

الجمهورية اللبنانية
وزارة الصحة العامة



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Preface

Health System Resilience in Lebanon: A Consistent Progress amidst Political Instability

Despite the ongoing insecurity climate and socio-political instability for decades, the Lebanese healthcare system has been able to sustain achievements among which, controlling and preventing outbreaks, ensuring universal accessibility to essential quality care, decreasing out-of-pocket expenditures and lowering of maternal and child mortality (achievement of MDGs 4 and 5)¹. Five years into the Syrian crisis, the Lebanese health system is still showing considerable resilience, despite the unprecedented increase of demand and strain on the healthcare system. The continuous focus on non-emergency reforms in the health sector shows that progress in achieving strategic goals has been maintained against all odds. It is, hence, noteworthy to look at the main historical stages of the health system development following the 1975-1989 civil war.

The after civil-war years of the 90s represented a period of assessment and planning, while setting basic administrative systems and reorganizing the MOPH. During this period, important studies were conducted including the Households' Health Utilization and Expenditures Survey, the PAPFAM and PAPChild surveys, the National Health Accounts and many others. This endeavor led to identifying problems and setting priorities, of which:

- Improving quality of health services.
- Containing cost of health care and reducing its financial burden on households.
- Reorienting health services towards promotion and prevention and ensuring universal access to Primary Health Care.
- Reducing price and improving quality of pharmaceuticals.

On the other hand, the political system based on power-sharing among political forces and distribution of benefits on a confessional basis, resulted in a widespread practice of favoritism and clientelism in government institutions. This required a professional response paying particular attention to improving governance while focusing on:

- Building a well-trained team of health professionals among MOPH staff and find ways for motivation and protecting them from political interferences.
- Introducing innovative governance mechanisms to overcome fragmentation of health financing and provision
- Promoting scientific approach for impartial assessment and performance contracting to face political and confessional favoritism.

The 2000-2010 denoted the era of innovative institutional arrangements, through the involvement of all stakeholders in the execution of the national strategy and programmes implementation. The post 2000 period brought meaningful achievements, such as:

- Enhancing Transparency through Website and Mobile Application development.
- Simplification of procedures through automation of the administrative transactions and implementation of the e-Services platform.
- Improving Accountability using a unified mechanism to receive and follow up on complaints.
- Strengthening primary healthcare and promoting essential drugs.
- Scaling up Epidemiological Surveillance and Response.
- Enforcement of public hospitals autonomy.
- Execution of human resources strategy, that focused on yielding production of nursing graduates. And post-graduate training of health controllers, medical inspectors and PHC physicians.
- Upgrading the registration of pharmaceuticals and revisiting the pricing structure.

- Implementation of the WHO Good Governance for Medicines Programme (GGM) and The Quality Assurance of Pharmaceutical Products Programme (QAPPP).
- The accreditation of hospitals and PHC centers.
- The performance contracting with hospitals and containing cost of hospital care, including²:
 - The creation of a Unified Beneficiaries Database, its maintenance & updating
 - Development of the visa system, its decentralization and linkage to database.
 - Setting of a financial ceiling in every contract between hospitals and the MOPH.
 - Utilization review and introducing incentives through new payment mechanisms.

Since 2010, studies have been consistently providing evidence on the significant positive impact of health reform policies, and tangible achievements became more and more recognized.

In the **WHO World Health Report 2010**, the case of Lebanon was documented as a success story in how to decrease total health spending in % of GDP by lowering, mainly, out-of-pocket spending, while at the same time improving health indicators. This validates the sound health policy of strengthening PHC and rationalizing the cost of hospital services, while promoting the MOPH regulatory capacity.

Box 4.2. Lebanon's reforms: improving health system efficiency, increasing coverage and lowering out-of-pocket spending³

In 1998 Lebanon spent 12.4% of its GDP on health, more than any other country in the Eastern Mediterranean Region. Out-of-pocket payments, at 60% of total health spending, were also among the highest in the region, constituting a significant obstacle to low-income people. Since then, a series of reforms has been implemented by the Ministry of Health to improve equity and efficiency.

The key components of this reform have been: a revamping of the public-sector primary-care network; improving quality in public hospitals; and improving the rational use of medical technologies and medicines. The latter has included increasing the use of quality-assured generic medicines. The Ministry of Health has also sought to strengthen its leadership and governance functions through a national regulatory authority for health and biomedical technology, an accreditation system for all hospitals, and contracting with private hospitals for specific inpatient services at specified prices. It now has a database that it uses to monitor service provision in public and private health facilities.

Improved quality of services in the public sector, at both the primary and tertiary levels, has resulted in increased utilization, particularly among the poor. Being a more significant provider of services, the Ministry of Health is now better able to negotiate rates for the services it buys from private hospitals and can use the database to track the unit costs of various hospital services.

Utilization of preventive, promotive and curative services, particularly among the poor, has improved since 1998, as have health outcomes. Reduced spending on medicines, combined with other efficiency gains, means that health spending as a share of GDP has fallen from 12.4% to 8.4%. Out-of-pocket spending as a share of total health spending fell from 60% to 44%, increasing the levels of financial risk protection.

Date: 11/26/2010 | WHO Report 2010 on Health Care Financing

By 2013, The **World Health Statistics** listed Lebanon among the only 45 countries in the world to have reached MDG 4 (reducing child mortality by a two thirds), and among the only 16 countries in the world to have achieved MDG 5 (reducing maternal mortality by 75 percent)⁴.

In addition, Lebanon became well rated in terms of cost-effectiveness. According to the article published in 2014 by the **Economist Intelligence Unit Healthcare**, "Health outcomes and cost: a 166-country comparison", Lebanon is ranked 32 in the second tier (out of six) in health outcomes, directly following Denmark and preceding the United States. Astonishingly, the cost per health outcome point in Lebanon is \$8 USD while, for slightly better outcomes, Denmark is at \$73.2 USD per health outcome point and for slightly lower outcomes, the US is at \$107.8 USD per outcome point. This evidence proves first, that the Lebanese healthcare system ranks well in terms of outcomes internationally, and second that healthcare is not expensive in Lebanon when compared to countries with similar health outcomes⁵.

² <http://www.moph.gov.lb/en/Pages/17/1275/health-reform-in-lebanon>

³ Health systems financing: the path to universal coverage. World health report 2010. <http://www.who.int/whr/2010/en/>

⁴ "World Health Statistics," World Health Organization, 2013

⁵ Health outcomes and cost: A 166-country comparison," The Economist Intelligence Unit, 2014.

Furthermore, the **World Economic Forum**⁶ published the Global Competitiveness Report 2016-2017, which confirmed the good performance of the health system in Lebanon, ranked 34 with a score of 6.8 out of a maximum of 7, despite the adverse conditions of other sectors including the social and economic determinants for health, as shown in the same report.

In the **Bloomberg** report on healthiest country index, Lebanon ranked first in the Eastern Mediterranean region with a worldwide rank of 32, a health grade of 74.03 and a health score of 79.55.

As a recognition, **Professor Walid Ammar**, Director General of Health, was awarded the renowned Shousha Foundation Prize by WHO for "his significant contribution to public health in Lebanon, in particular in the areas of primary health care and health policy, and for his efforts in translating research and evidence into policy, programmes and practice, and for bringing together a range of stakeholders to chart a vision for the welfare, rights and health care in an open network model of governance"⁷.

In his address in the awarding ceremony Dr. Ammar stated: "If I should attribute progress to one single characteristic of the health system, I would say: innovative governance. The most difficult leadership is that of getting things done by a multitude of stakeholders with different agenda, interests, and beliefs. The Lebanese society is plural and diverse by its different confessions and political groups, a strong private-for-profit sector and an active civil society with powerful NGOs. Considering the very limited resources and weak authority of the public sector, the challenge is how to make all these partners work together to achieve national health goals. The answer is to find a non-hierarchical governance structure, that replaces control and command leadership, by a collaborative leadership to achieve common goals through an open networking type of governance". Dr. Ammar paid tribute to the dedicated MOPH team, and to "people who collaborated with the Ministry of Health to make progress. These are health professionals working in different institutional settings, guided by science, professional ethics and human values. Those actors in public and private sectors, despite the depressing political climate and unfavorable working conditions, are contributing to alleviate pain, reduce morbidity and mortality, improve quality of life and promote social progress".

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This publication is the annual compilation of data available at the Ministry of Public Health, it is free of charge and can be accessed as well on the ministry's website. Although the statistics department endeavors to ensure accuracy of information in these documents, it cannot guarantee 100% accuracy nor can it be held liable for errors that may occur. However, the data provided herein are accurate up to the availability of baseline information.

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Table A.1: Selected indicators of Lebanon, 2014- 2016

	Unit	2014	2015	2016
Health Determinants and Risks				
Demographic and socioeconomic determinants				
Population Estimate*	1000 citizens	4,231	4,292	4,356
Number of registered births		88,704	85,453	88,996
Number of registered deaths		25,117	25,275	24,617
Crude Birth Rate	per 1000 population	21.0	19.9	20.4
Crude Death Rate	per 1000 population	5.9	5.9	5.7
Population Growth Rate		1.5	1.4	1.5
Population by Age				
< 15	percent	24.6	24.6	24.6
65+	percent	9.7	9.7	9.7
Risk Factors				
Low birth weight (less than 2500 g) (%)	percent	8.1	8.8	9.4
Caesarian delivery rate (%)	percent	45.6	46.7	47
Health Status				
Life Expectancy and Mortality				
Life expectancy at birth, Total Population				81.24 (2012)
Life expectancy at birth, Male				80.27 (2012)
Life expectancy at birth, Female				82.11 (2012)
Infant Mortality Rate	per 1000 Live Births			6.4
Less than five Mortality Rate	per 1000 Live Births			8.5
Maternal Mortality Ratio	per 100,000 Live Births	9	14	21
Morbidity				
Measles		235	39	44
Tetanus		0	3	2
Neonatal Tetanus		0	0	0
Acute Flaccid Paralysis		53	76	123
Hepatitis A		2582	985	519
Hepatitis B		218	390	367
Hepatitis C		100	136	116
Mumps		736	1,496	486
Brucellosis		252	389	402
Typhoid Fever		546	576	598
AIDS		38	22	21
Health System Response				
Health Financing				
Total GDP	Billion Leb. Pounds		76,518	76,518 (2015)
Allocated to MOPH from Total Gov Budget	percent			2.75
Annual Budget of MOPH	Billion Leb. Pounds			680
Annual Budget of MOPH per capita	\$US			104
Total Health Expenditure (THE) per capita	\$US			752 (2012)
THE as % GDP	percent			7.17 (2012)
Out Of Pocket Expenditure as % THE	percent			37.34 (2012)
Health Workforce				
per 10,000 population				
Physicians		30.7	32.0	31.0
Dentists		12.9	12.9	15.1
Pharmacists		17.5	17.7	18.2
Nursing and Midwifery Personnel		33.0	33.4	34.2
Hospital Beds		34.2	33.7	27.3
Medicines and Medical devices				
per million population				
Density of High Tech Equipment				260 (2012)
Service Coverage				
Infants Fully Immunized-DPT	percent immunized	97	91	90
Infants Fully Immunized-OPV	percent immunized	97	90	90.39
Infants Fully Immunized-Measles	percent immunized	98	91	90
Infants Fully Immunized-Hepatitis B	percent immunized	97	91	90
Married Women Using Contraceptives	percent			54 (2009)
Sources of Information				
Vital Data Observatory (VDO), MOPH.				
Department of Projects & Programs, MOPH.		Department of Vital and Health Statistics, MOPH.		
Expanded Program on Immunization, MOPH.		Economic Accounts of Lebanon.		
Estimated Population from the 2004 and 2007 Household surveys (CAS) in addition to Registered Births and Deaths at Department of Statistics.		MICS3, 2009. CAS/UNICEF		
National Health Accounts 2012, MOPH.	National AIDS Program (NAP), MOPH.	Syndicate Figures calculated for the given population.		
Epidemiological Surveillance Unit, MOPH.		Government Budget ارقام الموازنة العامة		

* Excluding Palestinian camps and Syrian refugees.

Table B.1: Number of registered Lebanese births by month, Qada and gender, 2016

<i>Qada</i>	<i>Jan</i>		<i>Feb</i>		<i>Mar</i>		<i>April</i>		<i>May</i>		<i>June</i>		<i>July</i>		<i>Aug</i>		<i>Sep</i>		<i>Oct</i>		<i>Nov</i>		<i>Dec</i>		<i>Total</i>		
	<i>M</i>	<i>F</i>	<i>T</i>																								
<i>Akkar</i>	527	502	508	467	462	471	494	466	346	382	462	419	542	504	595	575	561	524	553	521	452	459	472	453	5,974	5,743	11,717
<i>Minet-Danniyeh</i>	229	244	180	167	219	197	163	144	129	133	239	197	225	219	194	173	190	181	237	262	211	205	181	200	2,397	2,322	4,719
<i> Tripoli</i>	274	254	232	222	272	261	250	218	175	156	220	206	230	211	241	217	279	264	253	259	297	269	256	240	2,979	2,777	5,756
<i>Zghorta</i>	74	72	48	46	79	82	88	68	40	42	61	49	59	71	80	78	78	56	108	91	80	63	62	50	857	768	1,625
<i>Koura</i>	30	36	29	19	35	32	28	34	23	22	40	26	48	41	46	35	22	24	43	49	114	103	74	73	532	494	1,026
<i>Bcharreh</i>	29	15	26	27	33	32	29	28	23	14	26	21	28	33	31	21	22	23	26	19	30	24	19	19	322	276	598
<i>Batraoun</i>	34	34	26	26	34	30	38	18	24	42	36	45	38	41	46	44	40	46	61	45	51	36	46	449	470	919	
<i>Hermeil</i>	93	68	63	59	103	106	97	68	80	55	108	102	69	76	98	81	94	89	97	78	72	90	73	81	1,047	953	2,000
<i>Baalbek</i>	338	348	391	339	337	365	328	324	392	326	405	403	478	429	452	463	447	383	436	376	413	373	422	395	4,839	4,524	9,363
<i>Zahréh</i>	191	168	172	166	171	152	160	154	154	176	174	204	169	230	188	219	182	214	181	174	139	202	158	2,267	1,985	4,252	
<i>Rachaya</i>	40	29	29	21	86	73	35	31	26	33	31	33	54	49	40	41	40	57	68	68	102	89	40	44	591	568	1,159
<i>West Beqaa</i>	107	103	119	121	127	126	120	98	93	103	109	85	106	108	126	115	135	89	131	141	115	106	115	89	1,404	1,284	2,688
<i>Nabatiyeh</i>	171	152	145	160	184	168	166	187	162	143	165	156	179	172	176	160	188	161	209	206	181	184	148	141	2,074	1,990	4,064
<i>Hosnaya</i>	42	50	39	42	34	33	46	45	46	44	44	48	44	33	47	54	54	61	60	44	49	46	43	37	548	537	1,085
<i>Mariyoun</i>	114	104	134	127	136	142	128	119	99	100	129	125	151	117	162	157	147	149	106	121	142	144	120	108	1,568	1,513	3,081
<i>Bent Jbeil</i>	142	153	165	143	176	193	180	170	137	114	176	136	168	181	211	185	197	176	172	174	162	185	169	189	2,055	1,999	4,054
<i>Saida</i>	141	127	200	159	226	200	161	145	164	138	146	180	163	195	194	224	229	168	176	172	135	2,099	1,975	4,074			
<i>Sour</i>	200	194	218	213	290	262	184	160	176	151	299	310	225	233	263	262	250	236	251	252	204	208	193	179	2,753	2,660	5,413
<i>Lebanie</i>	36	27	30	40	33	25	28	29	24	25	47	57	37	30	49	37	38	36	41	45	53	52	29	29	445	432	877
<i>Jbeil</i>	61	51	53	60	67	53	58	49	62	53	57	62	56	75	96	68	60	57	48	65	55	77	47	56	720	726	1,446
<i>Keserwan</i>	58	37	55	53	49	55	46	61	51	56	58	54	53	44	67	68	75	41	78	58	59	46	55	46	704	619	1,323
<i>Man</i>	57	58	94	67	76	103	73	85	67	95	94	78	101	118	107	99	114	115	98	86	87	82	1,076	1,081	2,157		
<i>Babda</i>	85	103	120	91	102	99	82	99	103	114	122	82	85	117	123	136	101	81	98	103	122	96	118	106	1,261	1,227	2,488
<i>Adley</i>	60	68	81	83	93	74	87	88	61	60	89	78	109	97	117	121	92	89	104	91	120	94	69	66	1,082	1,009	2,091
<i>Ghoul</i>	133	136	129	136	138	145	125	129	128	135	245	218	208	186	169	173	193	159	191	189	148	142	125	134	1,932	1,883	3,815
<i>Bairut</i>	308	286	310	275	352	329	303	231	246	212	275	305	304	354	313	346	341	330	314	345	292	274	279	3,748	3,458	7,206	
Total	3,574	3,419	3,596	3,329	3,914	3,809	3,497	3,268	3,025	2,884	3,871	3,600	3,982	3,778	4,239	4,048	4,174	3,792	4,238	4,112	4,011	3,799	3,602	3,435	45,723	43,273	88,996

Source: Ministry of interior records reported to the Ministry of Health through district offices.

Table B.2: Number of registered Lebanese deaths by month, Qada and gender, 2016

Qada	Jan		Feb		Mar		April		May		June		July		Aug		Sep		Oct		Nov		Dec		Total			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T	
Aakkar	90	84	98	72	77	78	81	44	65	43	64	60	64	50	74	77	73	56	90	66	83	71	96	85	995	786	1,741	
Minieh-Danniyeh	29	27	42	39	38	31	34	19	25	15	31	25	23	15	24	16	47	22	41	34	40	24	37	31	411	298	709	
Tripoli	77	62	65	57	69	64	54	60	35	37	62	53	47	50	47	48	49	44	52	44	59	59	65	62	681	640	1,321	
Zgharta	30	22	26	22	26	24	35	21	18	11	23	19	18	14	19	17	24	21	22	16	21	9	44	26	306	222	528	
Koura	19	17	29	16	22	18	17	11	15	12	19	7	18	10	19	11	25	12	28	20	26	23	23	13	260	170	430	
Bichkek	11	13	15	20	22	19	10	7	9	12	5	8	16	7	12	5	12	7	25	16	15	12	13	6	166	132	298	
Batroun	21	21	23	19	27	18	24	18	21	15	13	15	21	15	17	20	19	14	34	19	31	22	24	16	275	212	487	
Hermele	14	12	21	8	11	18	10	26	17	11	15	10	6	2	17	14	24	10	27	17	17	11	14	10	193	149	342	
Baaibek	88	73	97	89	94	65	97	56	65	56	79	58	92	54	87	52	67	53	96	54	79	79	105	75	1,046	764	1,810	
Zahle	72	47	59	58	58	44	56	54	37	28	67	61	44	36	57	39	66	42	50	48	70	52	34	26	670	535	1,205	
Rachaya	16	14	12	12	22	17	13	9	13	8	5	6	5	8	4	6	15	19	9	15	22	12	11	8	147	134	281	
West Beqaa	28	26	42	18	22	18	24	16	21	29	21	20	30	25	28	19	24	20	35	27	25	22	22	33	322	273	595	
Matariyyeh	55	36	54	37	50	38	31	37	33	28	47	33	35	32	47	27	35	37	21	23	44	34	40	41	492	403	895	
Hasroun	23	23	16	8	14	10	5	10	11	10	10	15	9	13	10	13	15	15	12	10	6	9	4	155	127	282		
Marjayoun	45	38	29	23	36	30	37	32	21	26	27	20	25	14	28	24	32	31	22	23	37	35	34	21	374	317	691	
Bent Jbeil	42	34	45	35	59	36	54	35	27	22	41	31	34	30	32	32	33	28	32	28	42	36	49	43	490	390	880	
Saida	52	41	33	28	63	54	42	45	49	35	52	34	36	37	32	28	49	39	64	45	54	49	42	33	568	468	1,036	
Sour	67	45	66	43	57	47	56	39	33	24	52	54	41	40	55	45	49	28	41	50	60	39	59	43	636	497	1,133	
Jezzine	22	19	21	20	26	21	13	14	15	14	23	18	14	21	13	15	19	19	20	21	18	24	22	31	226	237	463	
Jbeil	30	23	36	33	24	26	25	21	23	14	20	19	20	25	25	23	16	35	19	37	23	34	32	324	285	609		
Keserwan	33	38	35	39	38	37	32	29	20	18	34	28	31	21	38	17	32	31	37	30	37	22	36	18	403	328	731	
Matn	70	72	86	55	76	51	46	42	53	39	70	53	45	44	61	60	62	44	73	61	53	60	55	40	750	621	1,371	
Baalbek	69	62	61	52	66	56	56	64	47	49	51	44	46	51	54	51	30	48	28	61	54	58	41	47	47	669	568	1,237
Antey	47	31	55	44	54	35	34	36	28	40	42	46	42	38	41	32	43	29	38	34	45	49	24	29	493	443	936	
Chouf	62	68	93	59	56	44	52	54	52	45	87	88	60	47	53	60	59	56	56	67	55	60	72	757	715	1,472		
Beirut	159	140	150	166	170	153	134	120	105	90	142	121	98	111	124	120	132	130	143	123	133	108	148	114	1,638	1,496	3,134	
Total	1,272	1,088	1,309	1,072	1,277	1,052	1,084	966	858	742	1,090	944	930	804	1,018	849	1,074	851	1,167	966	1,184	977	1,147	959	15,407	11,210	24,617	

Source: Ministry of Interior records reported to the Ministry of Health through district offices.

Table B.3: Resident population* distribution by age group and gender, 2016

Age groups	Percent			Population 2016		
	M	F	T	M	F	T
0-4	3.6	3.3	6.9	156,813	143,745	300,558
5-9	4.3	4.1	8.3	185,126	176,414	361,541
10-14	4.9	4.5	9.4	213,440	196,016	409,456
15-19	5.2	4.5	9.8	227,814	196,887	424,702
20-24	5.1	4.7	9.8	222,152	204,728	426,879
25-29	3.9	4.2	8.1	169,881	182,948	352,829
30-34	3.5	3.8	7.4	154,199	166,396	320,595
35-39	3.0	3.7	6.7	130,677	161,169	291,846
40-44	2.7	3.5	6.2	118,916	152,457	271,373
45-49	2.5	3.0	5.6	110,205	130,677	240,882
50-54	2.2	2.5	4.8	97,137	108,898	206,035
55-59	1.8	2.0	3.8	78,406	87,118	165,525
60-64	1.7	2.0	3.7	74,051	87,118	161,169
65-69	1.6	1.7	3.2	69,695	74,051	143,745
70-74	1.4	1.4	2.8	60,983	60,983	121,966
75-79	1.0	0.9	1.9	43,559	39,203	82,762
80-84	0.6	0.6	1.2	26,135	26,135	52,271
85+	0.3	0.2	0.5	13,068	8,712	21,780
Total	49.4	50.6	100.0	2,152,257	2,203,656	4,355,913

*Excluding Palestinian camps and Syrian refugees.

Source: Population estimate based on latest baseline data and age proportions available from the Central Administration of Statistics (CAS).

Table B.4: Resident population * distribution by age group and Qada, 2016

Qada	%	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
Aakkar	7.04	21,165	25,459	28,833	29,906	30,060	24,845	22,576	20,551	19,109	15,562	14,508	11,656	11,349	10,122	8,589	5,828	3,681	1,534	306,733
Minieh-Bamjeh	3.30	9,929	11,943	13,526	14,030	14,102	11,656	10,591	9,641	8,965	7,957	6,806	5,468	5,324	4,749	4,029	2,734	1,727	719	143,997
Tripoli	6.74	20,256	24,366	27,596	28,623	28,770	23,779	21,607	19,669	18,289	16,234	13,886	11,156	10,862	9,688	8,220	5,578	3,523	1,468	293,571
Zgharta	1.50	4,523	5,441	6,162	6,392	6,424	5,310	4,825	4,392	4,084	3,625	3,101	2,491	2,426	2,163	1,836	1,246	787	328	65,555
Koura	1.35	4,053	4,875	5,521	5,727	5,756	4,757	4,323	3,935	3,659	3,248	2,778	2,232	2,173	1,938	1,645	1,116	705	294	58,794
Bidnara	0.58	1,751	2,106	2,285	2,474	2,486	2,055	1,867	1,700	1,581	1,403	1,200	964	939	837	710	482	304	127	25,370
Batraoun	1.04	3,112	3,743	4,239	4,397	4,419	3,653	3,319	3,021	2,809	2,494	2,133	1,714	1,658	1,488	1,263	857	541	225	45,094
Baroum	21.56																			
Hermel	1.42	4,275	5,142	5,824	6,041	6,072	5,018	4,560	4,151	3,860	3,426	2,930	2,354	2,292	2,045	1,735	1,177	743	310	61,955
Babdek	6.01	18,073	21,740	24,621	25,538	25,669	21,216	19,278	17,549	16,318	14,485	12,389	9,953	9,691	8,644	7,334	4,977	3,143	1,310	261,928
Zaliett	3.97	11,934	14,355	16,257	16,863	16,949	14,009	12,729	11,588	10,775	9,564	8,181	6,572	6,399	5,707	4,843	3,286	2,075	865	177,950
Rihaya	0.86	2,596	3,123	3,537	3,669	3,688	3,048	2,770	2,521	2,344	2,081	1,780	1,430	1,392	1,242	1,054	715	452	188	37,629
West Beqaa	1.99	5,695	7,180	8,131	8,434	8,477	7,007	6,366	5,796	5,389	4,784	4,091	3,287	3,201	2,855	2,422	1,644	1,038	433	86,501
Al-Bed	14.26																			
Nabatieh	2.95	8,856	10,653	12,064	12,514	12,578	10,396	9,446	8,599	7,996	7,097	6,071	4,877	4,749	4,235	3,594	2,439	1,540	642	129,345
Hasroun	0.72	2,157	2,595	2,939	3,048	3,064	2,533	2,301	2,095	1,948	1,729	1,479	1,188	1,157	1,032	875	594	375	156	31,266
Mrajezoun	1.74	5,216	6,286	7,119	7,785	7,922	6,135	5,574	5,075	4,719	4,188	3,582	2,878	2,802	2,499	2,121	1,439	909	379	75,739
Bent Bayd	2.17	6,517	7,840	8,879	9,209	9,756	7,651	6,952	6,328	5,884	5,223	4,468	3,589	3,495	3,117	2,645	1,795	1,133	472	94,453
Saida	5.53	16,630	20,004	22,656	23,499	23,620	19,522	17,739	16,148	15,015	13,328	11,400	9,159	8,918	7,954	6,748	4,579	2,892	1,205	241,017
Sour	5.48	16,476	19,819	22,446	23,282	23,401	19,942	17,575	15,999	14,877	13,305	11,295	9,074	8,935	7,880	6,686	4,537	2,895	1,194	238,789
Jezzine	0.65	1,945	2,340	2,650	2,748	2,762	2,283	2,075	1,889	1,756	1,559	1,333	1,071	1,043	930	789	536	338	141	28,189
Jbeil	2.11	6,349	7,637	8,649	8,972	9,018	7,483	6,772	6,165	5,733	5,088	4,352	3,497	3,405	3,037	2,576	1,748	1,104	460	92,016
Keremwan	3.86	11,604	13,959	15,809	16,397	16,481	13,422	12,378	11,248	10,477	9,300	7,995	6,391	6,223	5,550	4,709	3,195	2,018	841	168,176
Metn	11.11	33,406	40,183	45,509	47,203	47,446	39,215	35,633	32,437	30,162	26,773	22,900	18,397	17,913	15,977	13,556	9,199	5,810	2,421	488,138
Bekka	11.21	33,701	40,539	45,911	47,651	47,865	39,562	35,947	32,774	30,428	27,009	23,102	18,560	18,071	16,118	13,676	9,280	5,861	2,442	488,417
Aley	3.20	9,609	11,558	13,090	13,577	13,647	11,280	10,249	9,330	8,676	7,701	6,587	5,292	5,152	4,595	3,899	2,646	1,671	696	139,254
Chouf	4.10	12,333	14,836	17,428	17,517	14,478	13,156	11,976	11,136	9,885	8,455	6,792	6,614	5,899	5,005	3,396	2,145	894	178,744	
Berat	35,60																			
Berat	9.35	28,114	33,819	38,301	39,777	39,930	33,004	29,989	27,299	25,384	22,532	19,273	15,483	15,076	13,446	11,409	7,742	4,889	2,037	407,453
Total	100,000	300,558	361,541	409,456	424,702	426,879	332,829	320,595	291,865	271,373	240,882	206,035	165,525	161,169	143,745	121,966	82,762	52,271	21,780	4,355,913

*Excluding Palestinian camps and Syrian refugees.

Source: Population estimate based on latest baseline data and age proportions available from the General Administration of Statistics (GAS).

Table B.5.- Resident population * distribution by Mohafaza and Qada, 2010-2016

Mohafaza	Qada	Percent of Total Population, 2010	Population 2010	Population 2011	Population 2012	Population 2013	Population 2014	Population 2015	Percent of Total Population, 2015	Population 2016	Percent of Total Population, 2016
Akkar		6.30	249,642	258,788	268,191	277,260	286,866	296,757	6.91	306,733	7.04
Minieh-Danniyeh		3.07	121,722	125,429	129,116	132,482	136,249	139,887	3.26	143,897	3.30
Tripoli		6.74	267,159	272,162	276,827	280,993	285,081	289,136	6.74	293,571	6.74
Zgharta		1.48	58,479	60,331	61,570	62,520	63,437	64,438	1.50	65,555	1.50
Koura		1.42	56,384	57,186	57,639	57,679	57,839	58,138	1.35	58,734	1.35
Bcharreh		0.54	21,559	22,626	23,587	24,139	24,686	25,070	0.58	25,370	0.58
Batroun		1.05	41,793	42,569	43,108	43,603	44,166	44,662	1.04	45,094	1.04
Total		20,62	816,739	839,092	860,029	878,677	886,325	918,109	21.39	938,955	21.56
Hermele		1.34	53,052	54,577	56,212	57,541	58,854	60,297	1.41	61,955	1.42
Baalbek		5.51	218,285	226,566	231,648	240,242	247,533	254,375	5.93	261,928	6.01
Zahrileh		3.90	154,642	157,894	160,925	163,841	166,841	169,903	3.96	172,950	3.97
Rachaya		0.82	32,317	33,657	34,466	35,107	36,020	36,751	0.86	37,629	0.86
West Beqaa		1.89	74,709	76,917	78,916	80,803	82,684	84,408	1.97	86,501	1.99
Total		13,46	533,305	549,611	562,167	577,534	591,932	605,734	14.11	620,963	14.26
Nabatiyeh		2.95	116,703	117,871	119,214	120,352	122,345	125,176	2.92	128,345	2.95
Hasbayya		0.66	26,070	26,944	27,988	28,866	29,685	30,463	0.71	31,266	0.72
Marjayaoun		1.51	9,676	63,037	66,441	68,771	71,128	73,349	1.71	75,739	1.74
Bent Jbyl		1.90	57,237	79,038	82,345	85,512	88,444	91,279	2.13	94,453	2.17
Total		7,01	277,686	286,890	295,988	303,501	311,602	320,267	7.46	329,803	7.57
Saida		5.31	210,190	217,616	224,624	230,653	235,037	237,979	5.55	241,017	5.53
Sour		5.34	211,601	216,368	221,040	225,539	230,247	234,509	5.46	238,789	5.48
Jezzine		0.64	25,178	25,826	26,380	26,860	27,346	27,775	0.65	28,189	0.65
Total		11,28	446,969	459,810	472,044	483,052	492,630	500,263	11.66	507,995	11.66
Mount Lebanon		2.19	86,659	87,770	88,650	89,591	90,432	91,179	2.12	92,016	2.11
Keserwan		4.15	164,489	165,216	165,875	166,480	167,039	167,584	3.90	168,176	3.86
Matn		12.10	479,510	480,197	480,936	481,535	482,535	483,352	11.26	484,138	11.11
Bacila		12.15	481,423	482,690	483,777	484,861	486,312	487,166	11.35	488,417	11.21
Asley		3.34	132,503	133,651	134,791	135,865	137,065	138,099	3.22	139,254	3.20
Chouf		4.14	164,074	166,799	169,331	171,794	174,181	176,401	4.11	178,744	4.10
Total		38,08	1,508,658	1,516,323	1,523,360	1,530,126	1,537,564	1,543,781	35.97	1,550,745	35.60
Beirut		9.55	378,464	382,725	390,238	394,880	399,304	403,381	9.40	407,453	9.35
Total		9,55	38,464	384,725	390,238	394,880	399,304	403,381	9.40	407,453	9.35
Total Population		10,00	3,961,820	4,036,450	4,105,825	4,167,769	4,231,356	4,291,534	100	4,355,913	100

*Excluding Palestinian camps and Syrian refugees.

Source: Population estimate based on latest baseline data and age proportions available from the Central Administration of Statistics (CAS) in addition to birth and death records available from the Ministry of Interior.

Table B.6: Resident population* distribution by age group, Qada and some basic indicators, 2016

Qada					Active Population**				Births	Deaths	CBR	CDR	RNI
	0-4	5-9	10-14	<15 years	>65 years	Total Population							
Aakkar	21,165	25,459	28,833	75,456	29,753	201,524	306,733	11,717	1,741	38,20	5,68	3.25	
Minnieh-Danniyeh	9,929	11,943	13,526	35,399	13,958	94,540	143,897	4,719	709	32,79	4,93	2.79	
Tripoli	20,256	24,366	27,596	72,218	28,476	192,876	293,571	5,756	1,321	19,61	4,50	1.51	
Zgharta	4,523	5,441	6,162	16,127	6,359	43,070	65,555	1,625	528	24,79	8,05	1.67	
Koura	4,053	4,875	5,521	14,449	5,697	38,588	58,734	1,026	430	17,47	7,32	1.01	
Bcharreh	1,751	2,106	2,385	6,241	2,461	16,668	25,370	598	298	23,57	11,75	1.18	
Batroun	3,112	3,743	4,239	11,093	4,374	29,627	45,094	919	487	20,38	10,80	0.96	
Hermel	4,275	5,142	5,824	15,241	6,010	40,704	61,955	2,000	342	32,28	5,52	2.68	
Baalbek	18,073	21,740	24,621	64,434	25,407	172,086	261,928	9,363	1,810	35,75	6,91	2.88	
Zahle	11,934	14,355	16,257	42,546	16,776	113,628	172,950	4,252	1,205	24,59	6,97	1.76	
Rachaija	2,595	3,123	3,537	9,257	3,650	24,722	37,629	1,159	281	30,80	7,47	2.33	
West Beqaa	5,969	7,180	8,131	21,279	8,391	56,831	86,501	2,688	595	31,07	6,88	2.42	
Nabatiyeh	8,856	10,653	12,064	31,573	12,449	84,323	128,345	4,064	895	31,66	6,97	2.47	
Hasbaya	2,157	2,595	2,939	7,691	3,033	20,541	31,266	1,085	282	34,70	9,02	2.57	
Mariqboun	5,226	6,286	7,119	18,632	7,347	49,760	75,739	3,081	691	40,68	9,12	3.16	
Bent Jbayl	6,517	7,840	8,879	23,235	9,162	62,056	94,453	4,054	880	42,92	9,32	3.36	
Saida	16,630	20,004	22,656	59,290	23,379	158,348	241,017	4,074	1,036	16,90	4,30	1.26	
Sour	16,476	19,819	22,446	58,742	23,163	156,884	238,789	5,413	1,133	22,67	4,74	1.79	
Jezzine	1,945	2,340	2,650	6,934	2,734	18,520	28,189	877	463	31,11	16,43	1.47	
Jbeyl	6,349	7,637	8,649	22,636	8,926	60,454	92,016	1,446	609	15,71	6,62	0.91	
Keserwan	11,604	13,959	15,809	41,371	16,313	110,492	168,176	1,323	731	7,87	4,35	0.35	
Matn	33,406	40,183	45,509	119,098	46,961	318,079	484,138	2,157	1,371	4,46	2,83	0.16	
Baabda	33,701	40,539	45,911	120,151	47,376	320,890	488,417	2,488	1,237	5,09	2,53	0.26	
Aley	9,609	11,558	13,090	34,257	13,508	91,490	139,254	2,091	936	15,02	6,72	0.83	
Chouf	12,333	14,836	16,802	43,971	17,338	117,435	178,744	3,815	1,472	21,34	8,24	1.31	
Berut	28,114	33,819	38,301	100,233	39,523	267,697	407,453	7,206	3,134	17,69	7,69	1.00	
Total	300,558	364,541	409,456	1,071,555	422,524	2,861,835	4,355,913	88,996	24,617	20,43	5,65	1,48	

*Excluding Palestinian camps and Syrian refugees.

**Active Population: Population between 15-65 years of age regardless of their employment status.

Source: Population estimate based on latest baseline data and age proportions available from the Central Administration of Statistics (CAS) in addition to birth and death records available from the Ministry of Interior.

Table B.7: Proportion of deaths by age group and gender in Beirut.

Age groups	Percent		
	M	F	T
0-4	1.4	1.2	1.3
5-9	0.3	0.1	0.2
10-14	0.3	0.2	0.2
15-19	0.9	0.1	0.5
20-24	1.4	0.5	0.9
25-29	1.0	0.7	0.9
30-34	1.2	0.6	0.9
35-39	1.3	0.8	1.0
40-44	1.5	1.1	1.3
45-49	2.2	1.7	1.9
50-54	4.1	2.7	3.4
55-59	6.2	4.3	5.3
60-64	8.0	6.7	7.4
65-69	9.0	6.9	8.0
70-74	13.0	9.7	11.4
75-79	14.6	14.9	14.7
80-84	15.3	17.6	16.4
85+	18.5	30.5	24.1
Total	100.0	100.0	100.0

Source: Ministry of interior and municipalities in addition to Governorate of Beirut, MOPH.

An analysis of 4,178 certificate of death in Beirut Governorate.

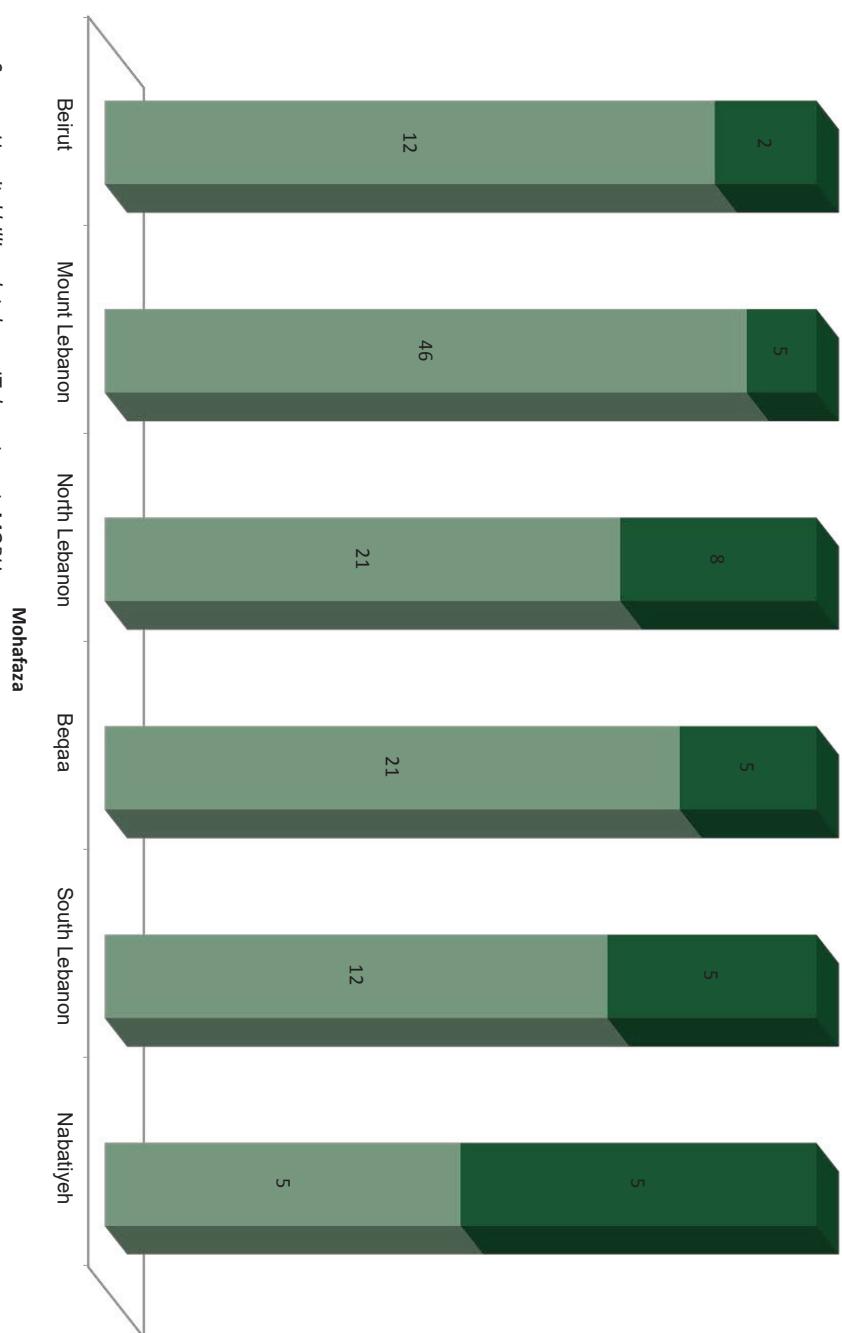
Table B.8: Proportion of deaths by cause of death according to ICD-10 chapters in Beirut.

Cause of death (COD)	Percent			
	ICD-10 Chapter	COD I	COD II	COD III
Diseases of the circulatory system	(I00-I99)	66	20	6
Neoplasms	(C00-D48)	4	8	2
Diseases of the respiratory system	(J00-J98)	2	6	2
External cause of mortality	(V01-Y89)	1	1	1
Certain infectious and parasitic diseases	(A00-B99)	1	2	1
Diseases of the genitourinary system	(N00-N99)	1	2	2
Injury, poisoning and certain other consequences of external causes	(S00-T98)	0	0	0
Symptoms and signs not elsewhere classified	(R00-R99)	0	0	0
Diseases of the digestive system	(K00-K92)	0	1	1
Endocrine, nutritional and metabolic diseases	(E00-E89)	0	1	1
Mental and behavioral disorders	(F01-F99)	0	0	0
Diseases of the nervous system	(G00-G98)	0	0	0
Certain conditions originating in the perinatal period	(P00-P96)	0	0	0
Diseases of blood and blood forming organs	(D50-D89)	0	0	0
Congenital malformations	(Q00-Q99)	0	0	0
Diseases of the eye and adnexa	(H00-H59)	0	0	0
Diseases of the ear and mastoid process	(H60-H95)	0	0	0
Diseases of skin and subcutaneous tissue	(L00-L98)	0	0	0
Diseases of the musculoskeletal system & connective tissue	(M00-M99)	0	0	0
Pregnancy, childbirth, and the puerperium	(O00-O99)	0	0	0
Factors influencing health status and contact with health services	(Z00-Z99)	0	0	0
Not Defined				
Total		100.0	100.0	100.0

Source: Ministry of interior and municipalities in addition to Governorate of Beirut, MOPH.
An analysis of 4,178 certificate of death in Beirut Governorate.

Graph C.1: Hospitals contracting with MOPH by Mohafaza and type, 2016

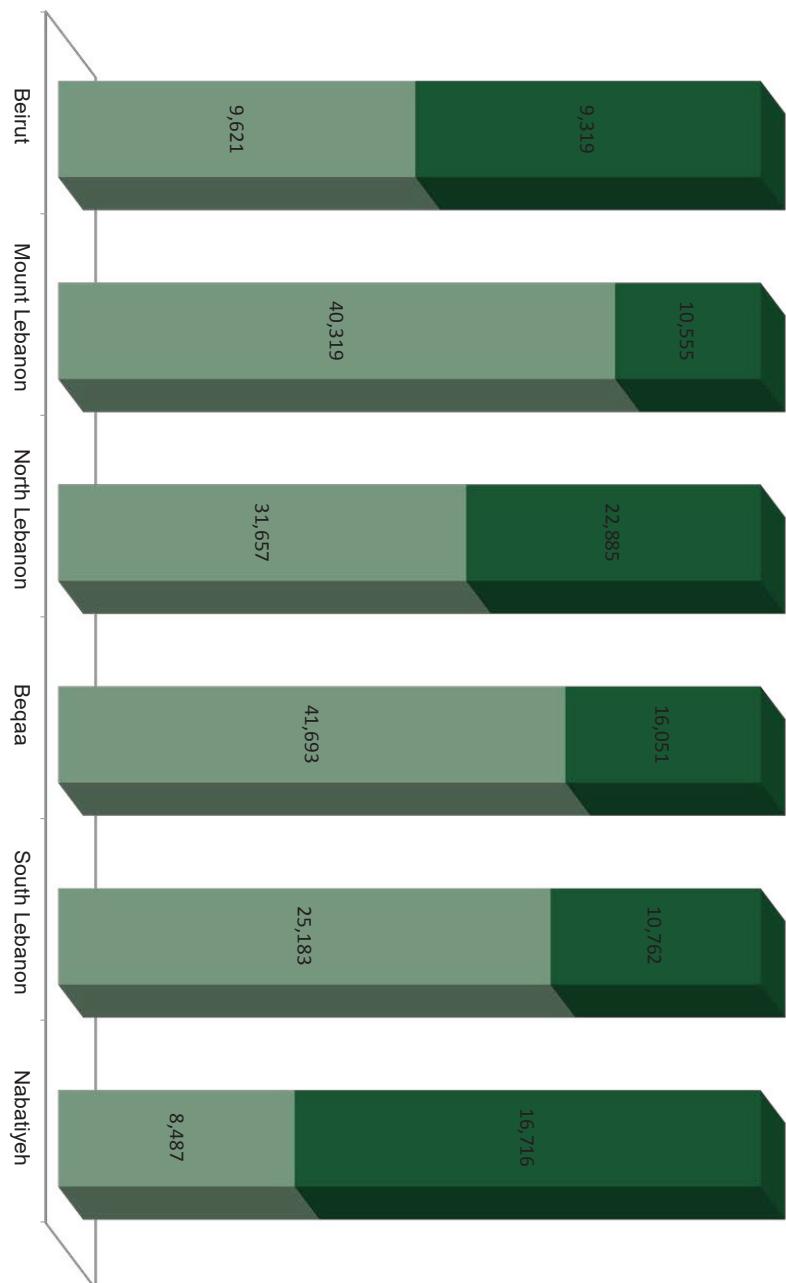
■ Public (N=30)
■ Private (N=117)



Source: Hospital billing database, IT department, MOPH.

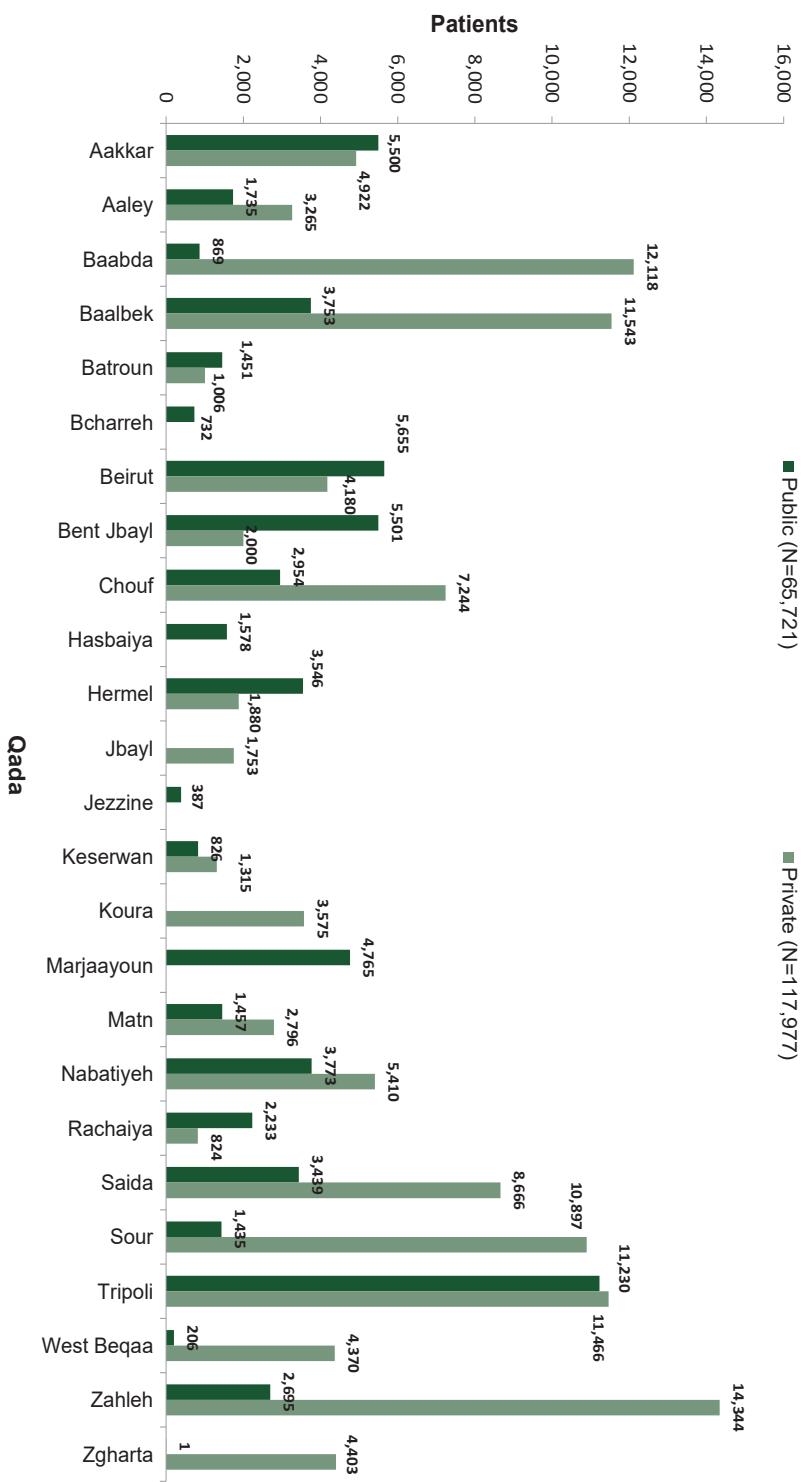
Graph C.2 : MOPH subsidized admissions by Mohafaza and type of hospital, 2016

■ Public (N=86,288)
■ Private (N=156,960)



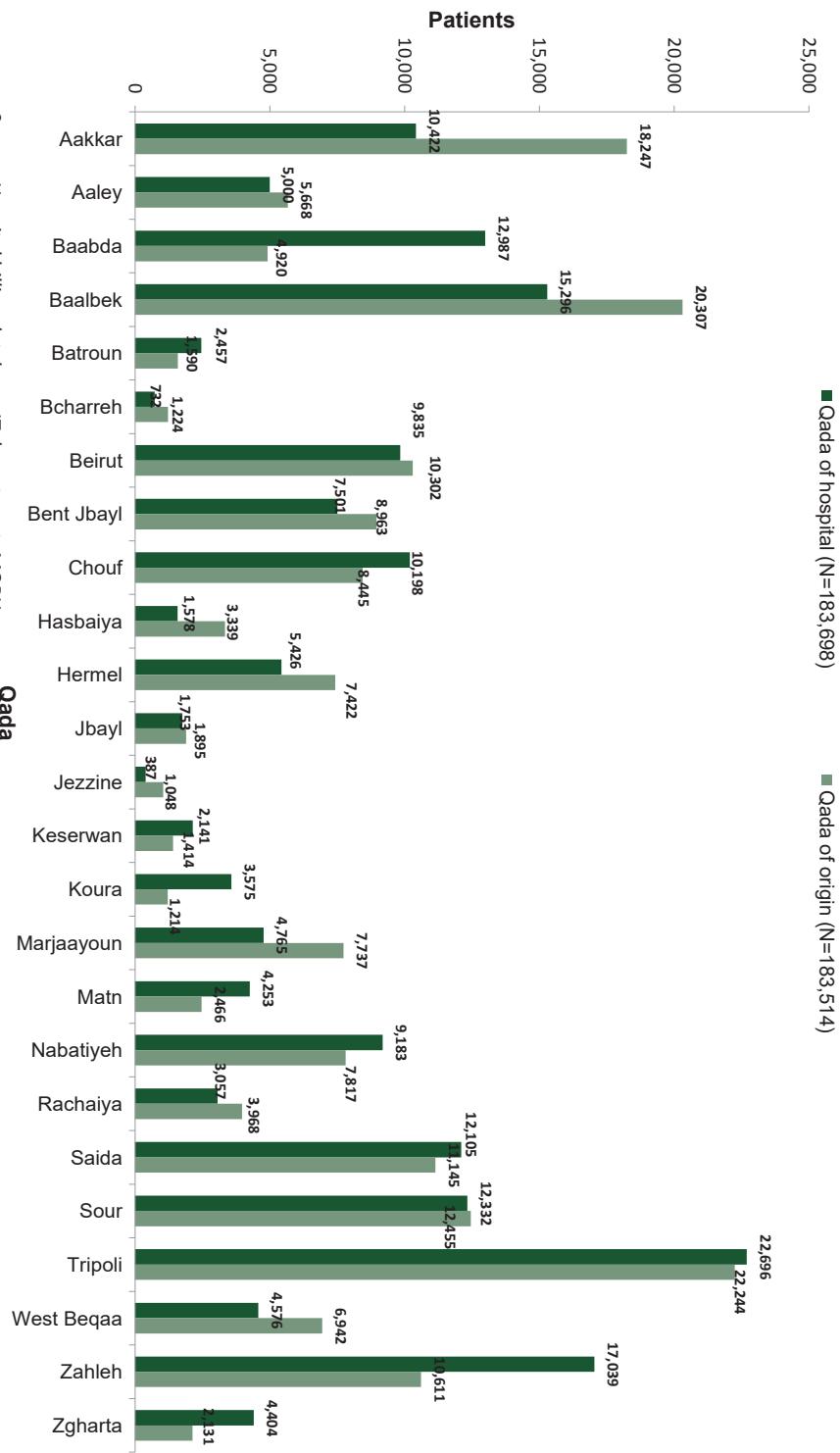
Source: Hospital billing database, IT department, MOPH.

Graph C.3: MOPH subsidized in-patients by Qada and type of hospital, 2016



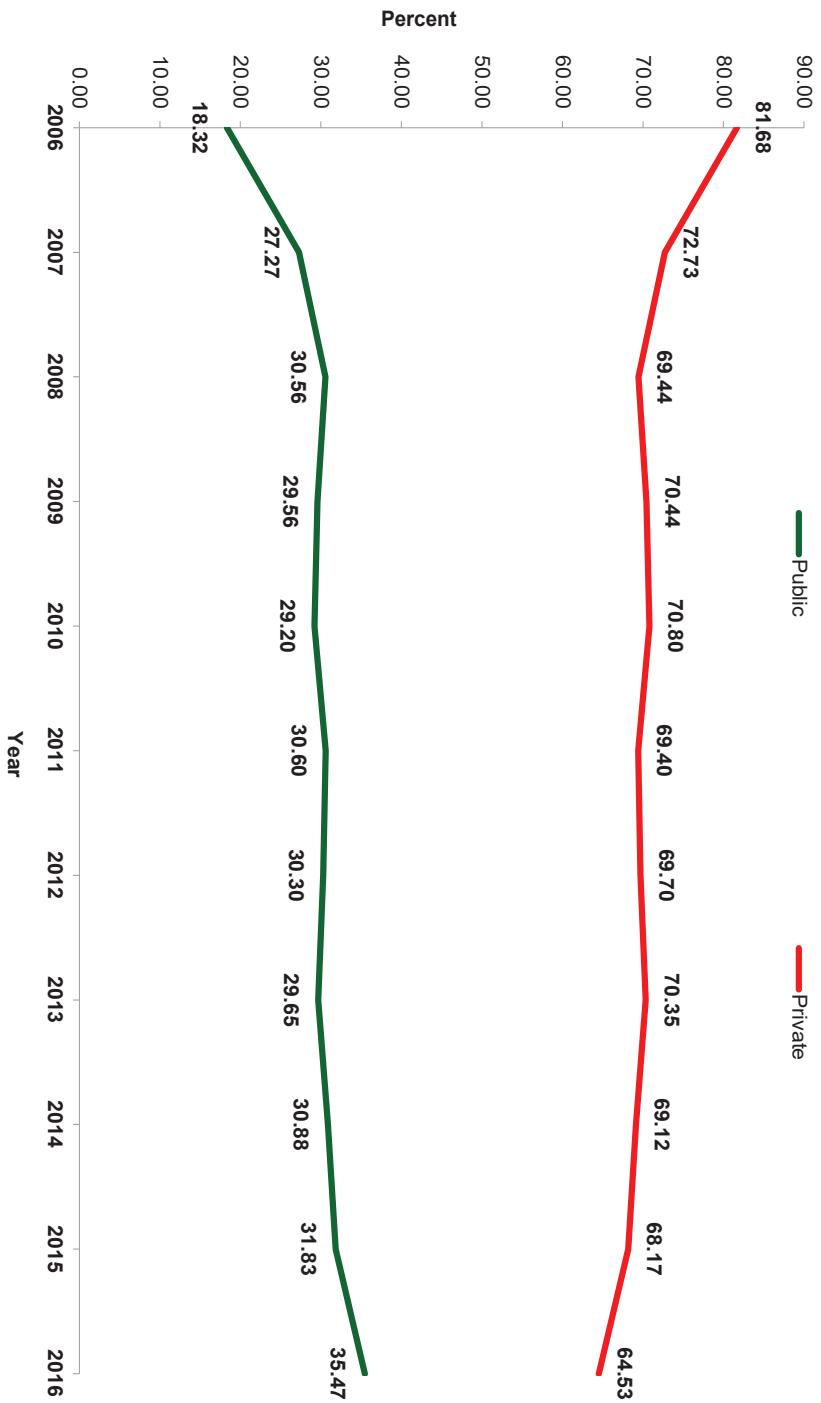
Source: Hospital billing database, IT department, MOPH.

Graph C.4: MOPH subsidized in-patients by Qada of hospital and Qada of origin, 2016



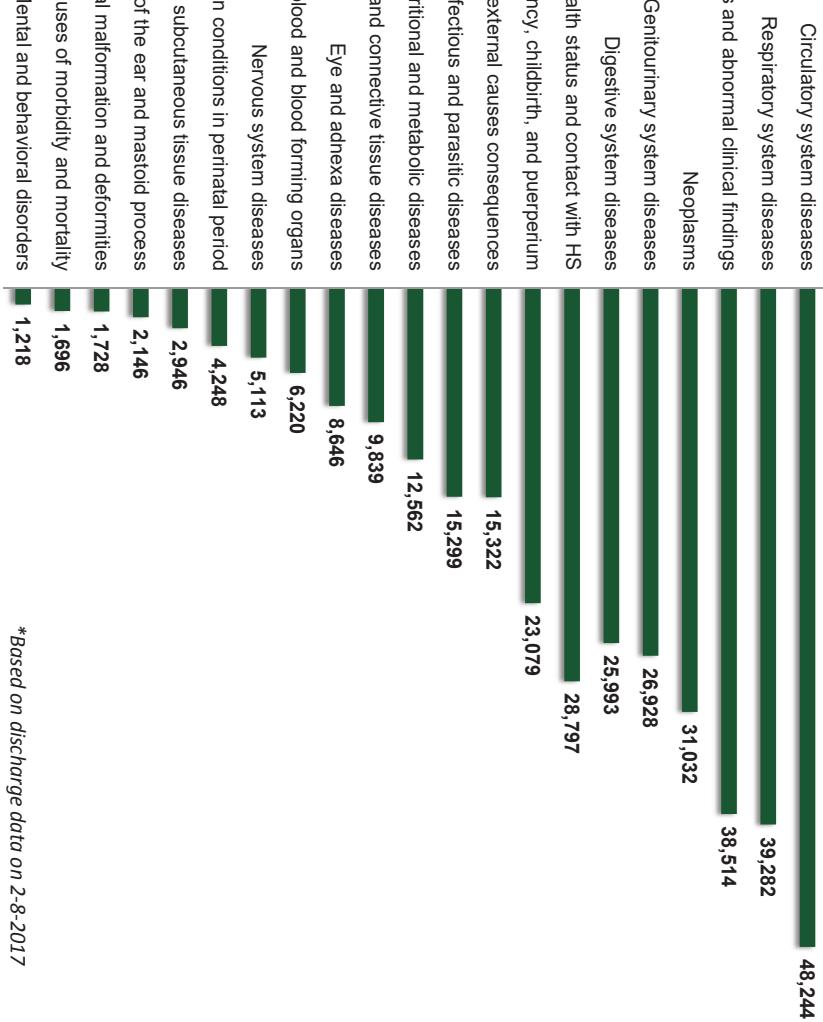
Source: Hospital billing database, IT department, MOPH.

Graph C.5: The evolution of MOPH subsidized admissions in public and private hospitals between 2006 and 2016



Source: Hospital billing database, IT department, MOPH.

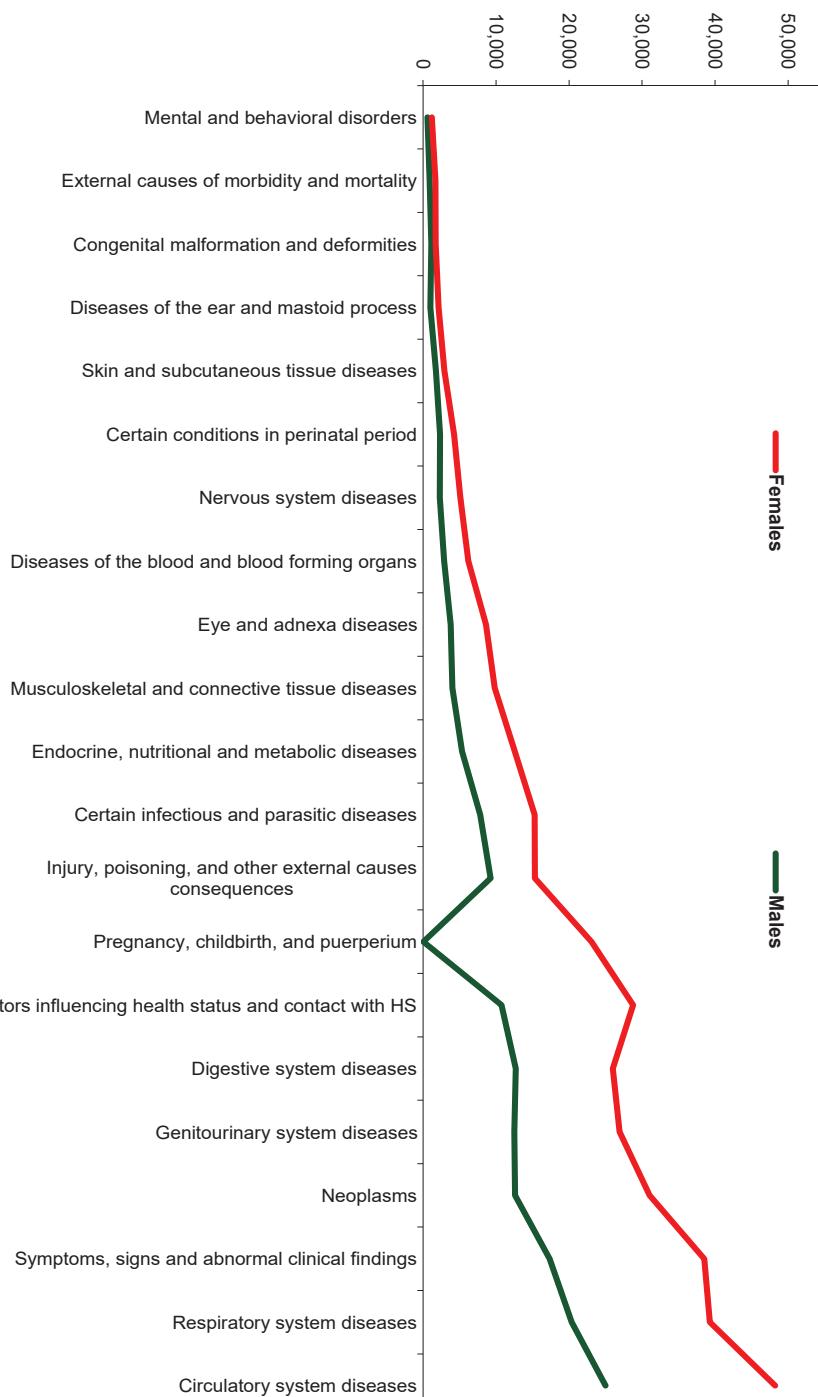
Graph C.6: MOPH subsidized hospital cases* by ICD10 category of diagnosis, 2016 (N=348,852)



*Based on discharge data on 2-8-2017

Source: Hospital billing database, IT department, MOPH.

Graph C.7: MOPH subsidized hospital cases* by ICD10 category of diagnosis and gender, 2016 (N = 348,852)



*Based on discharge data on 2-8-2017

Source: Hospital billing database, IT department, MOPH.

Table C.1: MOPH subsidized hospital cases* by category of diagnosis and gender, 2016

ICD10	Codes	Description	M	F	T
Chapter 1	A00-B99	Certain infectious and parasitic diseases	M	F	T
	A00-A09	Intestinal Infectious Diseases	6,044	5,644	11,688
	A15-A19	Tuberculosis	25	26	51
	A20-A28	Certain zoonotic bacterial diseases	53	63	116
	A30-A49	Other bacterial diseases	650	680	1,330
	A50-A64	Infections with a predominantly sexual mode of transmission	14	16	30
	A65-A69	Other spirochaetal diseases	4	3	7
	A70-A74	Other diseases caused by chlamydiae	0	0	0
	A75-A79	Rickettsioses	5	1	6
	A80-A89	Viral Infections of the CNS	41	28	69
	A90-A99	Arthropod-borne viral fevers and viral hemorrhagic fevers	2	4	6
	B00-B09	Viral Infections characterized by skin and mucous membrane lesions	65	83	148
	B15-B19	Viral hepatitis	154	82	236
	B20-B24	Human immunodeficiency virus[HIV] disease	32	1	33
	B25-B34	Other viral diseases	158	104	262
	B35-B49	Mycoses	72	55	127
	B50-B64	Protozoal diseases	38	12	50
	B65-B83	Helminthiases	37	29	66
	B85-B89	Pediculosis, acariasis and other infestations	3	4	7
	B90-B94	Sequelae of infectious and parasitic diseases	3	6	9
	B95-B97	Bacterial, viral and other infectious agents	414	603	1,017
	B99	Other infectious diseases	20	21	41
Total			7,834	7,465	15,299
Chapter 2	C00-D48	Neoplasms	M	F	T
	C00-C97	Malignant Neoplasms	11,377	16,130	27,507
	C00-C14.8	Lip oral cavity and pharynx	244	143	387
	C15-C26.9	Digestive organs	1,835	1,747	3,582
	C30-C39.9	Respiratory and intrathoracic organs	1,997	1,023	3,020
	C40-C41.9	Bone and articular cartilage	164	152	316
	C43-C44.9	Melanoma and other malignant neoplasms of skin	122	82	204
	C45-C49.9	Mesothelial and soft tissue	130	116	246
	C50-C50.9	Breast	224	6,853	7,077
	C51-C58	Female genital organs	37	1,471	1,508
	C60-C63.9	Male genital organs	821	15	836
	C64-C68.9	Urinary tract	1,150	389	1,539
	C69-C72.9	Eye, brain and other parts of CNS	374	200	574
	C73-C75.9	Thyroid and other endocrine glands	172	167	339
	C76-C80	Ill-defined, secondary and unspecified sites	562	950	1,512
	C81-C96.9	Lymphoid, haematopoietic and related tissue	3,543	2,819	6,362
	C97	Independent (primary) multiple sites	2	3	5
	D00-D09	In situ neoplasms	82	103	185
	D10-D36	Benign neoplasms	797	1,896	2,693
	D37-D48	Neoplasms of uncertain and unknown behavior	340	307	647
Total			12,596	18,436	31,032

ICD10	Codes	Description	M	F	T
Chapter 3	D50-D89	Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism	M	F	T
	D50-D53	Nutritional anaemias	345	803	1,148
	D55-D59	Haemolytic anaemias	950	708	1,658
	D60-D64	Aplastic and other anaemias	1,031	1,428	2,459
	D65-D69	Coagulation defects, purpura and other haemorrhagic conditions	233	171	404
	D70-D77	Other diseases of the blood and blood forming organs	183	145	328
	D80-D89	Certain disorders involving the immune mechanism	152	71	223
Total			2,894	3,326	6,220
Chapter 4	E00-E90	Endocrine, nutritional and metabolic diseases	M	F	T
	E00-E07	Disorders of thyroid gland	264	1,245	1,509
	E10-E14	Diabetes mellitus	3,151	3,569	6,720
	E15-E16	Other disorders of glucose regulation and pancreatic internal secretion	51	93	144
	E20-E35	Disorders of other endocrine glands	122	149	271
	E40-E46	Malnutrition	12	14	26
	E50-E64	Other nutritional deficiencies	29	47	76
	E65-E68	Obesity and other hyperalimentation	277	608	885
	E70-E90	Metabolic disorders	1,452	1,479	2,931
Total			5,358	7,204	12,562
Chapter 5	F00-F99	Mental and behavioral disorders	M	F	T
	F00-F09	Organic, including symptomatic, mental disorders	34	39	73
	F10-F19	Mental and behavioral disorders due to psychoactive substance abuse	150	100	250
	F20-F29	Schizophrenia, schizotypal and delusional disorders	205	140	345
	F30-F39	Mood [affective] disorders	94	146	240
	F40-F48	Neurotic, stress-related and somatoform disorders	73	114	187
	F50-F59	Behavioral syndromes associated with physiological disturbances and physical factors	12	15	27
	F60-F69	Disorders of adult personality and behaviour	3	12	15
	F70-F79	Mental retardation	19	15	34
	F80-F89	Disorders of psychological development	20	12	32
	F90-F98	Behavioral and emotional disorders with onset usually occurring in childhood and adolescence	5	3	8
	F99	Unspecified mental disorder	3	4	7
Total			618	600	1,218
Chapter 6	G00-G99	Diseases of the nervous system	M	F	T
	G00-G09	Inflammatory diseases of the central nervous system	78	62	140
	G10-G13	Systemic atrophies primarily affecting the nervous system	22	21	43
	G20-G26	Extrapyramidal and mood disorders	54	57	111
	G30-G32	Other degenerative diseases of the nervous system	53	66	119
	G35-G37	Demyelinating diseases of the CNS	103	193	296
	G40-G47	Episodic and paroxysmal disorders	1,030	1,073	2,103
	G50-G59	Nerve, nerve root and plexus disorders	233	690	923
	G60-G64	Polyneuropathies and other disorders of the peripheral NS	53	69	122
	G70-G73	Diseases of myoneural junction and muscle	55	28	83
	G80-G83	Cerebral palsy and other paralytic syndromes	410	367	777
	G90-G99	Others disorders of the nervous system	204	192	396
Total			2,295	2,818	5,113

ICD10	Codes	Description	M	F	T
Chapter 7	H00-H59	Diseases of the eye and adnexa	M	F	T
	H00-H06	Disorders of eyelid, lachrymal system and orbit	141	196	337
	H10-H13	Disorders of conjunctiva	62	56	118
	H15-H22	Disorders of sclera, cornea, iris, and ciliary body	86	85	171
	H25-H28	Disorders of lens	2,754	3,890	6,644
	H30-H36	Disorders of choroid and retina	180	118	298
	H40-H42	Glaucoma	107	125	232
	H43-H45	Disorders of vitreous body and globe	172	128	300
	H46-H48	Disorders of optic nerve and visual pathways	6	8	14
	H49-H52	Disorders of ocular muscles, binocular movement accommodation and refraction	59	85	144
	H53-H54	Visual disturbances and blindness	137	106	243
	H55-H59	Other disorders of eye and adnexa	83	62	145
Total			3,787	4,859	8,646
Chapter 8	H60-H95	Diseases of the ear and mastoid process	M	F	T
	H60-H62	Diseases of the external ear	182	165	347
	H65-H75	Diseases of the middle ear and mastoid	580	566	1,146
	H80-H83	Diseases of the inner ear	234	358	592
	H90-H95	Other disorders of ear	22	39	61
Total			1,018	1,128	2,146
Chapter 9	I00-I99	Diseases of the circulatory system	M	F	T
	I00-I02	Acute rheumatic fever	22	24	46
	I05-I09	Chronic rheumatic heart disease	114	175	289
	I10-I15	Hypertensive diseases	5,399	7,113	12,512
	I20-I25	Ischemic heart diseases	11,021	7,771	18,792
	I26-I28	Pulmonary heart disease and diseases of the pulmonary circulation	60	113	173
	I30-I52	Other forms of heart disease	4,183	4,954	9,137
	I60-I69	Cerebrovascular diseases	1,390	1,376	2,766
	I70-I79	Diseases of arteries, arterioles and capillaries	829	560	1,389
	I80-I89	Diseases of veins, lymphatic vessels and lymph nodes NEC	1,770	878	2,648
	I95-I99	Other and unspecified disorders of the circulatory system	201	291	492
Total			24,989	23,255	48,244
Chapter 10	J00-J99	Diseases of the respiratory system	M	F	T
	J00-J06	Acute upper respiratory infections	1,765	1,332	3,097
	J10-J18	Influenza and pneumonia	6,847	6,380	13,227
	J20-J22	Other acute lower respiratory infections	2,974	2,500	5,474
	J30-J39	Other diseases of upper respiratory tract	3,899	3,515	7,414
	J40-J47	Chronic lower respiratory diseases	3,130	3,213	6,343
	J60-J70	Lung diseases due to external agents	55	45	100
	J80-J84	Other resp. diseases principally affecting interstitium	769	966	1,735
	J85-J86	Suppurative and necrotic conditions of lower RT	38	9	47
	J90-J94	Other diseases of plura	472	445	917
	J95-J99	Other diseases of the respiratory system	430	498	928
Total			20,379	18,903	39,282

ICD10	Codes	Description	M	F	T
Chapter 11	K00-K93	Diseases of the digestive system	M	F	T
	K00-K14	Diseases of oral cavity, salivary glands and jaws	135	135	270
	K20-K31	Diseases of oesophagus, stomach and duodenum	1,854	2,791	4,645
	K35-K38	Diseases of appendix	852	757	1,609
	K40-K46	Hernia	3,706	1,428	5,134
	K50-K52	Noninfective enteritis and colitis	1,517	1,824	3,341
	K55-K63	Other diseases of intestines	1,938	1,665	3,603
	K65-K67	Diseases of peritoneum	171	206	377
	K70-K77	Diseases of liver	445	296	741
	K80-K87	Disorders of gallbladder, biliary tract and pancreas	1,761	3,795	5,556
	K90-K93	Other diseases of the digestive system	335	382	717
Total			12,714	13,279	25,993
Chapter 12	L00-L99	Diseases of the skin and subcutaneous tissue	M	F	T
	L00-L08	Infections of the skin and subcutaneous tissue	1,109	624	1,733
	L10-L14	Bullous disorders	5	5	10
	L20-L30	Dermatitis and eczema	23	22	45
	L40-L45	Papulosquamous disorders	22	11	33
	L50-L54	Urticaria and erythema	41	50	91
	L55-L59	Radiation-related disorders of the skin and subcutaneous tissue	3	3	6
	L60-L75	Disorders of skin appendages	55	45	100
	L80-L99	Other disorders of the skin and subcutaneous tissue	519	409	928
Total			1,777	1,169	2,946
Chapter 13	M00-M99	Diseases of the musculoskeletal system and connective tissue	M	F	T
	M00-M25	Arthropathies	1,532	2,302	3,834
	<i>M0-M03</i>	<i>Infectious arthropathies</i>	30	20	50
	<i>M05-M14.8</i>	<i>Inflammatory polyarthropathies</i>	364	798	1,162
	<i>M15-M19.9</i>	<i>Arthrosis</i>	418	785	1,203
	<i>M20-M25.9</i>	<i>Other joint disorders</i>	720	699	1,419
	M30-M36	Systemic connective tissue disorders	52	98	150
	M40-M54	Dorsopathies	1,265	2,066	3,331
	<i>M40-M43.9</i>	<i>Deforming dorsopathies</i>	60	140	200
	<i>M45-M49.8</i>	<i>Spondylopathies</i>	189	321	510
	<i>M50-M54.9</i>	<i>Other dorsopathies</i>	1,016	1,605	2,621
	M60-M79	Soft tissue disorders	632	881	1,513
	<i>M60-M63.8</i>	<i>Disorders of muscles</i>	75	67	142
	<i>M65-M68.8</i>	<i>Disorders of synovium and tendon</i>	211	400	611
	<i>M70-M79.9</i>	<i>Other soft tissue disorders</i>	346	414	760
	M80-M94	Osteopathies and chondropathies	501	434	935
	<i>M80-M85.9</i>	<i>Disorders of bonedensity and structure</i>	204	241	445
	<i>M86-M90.8</i>	<i>Other osteopathies</i>	277	172	449
	<i>M91-M94.9</i>	<i>Chondropathies</i>	20	21	41
	M95-M99	Other disorders of the musculoskeletal system and connective tissue	39	37	76
Total			4,021	5,818	9,839

ICD10	Codes	Description	M	F	T
Chapter 14	N00-N99	Diseases of the genitourinary system	M	F	T
	N00-N08	Glomerular diseases	240	197	437
	N10-N16	Renal tubulo-interstitial diseases	787	1,164	1,951
	N17-N19	Renal failure	2,061	1,851	3,912
	N20-N23	Urolithiasis	4,938	3,356	8,294
	N25-N29	Other disorders of kidney and ureter	128	89	217
	N30-N39	Other diseases of the urinary system	2,032	3,343	5,375
	N40-N51	Diseases of male genital organs	2,287	0	2,287
	N60-N64	Disorders of breast	33	368	401
	N70-N77	Inflammatory diseases of female pelvic organs	0	362	362
	N80-N98	Noninflammatory disorders of female genital tract	0	3,662	3,662
	N99	Other disorders of the genitourinary system	10	20	30
Total			12,516	14,412	26,928
Chapter 15	O00-O99	Pregnancy, childbirth and puerperium	M	F	T
	O00-008	Pregnancy with abortive outcome	0	1,865	1,865
	O10-O16	Oedema, proteinuria and hypertensive disorders in pregnancy, childbirth and the puerperium	0	89	89
	O20-O29	Other maternal disorders predominantly related to pregnancy	0	273	273
	O30-O48	Maternal care related to the fetus and amniotic cavity and possible delivery problems	0	1,760	1,760
	O60-075	Complications of labor and delivery	0	583	583
	O80-O84	Delivery	0	18,374	18,374
	O85-O92	Complications predominantly related to the puerperium	0	55	55
	O95-O99	Other obstetric conditions NEC	0	80	80
Total			0	23,079	23,079
Chapter 16	P00-P96	Certain conditions originating in the perinatal period	M	F	T
	P00-P04	Fetus and newborn affected by maternal factors and by complications of pregnancy labour and delivery	54	157	211
	P05-P08	Disorders related to length of gestation and fetal growth	273	242	515
	P10-P15	Birth trauma	14	10	24
	P20-P29	Respiratory and cardiovascular disorders specific to the perinatal period	1,169	815	1,984
	P35-P39	Infections specific to the perinatal period	287	235	522
	P50-P61	Haemorrhagic and haematological disorders of fetus and newborn	406	343	749
	P70-P74	Transitory endocrine and metabolic disorders specific to fetus and newborn	54	60	114
	P75-P78	Digestive system disorders of fetus and newborn	21	23	44
	P80-P83	Conditions involving the integument and temperature regulation of fetus and newborn	14	8	22
	P90-P96	Other disorders originating in the perinatal period	31	32	63
Total			2,323	1,925	4,248

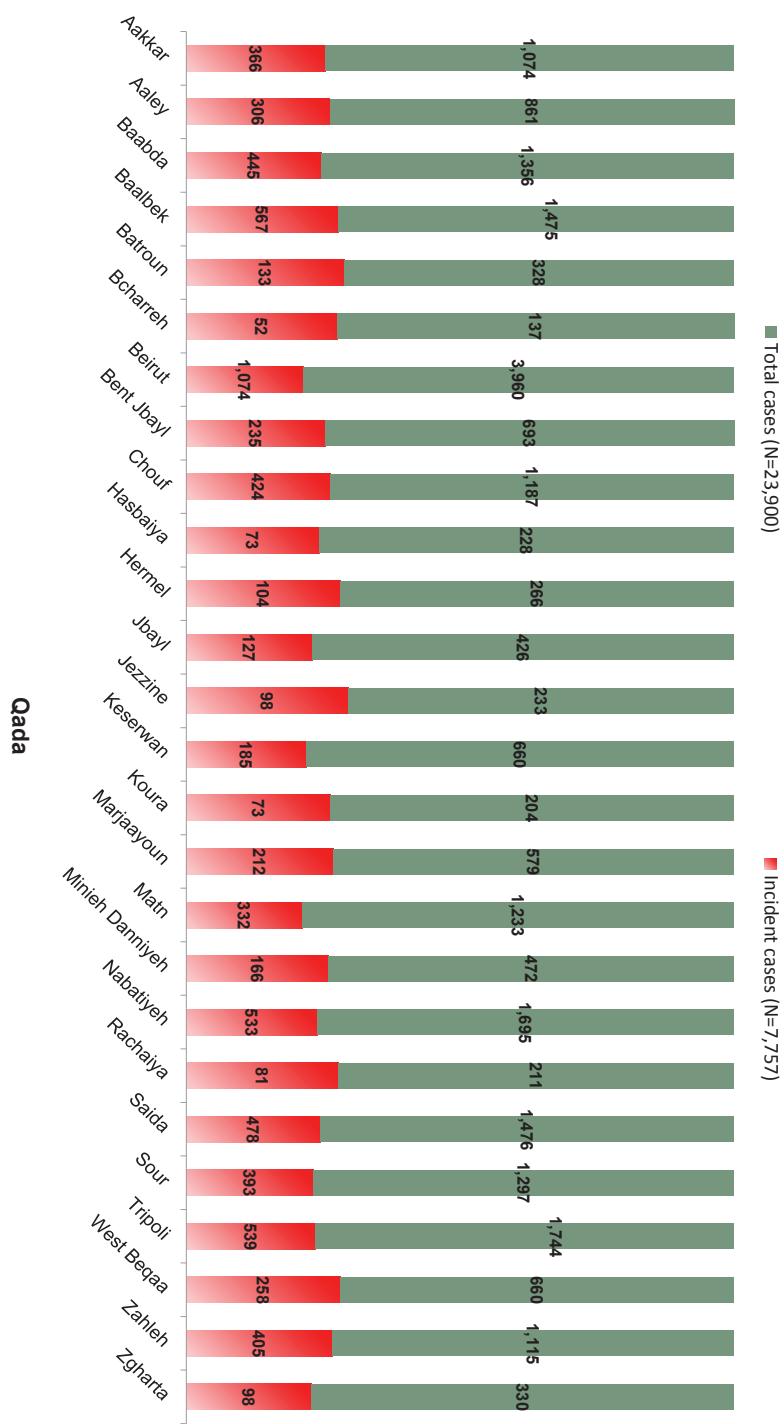
ICD10	Codes	Description	M	F	T
Chapter 17	Q00-Q99	Congenital malformations, deformations and chromosomal abnormalities	M	F	T
	Q00-Q07	Congenital malformations of the nervous system	38	32	70
	Q10-Q18	Congenital malformations of eye, ear, face and neck	13	10	23
	Q20-Q28	Congenital malformations of the circulatory system	191	199	390
	Q30-Q34	Congenital malformations of the respiratory system	10	10	20
	Q35-Q37	Cleft lip and cleft palate	30	29	59
	Q38-Q45	Other congenital malformations of the digestive system	87	55	142
	Q50-Q56	Congenital malformations of the genital organs	514	43	557
	Q60-Q64	Congenital malformations of the urinary system	111	63	174
	Q65-Q79	Congenital malformations and deformations of the musculoskeletal system	97	101	198
	Q80-Q89	Other congenital malformations	23	37	60
	Q90-Q99	Chromosomal abnormalities, NEC	19	16	35
Total			1,133	595	1,728
Chapter 18	R00-R99	Symptoms, signs and abnormal clinical and laboratory findings NEC	M	F	T
	R00-R09	Symptoms and signs involving the circulatory and respiratory systems	4,902	5,596	10,498
	R10-R19	Symptoms and signs involving the digestive system and abdomen	5,747	8,998	14,745
	R20-R23	Symptoms and signs involving the skin and subcutaneous tissue	178	171	349
	R25-R29	Symptoms and signs involving the nervous and musculoskeletal systems	39	29	68
	R30-R39	Symptoms and signs involving the urinary system	920	503	1,423
	R40-R46	Symptoms and signs involving cognition, perception, emotional state and behaviour	532	766	1,298
	R47-R49	Symptoms and signs involving speech and voice	27	27	54
	R50-R69	General symptoms and signs	4,756	4,823	9,579
	R70-R79	Abnormal findings on examination of blood, without diagnosis	129	145	274
	R80-R82	Abnormal findings on examination of urine, without diagnosis	7	12	19
	R83-R89	Abnormal findings on examination of other body fluids substances and tissues, without diagnosis	5	6	11
	R90-R94	Abnormal findings on diagnostic imaging and in function studies, without diagnosis	76	46	122
	R95-R99	Ill-defined and unknown causes of mortality	39	35	74
Total			17,357	21,157	38,514

ICD10	Codes	Description	M	F	T
Chapter 19	S00-T98	Injury, poisoning and certain other consequences of external causes	M	F	T
	S00-S09	Injuries to the head	1,216	591	1,807
	S10-S19	Injuries to the neck	51	36	87
	S20-S29	Injuries to the thorax	196	108	304
	S30-S39	Injuries to the abdomen, lower back, lumbar spine and pelvis	281	192	473
	S40-S49	Injuries to the shoulder and upper arm	710	567	1,277
	S50-S59	Injuries to the elbow and forearm	959	520	1,479
	S60-S69	Injuries to the wrist and hand	1,140	502	1,642
	S70-S79	Injuries to the hip and thigh	927	1,177	2,104
	S80-S89	Injuries to the knee and lower leg	1,187	613	1,800
	S90-S99	Injuries to the ankle and foot	405	202	607
	T00-T07	Injuries involving multiple body regions	1,109	636	1,745
	T08-T14	Injuries to unspecified part of trunk, limb or body region	226	131	357
	T15-T19	Effects of foreign body entering through natural orifice	64	50	114
	T20-T32	Burns and corrosions	106	91	197
	T33-T35	Frogsbite	6	2	8
	T36-T50	Poisoning by drugs, medicaments and biological substances	48	87	135
	T51-T65	Toxic effects of substances chiefly nonmedicinal as to source	101	95	196
	T66-T78	Other and unspecified effects of external causes	61	66	127
	T79	Certain early complications of trauma	51	25	76
	T80-T88	Complications of surgical and medical care NEC	341	341	682
	T90-T98	Sequelae of injuries, of poisoning and of other consequences of external causes	69	36	105
Total			9,254	6,068	15,322
Chapter 20	V01-Y98	External causes of morbidity and mortality	M	F	T
Total			927	769	1,696
Chapter 21	Z00-Z99	Factors influencing health status and contact with health services	M	F	T
	Z00-Z13	Persons encountering health services for examination and investigation	829	934	1,763
	Z20-Z29	Persons with potential health hazards related to communicable diseases	44	30	74
	Z30-Z39	Persons encountering health services in circumstances related to reproduction	201	5,729	5,930
	Z40-Z54	Persons encountering health services for specific procedures and health care	7,160	8,886	16,046
	Z55-Z65	Persons with potential health hazards related to socioeconomic and psychosocial circumstances	4	2	6
	Z70-Z76	Persons encountering health services in other circumstances	629	489	1,118
	Z80-Z99	Persons with potential health hazards related to family and personal history and certain conditions influencing health status	1,878	1,982	3,860
Total			10,745	18,052	28,797
Total Number of Hospitalized Diagnoses			154,592	194,260	348,852

*Based on discharge data (On 2-8-2017)

Source: Hospital Billing database, IT department, MOPH.

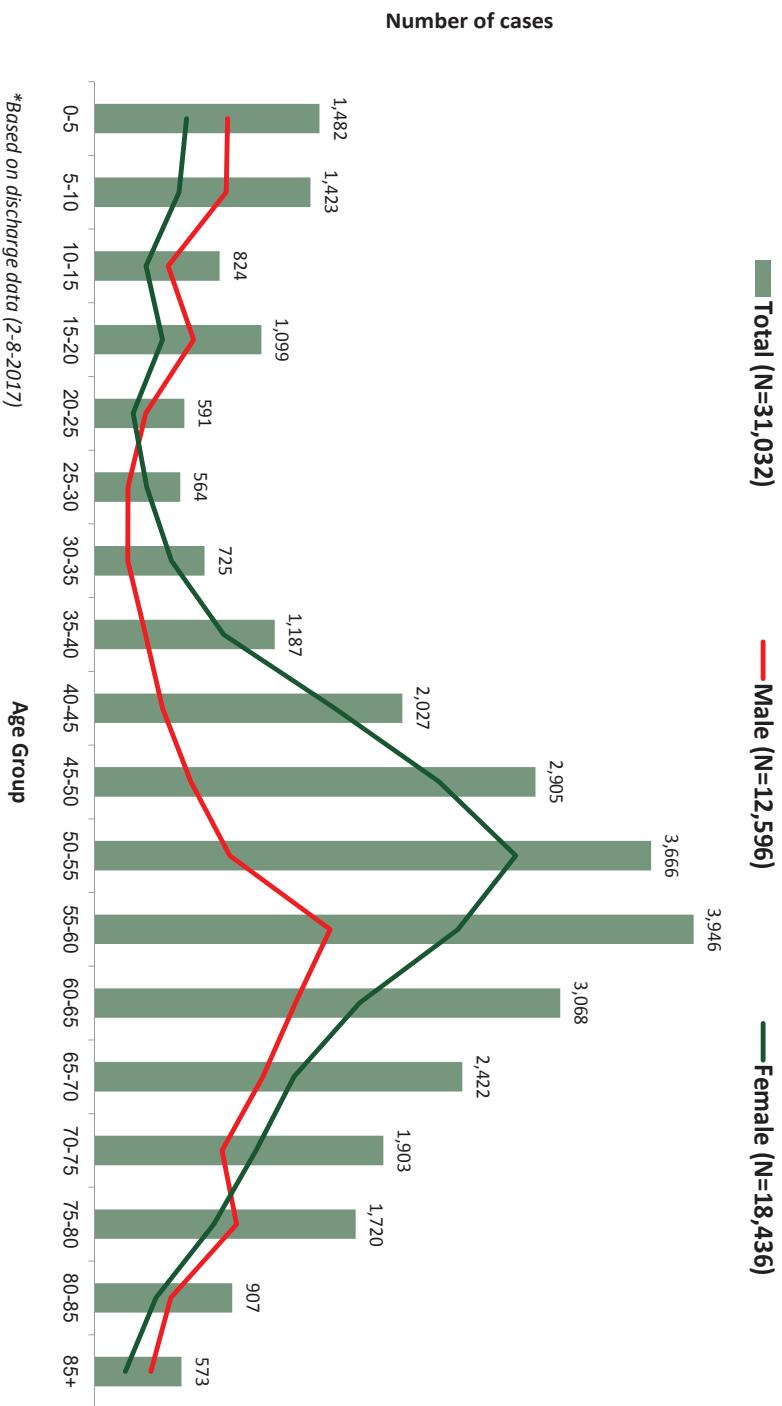
Graph C.8: Total and incident cases benefiting from the DDC* by Qada, 2016



*Drug Dispensing Center

Source: Drug dispensing center database, MOPH.

Graph D.1: MOPH subsidized hospitalized *neoplasms cases by gender and age group, 2016**

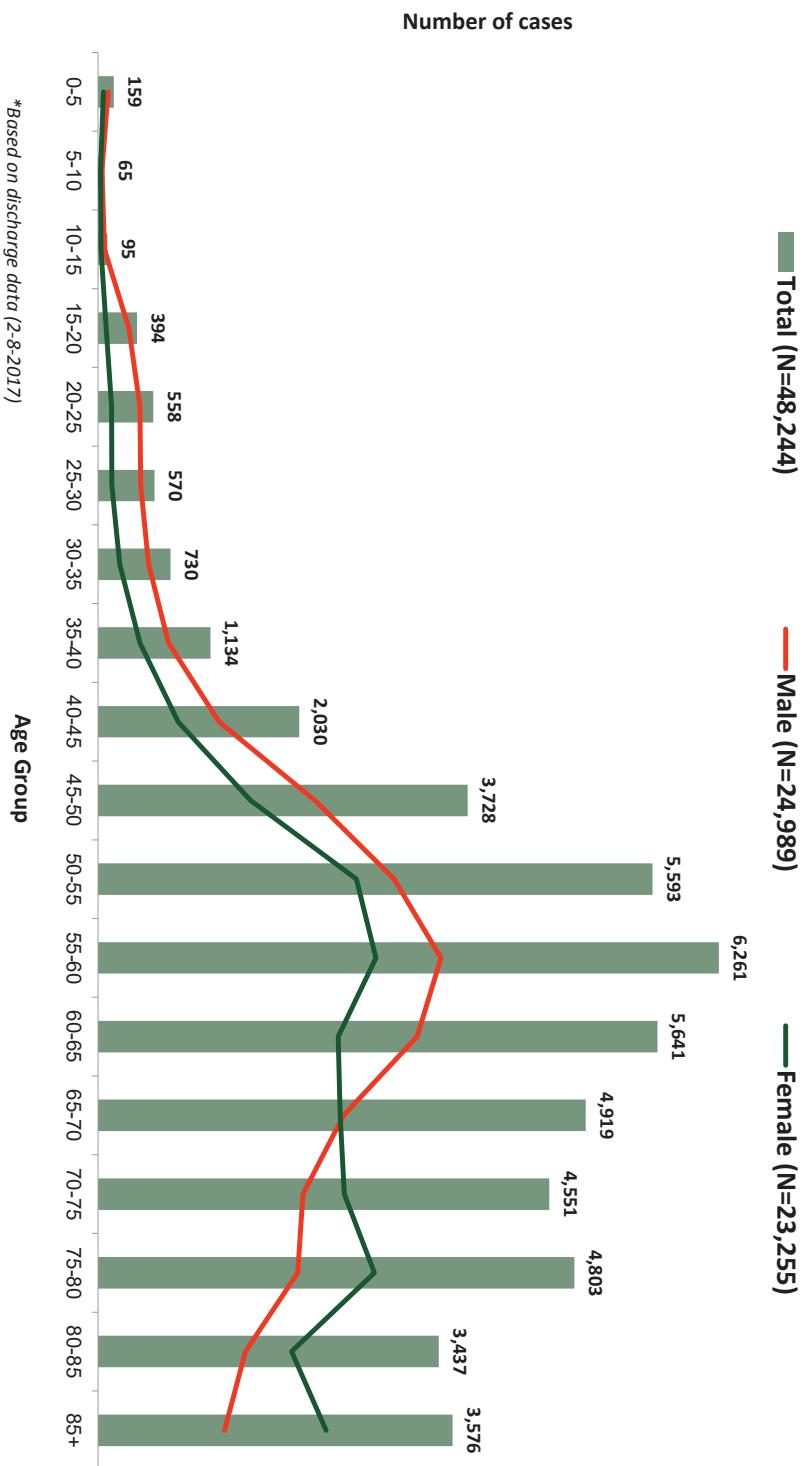


*Based on discharge data (2-8-2017)

**ICD-codes: C00-D48

Source: Hospital billing database, IT department, MOPH.

Graph D.2: MOPH subsidized hospitalized* cardiovascular cases ** by gender and age group, 2016

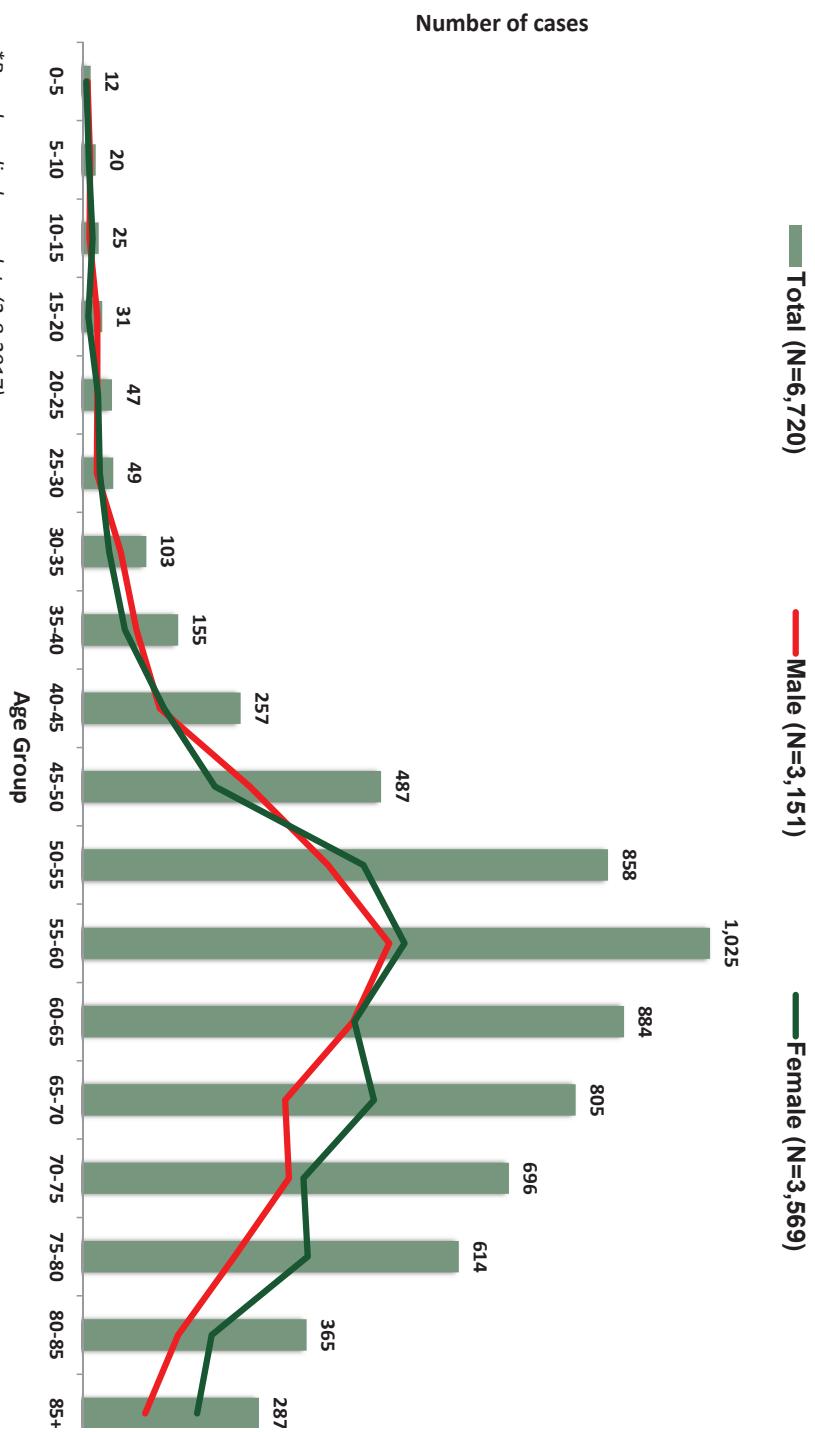


*Based on discharge data (2-8-2017)

**ICD10 codes: I00-I99

Source: Hospital billing database, IT department, MOPH.

Graph D.3: MOPH subsidized hospitalized* diabetes mellitus cases by gender and age group, 2016**

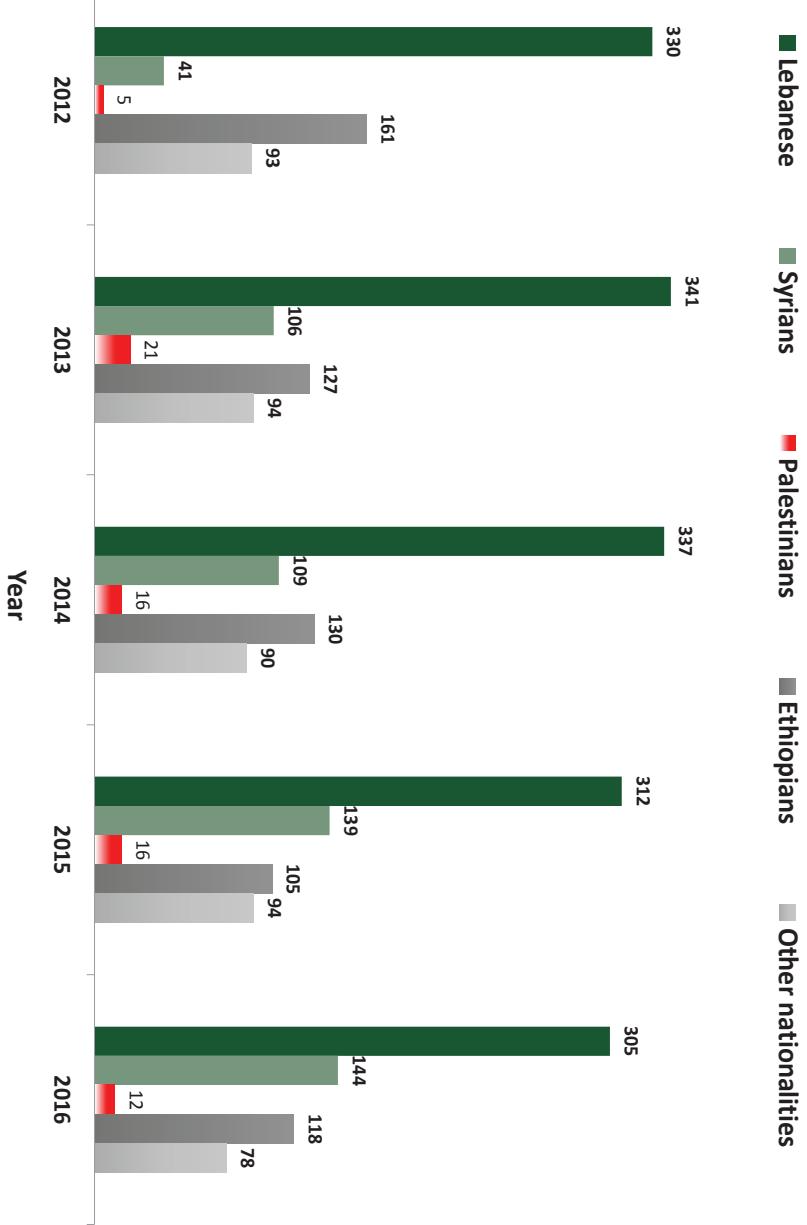


*Based on discharge data(2-8-2017)

**ICD10 codes: E10-E14

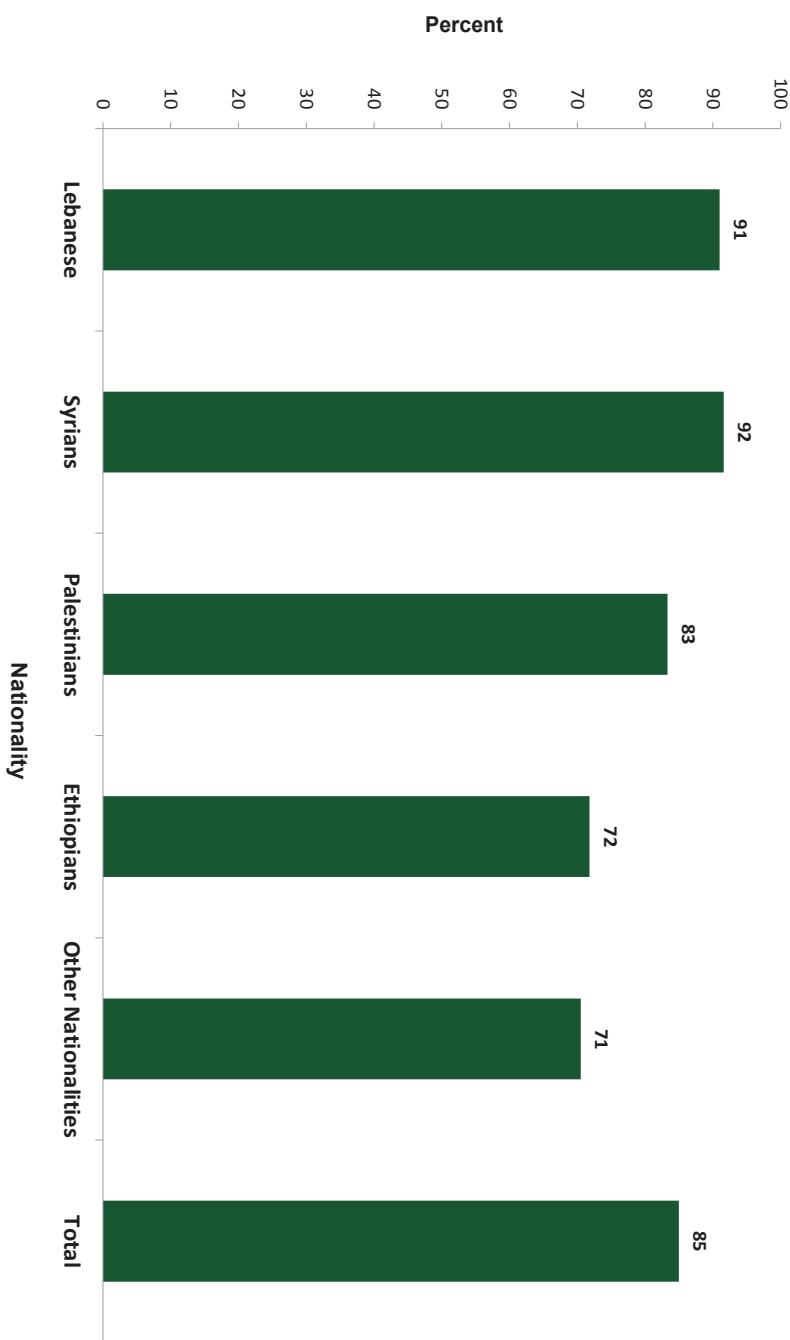
Source: Hospital billing database, IT department, MOPH.

Graph D.4: The trend in tuberculosis cases by nationality between 2012 and 2016



Source: *The National Tuberculosis Program, MOPH.*

Graph D.5: Proportion of tuberculosis treatment success by nationality, 2016



Source: The National Tuberculosis Program, MOPH.

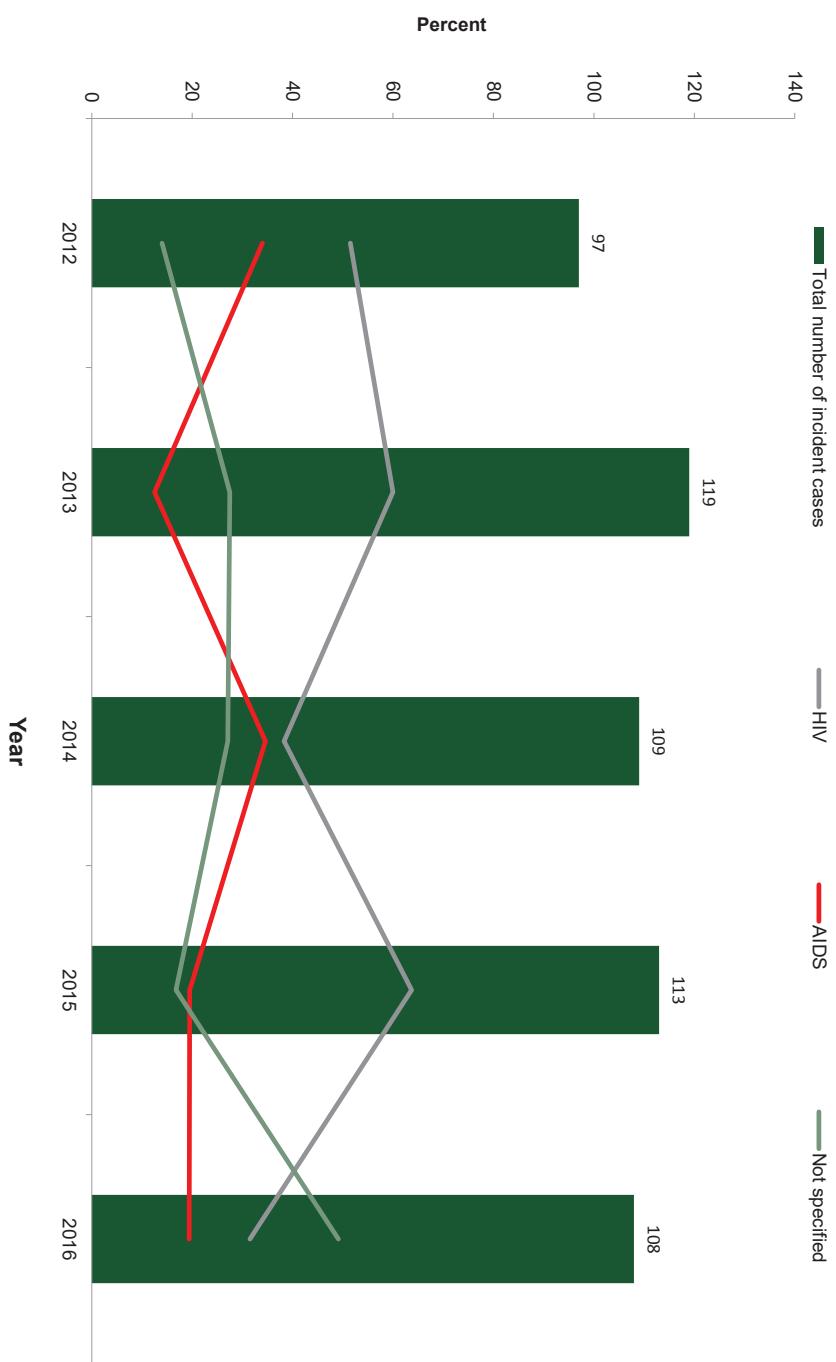
Table D.1: HIV/AIDS estimated incidence in Lebanon, 2016

Number of incident cases in 2016 is 108	
The estimated incidence rate is per 2.47 100,000*	
N (%)	
Stages of the Disease	
HIV	34(31.5%)
AIDS	21(19.4%)
Not specified	53(49.1%)
Gender	
Males	100(92.6%)
Females	8(7.4%)
Age Group	
0-14	0 (0)
15-29	46(42.6%)
30-49	28(25.9%)
>50	7(6.5%)
Unspecified	27(25%)
Mode of Transmission	
Sexual	76(70.4%)
Transfusion	0 (0)
IDU	0 (0)
Perinatal	0 (0)
Not specified	32(29.6%)
Sexual Behavior	
Homosexual	51(47.2%)
Bisexual	2(1.8%)
Heterosexual	14(13%)
Not specified	41(38%)
Travel History	
Yes	19(17.6%)
No	89(82.4%)
ART	
New in 2016	Cumulative
150	980

*Using an estimated population for 2016 of 4,355,913 as denominator.

Source: National AIDS Program (NAP), MOPH

Graph D.6: The trend in incident cases of HIV/AIDS between 2012 and 2016

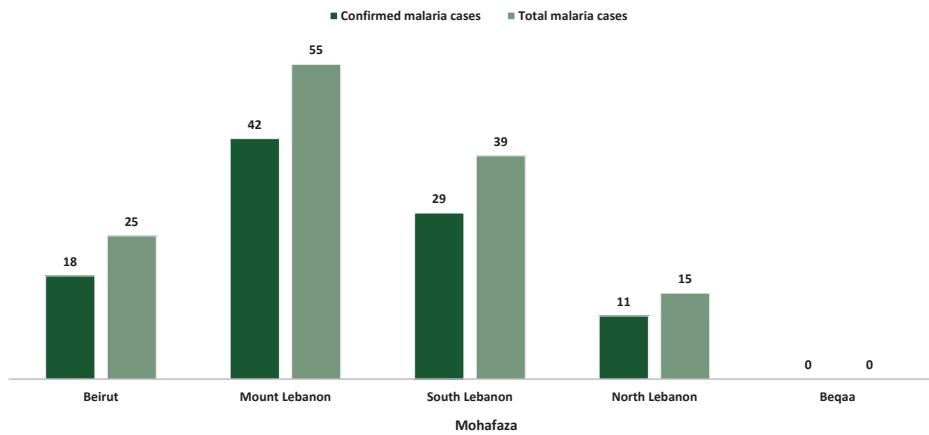


Source: National AIDS Program (NAP), MOPH.

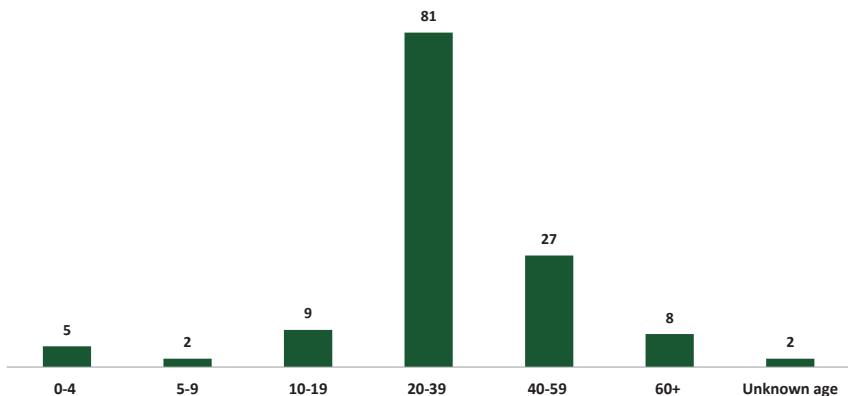
Graph D.7: Reported cases of malaria by gender, 2016



Graph D.8: Confirmed malaria cases by Mohafaza, 2016

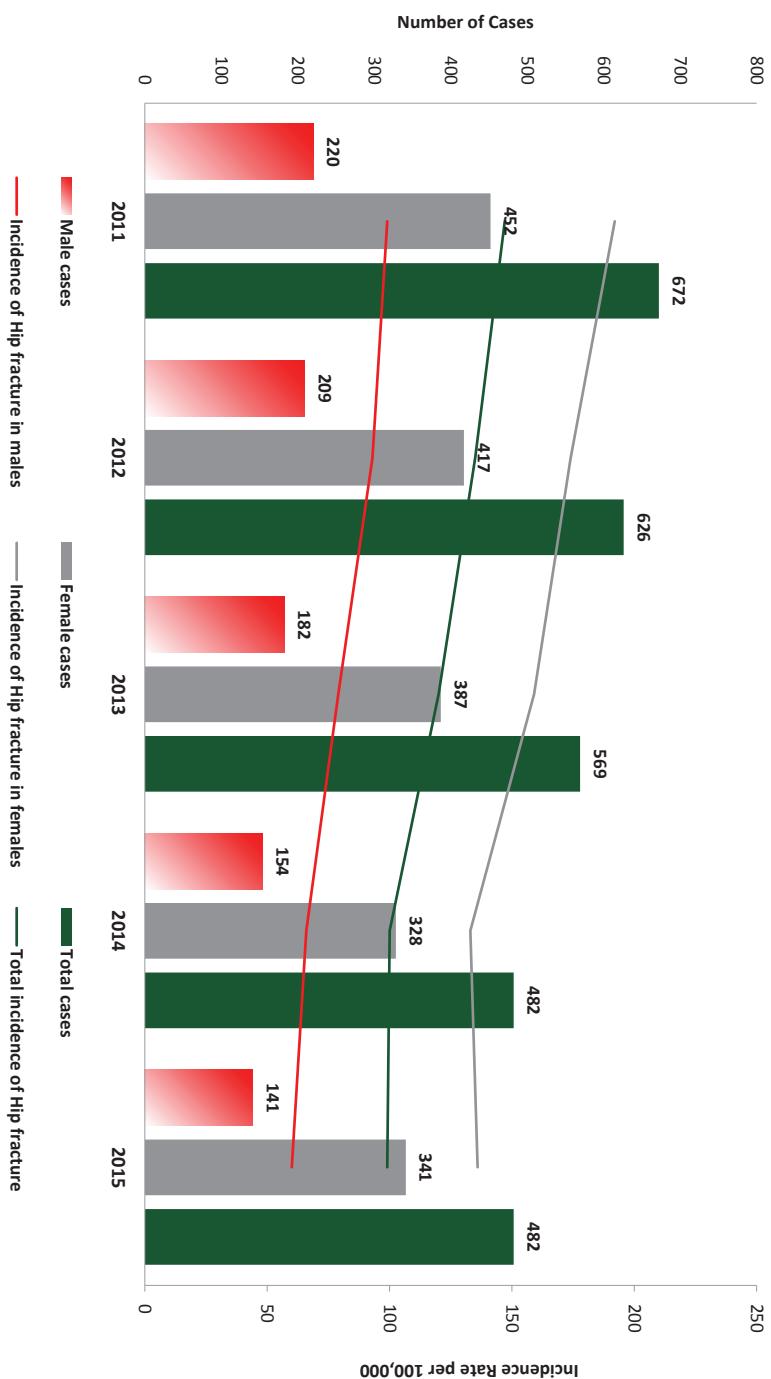


Graph D.9: Reported cases of malaria by age group, 2016



Source: Malaria Eradication Bureau, MOPH.

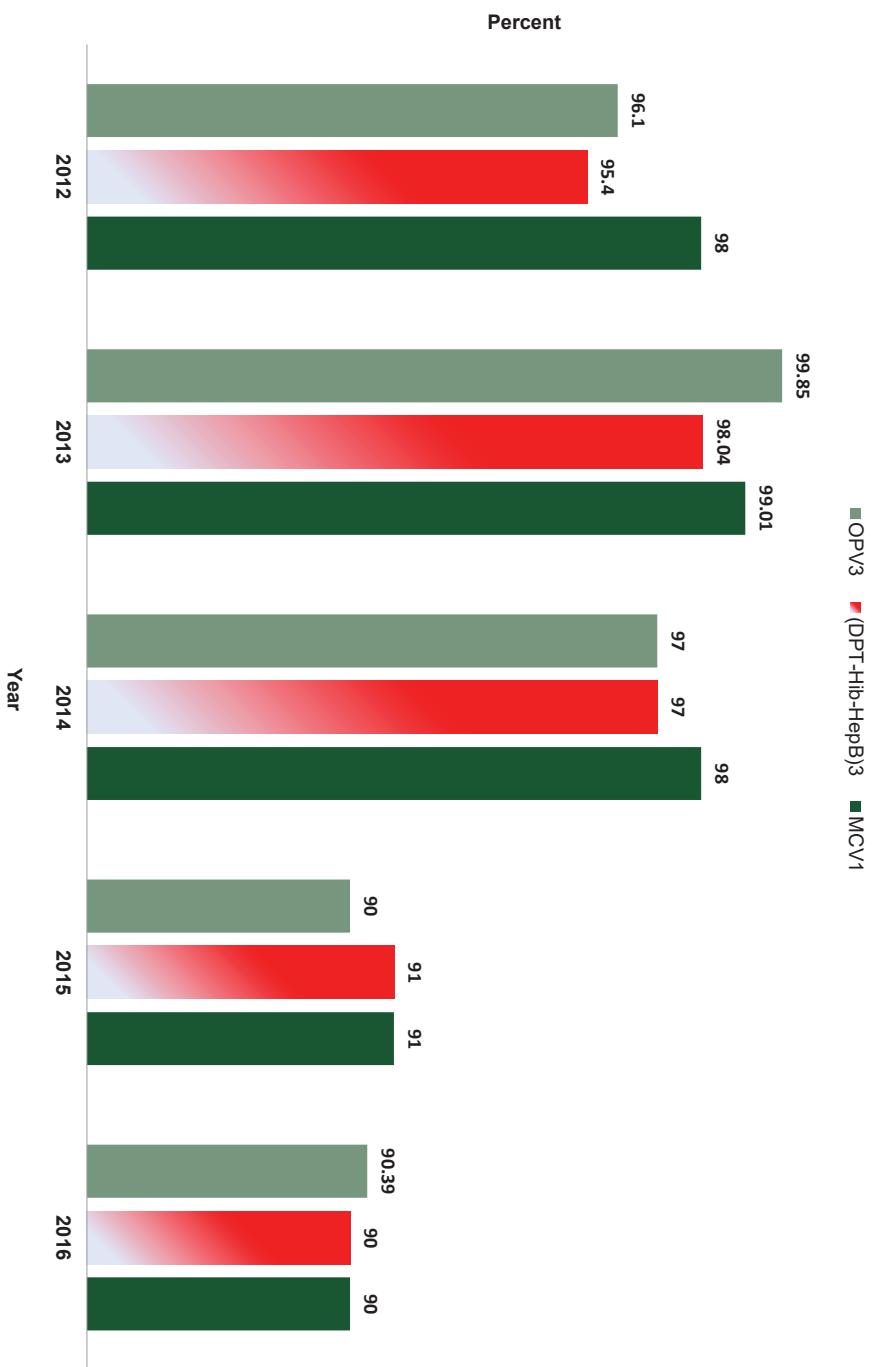
Graph D.10: Hip fracture cases* and incidence rate among MOPH eligible population by gender, 2011-2015



*ICD10 codes: S72.0, S72.1, S72.2

Source: Hospital billing database, IT Department, MOPH

Graph E.1: National immunization coverage rates by polio, measles and pentavalent vaccines, 2012-2016



Source: EPI program, Department of Primary Health Care, MOPH.

Table F.1: Cases of notifiable diseases reported to the MOPH epidemiological surveillance unit by month, 2016

	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Vaccine Preventable Diseases													
Acute Flaccid Paralysis	123	9	9	14	8	10	5	11	14	8	13	15	7
Acute Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	44	2	0	6	4	9	6	3	6	3	3	1	1
Mumps	486	19	51	58	128	108	49	12	15	5	18	14	9
Pertussis	97	6	1	3	8	13	17	15	8	11	5	7	3
Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	12	1	2	0	1	1	0	2	0	0	1	4	0
Tetanus	2	0	0	0	0	0	0	0	0	0	1	0	1
Tetanus neonatal	0	0	0	0	0	0	0	0	0	0	0	0	0
Viral Hepatitis B	367	27	47	31	36	37	22	22	34	25	23	38	25
Food & Water Borne Diseases													
Brucellosis	402	20	13	25	48	48	63	47	53	24	31	17	13
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	0
Dysentery	330	9	13	24	21	21	33	54	61	28	27	22	19
Food Poisoning	524	5	18	22	7	7	92	229	65	49	13	7	12
Hydatic Cyst	11	1	0	1	1	1	0	1	1	1	1	3	1
Parasitic Worms	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichinosis	1	1	0	0	0	0	0	0	0	0	0	0	0
Typhoid Fever	598	33	34	32	44	44	43	50	50	75	105	64	49
Viral Hepatitis A	519	46	26	21	20	20	24	37	35	54	78	93	67
Other Diseases													
Bilharziasis	0	0	0	0	0	0	0	0	0	0	0	0	0
Creutzfeld Jakob Disease	0	0	0	0	0	0	0	0	0	0	0	0	0
Ebola	0	0	0	0	0	0	0	0	0	0	0	0	0
Gonorrhea	0	0	0	0	0	0	0	0	0	0	0	0	0
Leishmaniasis	58	5	6	10	6	4	10	2	0	1	2	6	6
Leprosy	3	0	1	1	0	1	0	0	0	0	0	0	0
Meningitis	458	22	32	49	42	67	42	49	35	46	22	35	17
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0
Syphilis	36	2	4	1	1	4	4	3	3	5	2	6	1
Typhus	11	0	0	0	1	1	3	1	2	1	1	1	0
Viral Hepatitis C	116	0	4	17	10	8	8	6	13	11	15	11	13
Yellow Fever	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: Epidemiological Surveillance Unit, MOPH.

Table F.2: Cases of notifiable diseases reported to the MOPH epidemiological surveillance unit by age groups and gender, 2016

	Total	0-4 years	5-9 years	10-19 years	20-39 years	40-59 years	60+ years	Unknown age	Male	Female	Sex unknown
Vaccine Preventable Diseases											
Acute Flaccid Paralysis	123	15	15	5	2	0	0	86	68	55	0
Acute Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0
Diphtheria	0	0	0	0	0	0	0	0	0	0	0
Measles	44	25	10	3	5	0	0	1	27	17	0
Mumps	486	77	140	184	37	6	1	41	294	191	1
Pertussis	97	82	2	3	0	0	0	10	44	53	0
Rabies	0	0	0	0	0	0	0	0	0	0	0
Rubella	12	6	2	2	2	0	0	0	7	5	0
Tetanus	2	1	0	0	0	0	0	1	2	0	0
Tetanus neonatal	0	0	0	0	0	0	0	0	0	0	0
Viral Hepatitis B	367	1	1	4	199	85	28	49	236	131	0
Food & Water Borne Diseases											
Brucellosis	402	16	18	49	87	64	26	142	204	198	0
Cholera	0	0	0	0	0	0	0	0	0	0	0
Dysentery	330	92	39	29	42	31	45	52	157	173	0
Food Poisoning	524	22	43	87	95	27	10	240	297	216	11
Hydatic Cyst	11	0	1	1	2	2	2	3	8	3	0
Parasitic Worms	0	0	0	0	0	0	0	0	0	0	0
Trichinosis	1	0	0	0	1	0	0	0	1	0	0
Typhoid Fever	598	125	43	83	142	67	60	78	307	291	0
Viral Hepatitis A	519	70	93	200	123	9	2	22	307	212	0
Other Diseases											
Bilharziasis	0	0	0	0	0	0	0	0	0	0	0
Creutzfeld Jakob Disease	0	0	0	0	0	0	0	0	0	0	0
Ebola	0	0	0	0	0	0	0	0	0	0	0
Gonorrhea	0	0	0	0	0	0	0	0	0	0	0
Leishmaniasis	58	9	6	7	6	4	1	25	30	28	0
Leprosy	3	0	0	0	1	0	1	1	2	1	0
Meningitis	458	176	91	79	57	17	34	4	295	161	2
Plague	0	0	0	0	0	0	0	0	0	0	0
Syphilis	36	0	0	1	24	4	0	7	18	18	0
Typhus	11	0	0	1	5	3	0	2	6	5	0
Viral Hepatitis C	116	1	0	2	47	27	23	16	82	34	0
Yellow Fever	0	0	0	0	0	0	0	0	0	0	0

Source: Epidemiological Surveillance Unit, MOPH.

Table F.3: Cases of notifiable diseases reported to the MOPH epidemiological surveillance unit by Mohafaza, 2016

	Total	North	Beqaa	Nabatiyah	South	Mount-Lebanon	Beirut	Unknown
Vaccine Preventable Diseases								
Acute Flaccid Paralysis	123	17	21	14	14	44	10	3
Acute Poliomyelitis	0	0	0	0	0	0	0	0
Diphtheria	0	0	0	0	0	0	0	0
Measles	44	8	10	3	11	12	0	0
Mumps	486	12	162	16	227	57	7	5
Pertussis	97	4	35	4	5	36	7	6
Rabies	0	0	0	0	0	0	0	0
Rubella	12	1	6	1	3	1	0	0
Tetanus	2	0	1	0	1	0	0	0
Tetanus neonatal	0	0	0	0	0	0	0	0
Viral Hepatitis B	367	2	21	13	51	116	33	131
Food & Water Borne Diseases								
Brucellosis	402	25	286	16	26	22	4	23
Cholera	0	0	0	0	0	0	0	0
Dysentery	330	12	84	8	35	160	3	28
Food Poisoning	524	81	128	10	25	237	16	27
Hydatic Cyst	11	0	6	0	1	1	1	2
Parasitic Worms	0	0	0	0	0	0	0	0
Trichinosis	1	0	0	0	0	0	1	0
Typhoid Fever	598	56	121	49	72	218	37	45
Viral Hepatitis A	519	39	284	29	60	69	11	27
Other Diseases								
Bilharziasis	0	0	0	0	0	0	0	0
Creutzfeld Jakob Disease	0	0	0	0	0	0	0	0
Ebola	0	0	0	0	0	0	0	0
Gonorrhea	0	0	0	0	0	0	0	0
Leishmaniasis	58	0	52	0	1	2	0	3
Leprosy	3	0	1	0	0	0	0	2
Meningitis	458	58	50	0	76	193	0	18
Plague	0	0	0	0	0	0	0	0
Syphilis	36	0	2	27	9	6	36	16
Typhus	11	0	0	0	0	5	0	3
Viral Hepatitis C	116	2	2	1	25	18	2	53
Yellow Fever	0	0	0	0	0	0	3	0

Source: Epidemiological Surveillance Unit, MOPH. (on 16-6-2017)

Table G.1: Vital Data Observatory (VDO) statistics* by Qada and nationality, 2016

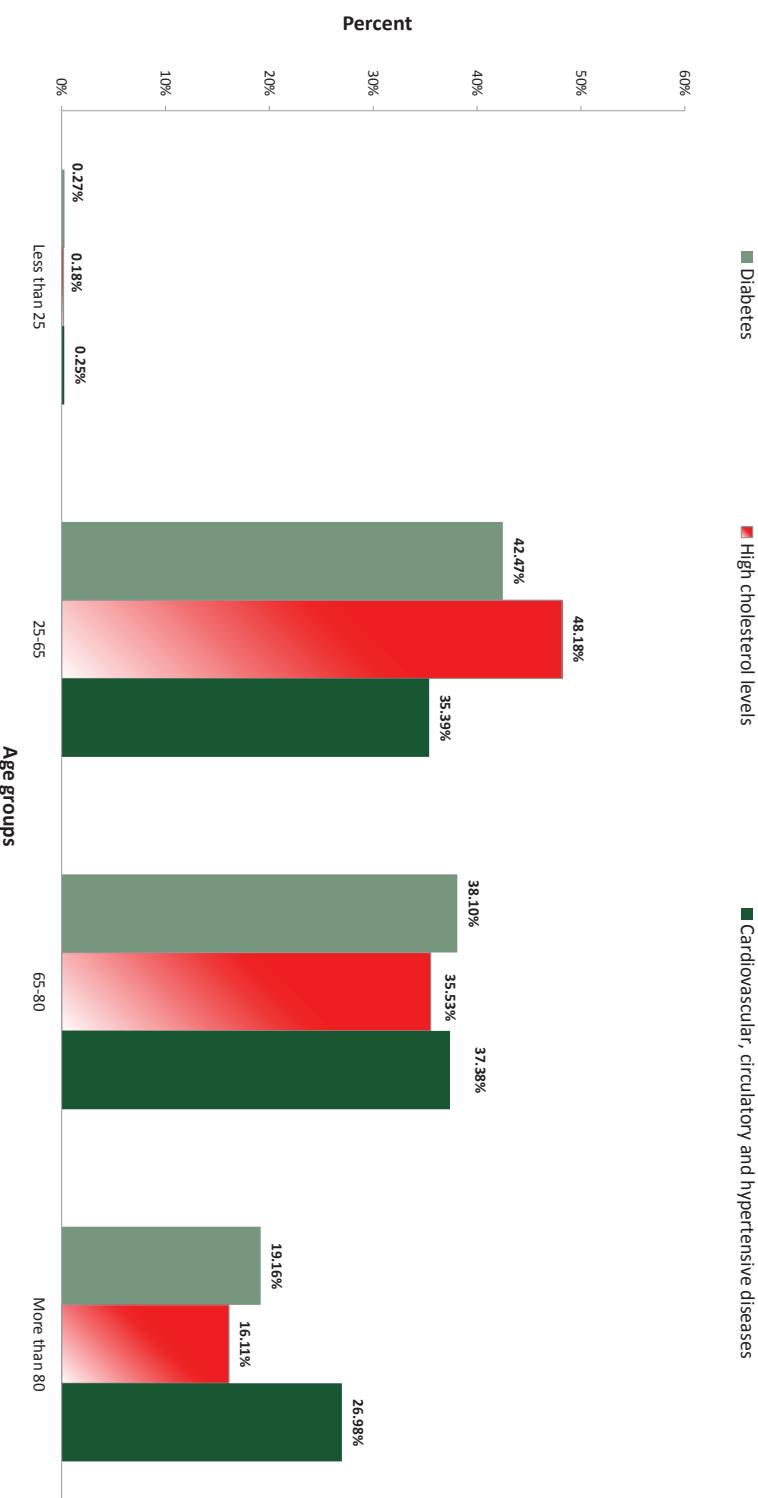
Qada	Deliveries	Vaginal Deliveries			Caesarian Sections			Newborns			Live Births			Live Births less than 2.5 Kg			Birth Defects			StillBirths			Abortions & IUD			Nonnatal Deaths						
		L	NL	L	NL	L	NL	L	NL	L	NL	L	NL	L	NL	L	NL	L	NL	Total	L	NL	L	NL	L	NL						
Unl.																																
Aakkar	5,703	2,373	3,817	1,767	1,886	606	5,764	2,418	5,666	2,348	334	238	64	43	6	1	763	21	12	2	0											
Mintieh-Danniyeh	862	1,827	628	1,394	234	433	870	1,826	859	1,815	59	206	3	2	0	0	195	0	0	0	0	2										
Tripoli	9,479	4,598	5,314	3,440	4,165	1,158	9,428	4,824	9,338	4,780	604	187	62	16	17	6	1,296	20	17	1	1											
Zgharta	1,854	172	691	70	1,163	102	1,912	175	1,896	164	231	28	16	4	2	2	213	10	1	0	0											
Koura	2,008	283	990	169	1,018	124	2,078	301	2,052	296	218	58	2	0	11	2	217	5	0	0	0	0										
Bcharreh	26	42	17	29	9	13	26	42	25	39	2	3	0	0	1	3	0	0	0	0	7	1	0	0	0	0	0	0	0			
Batroun	157	58	61	48	96	10	160	58	157	55	29	20	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	0	0			
Hermel	1,156	642	208	316	948	326	1,151	661	1,139	649	59	54	0	0	7	12	205	2	0	0	0											
Baabdeh	3,429	1,855	784	1,182	2,645	673	3,433	1,935	3,400	1,919	274	201	20	5	3	0	612	25	18	1	0											
Zahléh	5,949	4,835	1,910	3,243	4,039	1,592	5,973	4,969	5,907	4,885	593	494	35	35	11	19	726	14	9	2	3											
Rachaya	315	226	136	168	179	68	315	232	311	222	7	11	1	1	1	8	77	2	2	0	0											
West Beqaa	429	2,941	174	1,822	255	1,119	423	3,000	412	2,950	20	258	0	0	0	0	237	0	0	0	0	1										
Nabatiyeh	3,514	1,191	1,241	720	2,273	471	3,590	1,205	3,559	1,188	186	110	13	20	11	1	387	16	14	0	1											
Hasbayya	150	107	47	64	103	43	153	107	152	106	15	7	0	0	1	1	72	0	0	0	0											
Marijayoun	608	337	236	233	372	104	612	337	607	335	51	18	1	2	1	0	109	0	1	0	0											
Bent Jbayl	793	392	453	313	340	79	798	392	790	382	50	28	5	5	2	4	146	0	0	0	0											
Saida	4,559	5,514	2,048	3,101	2,511	2,413	4,583	5,754	4,516	5,685	499	812	16	42	18	17	968	37	127	2	1											
Sour	3,362	1,860	1,417	1,127	1,945	733	3,552	1,781	3,519	1,744	313	164	9	6	10	18	716	12	14	0	1											
Jbail	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Keserwan	1,268	102	547	80	721	22	1,332	95	1,307	94	176	8	13	0	3	0	126	3	0	1	0											
Matn	1,169	1,263	512	789	657	474	1,202	1,257	1,192	1,237	161	96	9	2	2	13	131	2	4	0	0											
Baabda	4,780	1,679	1,812	923	2,968	756	4,998	1,628	4,969	1,618	525	152	7	1	4	2	543	8	3	0	0											
Aley	9,749	4,457	4,309	2,745	5,440	1,712	10,068	4,456	9,972	4,347	868	406	120	86	10	10	1,889	46	39	1	3											
Chouf	330	1,258	146	957	184	301	338	1,267	338	1,257	16	52	0	3	0	3	105	0	0	0	0											
Beirut	1,175	3,155	521	2,253	654	902	1,182	3,199	1,168	3,109	92	604	4	11	2	29	490	6	35	0	0											
Total	7,287	2,736	3,555	1,837	3,732	889	7,671	2,638	7,585	2,566	826	335	59	7	25	21	1,083	27	1	1	0											
Grand Total	70,111	43,914	31,574	28,780	38,537	15,134	71,592	44,558	70,836	43,791	6,208	4,550	459	291	148	172	11,318	257	297	11	13											

*Previously known as Maternal Neonatal Mortality Notification System (MNMS)

La Libanais; NL=Non-Libanais

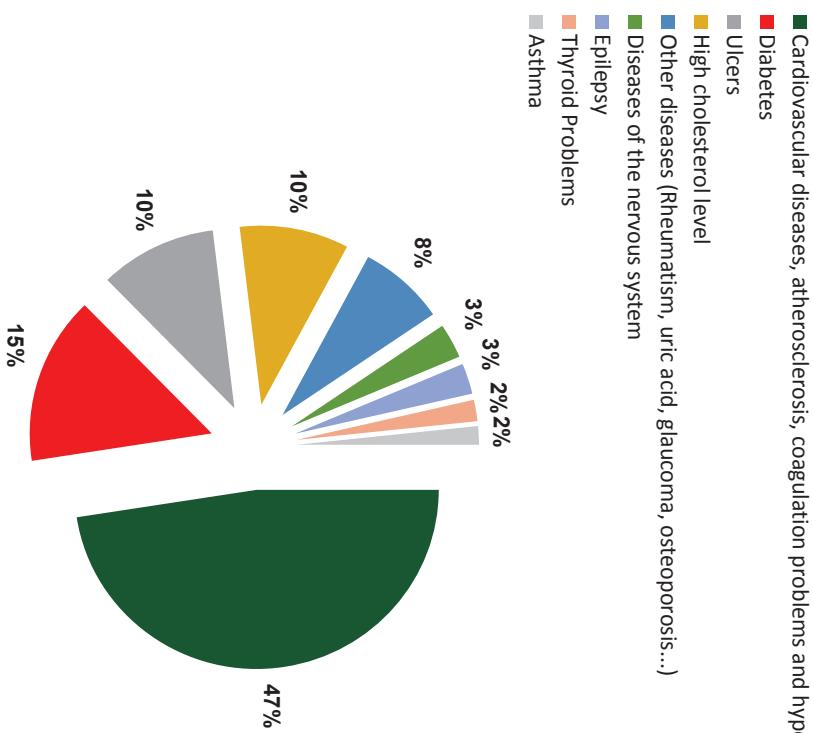
Source: Vital Data Observatory (VDO), MDPH

Graph H.1: Proportion of beneficiaries from the MOPH chronic drugs' program by age group and medical condition, 2016



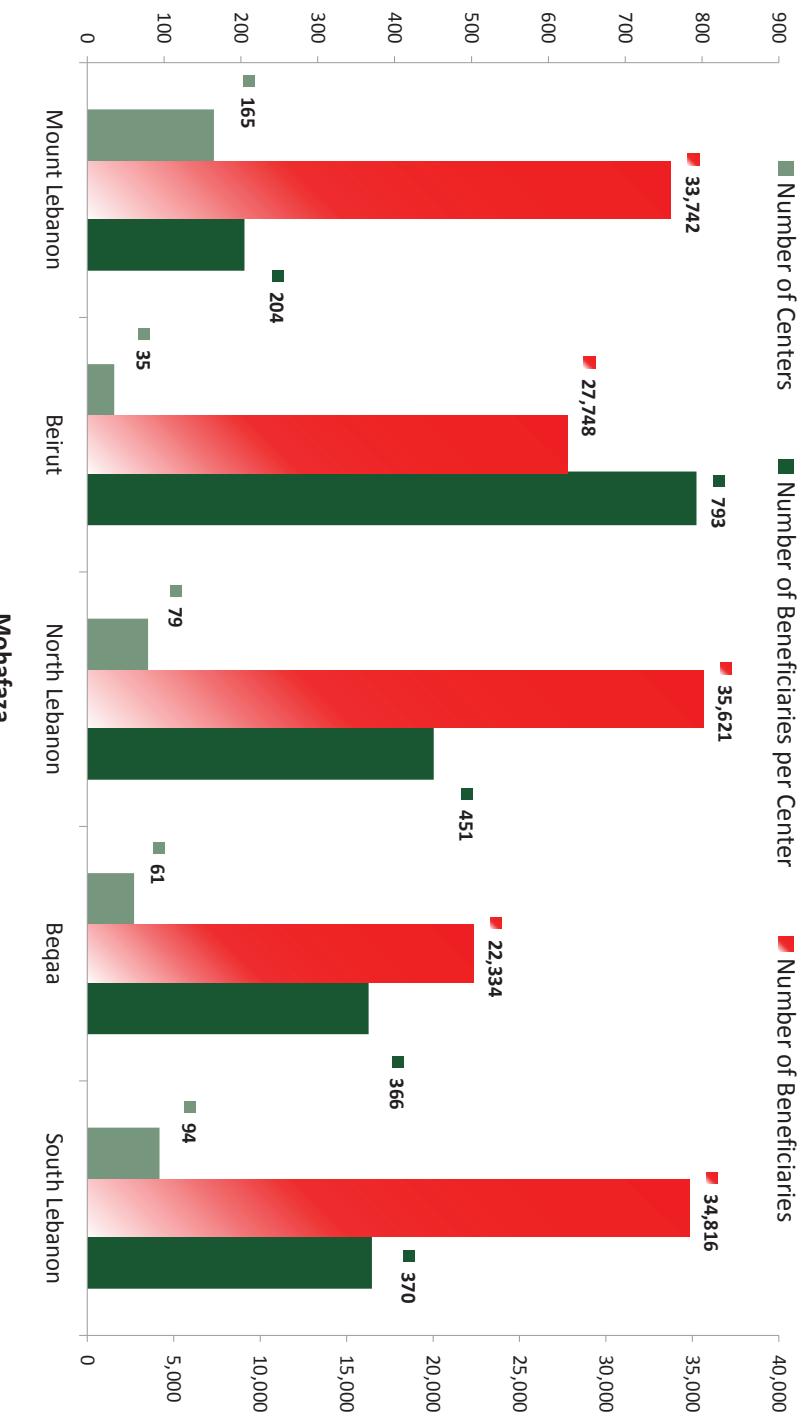
Source: Chronic drugs program, MOPH, YMCA

Graph H.2: Distribution of chronic conditions among users of chronic drugs, 2016



Source: Chronic drugs program, MOPH, YMCA

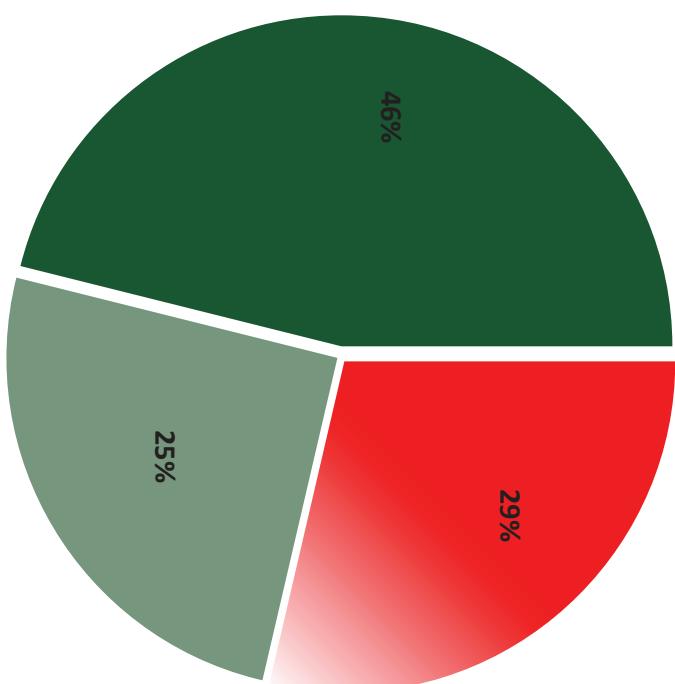
Graph H.3: Socio-medical centers and beneficiaries per center by Mohafaza, 2016



Source: Chronic drugs program, MOPH, YMCA

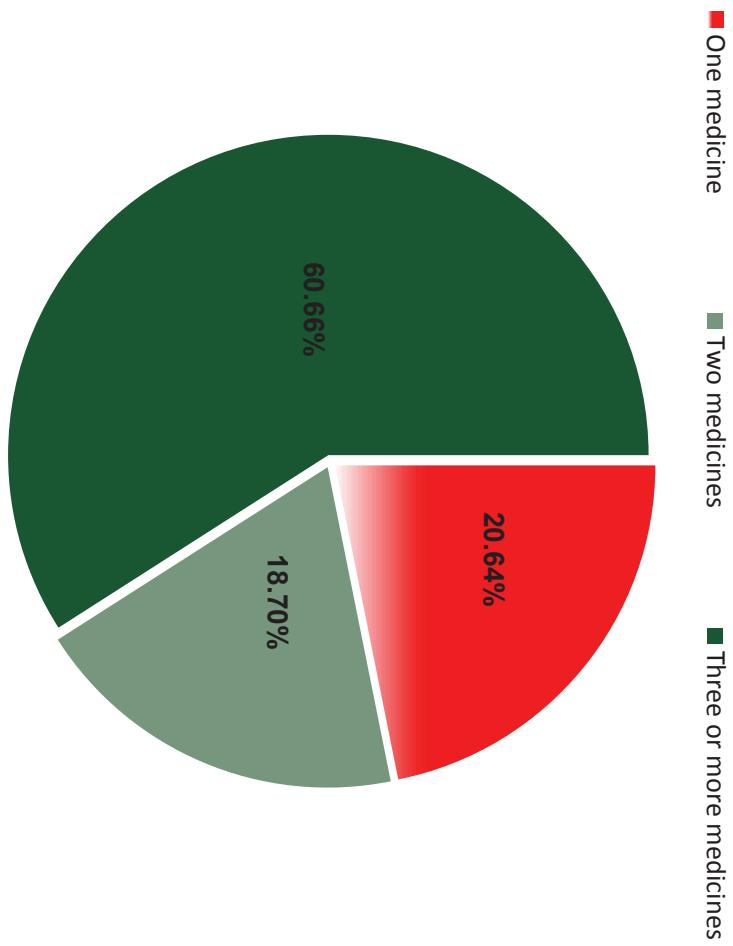
Graph H.4: Proportion of patients suffering from chronic conditions, 2016

■ One chronic condition ■ Two chronic conditions ■ Three chronic conditions or more



Source: Chronic drugs program, MOPH, YMCA

**Graph H.5: Proportion of patients taking medications
2016**



Source: Chronic drugs program, MOPH, YMCA

Table I.1: National health accounts of Lebanon, 2012-Summary table

Amounts in 000 LL

FINANCING IN INTERMEDIARIES	FUNDING SOURCES				EXPENDITURES	
	Households Fees for Services (out of pocket)	Employer Contributions/ Premiums	Treasury Contributions/ Premiums	Extra budgetary Donations / Loans		
Ministry of Public Health					647,220,844	647,220,844
National Social Security Fund	120,608,667	422,130,333	145,005,250		687,744,250	
Civil Servants Cooperative	33,110,290		250,000,000		283,110,290	
Army			240,985,225		240,985,225	
Internal Security Forces			97,870,001		97,870,001	
State Security Forces			9,494,444		9,494,444	
Customs			7,346,716		7,346,716	
General Security Forces			18,445,265		18,445,265	
Private Insurance	446,992,958	292,391,892			739,384,850	
Mutual Funds	128,011,108		31,000,000		159,011,108	
International Organizations				21,793,445	21,793,445	
Households		1,735,230,986			1,735,230,986	
TOTAL	1,735,230,986	728,723,023	714,522,225	1,447,367,745	21,793,445	4,647,637,424
% Total Health Expenditure	37.34	15.68	15.37	31.14	0.47	100
GDP (2012 preliminary figures, MOF)	64,800,000,000					
THE % GDP 2012	7.17					
Public (%)	31.14					
Private (%)	68.39					
Households (Out Of Pocket and contributions)	53.02					
OOP	37.34					
Contributions	15.68					
Employers (contributions)	15.37					
Donors (%)	0.47					

* **USD exchange rate= 1507.5 LBP**

Source: National Health Accounts (NHA 2012), MOPH.

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- His Excellency the Minister of Public Health, *Mr. Ghassan Hasbani*.
- His Excellency the Director General of the Ministry of Public Health, *Dr. Walid Ammar*.

And colleagues at the:

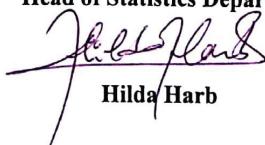
- Directorate of Preventive Health Care.
- Directorate of Medical Care.
- Service of Pharmacy.
- Department of Accounting.
- Department of Health Education.
- Department of Information Technology.
- Department of Primary Health Care.
- Department of Projects & Programs.
- Epidemiological Surveillance Unit.
- Medical Professions Section.
- District Health Departments.
- Drug Dispensing Center (DDC).
- Expanded Program on Immunization.
- National AIDS Control Program.
- National E-Health Program.
- National Tuberculosis Control Program.
- YMCA.
- Malaria Eradication Bureau.
- Ministry of Interior and Municipalities.

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Head of Statistics Department



Hilda Harb