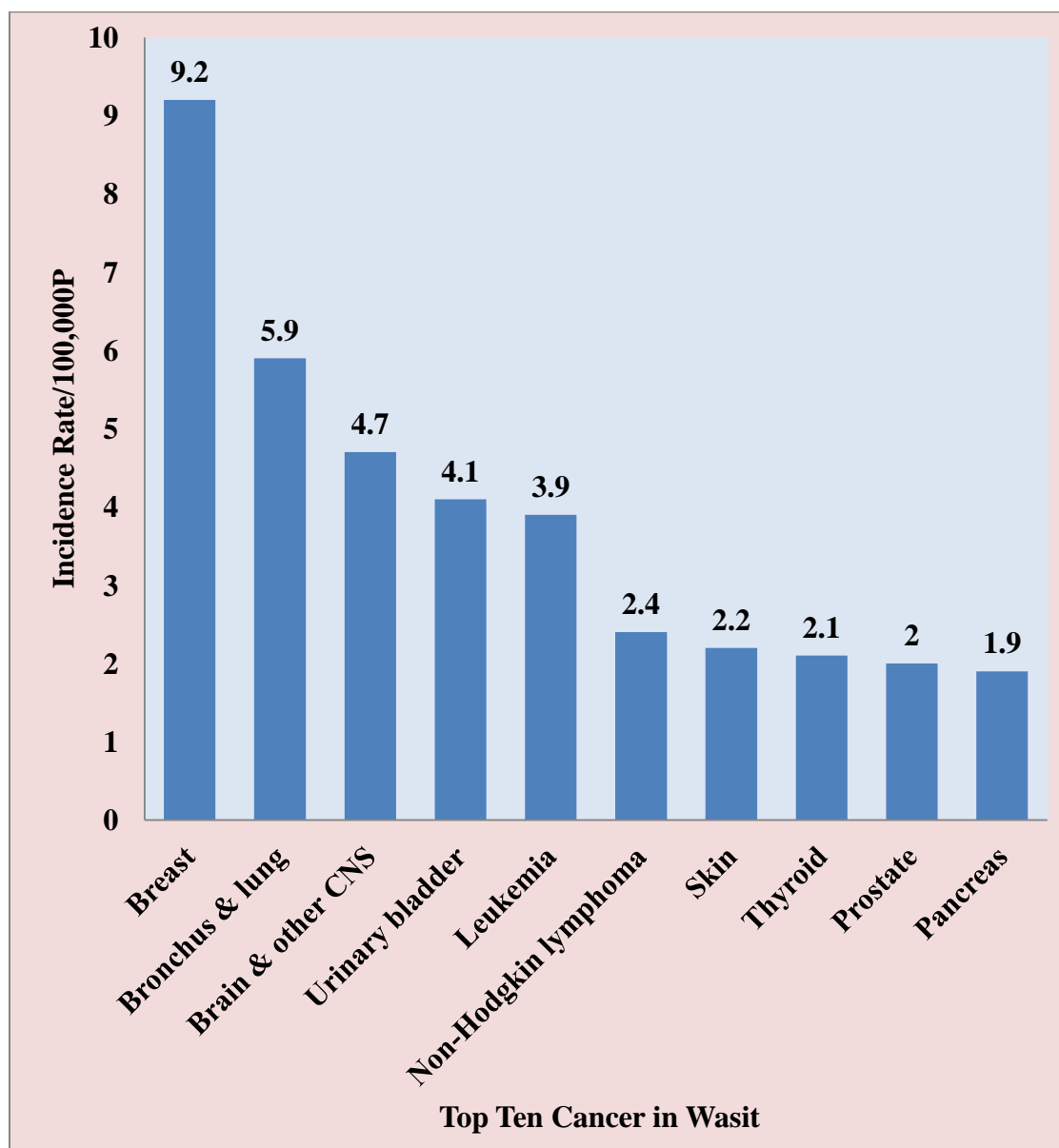
Top ten cancer	No.	%
Breast	123	15.7
Bronchus & lung	80	10.2
Brain & other CNS*	63	8.1
Urinary bladder	55	7.1
Leukemia**	53	6.7
Non-Hodgkin lymphoma***	33	4.2
Skin	29	3.7
Thyroid	28	3.6
Prostate	27	3.4
Pancreas	26	3.3
Total other site cancer	267	34
Total cancers in Wasit	784	100%

*Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

**Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (29) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Wasit, Iraq, 2015



Note: Incidence rate of all top ten cancers /100,000 total population
except for prostate cancer incidence rate /100,000 male populations

Table No.; (47) Distribution of Top Ten Cancer by Districts in Wasit, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Kut		Numanian		Hay		Badra		Al-Suarrah		Al-Aziziya		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	78	15.3	11	2.2	11	2.2	3	0.5	10	1.9	10	1.9	123	24
Bronchus & lung	48	9.5	0	0	16	3.2	1	0.2	8	1.5	7	1.3	80	15.7
Brain & other CNS	37	7.4	7	1.3	5	0.9	1	0.2	7	1.3	6	1.1	63	12.2
Urinary bladder	31	6.1	3	0.5	10	1.9	0	0	6	1.1	5	0.9	55	10.5
Leukemia	34	6.7	2	0.3	8	1.5	1	0.2	6	1.1	2	0.3	53	10.1
Non-Hodgkin lymphoma	21	4.2	1	0.2	1	0.2	1	0.2	6	1.1	3	0.5	33	6.4
Skin	16	3.2	0	0	5	0.9	1	0.2	5	0.9	2	0.3	29	5.5
Thyroid	15	3	2	0.3	4	0.7	1	0.2	4	0.7	2	0.3	28	5.2
Prostate	11	2.2	1	0.2	5	0.9	1	0.2	7	1.7	2	0.3	27	5.5
Pancreas	12	2.5	3	0.5	2	0.3	0	0	7	1.3	2	0.3	26	4.9
Total	303	60.1	30	5.5	67	12.7	10	1.9	66	12.6	41	7.2	517	100%

Table No.; (48) Distribution of Top Ten Cancer by Districts in Wasit, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Kut		Numanian		Hay		Badra		Al-Suarrah		Al-Aziziya		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	78	63.6	11	8.9	11	8.9	3	2.4	10	8.1	10	8.1	123	100%
Bronchus & lung	48	60.1	0	0	16	20	1	1.2	8	10	7	8.7	80	100%
Brain & other CNS	37	58.8	7	11.1	5	7.9	1	1.6	7	11.1	6	9.5	63	100%
Urinary bladder	31	56.4	3	5.4	10	18.2	0	0	6	10.9	5	9.1	55	100%
Leukemia	34	64.2	2	3.7	8	15.1	1	1.9	6	11.3	2	3.7	53	100%
Non-Hodgkin lymphoma	21	63.7	1	3	1	3	1	3	6	18.2	3	9.1	33	100%
Skin	16	55.2	0	0	5	17.2	1	3.4	5	17.2	2	6.9	29	100%
Thyroid	15	53.7	2	7.1	4	14.3	1	3.5	4	14.3	2	7.1	28	100%
Prostate	11	40.8	1	3.7	5	18.5	1	3.7	7	25.9	2	7.4	27	100%
Pancreas	12	46.2	3	11.5	2	7.7	0	0	7	26.9	2	7.7	26	100%
Total	303	58.8	30	5.8	67	12.9	10	1.9	66	12.7	41	7.9	517	100%

Table No.; (49) Distribution of Top Ten Cancer by District in Diwaniya, Iraq, 2015

Top ten cancer	No.	%
Breast	90	12.5
Bronchus & lung	80	11.1
Thyroid	67	9.3
Urinary bladder	53	7.3
Leukemia*	50	6.9
Non-Hodgkin lymphoma**	39	5.4
Brain & other CNS***	30	4.2
Skin	29	4.1
Colorectal	26	3.6
Larynx	20	2.8
Total other site cancer	237	32.8
Total cancers in Diwaniya	721	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

***Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

Figure No.; (30) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Diwanyia, Iraq, 2015

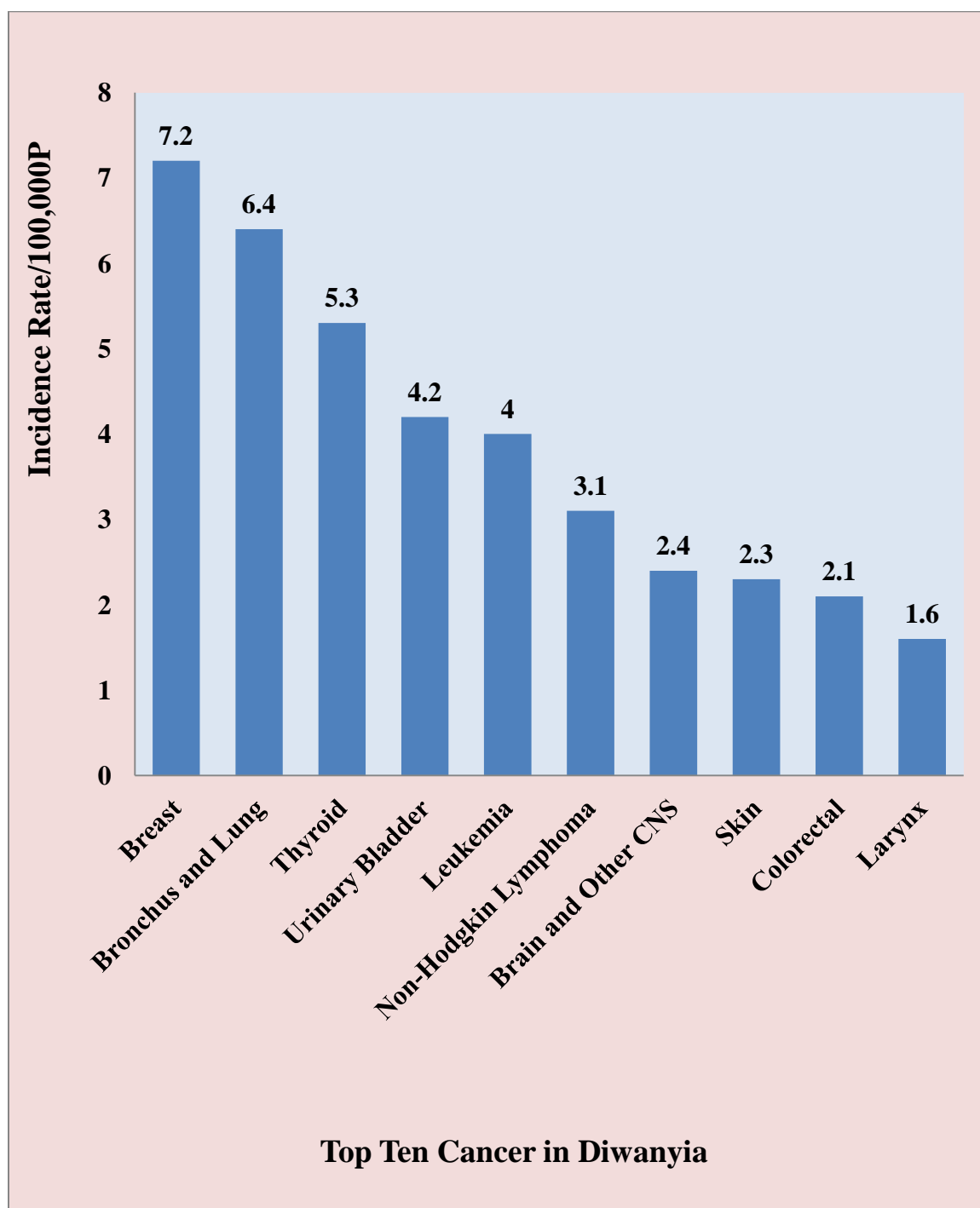


Table No.; (50) Distribution of Top Ten Cancer by Districts in Diwaniya, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Diwaniya		Affak		Shamiah		Hamza		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	72	14.9	4	0.8	6	1.2	8	1.6	90	18.5
Bronchus & lung	64	13.4	3	0.6	11	2.2	2	0.4	80	16.6
Thyroid	56	11.6	3	0.6	4	0.8	4	0.8	67	13.8
Urinary bladder	42	8.8	4	0.8	5	1	2	0.4	53	11
Leukemia	39	8.2	4	0.8	3	0.6	4	0.8	50	10.4
Non-Hodgkin lymphoma	29	5.9	6	1.2	1	0.2	3	0.6	39	7.9
Brain & other CNS	23	4.8	1	0.2	4	0.8	2	0.4	30	6.2
Skin	17	3.6	1	0.2	5	1	6	1.2	29	6
Colorectal	19	3.9	0	0	3	0.6	4	0.8	26	5.3
Larynx	16	3.5	0	0	3	0.6	1	0.2	20	4.3
Total	377	78.6	26	5.2	45	9	36	7.2	484	100%

Table No.; (51) Distribution of Top Ten Cancer by Districts in Diwaniya, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Diwaniya		Affak		Shamiah		Hamza		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	72	80.1	4	4.4	6	6.6	8	8.9	90	100%
Bronchus & lung	64	80.1	3	3.7	11	13.7	2	2.5	80	100%
Thyroid	56	83.7	3	4.5	4	5.9	4	5.9	67	100%
Urinary bladder	42	79.4	4	7.5	5	9.4	2	3.7	53	100%
Leukemia	39	78	4	8	3	6	4	8	50	100%
Non-Hodgkin lymphoma	29	74.4	6	15.4	1	2.5	3	7.7	39	100%
Brain & other CNS	23	76.7	1	3.3	4	13.3	2	6.7	30	100%
Skin	17	58.7	1	3.4	5	17.2	6	20.7	29	100%
Colorectal	19	73.1	0	0	3	11.5	4	15.4	26	100%
Larynx	16	80	0	0	3	15	1	5	20	100%
Total	377	77.9	26	5.4	45	9.3	36	7.4	484	100%

Table No.; (52) Distribution of Top Ten Cancer in Kirkuk, Iraq, 2015

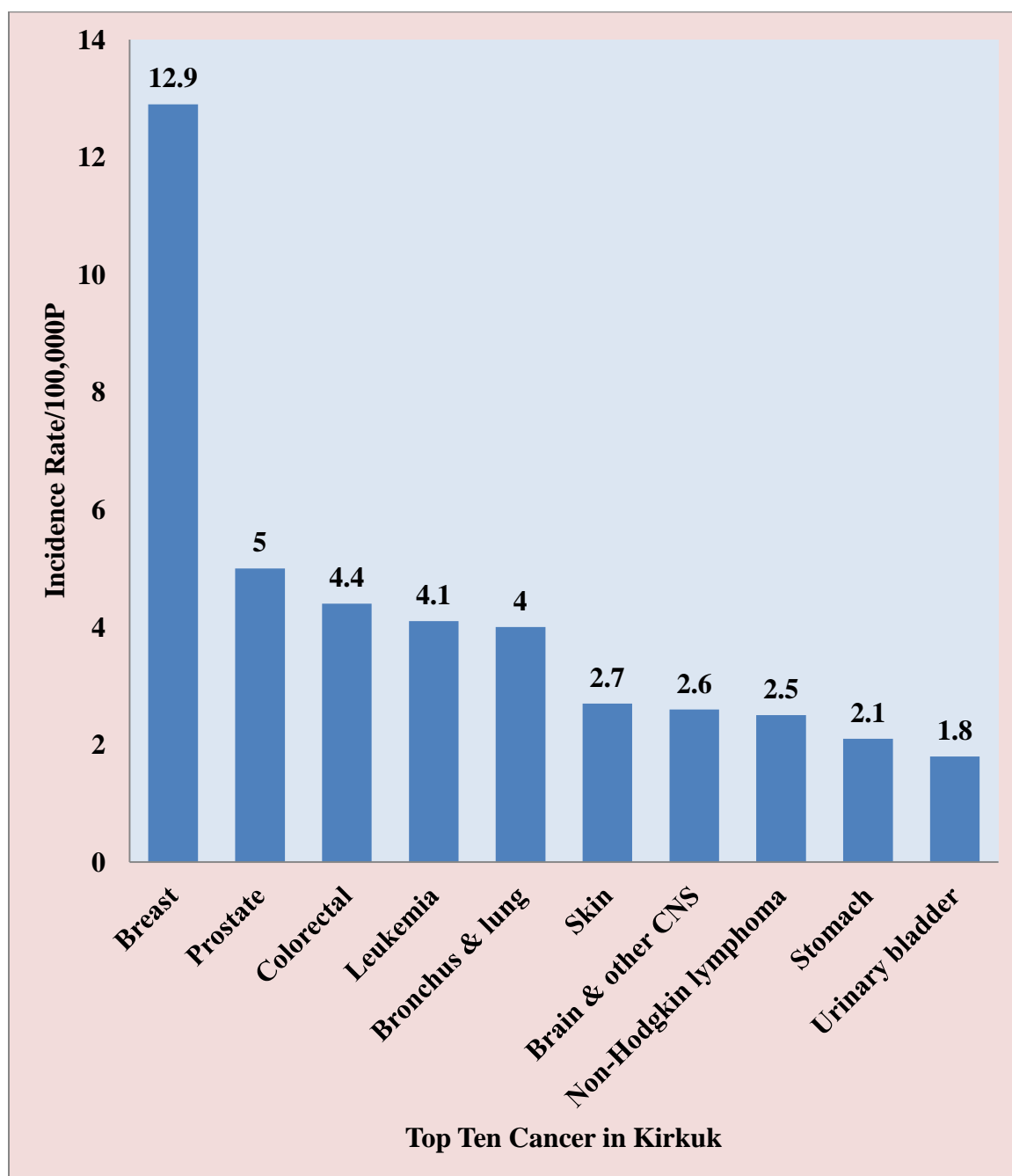
Top ten cancer	No.	%
Breast	200	22.8
Colorectal	68	7.7
Leukemia*	63	7.2
Bronchus & lung	62	7.1
Skin	42	4.8
Brain & other CNS**	40	4.5
Prostate	39	4.5
Non-Hodgkin lymphoma***	39	4.5
Stomach	32	3.6
Urinary bladder	28	3.2
Total other site cancer	264	30.1
Total cancers in Kirkuk	877	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (31) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Kirkuk, Iraq, 2015



Note: Incidence rate of all top ten cancers /100,000 total population
except for prostate cancer incidence rate /100,000 male populations

Table No.; (53) Distribution of Top Ten Cancer by Districts in Kirkuk, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Kirkuk		Al-Hawja		Dakook		Dibis		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	179	29.4	12	1.9	5	0.8	4	0.6	200	32.7
Colorectal	57	9.5	3	0.5	2	0.3	6	0.9	68	11.2
Leukemia	47	7.8	8	1.3	6	0.9	2	0.3	63	10.3
Bronchus & lung	56	9.2	5	0.8	0	0	1	0.1	62	10.1
Skin	34	5.6	3	0.5	5	0.8	0	0	42	6.9
Brain & other CNS	32	5.2	6	0.9	1	0.1	1	0.1	40	6.3
Prostate	38	6.2	1	0.1	0	0	0	0	39	6.3
Non-Hodgkin lymphoma	31	5	7	1.4	0	0	1	0.1	39	6.5
Stomach	27	4.4	3	0.5	0	0	2	0.3	32	5.2
Urinary bladder	25	4	0	0	3	0.5	0	0	28	4.5
Total	526	86.3	48	7.9	22	3.4	17	2.4	613	100%

Table No.; (54) Distribution of Top Ten Cancer by Districts in Kirkuk, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Kirkuk		Al-Hawja		Dakook		Dibis		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	179	89.5	12	6	5	2.5	4	2	200	100%
Colorectal	57	83.9	3	4.4	2	2.9	6	8.8	68	100%
Leukemia	47	74.6	8	12.7	6	9.5	2	3.2	63	100%
Bronchus & lung	56	90.3	5	8.1	0	0	1	1.6	62	100%
Skin	34	81	3	7.1	5	11.9	0	0	42	100%
Brain & other CNS	32	80	6	15	1	2.5	1	2.5	40	100%
Prostate	38	97.5	1	2.5	0	0	0	0	39	100%
Non-Hodgkin lymphoma	31	79.6	7	17.9	0	0	1	2.5	39	100%
Stomach	27	84.4	3	9.4	0	0	2	6.2	32	100%
Urinary bladder	25	89.3	0	0	3	10.7	0	0	28	100%
Total	526	85.9	48	7.8	22	3.6	17	2.7	613	100%

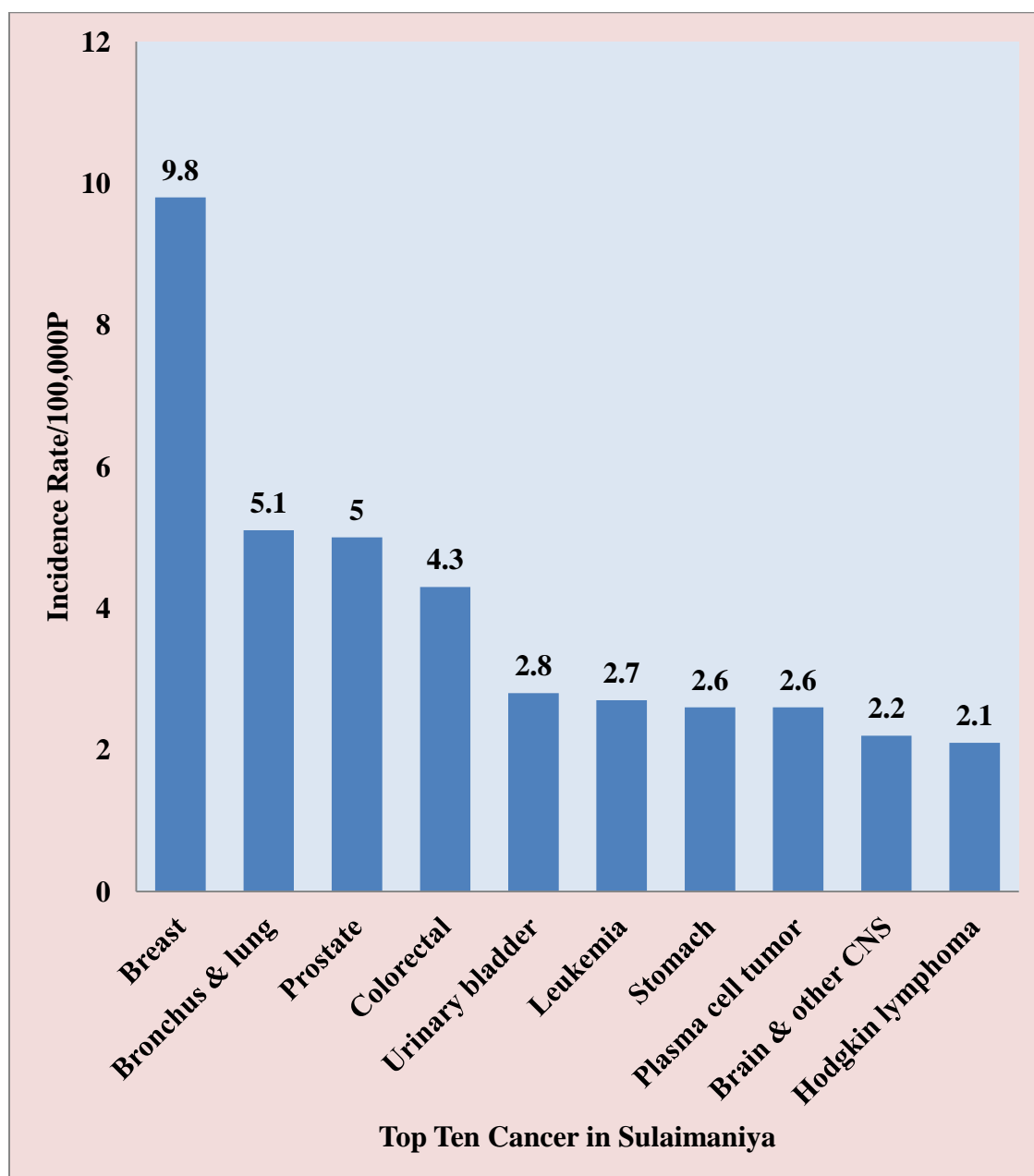
Table No.; (55) Distribution of Top Ten Cancer in Sulaimaniya, Iraq, 2015

Top ten cancer	No.	%
Breast	207	17.6
Bronchus & lung	106	8.9
Colorectal	90	7.7
Urinary bladder	60	5.2
Leukemia*	57	4.8
Stomach	54	4.5
Plasma cell tumor	54	4.5
Prostate	52	4.4
Brain & other CNS**	44	3.7
Hodgkin lymphoma	42	3.5
Total other site cancer	415	35.2
Total cancers in Sulaimaniya	1,181	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

Figure No.; (32) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Sulaimaniya, Iraq, 2015



Note: Incidence rate of all top ten cancers/100/000 total population except for prostate cancer incidence rate/100,000 male populations

Table No.; (56) Distribution of Top Ten Cancer by Districts in Sulaimaniya, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Sulaimaniya		Halabja		Bashdar		Rania		Dokan		Der-bandy khan		Cham- Caamal		Kalar		Kefri		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	141	18.3	4	0.5	7	0.9	16	2.1	2	0.2	1	0.3	18	2.3	18	2.3	0	0	207	26.9
Bronchus & lung	67	8.6	6	0.7	7	0.9	11	1.4	4	0.6	0	0	4	0.6	6	0.7	1	0.3	106	13.8
Colorectal	51	6.5	10	1.3	3	0.4	9	1.2	0	0	1	0.3	9	1.2	5	0.6	2	0.2	90	11.7
Urinary bladder	42	5.1	5	0.6	0	0	3	0.4	1	0.3	2	0.2	2	0.2	5	0.6	0	0	60	7.5
Leukemia	32	4.1	3	0.4	4	0.5	4	0.6	1	0.3	2	0.2	6	0.7	4	0.5	1	0.3	57	7.6
Stomach	36	4.6	3	0.4	1	0.3	4	0.6	1	0.3	0	0	4	0.6	5	0.6	0	0	54	7.4
Plasma cell tumor	39	5.1	3	0.4	3	0.4	3	0.4	1	0.3	2	0.2	1	0.3	2	0.2	0	0	54	7.3
Prostate	31	4.2	2	0.2	2	0.2	3	0.4	1	0.3	1	0.3	8	1	4	0.6	0	0	52	7.2
Brain & other CNS	27	3.5	2	0.2	2	0.2	2	0.2	2	0.2	1	0.3	5	0.6	3	0.4	0	0	44	5.6
Hodgkin lymphoma	28	3.4	3	0.4	2	0.2	3	0.4	0	0	0	0	2	0.2	4	0.5	0	0	42	5.1
Total	494	63.4	41	5.1	31	4	58	7.7	13	2.5	10	1.8	59	7.7	56	7	4	0.8	766	100%

Table No.; (57) Distribution of Top Ten Cancer by Districts in Sulaimaniya, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Sulaimaniya		Halabja		Bashdar		Rania		Dokan		Der-bandykhan		Cham-Caamal		Kalar		Kefri		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	141	68.2	4	1.9	7	3.4	16	7.7	2	0.9	1	0.5	18	8.7	18	8.7	0	0	207	100%
Bronchus & lung	67	63.6	6	5.6	7	6.6	11	10.3	4	3.7	0	0	4	3.7	6	5.6	1	0.9	106	100%
Colorectal	51	56.8	10	11.1	3	3.3	9	10	0	0	1	1.1	9	10	5	5.5	2	2.2	90	100%
Urinary bladder	42	70.2	5	8.3	0	0	3	5	1	1.6	2	3.3	2	3.3	5	8.3	0	0	60	100%
Leukemia	32	56.3	3	5.3	4	7	4	7	1	1.7	2	3.5	6	10.5	4	7	1	1.7	57	100%
Stomach	36	66.9	3	5.5	1	1.8	4	7.4	1	1.8	0	0	4	7.4	5	9.2	0	0	54	100%
Plasma cell tumor	39	72.5	3	5.5	3	5.5	3	5.5	1	1.8	2	3.7	1	1.8	2	3.7	0	0	54	100%
Prostate	31	59.8	2	3.8	2	3.8	3	5.7	1	1.9	1	1.9	8	15.4	4	7.7	0	0	52	100%
Brain & other CNS	27	61.6	2	4.5	2	4.5	2	4.5	2	4.5	1	2.3	5	11.3	3	6.8	0	0	44	100%
Hodgkin lymphoma	28	66.9	3	7.1	2	4.7	3	7.1	0	0	0	0	2	4.7	4	9.5	0	0	42	100%
Total	494	64.7	41	5.3	31	4	58	7.5	13	1.7	10	1.3	59	7.7	56	7.3	4	0.5	766	100%

Table No.; (58) Distribution of Top Ten Cancer in Misan, Iraq, 2015

Top ten cancer	No.	%
Breast	119	19.8
Urinary bladder	58	9.7
Bronchus & Lung	48	7.9
Leukemia*	40	6.7
Brain & other CNS**	34	5.6
Non-Hodgkin lymphoma***	20	3.3
Skin	18	2.9
Colorectal	16	2.6
Larynx	16	2.6
Kidney	16	2.6
Total other site cancer	220	36.3
Total cancers in Misan	605	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (33) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Misan, Iraq, 2015

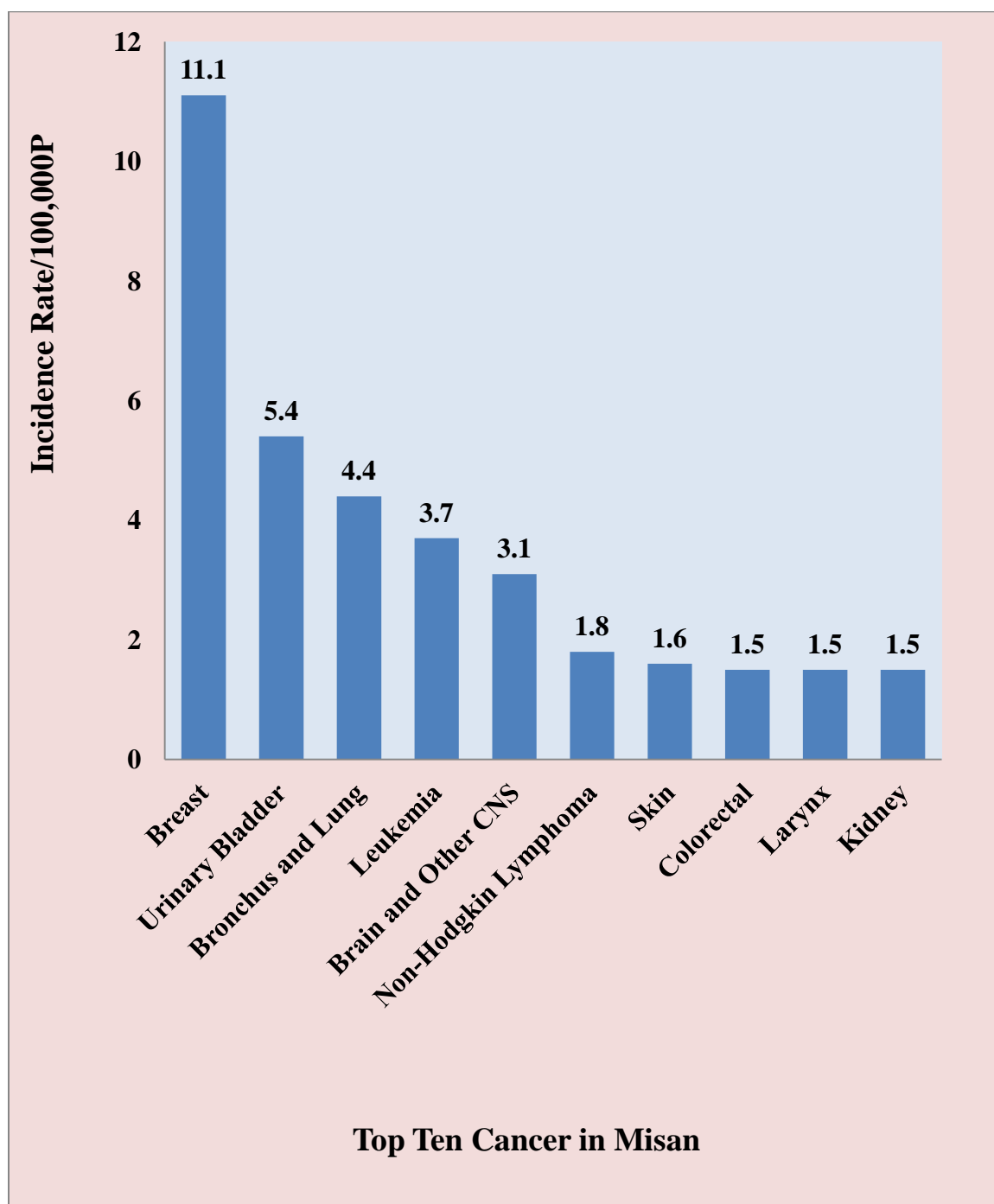


Table No.; (59) Distribution of Top Ten Cancer by Districts in Misan, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Ammarah		Ali-Algerbi		Maymoona		Qalat-Salih		Almajara Kabeer		Kahlaa		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	90	23.4	5	1.3	9	2.3	5	1.3	8	2	2	0.4	119	30.7
Urinary bladder	39	10.1	2	0.5	2	0.5	6	1.5	5	1.3	4	1.1	58	15
Bronchus & lung	35	9.1	2	0.5	3	0.8	4	1.1	2	0.5	2	0.5	48	12.5
Leukemia	27	7.1	0	0	1	0.3	4	1.1	7	1.8	1	0.3	40	10.6
Brain& other CNS	21	5.5	1	0.3	4	1.1	4	1.1	4	1.1	0	0	34	9.1
Non-Hodgkin lymphoma	17	4.6	0	0	0	0	1	0.3	2	0.5	0	0	20	5.4
Skin	14	3.8	0	0	3	0.8	1	0.3	0	0	0	0	18	4.9
Colorectal	10	2.6	0	0	1	0.2	3	0.8	2	0.5	0	0	16	4.1
Larynx	11	2.6	0	0	0	0	4	1.1	1	0.3	0	0	16	4
Kidney	11	2.6	1	0	2	0.5	1	0.3	0	0	1	0.3	16	3.7
Total	275	71.4	11	2.6	25	6.5	33	8.9	31	8	10	2.6	385	100%

Table No.; (60) Distribution of Top Ten Cancer by Districts in Misan, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Ammarah		Ali-Algerbi		Maymoona		Qalat-Salih		Almajara Kabeer		Kahlaa		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	90	75.6	5	4.2	9	7.6	5	4.2	8	6.7	2	1.7	119	100%
Urinary bladder	39	67.4	2	3.4	2	3.4	6	10.3	5	8.6	4	6.9	58	100%
Bronchus & lung	35	72.9	2	4.2	3	6.2	4	8.3	2	4.2	2	4.2	48	100%
Leukemia	27	67.5	0	0	1	2.5	4	10	7	17.5	1	2.5	40	100%
Brain& other CNS	21	62	1	2.9	4	11.7	4	11.7	4	11.7	0	0	34	100%
Non-Hodgkin lymphoma	17	85	0	0	0	0	1	5	2	10	0	0	20	100%
Skin	14	77.7	0	0	3	16.7	1	5.6	0	0	0	0	18	100%
Colorectal	10	62.6	0	0	1	6.2	3	18.7	2	12.5	0	0	16	100%
Larynx	11	68.8	0	0	0	0	4	25	1	6.2	0	0	16	100%
Kidney	11	68.9	1	6.2	2	12.5	1	6.2	0	0	1	6.2	16	100%
Total	275	71.4	11	2.8	25	6.5	33	8.6	31	8.1	10	2.6	385	100%

Table No.; (61) Distribution of Top Ten Cancer in Muthana, Iraq, 2015

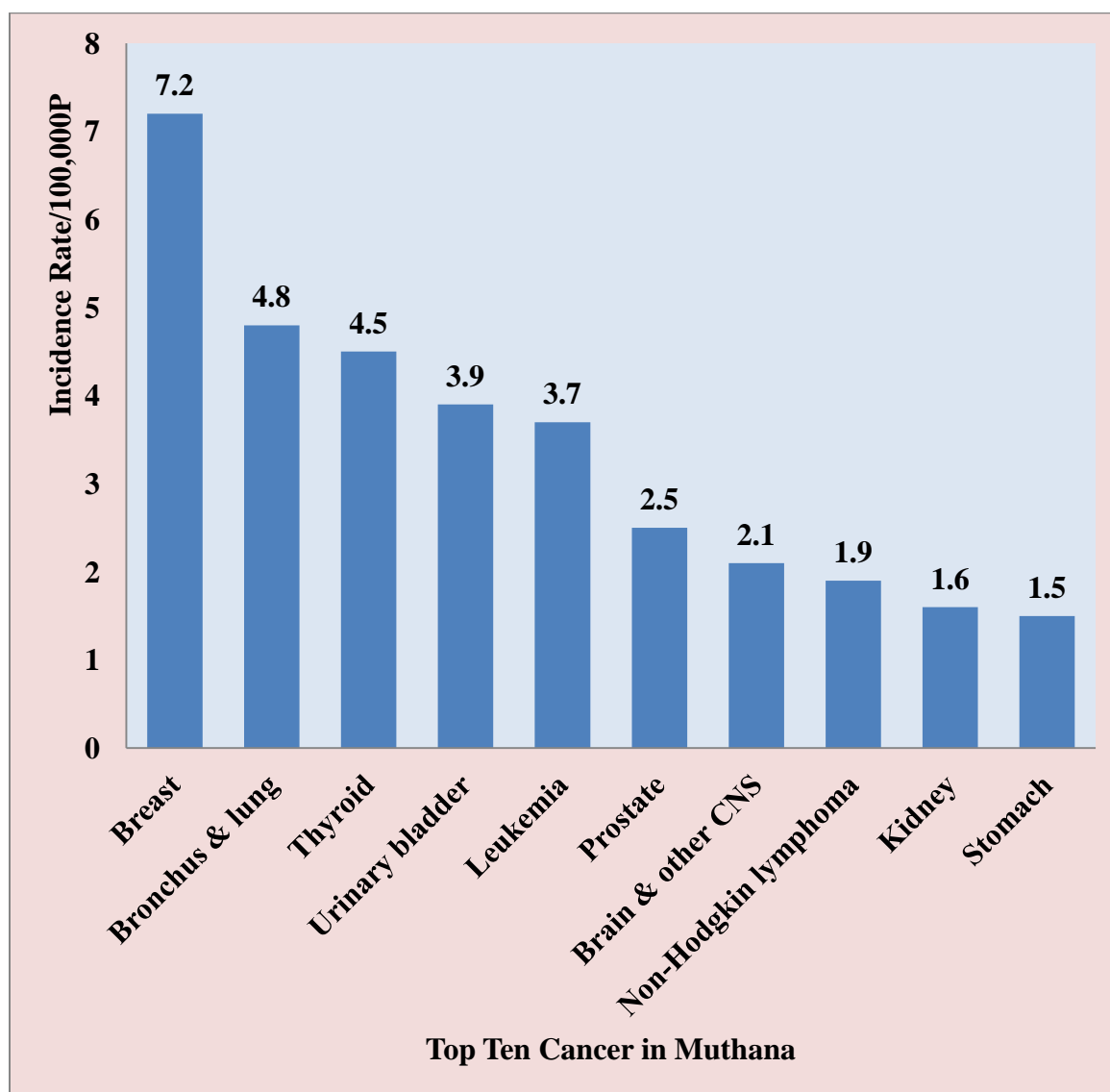
Top ten cancer	No.	%
Breast	57	15.1
Bronchus & lung	38	10.1
Thyroid	36	9.5
Urinary bladder	31	8.2
Leukemia*	29	7.6
Brain & other CNS**	17	4.5
Non-Hodgkin lymphoma***	15	3.9
Kidney	13	3.4
Stomach	12	3.2
Prostate	10	2.6
Total other site cancer	121	31.9
Total cancers in Muthana	379	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (34) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Muthana, Iraq, 2015



Note: Incidence rate of all top ten cancers/100/000 total population
except for prostate cancer incidence rate/100,000 male populations

Table No.; (62) Distribution of Top Ten Cancer by Districts in Muthana, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Samawa		Rumaitha		Khidhiir		Total	
	N.	%	N.	%	N.	%	N.	%
Breast	46	17.9	9	3.7	2	0.7	57	22.1
Bronchus & lung	23	8.9	11	4.3	4	1.5	38	14.7
Thyroid	28	10.9	5	1.9	3	1.1	36	13.9
Urinary bladder	24	9.6	2	0.8	5	1.9	31	12.3
Leukemia	15	5.9	10	3.6	4	1.5	29	11.3
Brain & other CNS	13	5.2	3	1.1	1	0.3	17	6.6
Non-Hodgkin lymphoma	13	5.2	1	0.3	1	0.3	15	5.8
Kidney	9	3.7	2	0.7	2	0.7	13	5.2
Stomach	7	2.7	5	1.9	0	0	12	4.6
Prostate	7	2.7	2	0.7	1	0.3	10	3.7
Total	185	72.7	50	19.1	23	8.3	258	100%

Table No.; (63) Distribution of Top Ten Cancer by Districts in Muthana, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Samawa		Rumaitha		Khidhiir		Total	
	N.	%	N.	%	N.	%	N.	%
Breast	46	80.7	9	15.8	2	3.5	57	100%
Bronchus & lung	23	60.6	11	28.9	4	10.5	38	100%
Thyroid	28	77.8	5	13.9	3	8.3	36	100%
Urinary bladder	24	77.5	2	6.4	5	16.1	31	100%
Leukemia	15	51.7	10	34.5	4	13.8	29	100%
Brain & other CNS	13	76.6	3	17.6	1	5.8	17	100%
Non-Hodgkin lymphoma	13	86.6	1	6.7	1	6.7	15	100%
Kidney	9	69.2	2	15.4	2	15.4	13	100%
Stomach	7	58.3	5	41.7	0	0	12	100%
Prostate	7	70	2	20	1	10	10	100%
Total	185	71.7	50	19.4	23	8.9	258	100%

Table No.; (64) Distribution of Top Ten Cancer in Salah Al-Deen, Iraq, 2015

Top ten cancer	No.	%
Breast	145	24.4
Leukemia*	46	7.7
Colorectal	38	6.4
Bronchus & lung	38	6.4
Brain & other CNS**	33	5.5
Non-Hodgkin lymphoma***	31	5.2
Thyroid	21	3.5
Urinary bladder	20	3.3
Larynx	18	3.1
Stomach	16	2.8
Total other site cancer	187	31.7
Total cancers in Salah Al-Deen	593	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

**Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

*** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

Figure No.; (35) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Salah Al-Deen, Iraq, 2015

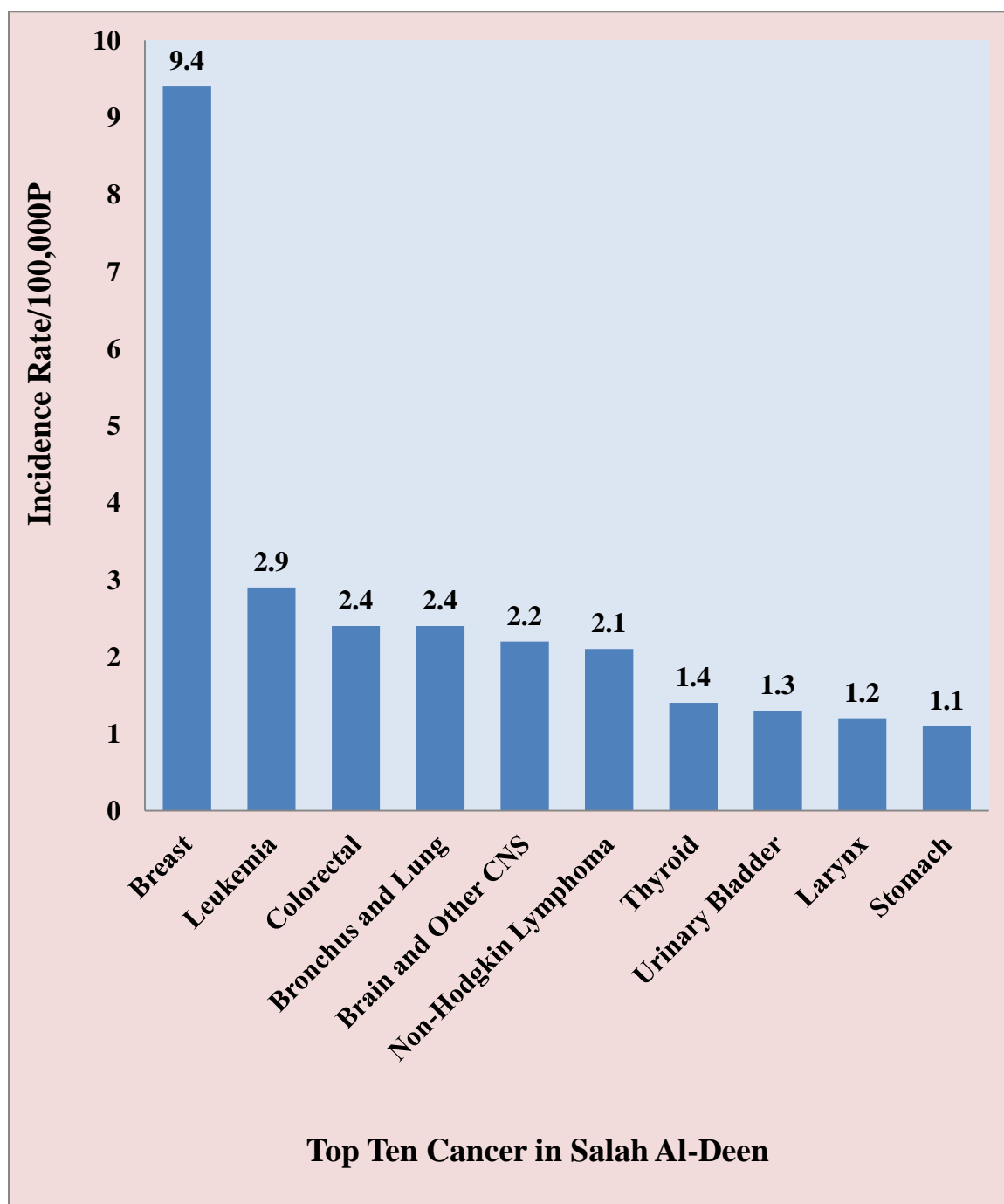


Table No.; (65) Distribution of Top Ten Cancer by Districts in Salah Al-Deen, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Tikret		Dooz-khormatoo		Sammara		Balad		Beigy		Al-Door		Al-Shirkat		Al-Faris		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	36	8.6	15	3.5	34	8.4	36	8.6	9	2.2	4	0.9	11	2.7	0	0	145	34.9
Leukemia	10	2.3	7	1.7	8	1.9	4	0.9	8	1.9	1	0.6	7	1.7	1	0.6	46	11.6
Colorectal	11	2.5	5	1.2	8	1.9	1	0.6	3	0.6	1	0.6	9	2.2	0	0	38	9.6
Bronchus & lung	11	2.5	3	0.6	9	2.2	5	1.2	5	1.2	1	0.6	4	0.9	0	0	38	9.2
Brain & other CNS	8	1.7	3	0.6	8	1.9	8	1.9	1	0.6	0	0	4	0.9	1	0.6	33	8.2
Non-Hodgkin lymphoma	8	1.7	6	1.4	5	1.2	6	1.4	2	0.5	0	0	3	0.6	1	0.6	31	7.4
Thyroid	5	1.1	2	0.5	5	1.2	7	1.7	0	0	0	0	2	0.5	0	0	21	5
Urinary bladder	1	0.5	6	1.4	2	0.5	5	1.2	2	0.5	0	0	2	0.5	2	0.5	20	5.1
Larynx	8	1.7	0	0	4	0.9	3	0.7	1	0.6	0	0	1	0.6	1	0.6	18	5.1
Stomach	4	0.9	3	0.6	1	0.6	5	1.2	0	0	0	0	3	0.6	0	0	16	3.9
Total	102	23.5	50	11.5	84	20.7	80	19.4	31	8.1	7	2.7	46	11.2	6	2.9	406	100%

Table No.; (66) Distribution of Top Ten Cancer by Districts in Salah Al-Deen, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Tikret		Dooz-khormatoo		Sammara		Balad		Beigy		Al-Door		Al-Shirkat		Al-Faris		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	36	25	15	10.3	34	23.4	36	24.8	9	6.2	4	2.7	11	7.6	0	0	145	100%
Leukemia	10	21.7	7	15.2	8	17.4	4	8.7	8	17.4	1	2.2	7	15.2	1	2.2	46	100%
Colorectal	11	29.1	5	13.1	8	21	1	2.6	3	7.9	1	2.6	9	23.7	0	0	38	100%
Bronchus & lung	11	29.1	3	7.9	9	23.7	5	13.1	5	13.1	1	2.6	4	10.5	0	0	38	100%
Brain & other CNS	8	24.4	3	9.1	8	24.2	8	24.2	1	3	0	0	4	12.1	1	3	33	100%
Non-Hodgkin lymphoma	8	26	6	19.3	5	16.1	6	19.3	2	6.4	0	0	3	9.7	1	3.2	31	100%
Thyroid	5	23.9	2	9.5	5	23.8	7	33.3	0	0	0	0	2	9.5	0	0	21	100%
Urinary bladder	1	5.3	6	30	2	10	5	25	2	10	0	0	2	10	2	10	20	100%
Larynx	8	44.6	0	0	4	22.2	3	16.6	1	5.5	0	0	1	5.5	1	5.5	18	100%
Stomach	4	25.2	3	18.7	1	6.2	5	31.2	0	0	0	0	3	18.7	0	0	16	100%
Total	102	25.2	50	12.3	84	20.7	80	19.7	31	7.6	7	1.7	46	11.3	6	1.5	406	100%

Table No.; (67) Distribution of Top Ten Cancer in Anbar, Iraq, 2015

Top ten cancer	No.	%
Breast	98	21.8
Leukemia*	37	8.8
Colorectal	34	7.5
Hodgkin lymphoma	26	5.8
Bronchus & lung	24	5.3
Thyroid	20	4.4
Non-Hodgkin lymphoma**	17	3.8
Brain & other CNS***	16	3.6
Stomach	15	3.3
Kidney	15	3.3
Total other site cancer	145	32.4
Total cancers in Anbar	447	100%

*Leukemia (acute leukemia, chronic leukemia, lymphoid leukemia, myeloid leukemia, other leukemia's)

** Non –Hodgkin lymphomas (nodal & extra nodal origin) and other sites.

***Brain & other CNS (benign & malignant tumors of the brain, cerebellum, brain stem, Meninges, spinal cord)

Figure No.; (36) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Anbar, Iraq, 2015

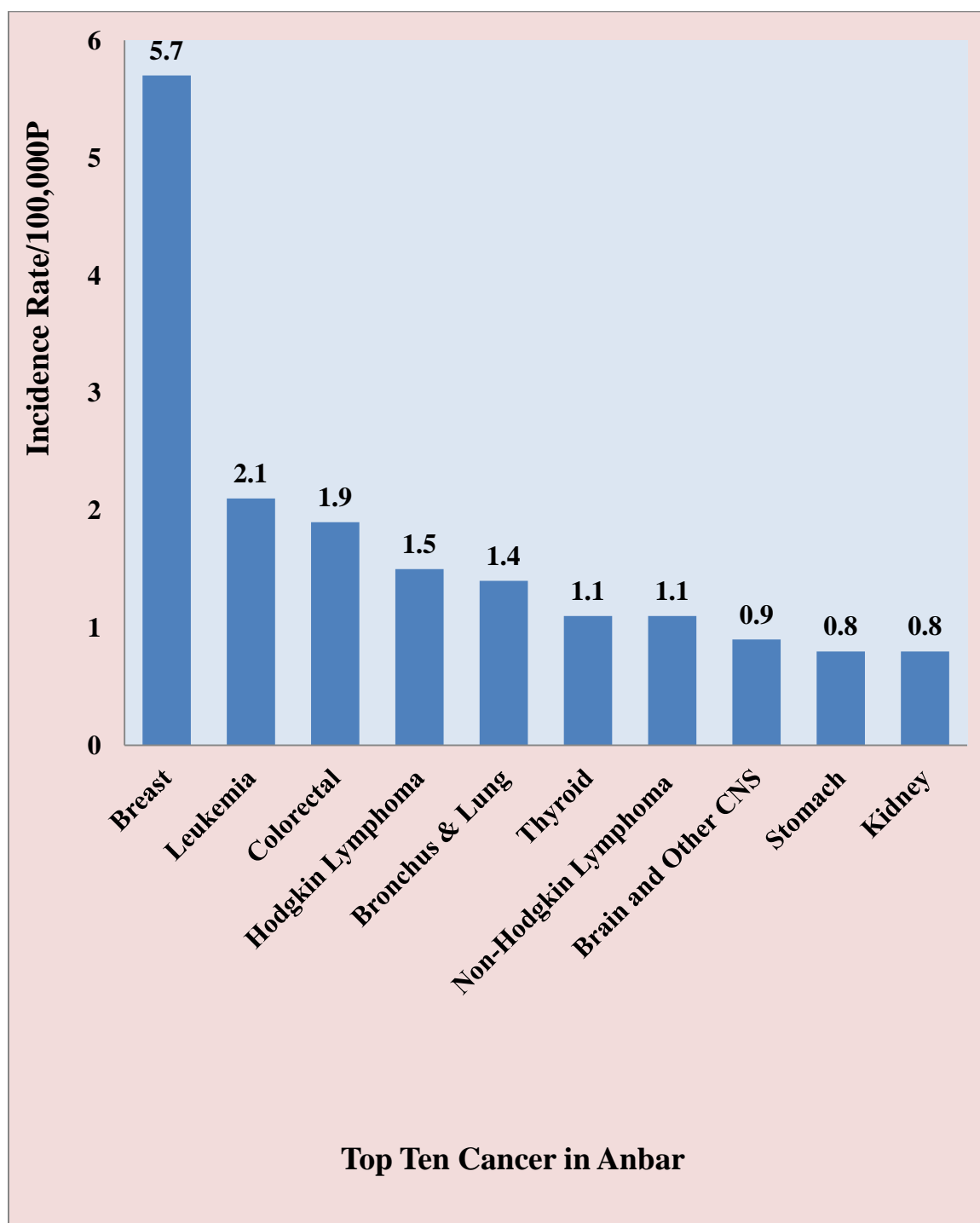


Table No.; (68) Distribution of Top Ten Cancer by Districts in Anbar, Iraq, 2015
(Percentage of Each Type of Cancer Out of All)

Top ten	Al-Ramadi		Heet		Al-Faloja		Aana		Hadetha		Al-Rutba		Al-Kaeem		Rawah		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	48	15.9	2	0.6	35	11.6	0	0	5	1.6	3	0.9	5	1.6	0	0	98	32.2
Leukemia	20	6.7	3	0.9	9	2.9	0	0	0	0	0	0	5	1.6	0	0	37	12.1
Colorectal	20	6.7	1	0.4	9	2.9	0	0	1	0.4	0	0	3	0.9	0	0	34	11.3
Hodgkin lymphoma	9	2.9	4	1.3	10	3.3	0	0	1	0.4	0	0	1	0.4	1	0.4	26	8.7
Bronchus & lung	10	3.4	0	0	9	2.9	1	0.4	1	0.4	0	0	3	0.9	0	0	24	8
Thyroid	13	4.4	0	0	6	1.9	0	0	1	0.4	0	0	0	0	0	0	20	6.7
Non- Hodgkin lymphoma	9	2.9	1	0.4	6	1.9	0	0	0	0	0	0	1	0.4	0	0	17	5.6
Brain & other CNS	12	3.9	0	0	3	0.9	0	0	1	0.4	0	0	0	0	0	0	16	5.2
Stomach	8	2.8	0	0	6	1.9	0	0	1	0.4	0	0	0	0	0	0	15	5.1
Kidney	10	3.5	0	0	2	0.6	0	0	1	0.4	0	0	2	0.6	0	0	15	5.1
Total	159	53.1	11	3.6	95	30.8	1	0.4	12	4.4	3	0.9	20	6.4	1	0.4	302	100%

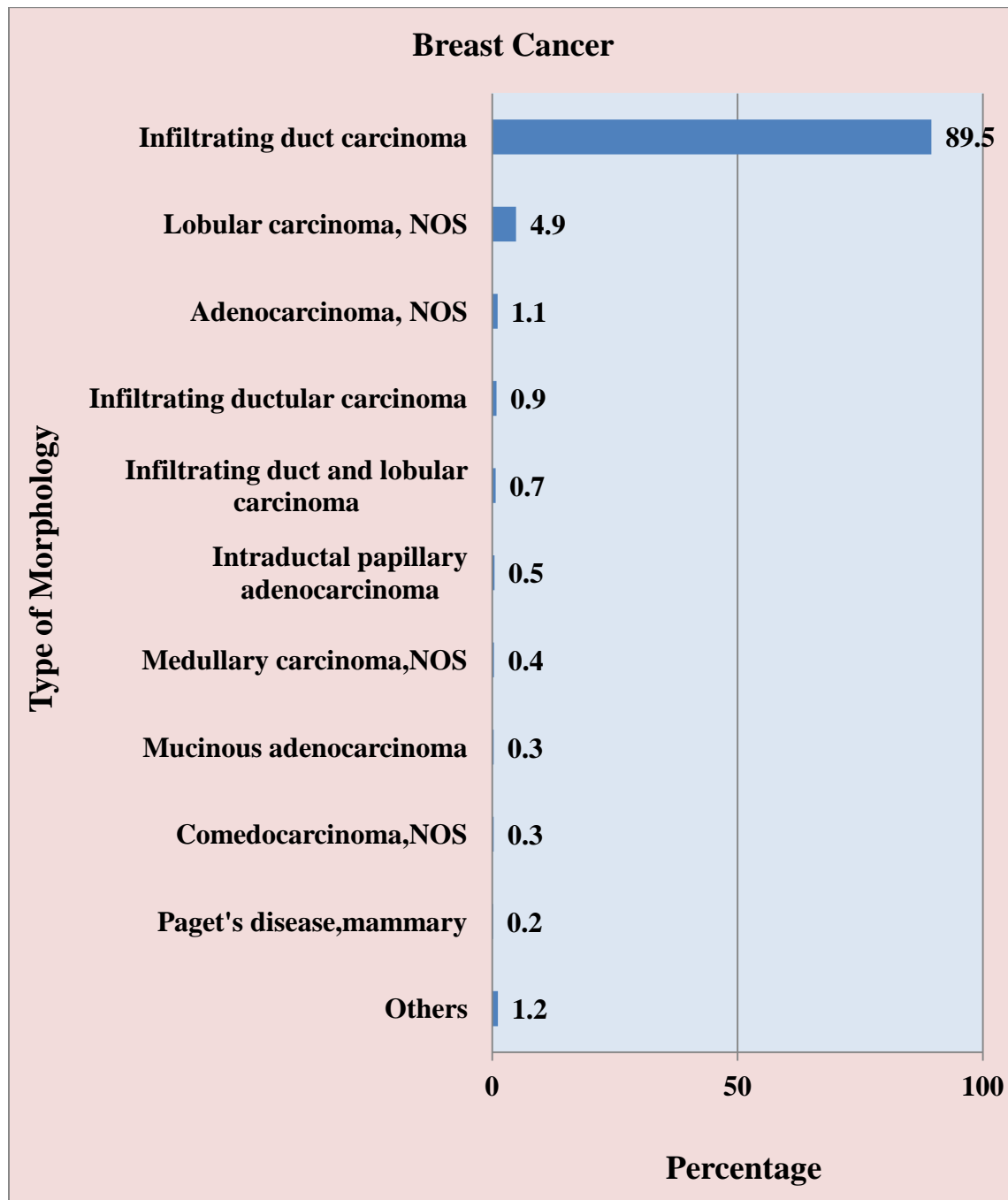
Table No.; (69) Distribution of Top Ten Cancer by Districts in Anbar, Iraq, 2015
(Percentage of Each Type of Cancer from the Same Type)

Top ten	Al-Ramadi		Heet		Al-Faloja		Aana		Hadetha		Al-Rutba		Al-Kaeem		Rawa		Total	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
Breast	48	49	2	2	35	35.7	0	0	5	5.1	3	3.1	5	5.1	0	0	98	100%
Leukemia	20	54.1	3	8.1	9	24.3	0	0	0	0	0	0	5	13.5	0	0	37	100%
Colorectal	20	59	1	2.9	9	26.4	0	0	1	2.9	0	0	3	8.8	0	0	34	100%
Hodgkin lymphoma	9	34.8	4	15.4	10	38.4	0	0	1	3.8	0	0	1	3.8	1	3.8	26	100%
Bronchus & lung	10	41.6	0	0	9	37.5	1	4.2	1	4.2	0	0	3	12.5	0	0	24	100%
Thyroid	13	65	0	0	6	30	0	0	1	5	0	0	0	0	0	0	20	100%
Non-Hodgkin lymphoma	9	53.1	1	5.8	6	35.3	0	0	0	0	0	0	1	5.8	0	0	17	100%
Brain & other CNS	12	75.1	0	0	3	18.7	0	0	1	6.2	0	0	0	0	0	0	16	100%
Stomach	8	53.4	0	0	6	40	0	0	1	6.6	0	0	0	0	0	0	15	100%
Kidney	10	66.8	0	0	2	13.3	0	0	1	6.6	0	0	2	13.3	0	0	15	100%
Total	159	52.9	11	3.6	95	31.4	1	0.3	12	3.9	3	0.9	20	6.6	1	0.3	302	100%

3.4. Morphology of top ten cancers in 2015:

Below the morphology of top ten cancers in 2015

Figure No.; (37) Breast Cancer by the Type of Morphology, Iraq, 2015



*NOS: Not otherwise specified

Figure No.; (38) Bronchus and Lung Cancer by the Type of Morphology, Iraq, 2015

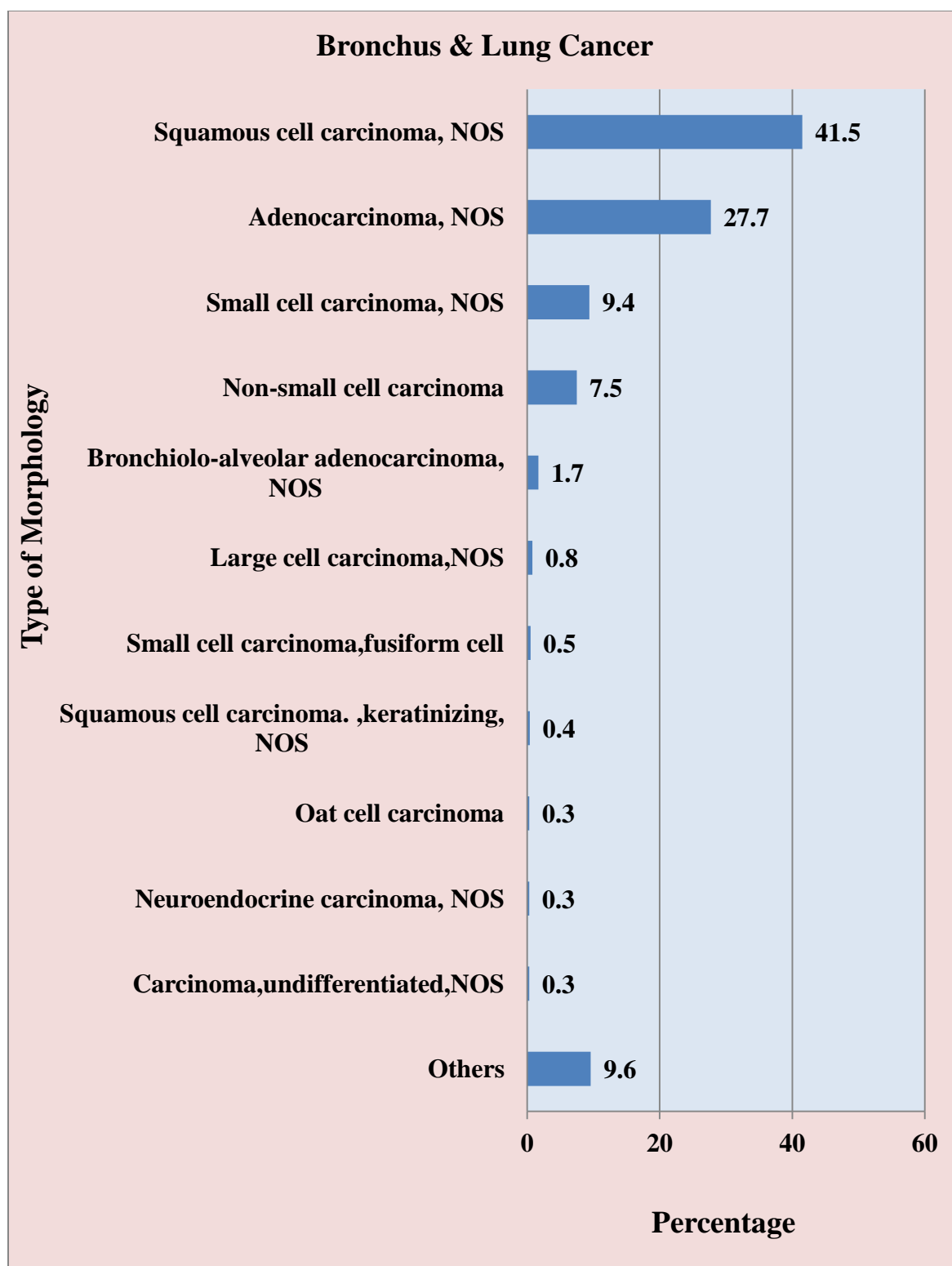
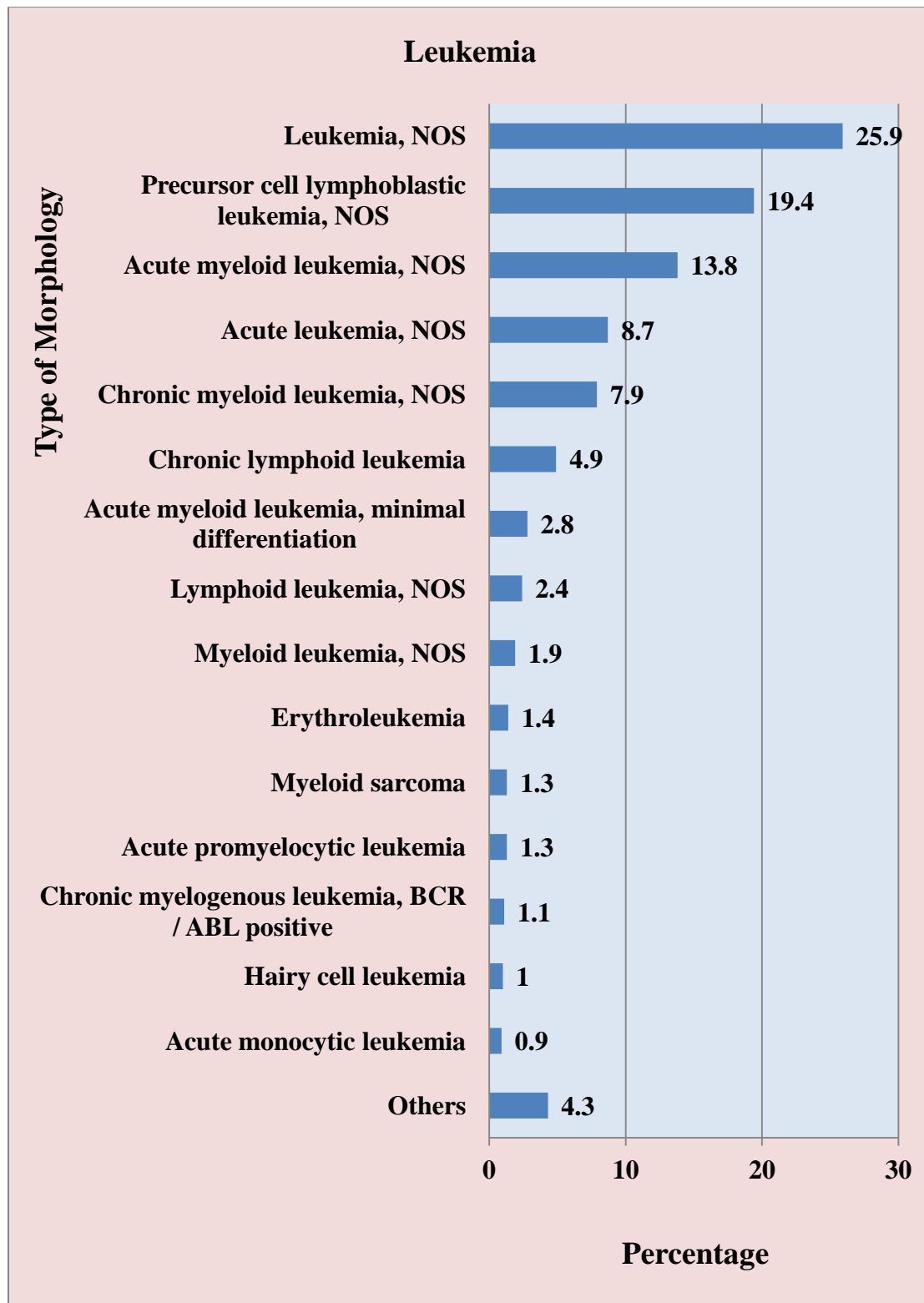


Figure No.; (39) Leukemia by the Type of Morphology, Iraq, 2015



**Figure No.; (40) Brain & other CNS Tumor by the Type of Morphology,
Iraq, 2015**

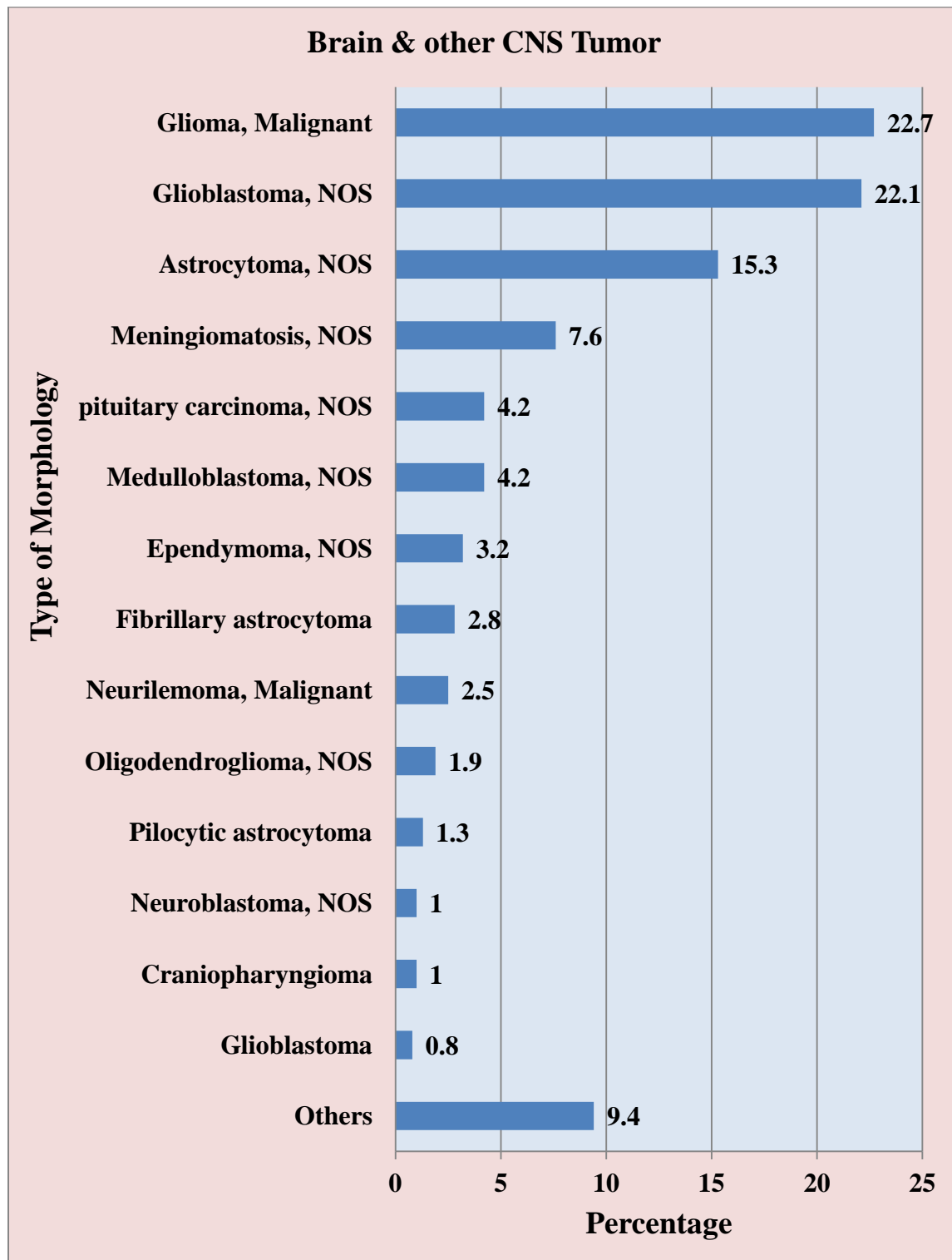


Figure No.; (41) Colorectal Cancer by the Type of Morphology, Iraq, 2015

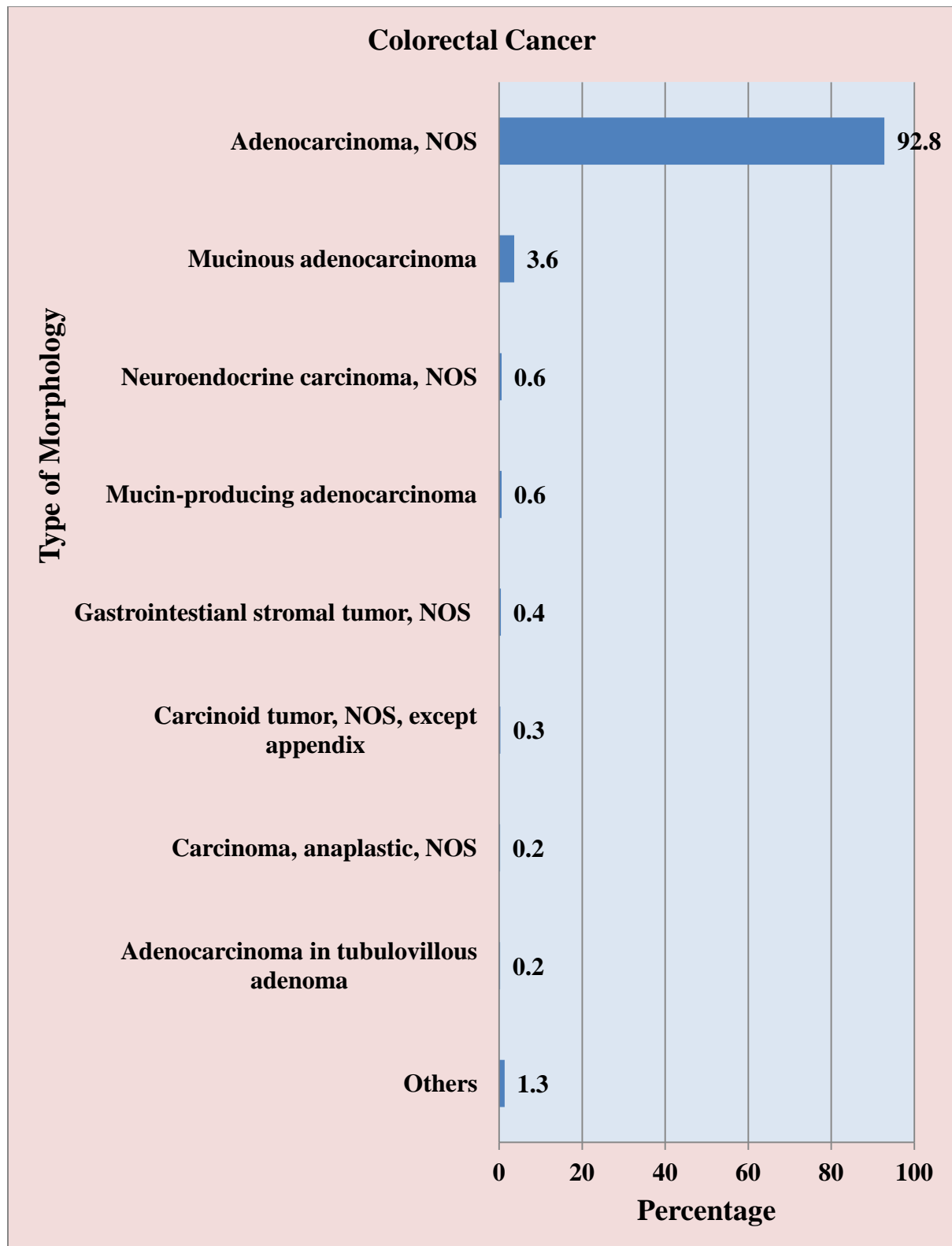


Figure No.; (42) Urinary Bladder Cancer by the Type of Morphology, Iraq, 2015

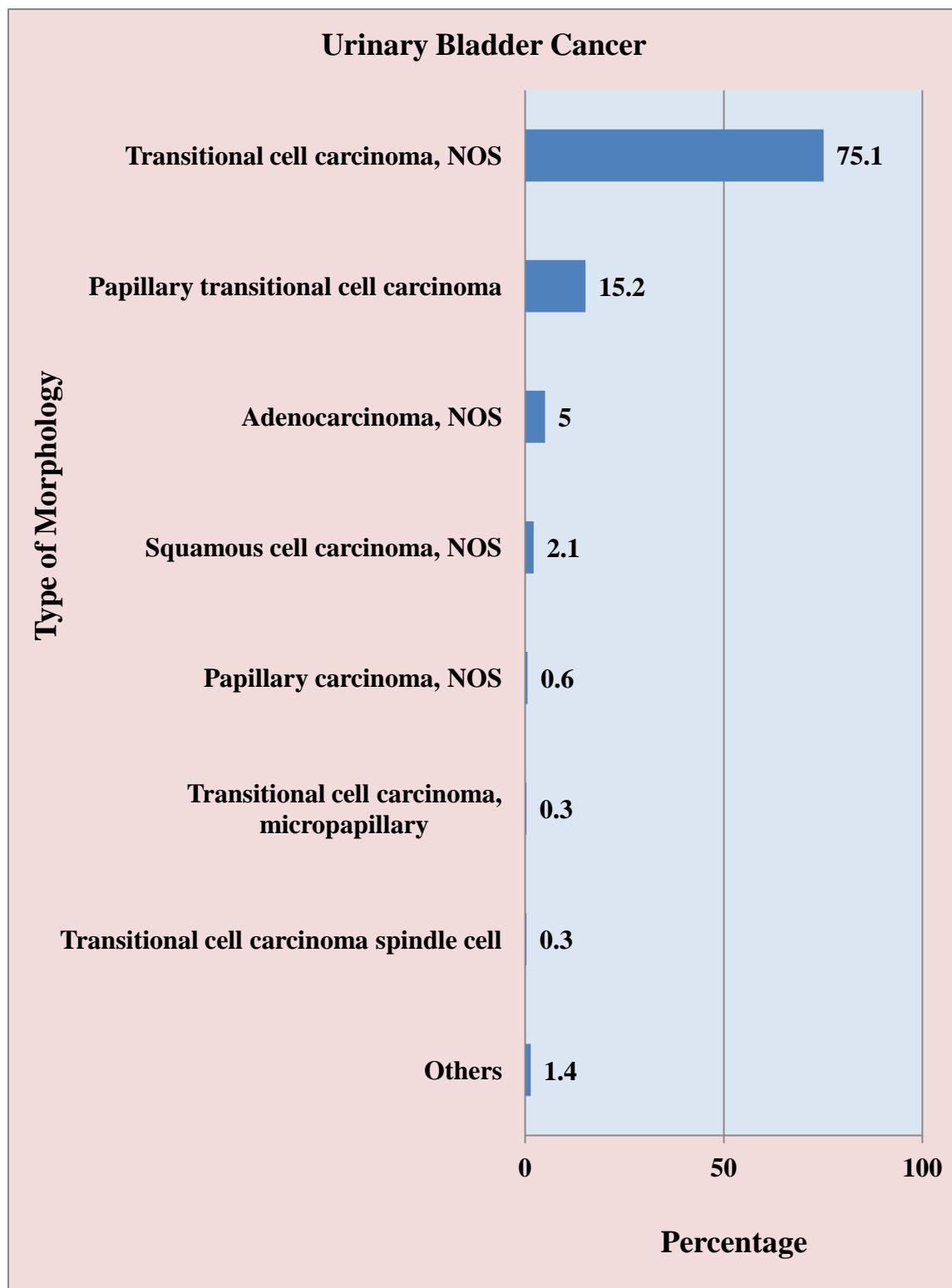


Figure No.; (43) Non- Hodgkin Lymphoma by the Type of Morphology, Iraq, 2015

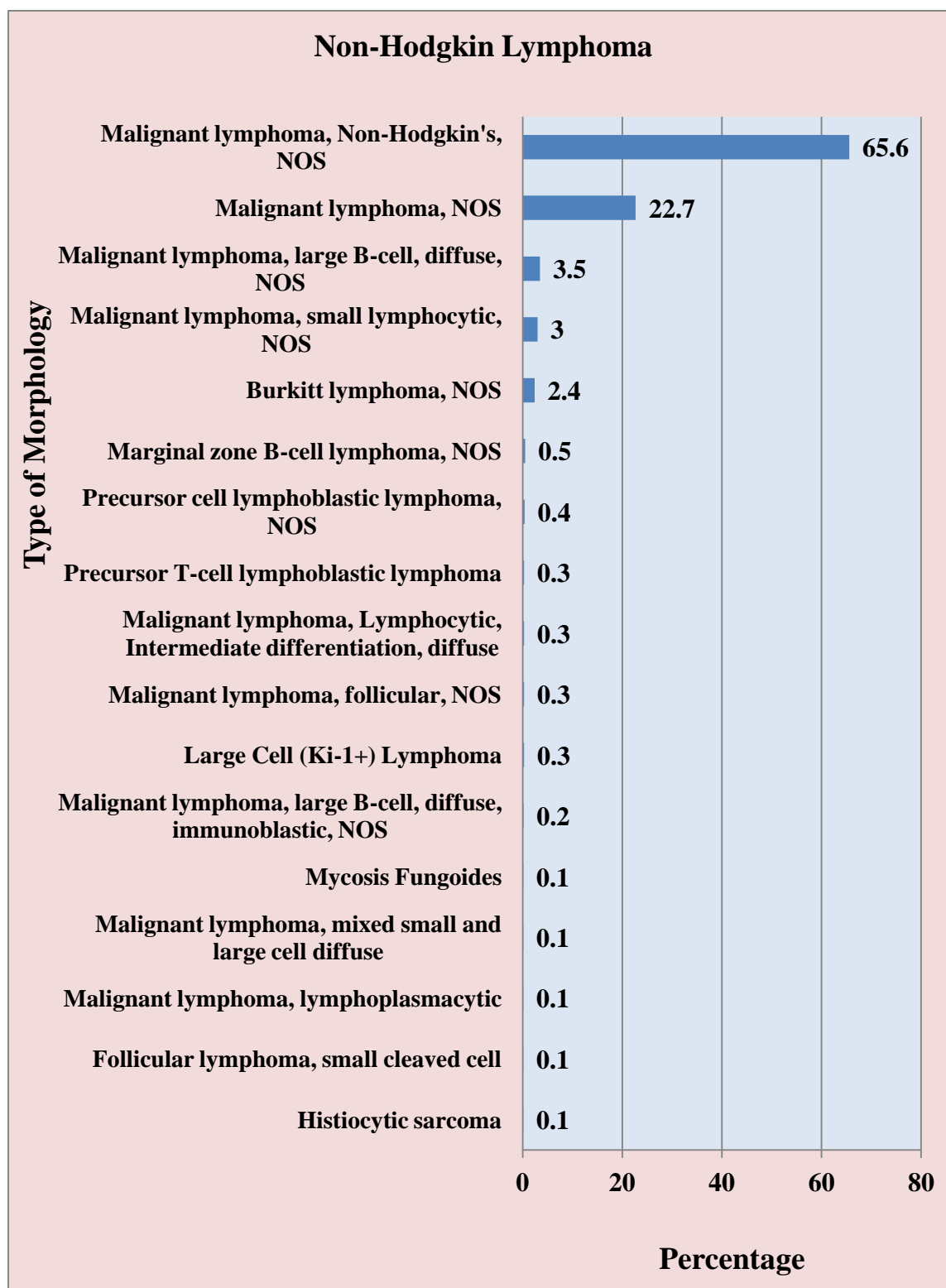


Figure No.; (44) Thyroid Gland Cancer by the Type of Morphology, Iraq, 2015

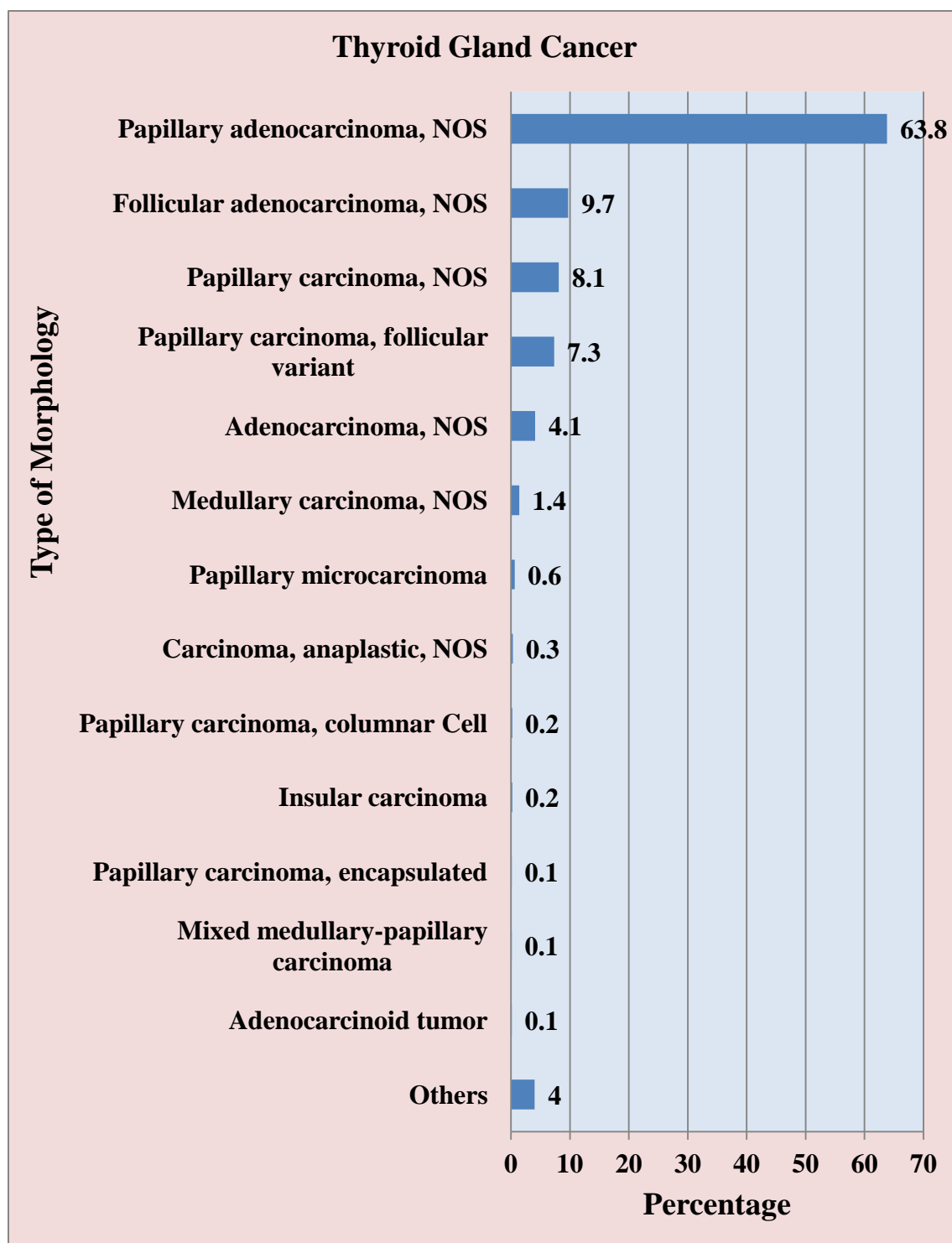


Figure No.; (45) Skin Cancer by the Type of Morphology, Iraq, 2015

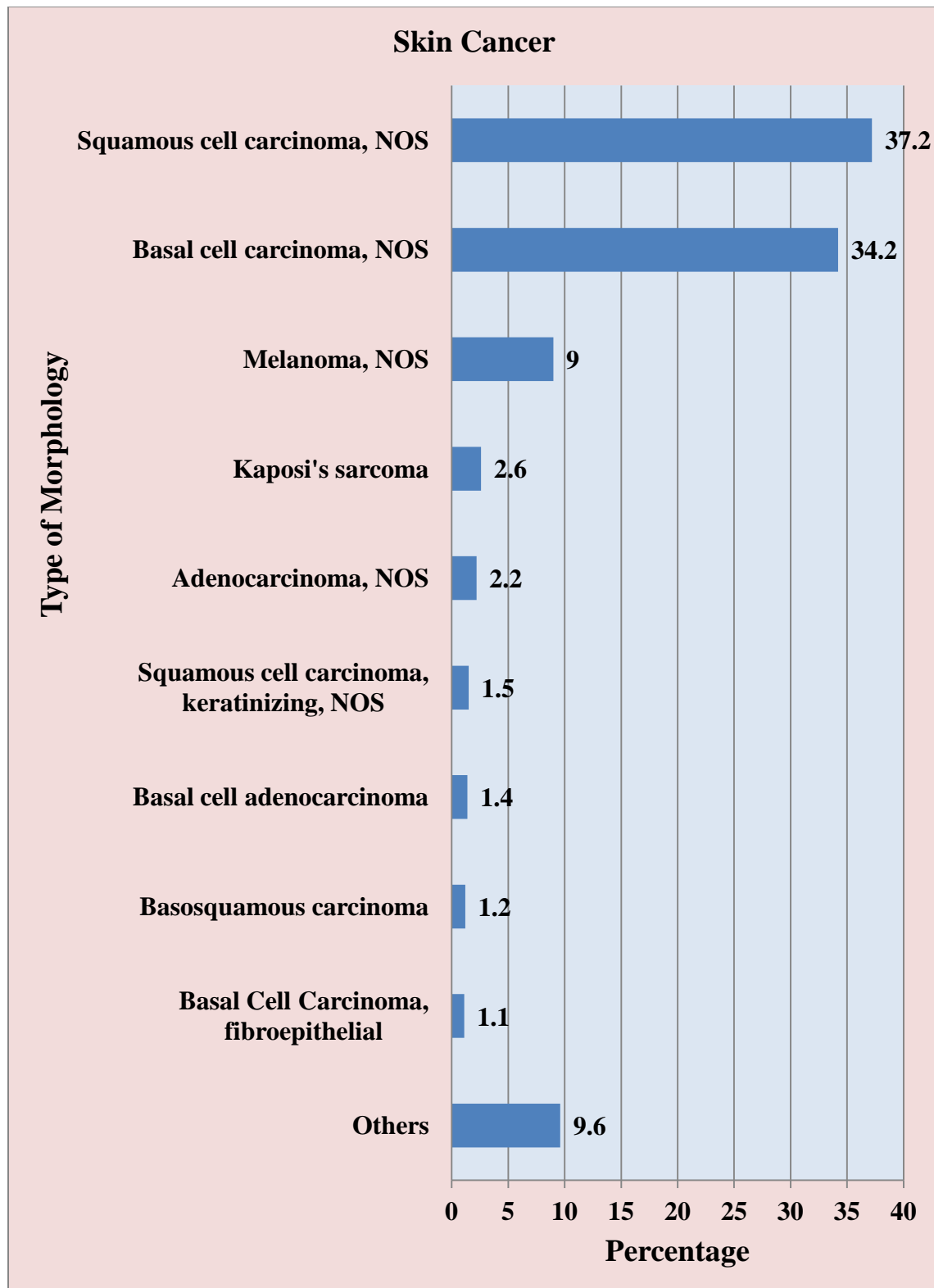
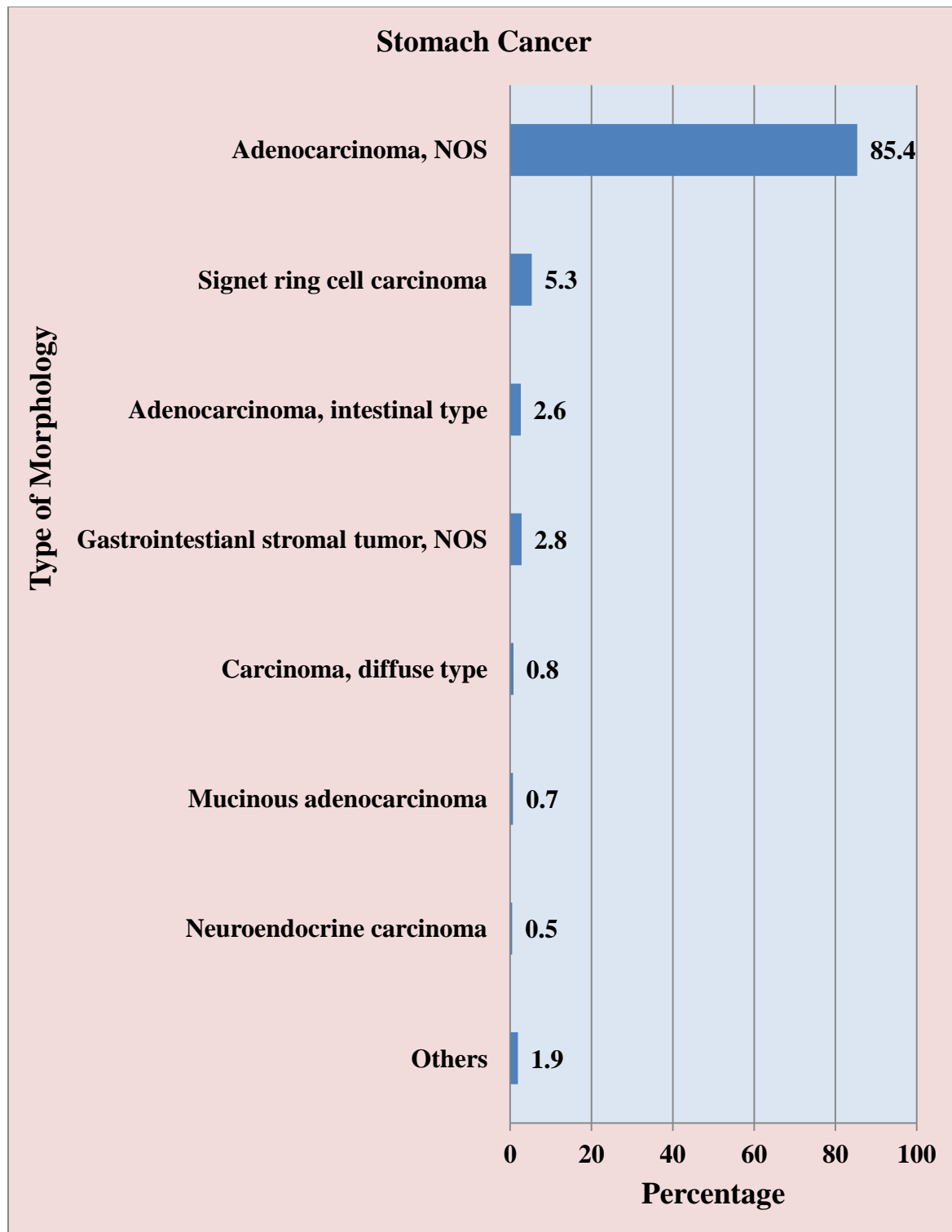


Figure No.; (46) Stomach Cancer by the Type of Morphology, Iraq, 2015



3.5. Child cancer 0-14 years:

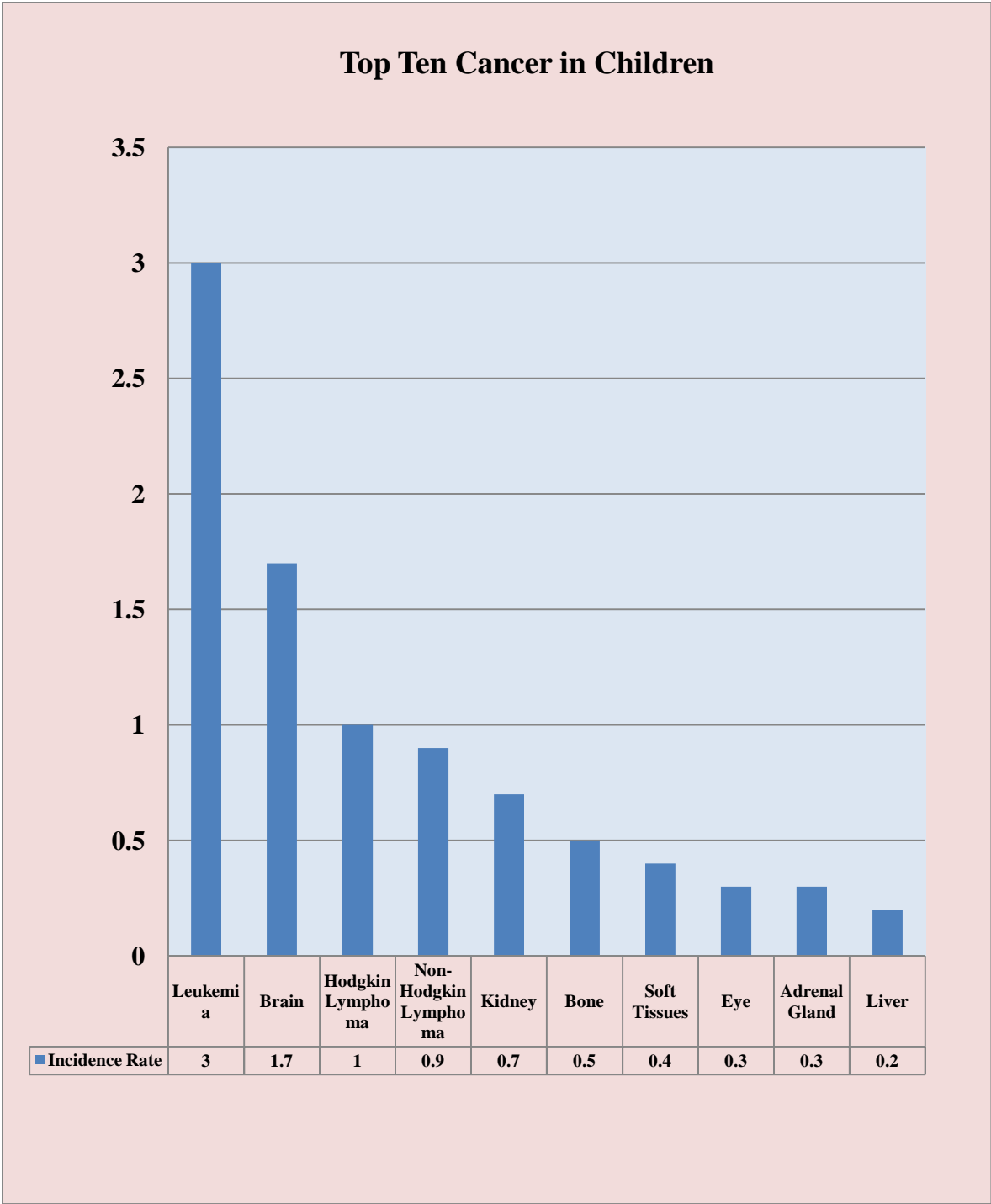
3.5.1. Distribution and the incidence rate of top ten cancers in children:

Table No.; (70), Figure No.; (47) shows the distribution and the incidence rate of top ten cancer in children, which shows that the highest percentage and incidence of top ten was Leukemia and lowest was Liver. Male to female ratio was 1.3:1

Table No.; (70) Distribution of Top Ten Cancer in Children by Gender, Iraq, 2015

Top ten cancer	Male		Female		Total	
	No.	%	No.	%	No.	%
Leukemia	270	17.3	183	11.8	453	29.1
Brain	133	8.5	130	8.4	263	16.9
Hodgkin lymphoma	91	5.8	58	3.8	149	9.6
Non-Hodgkin lymphoma	104	6.6	43	2.8	147	9.4
Kidney	49	3.1	52	3.4	101	6.5
Bone	45	2.9	34	2.2	79	5.1
Soft tissues	31	1.9	27	1.8	58	3.7
Eye	23	1.4	22	1.5	45	2.9
Adrenal gland	26	1.6	19	1.3	45	2.9
Liver	12	0.7	13	0.8	25	1.5
Total other site cancer	92	5.9	99	6.5	191	12.4
Total cancers in children	876	55.7%	680	44.3%	1,556	100%

Figure No.; (47) Incidence Rate (Per 100,000Population) of Top Ten Cancer in Children, Iraq, 2015



3.5.2. Distribution of crude child cancer by site and gender:

Table No.; (71) Distribution of Crude Child Cancer by Site and Gender, Iraq, 2015

Site	ICD O	Male					Female				
		0-	5-	10-	total	%	0-	5-	10-	total	%
Lip	C00				0	0.00		1		1	0.15
Gum	C03	1			1	0.11				0	0.00
Mouth - floor	C04	1			1	0.11	1			1	0.15
Mouth - others	C06		1		1	0.11				0	0.00
Parotid gland	C07			1	1	0.11			1	1	0.15
Salivary gland	C08			1	1	0.11				0	0.00
Tonsils	C09			1	1	0.11				0	0.00
Nasopharynx	C11			3	3	0.34		1	1	2	0.29
Pyriform sinus	C12				0	0.00		1		1	0.15
Hypo pharynx	C13				0	0.00			1	1	0.15
Stomach	C16	1		1	2	0.23		1	2	3	0.44
Liver	C22	8	1	3	12	1.37	8	2	3	13	1.91
Pancreas	C25				0	0.00			1	1	0.15
Other digestive organ	C26				0	0.00	1			1	0.15
Ear/nose	C30		1	1	2	0.23				0	0.00
Accessory sinus	C31				0	0.00	1	1		2	0.29
Glottis / larynx	C32	2	1		3	0.34			1	1	0.15
Bronchus & lung	C34			2	2	0.23				0	0.00

Site	ICD O	Male					Female				
		0-	5-	10-	total	%	0-	5-	10-	total	%
Heart/Mediastinum	C38	1			1	0.11	1			1	0.15
Bones / limbs	C40	2	7	12	21	2.40	2	3	6	11	1.62
Bones / other	C41	7	4	13	24	2.74	3	10	10	23	3.38
Skin	C44	4	4	3	11	1.26	2	1	1	4	0.59
Nerves	C47	8	3		11	1.26	8		1	9	1.32
Peritoneum	C48	4		1	5	0.57	2	1		3	0.44
Soft Tissues	C49	11	8	12	31	3.54	4	9	14	27	3.97
Vagina	C52				0	0.00	1			1	0.15
Ovary	C56				0	0.00	4	1	10	15	2.21
Testis	C62	6	1	4	11	1.26				0	0.00
Kidney	C64	37	11	1	49	5.59	32	13	7	52	7.65
Bladder	C67	1	2	2	5	0.57	1			1	0.15
Eye	C69	19	4		23	2.63	16	4	2	22	3.24
Meninges	C70	1			1	0.11	1	1	2	4	0.59
Brain	C71	52	51	27	130	14.84	36	48	34	118	17.35
Nervous system	C72		2		2	0.23	3	1		4	0.59
Thyroid	C73			3	3	0.34			2	2	0.29
Adrenal gland	C74	22	2	2	26	2.97	12	3	4	19	2.79
Endocrine / other	C75				0	0.00	1	2	2	5	0.74
Not otherwise specified	C76	6	4	2	12	1.37	7	5	6	18	2.65
Unknown	C80	6	3	3	12	1.37	7	7	5	19	2.79

Site	ICDO	Male					Female				
		0-	5-	10-	total	%	0-	5-	10-	total	%
Non-Hodgkin lymphoma		37	46	21	104	11.87	19	16	8	43	6.32
Hodgkin disease		24	33	34	91	10.39	9	20	29	58	8.53
Plasma cell tumor		1			1	0.11		1	1	2	0.29
Chronic Myeloproliferative disorder				1	1	0.11		1	1	2	0.29
Leukemia		131	70	69	270	30.82	84	60	39	183	26.91
Myeloid dysplastic syndromes				1	1	0.11			6	6	0.88
Total		393	259	224	876	100%	266	214	200	680	100%

3.5.3. Number of cancer in children by provinces stratified by age group and gender:

Table No.; (72) Number of Cancer in Children by Provinces Stratified by Age Group and Gender, Iraq, 2015

Provinces	No.		No.		No.		Total
	0-4		5-9		10-14		
	Male	Female	Male	Female	Male	Female	
Baghdad	96	64	69	46	46	51	372
Nineveh	29	21	17	13	15	9	104
Basra	42	27	17	31	23	26	166
Thiqr	23	12	14	19	11	9	88
Babil	11	14	8	13	16	12	74
Kerbala	11	8	11	9	11	9	59
Dyala	20	10	17	9	8	4	68
Misan	13	7	5	7	3	3	38
Najaf	14	15	12	7	10	11	69
Wasit	15	8	9	7	6	7	52
Duhok	13	7	10	2	5	6	43
Kirkuk	10	10	9	7	7	7	50
Erbil	15	10	5	6	1	3	40
Salah - Alden	13	8	9	6	10	5	51
Diwanyia	14	7	11	9	10	5	56
Anbar	7	7	10	2	11	5	42
Sulaimaniya	14	10	7	9	11	11	62
Muthana	7	4	4	2	5	6	28
Unknown Address	26	17	15	10	15	11	94
Total	393	266	259	214	224	200	1,556

3.6. Cancer mortality:

3.6.1. Distribution and incidence rate of the top ten cause of mortality by cancer:

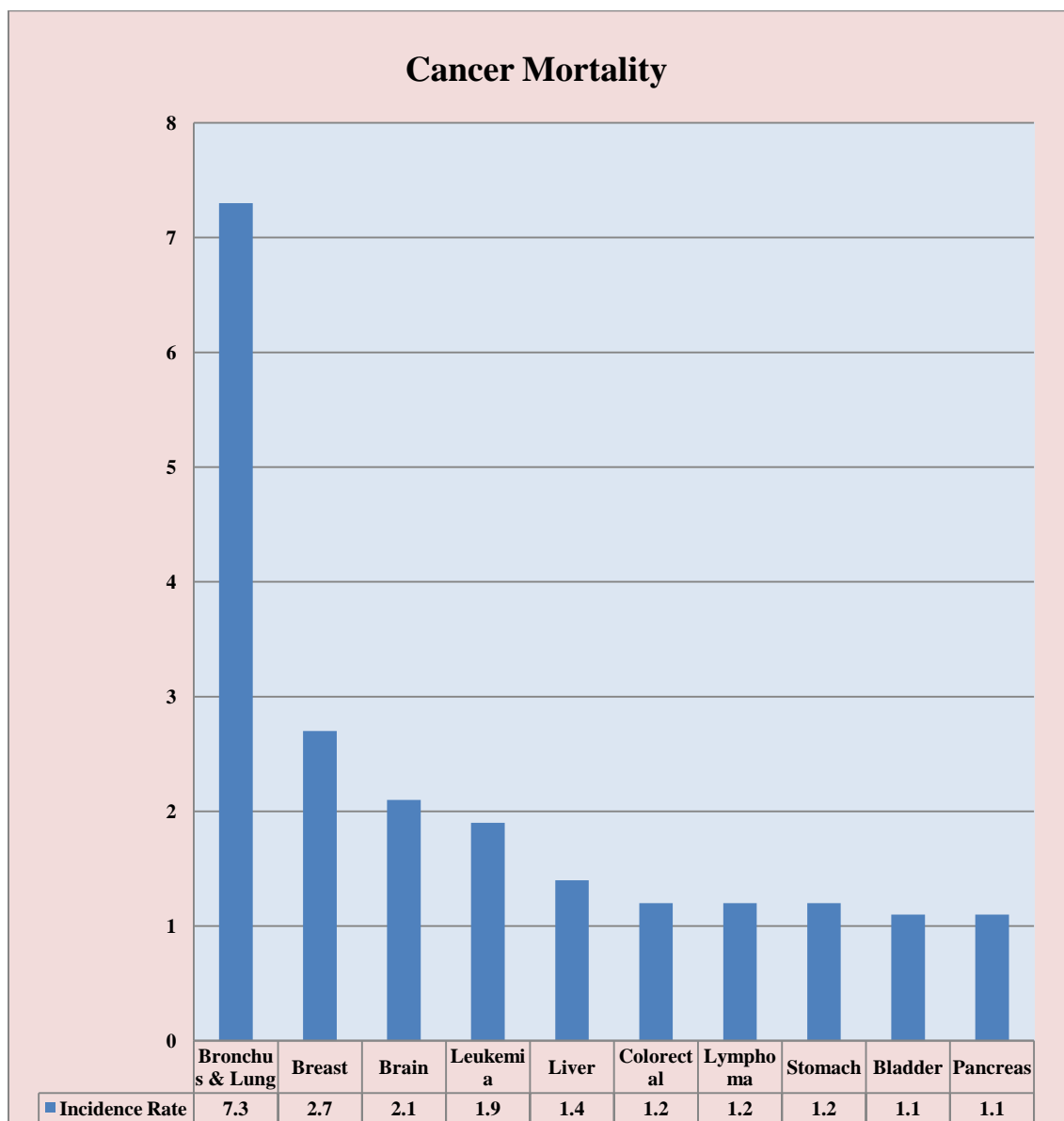
Table No.; (73) shows the distribution of top ten cause of mortality by cancer which shows that the first cause of mortality was bronchus and lung, while the last cause was pancreas.

Table No.; (73) Distribution of Top Ten Cause of Mortality by Cancer, Iraq, 2015

Top ten cancer mortality	No.	%
Bronchus & lung	1,380	15.7
Breast	1,002	11.3
Brain	797	9.1
Leukemia	732	8.3
Liver	543	6.1
Colorectal	468	5.3
Lymphoma	445	5.1
Stomach	444	5
Bladder	433	4.9
Pancreas	421	4.7
Mortality from other site	2,160	24.5
Total cancer mortality	8,825	100%

Figure No.; (48) shows the incidence rate of top ten cause of mortality by cancer which shows that the highest incidence was among bronchus and lung, while the lowest was among bladder and pancreas cancer.

Figure No.; (48) Incidence Rate (Per 100,000Population) of Top Ten Cause of Mortality by Cancer, Iraq, 2015



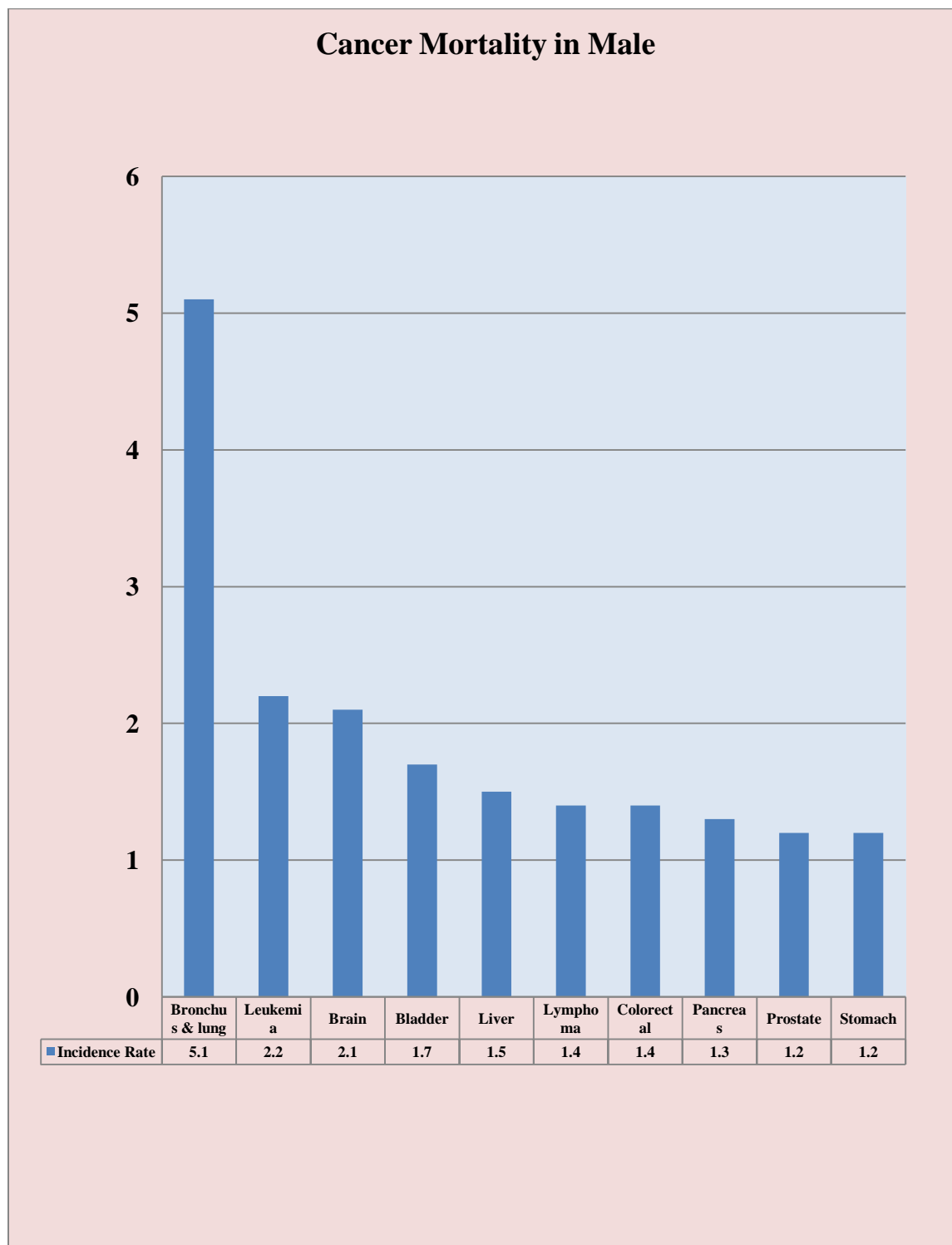
3.6.2. Distribution and incidence rate of the top ten cause of mortality by cancer in male:

Table No.; (74), Figure No.; (49) shows the distribution and the incidence rate of top ten cause of mortality by cancer in male, which shows that the highest percentage and incidence was among bronchus and lung, while the lowest was among prostate and stomach cancer.

Table No.; (74) Distribution of Top Ten Cause of Mortality by Cancer in Male, Iraq, 2015

Top ten cancer mortality	No.	%
Bronchus & lung	948	21.3
Leukemia	407	9.2
Brain	401	8.8
Bladder	314	7.2
Liver	289	6.4
Lymphoma	259	5.8
Colorectal	258	5.7
Pancreas	239	5.3
Prostate	230	5.1
Stomach	229	5.1
Mortality from other site	902	20.1
Total cancer mortality in male	4,476	100%

Figure No.; (49) Incidence Rate (Per 100,000Population) of Top Ten Cause of Mortality by Cancer in Male, Iraq, 2015



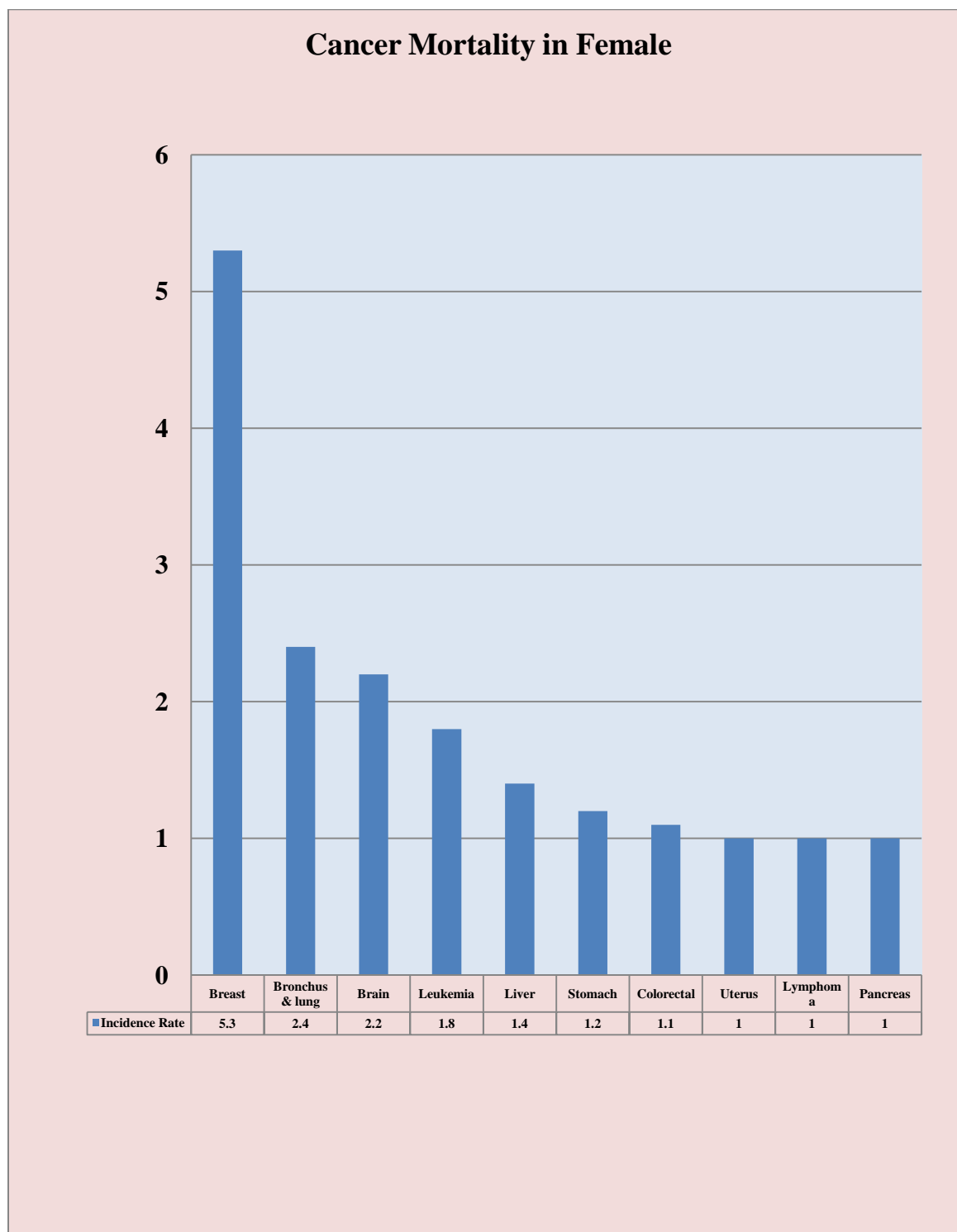
3.6.3. Distribution and incidence rate of the top ten cause of mortality by cancer in female:

Table No.; (75), Figure No.; (50) shows the distribution and the incidence rate of top ten cause of mortality by cancer in female, which shows that the highest percentage was among breast, while the lowest was among pancreas cancer. And the highest incidence was among breast, while the lowest was among uterus, lymphoma, and pancreas cancer

Table No. (75) Distribution of Top Ten Cause of Mortality by Cancer in Female, Iraq, 2015

Top ten cancer mortality	No.	%
Breast	969	22.3
Bronchus & lung	432	9.9
Brain	396	9.1
Leukemia	325	7.5
Liver	254	5.8
Stomach	215	4.9
Colorectal	210	4.8
Uterus	189	4.4
Lymphoma	186	4.3
Pancreas	182	4.2
Mortality from other site	991	22.8
Total cancer mortality in female	4,349	100%

Figure No.; (50) Incidence of Mortality Rate (Per 100,000Population) of Top Ten Cause of Mortality by Cancer in Female, Iraq, 2015



3.6.4. Distribution and incidence rate of the top ten cause of mortality by Provinces:

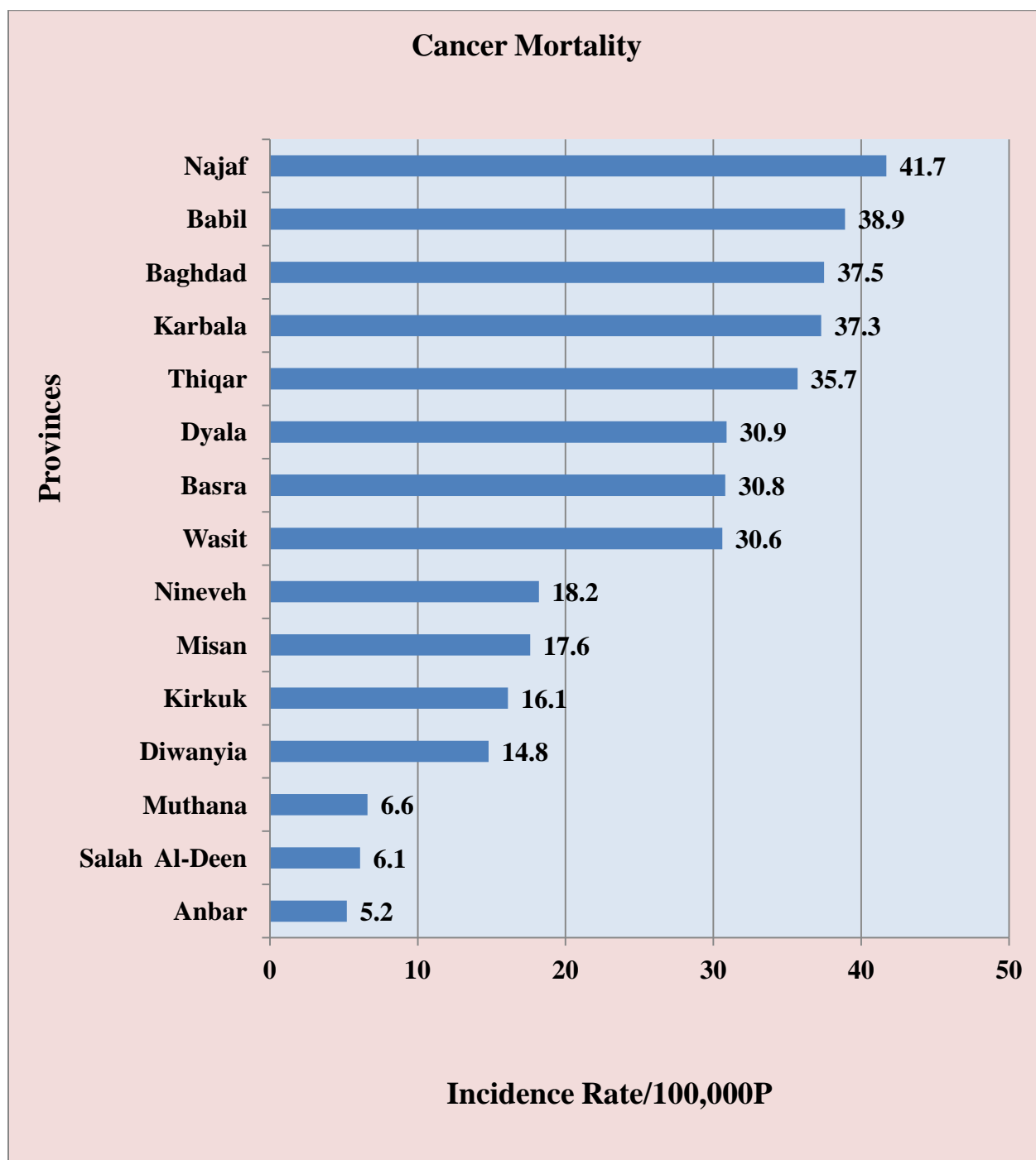
Table No.; (76), Figure No.; (51) shows the distribution and the incidence rate of top ten cause of mortality by cancer in provinces, which shows that the highest percentage was in Baghdad, while the lowest was in Muthana. Male to female ratio was 1:1. The highest incidence was in Najaf, and the lowest was Anbar provinces.

Table No.; (76) Distribution of Cancer Mortality by Provinces Stratified by Gender, Iraq, 2015

Provinces	Male		Female		Total	
	N.	%	N.	%	N.	%
Baghdad	1,433	16.3	1,524	17.4	2,957	33.7
Nineveh	363	4.1	296	3.3	659	7.4
Kirkuk	139	1.6	110	1.3	249	2.9
Anbar	51	0.6	39	0.5	90	1.1
Salah Al-Deen	63	0.7	31	0.4	94	1.1
Dyala	237	2.8	253	2.9	490	5.7
Kerbala	218	2.4	223	2.5	441	4.9
Najaf	304	3.4	291	3.3	595	6.7
Babil	389	4.4	389	4.4	778	8.8
Wasit	205	2.4	204	2.4	409	4.8
Misan	97	1.1	93	1	190	2.1
Diwanyia	95	1	90	1	185	2
Thiqar	382	4.3	343	3.4	725	7.7
Basra	449	5	421	4.8	870	9.8
Muthana	31	0.4	21	0.3	52	0.7
Unknown address	20	0.3	21	0.3	41	0.6
Total	4,476	50.8%	4,349	49.2%	8,825	100%

Note: Without Sulaimaniya, Duhok, and Erbil.

Figure No.; (51) Incidence Rate (Per 100,000Population), of Cancers Mortality by Provinces, Iraq, 2015



4. Recommendations:

- ❖ There is a need for further research and evaluation of the exact burden of cancer.
- ❖ Access to good quality information from Iraqi Cancer Registry is essentially guaranteed by holding regular workshops for training staff members and supporting them with annual funds so as to urge them to be involved in the registration field.
- ❖ Public Health officials and stakeholders need to:
 - Further work on reviews of the existing evidence on the links between environmental factors and cancer. The preparation and dissemination of reports on the magnitude of those risks, their common determinants, and on the most susceptible groups would help communities to plan interventions.
 - Strategies for action should be defined and proposed, based upon the priority issues identified and the experience with preventive interventions and their effectiveness.
 - Implementation of effective community based preventive programs by regulatory measures, environmental changes, and education which may play a crucial role in the prevention and control of cancer.

Annex:

Ministry Of Health Iraqi Cancer Registry									
Can Reg					<input type="checkbox"/> - <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
I. Patient information									
١. الاسم الاول : First Name					٢. اسم الاب : Fathers Name				
٣. اسم العائلة : Family Name					٤. اسم الام : Mothers Name				
Sex <input type="checkbox"/> (1. Male 2. Female 3. Unknown)					Birth Date				
Age									
Nationality <input type="checkbox"/> (1. Iraqi 2. Arab 3. Unknown)					Telephone				
Address					٥. العنوان : المحافظة : _____ المدينة : _____ المنطقة : _____				
Address Detail									
٦. المهنة : (١. ربة بيت ٢. عامل ٣. مزارع ٤. فني ٥. موظف ٦. معلم ٧. معني ٨. كسب ٩. لاد ١٠. غير موظف) Occupation <input type="checkbox"/> (0. House wife 1. Manual 2. Agriculture 3. Technical 4. Office Gang 5. Teaching 6. Professional 7. Business 8. Other 9. Unknown)									
Tumour									
Diagnosis									
Basis of diagnosis <input type="checkbox"/> (0. Death certificate 1. Clinical only 2. Clinical investigation 3. Surgery/autopsy 4. Laboratory test 5. Cytology Haematological 6. Histology of Metastases 7. Histology of Primary 8. Autopsy with Histology 9. Unknown)									
Topography									
Behaviour <input type="checkbox"/> (0. Benign 1. Uncertain behaviour 2. In situ 3. Malignant)									
Grad <input type="checkbox"/> (1. Grad 2. Grade II 3. Grade III 4. Grade IV 5. T-Cell 6. B-Cell 7. Null Cell 8. Killer Cell 9. Unknown)									
Extent <input type="checkbox"/> (1. In situ 2. Localised 3. Regional 4. Distant 5. Direct L. N. ext. 7. Distant metastasis 8. Not applicable 9. Unknown)									
T <input type="checkbox"/> (Advanced / Localized)									
N <input type="checkbox"/> (+/0) Multiple Primary									
M <input type="checkbox"/> (+/0) ICD - 10									
Hospital					Treatment				
Hospital					No Patient				
Date					Surgery <input type="checkbox"/> (1. Yes 2. No 3. Unknown)				
Path Lab.					Radiotherapy <input type="checkbox"/> (1. Yes 2. No 3. Unknown)				
Date					Chemotherapy <input type="checkbox"/> (1. Yes 2. No 3. Unknown)				
Path Lab. No.					Hormonal therapy <input type="checkbox"/> (1. Yes 2. No 3. Unknown)				
Date					Immunotherapy <input type="checkbox"/> (1. Yes 2. No 3. Unknown)				
Follow up									
Date of last Contact or Death									
Status <input type="checkbox"/> (1. Dead 2. Alive)									
Cause of Death <input type="checkbox"/> (1. Cancer 2. Other 3. Unknown)									
ملاحظة : يرجى املاء الحقول رقم (١، ٢، ٣، ٤، ٥، ٦، ٧، ٨، ٩، ١٠، ١١) باللغة العربية وتركها فارغة لملأها لمركز التسجيل السرطاني. اسم مستطير الاستشارة وتوقيعه : _____ الطبيب : _____									

ملخص التقرير السنوي:

التقرير السنوي للتسجيل السرطاني في العراق يعطي معلومات عن الحالات السرطانية الجديدة المشخصة خلال السنة بالإضافة إلى حالات الوفاة المسجلة بسبب السرطان، عن طريق جمع البيانات من المستشفيات والمختبرات (الحكومية والأهلية) في جميع دوائر الصحة في العراق بواسطة برنامج 4 CanReg.

العدد الكلي للحالات السرطانية الجديدة المسجلة خلال سنة ٢٠١٥ هو ٢٥,٢٦٩ ونسبة الإصابة للرجال مقارنة بالنساء هو ٨,٠ إلى واحد. كما أن أكثر الأعمار عرضة للإصابة بالسرطان هو ٧٠ سنة فما فوق وقد لوحظ أن التقدير السنوي للإصابة يزداد بازدياد العمر، كما لوحظ أن أعلى تقدير سنوي للإصابة كان في محافظة كربلاء (٩٨,٧ لكل مئة ألف من السكان) وأن أقل تقدير سنوي للإصابة كان في محافظة الأنبار (٢٦,١ لكل مئة ألف من السكان).

أعلى نسب للإصابات السرطانية كانت بسبب سرطان الثدي (١٩,١%)، سرطان القصبات والرئة (٨,١%)، اللوكيميا (٦,٣%)، أورام الدماغ والجهاز العصبي المركزي (٦,١%)، سرطان القولون والمستقيم (٥,٧%)، سرطان المثانة (٥,١%)، سرطان الغدة اللمفاوية اللا هودجكيني (٤,٣%)، سرطان الغدة الدرقية (٣,٨%)، سرطان الجلد (٣,٢%)، وسرطان المعدة (٣,٢%). وأن أعلى تقدير سنوي للإصابة بالسرطان في الرجال هو بسبب سرطان القصبات والرئة (٦,٧ لكل مئة ألف من السكان/فئة الرجال) بينما أعلى تقدير سنوي للإصابة بالسرطان في النساء هو بسبب سرطان الثدي (٢٥,٨ لكل مئة ألف من السكان/فئة النساء).

لوحظ تزايد في نسبة التقدير السنوي لسرطان الثدي، سرطان القصبات والرئة، أورام الدماغ والجهاز العصبي المركزي، سرطان القولون والمستقيم، سرطان الغدة الدرقية، وسرطان المعدة للسنوات الخمس الأخيرة (٢٠١١-٢٠١٥)، بينما لوحظ تناقص قليل في نسبة التقدير السنوي لسرطان المثانة، اللوكيميا، وسرطان الغدة اللمفاوية اللا هودجكيني للسنوات الخمس الأخيرة (٢٠١١-٢٠١٥)، أما بالنسبة لسرطان الجلد فان نسبة التقدير السنوي لم تتغير.

العدد الكلي للحالات السرطانية الجديدة المسجلة بين الأطفال (دون سن الخامسة عشر) هو ١,٥٥٦ من مجموع ٢٥,٢٦٩ (العدد الكلي للإصابات السرطانية ولكافة الفئات العمرية)، وأن أعلى تقدير سنوي للإصابات بين الأطفال هو بسبب اللوكيميا (٣ لكل مئة ألف من السكان/ فئة الأعمار دون سن الخامسة عشر) ونسبة الإصابات السرطانية للرجال مقارنة بالنساء في الأطفال هو ٤,٠ إلى واحد.

العدد الكلي للوفيات بسبب السرطان خلال سنة ٢٠١٥ هو ٨,٨٢٥ وقد لوحظ إن نسبة الوفاة للرجال مقارنة بالنساء تقريبا متساوية. كما لوحظ أن أعلى تقدير سنوي للوفاة هو بسبب سرطان القصبات والرئة (٧,٣ لكل مئة ألف من السكان) يليه سرطان الثدي (٢,٧ لكل مئة ألف من السكان). كما أن أعلى تقدير سنوي للوفاة بسبب السرطان سجل في محافظة النجف (١١,٧ لكل مئة ألف من السكان) وأقل تقدير سنوي للوفاة بسبب السرطان سجل في محافظة الأنبار (٥,٢ لكل مئة ألف من السكان).



كلمة السيدة وزيرة الصحة

يعتبر مرض السرطان مشكلة صحية كبيرة، فبالإضافة إلى كونه السبب الرئيسي الثاني للوفيات حسب إحصائيات ٢٠١٦، فإن مرض السرطان يعتبر ذات تأثير كبير على الواقع الصحي والاجتماعي والاقتصادي ينعكس على حياة الفرد والمجتمع في العراق. هذا العبء الذي يسببه المرض هو في زيادة مطردة مع ارتفاع متوسط العمر المتوقع للفرد العراقي. ولعقود من الزمن، بذلت وزارة الصحة جهودا كبيرة لمواجهة هذا المرض من اجل الحد من خطورته وتأثيراته السلبية على المجتمع وذلك عن طريق تبني برامج المسح والكشف المبكر وتشجيع برامج الوقاية من السرطان والتوعية المجتمعية بالإضافة إلى تقديم الخدمات التشخيصية والعلاجية والتلطيفية باستحداث مراكز علاجية مجهزة بمختلف الأجهزة المتقدمة والأدوية السرطانية الحديثة المعتمدة عالميا.

ولإنجاح كل المحاور الرئيسية التي تبنتها الوزارة للسيطرة على السرطان، أصبح برنامج التسجيل السرطاني الحجر الأساس لوضع خطط السيطرة على السرطان. إن برنامج التسجيل السرطاني في العراق يعتمد على جمع المعلومات من المراكز العلاجية وشعب السيطرة على السرطان في دوائر الصحة الموجودة في كل المحافظات وهذه بدورها مرتبطة مركزيا بشعبة التسجيل السرطاني في الوزارة حيث يتم التعامل مع البيانات وإصدارها في تقرير سنوي إحصائي عن طريق مجلس السرطان. إن دقة وشمول المعلومات التي يتم جمعها عن طريق هذا البرنامج الوطني تعتبر العامل المهم والأساس لوضع خطط رصينة تستند على أساس تقدير الحاجة الفعلية من الموارد البشرية المادية إضافة إلى الأجهزة الطبية والأدوية السرطانية بما يضمن خدمة صحية متكاملة تغطي جميع مدن العراق.

ومن الجدير ذكره إن التسجيل السرطاني يعتبر مصدر مهم جدا للدراسات والبحوث العلمية السريرية والوبائية في وزارة الصحة والتي تسهم بدورها في تطوير خطط وخدمات السيطرة على السرطان وهذا ما سينعكس في تحقيق أهداف الوزارة في التقليل من الإصابات بهذا المرض وفي زيادة معدل أعمار المصابين به مع التحسن النوعي لحياة مريض السرطان وتقليل معاناته.

وأخيرا وليس آخرا نثمن جهود المخلصين العاملين في إعداد هذا التقرير السنوي، ومن الله التوفيق.

وزيرة الصحة

الدكتورة عديلة حمود حسين

رئيس مجلس السرطان في العراق

جمهورية العراق
وزارة الصحة / البيئة
مجلس السرطان في العراق

التقرير السنوي
للتسجيل السرطاني في العراق
2015

Email: Iraqicancerboard@yahoo.com

Copyrights © 2018



جمهورية العراق
وزارة الصحة / البيئة
مجلس السرطان في العراق

التقرير السنوي
للتسجيل السرطاني في العراق
2015

