REPUBLIC OF LEBANON
MINISTRY OF PUBLIC HEALTH

الجمهُوريـّة اللبنـانـيـّة
وزارَة الـصـحـّـة الـعـَامـّـة

مقـــــدمـــــة

تسعى وزارة الصحة العامة بشكل دائم إلى تعزيز دورها الريادي في رسم السياسات والخطط المسندة إلى البراهين والهادفة إلى توفير الخدمات الصحية، الوقائية والعلاجية المضمونة الجودة للمواطنين وفقا" لمبادئ الفعالية والعدالة والإنصاف. إلى جانب ذلك، ونظرا لدورها كممول للخدمات الصحية لما يقارب نصف الشعب اللبناني، تحرص الوزارة دائما على ترشيد القرارات المتعلقة بتقديم وتوزيع الخدمات على المستفيدين وفقا" للمعطيات الإحصائية والوبائية. بناء عليه، تندرج هذه النشرة ضمن الجهود التي تبذلها الوزارة لترشيد القرار السياسي وتعزيز الشفافية عبر جمع الإحصاءات الحيوية و المعلومات عن التقديمات الصحية وكيفية توزيع الخدمات على الأراضي اللبنانية كافة.

إن المعلومات المبينة في هذه النشرة هي مستخرجة بمعظمها من قواعد بيانات الوزارة التي عمدنا على رفع مستواها التقني آخذين بعين الاعتبار الموقع الذي تتمتع به الوزارة في النظام الصحي ككل والأهمية القصوى للمعلومات الصحية كواحدة من ركائز النظام الصحي الناجح.

إلى جانب ذلك، لا يجب إغفال دور الأكاديميين والباحثين الصحيين كشركاء أساسيين في القطاع الصحي، والذين تندرج أولى اهتماماتهم بالبيانات الإحصائية حتى يصوبوا توجهاتهم في أبحاثهم ويساهموا مع صانعي القرار في بناء وتطوير القطاع الصحي.

منذ بداية إصدار هذه النشرة في العام 2006، يتزايد الطلب عليها من كافة المعنيين من صانعي القرار والأكاديميين والطلاب، وتتزايد الاقتراحات من ذوي الحاجة والاختصاص، حتى صرنا نشعر بأن نشرها و تطويرها يتعديا الواجبات الإدارية ليصبحا ضرورة وطنية لتطوير النظام الصحي. بناء عليه، نعمد كل سنة إلى إغناء مضمونها من حيث المعلومات الطبية والخدماتية، والمؤشرات الصحية المستجدة تعزيزا" لدور الإحصاءات وتجاوبا مع الحاجة للمعلومات الصحية التي تتزايد يوما بعد يوم.

نذكر بأن هذه النشرة تعرض أيضا"على موقع وزارة الصحة الإلكتروني www.moph.gov.lb،كما نشجع الجميع على زيارة هذا الموقع دوريا" لأهمية المواضيع المنشورة عليه وتعددها، ولمساهمته الكبيرة في تعميم المعرفة الصحية وتعزيز الشفافية والشراكة.

مدير عام وزارة الصحة العامة

د. وليد عمّار

الجمهورية اللبنانية
وزارة الصحة العامة

	Page
Foreword	
Table of Contents	1-2
Summary Tables	
Table 1: Selected Indicators of Lebanon, 2009-2010	3
Table 2: MOPH Itemized Budget for the Past Three Years (Thousands LBP*)	4
Population Data	
Table 3: Number of Registered Births By Month and Qada, 2010	5
Table 4: Number of Births Occurring and Registered in 2010, By Qada	6
Table 5: Number of Registered Deaths By Month and Qada, 2010	7
Table 6: Resident Population* Distribution By Mohafaza and Qada, 2004-2010	8
Table 7: Resident Population* Distribution By Age Group and Gender, 2010	9
Table 8: Resident Population* Distribution By Age Group and Qada, 2010	10
Table 9: Resident Population* Distribution By Age Group, Qada, and Some Basic Indicators, 2010	11
MOPH In-Patient Services Utilization Data	
Graph 1: Number of Hospitals Contracting With The MOPH By Mohafaza and Type, 2010	12
Graph 2: Number of Subsidized In-Patients by Qada of Origin and Hospital Location, MOPH 2010	13
Graph 3: Number of MOPH Patients by Qada of Origin and Type of Hospital, 2010	14
Graph 4: Number of Admissions by Type of Hospital and Location, MOPH 2010	15
Graph 5: The Evolution of MOPH Subsidized Admissions in Public and Private Hospitals Between 2005 and 2010	16
Graph 6: MOPH Subsidized Admissions By ICD10 Categories of Diagnosis, 2010	17
Table 10: MOPH Subsidized Hospital Admissions By Categories of Diagnosis and Gender 2010	18-24
Graph 7: MOPH Subsidized Admissions by Category of Diagnosis and Gender, 2010	25
Graph 8: Number of Diagnoses, Number of Patients, and Morbidity per Patient By Qada, 2010	26
Graph 9: Percent Hospitalized Morbidities Among Eligibles By Age Group and Gender, 2010	27
Graph 10: Percent Population Hospitalized Among Eligible Population By Qada, 2010	28
Epidemiology	
Graph 11: Cases of Neoplasms Subsidized by the MOPH By Age and Gender, 2010	29
Graph 12: The Trend in MOPH Subsidized Hospitalized Cases of **Neoplasms** By Age Group , 2006 - 2010	30
Graph 13: The Trend in MOPH Subsidized Hospitalized *Male* Cases of **Neoplasms** By Age Group, 2006-2010	31
Graph 14: The Trend in MOPH Subsidized Hospitalized *Female* Cases of **Neoplasms** By Age Group, 2006-2010	32
Graph 15: Total Hospitalized Neoplasm Cases and **Percent Malignant out of Total Conditions** By Qada, 2010	33
Graph 16: Percent Breast Ca out of total Female Cancers by Qada, 2010	34
Graph 17: Hospitalized Cases of **Malignant Neoplasms of the Breast** by Age, 2010	35
Graph 18: MOPH Subsidized Hospitalized **Cardiovascular Cases** By Gender and Age Group, 2010	36
Graph 19: Number of MOPH Subsidized **Open Heart Surgeries** By Category, 2010	37
Table 11: **HIV/AIDS** Incidence in Lebanon, 2010	38
Lifetables	
Table 12: Lifetable of the Lebanese Population based on 2009 Estimates	39
Diseases' Surveillance Data	
Table 13: Table Showing The Cases of **Notifiable Diseases** Reported to The MOPH By Month, 2010	40
Table 14: Table Showing The Cases of **Notifiable Diseases** Reported to The MOPH By Age and Gender, 2010	41
Table 15: Table Showing The Cases of **Notifiable Diseases** Reported to The MOPH By Mohafaza, 2010	42

Vaccination	
Table 16: National Immunization Coverage Rates For Polio by Qada, 2010	**43**
Medication for Chronic Illnesses Program: the YMCA Records	
Graph 20: Cumulative Number of Beneficiaries of the YMCA Chronic Drugs Program by Age and Gender, as on December 2010	**44**
Graph 21: Cases of Chronic Conditions*, 2006-2010	**45**
Graph 22: Number of Socio-medical Centers and Number of Beneficiaries Per Center by Mohafaza, YMCA, 2010	**46**
Graph 23: Percent Prevalence of Chronic Conditions Among Users, YMCA 2010	**47**
Drug Dispensing Center Records	
Graph 24: Total Number of Patients Benefiting from the DDC* and New Cases by Qada, 2010	**48**
Graph 25: Total Incidence and Prevalence of Dreadful Diseases among MOPH Eligible Population by Qada, 2010	**49**

For comments and suggestions, please contact:

Hilda Harb
Head of Statistics Department
Ministry of Public Health
Beirut, Lebanon
Tel Number: 01-611390
E-mail: dep-stat@public-health.gov.lb

Table 1: Selected Indicators of Lebanon, 2009-2010

	Unit	2009	2010	Latest figures (year)
Demographic Indicators				
Population Estimate*	1000 citizens	3,891	3,962	3,962 (2010)
Number of Births		88,206	91,795	91,795 (2010)
Number of Deaths		20,858	21,441	21,441 (2010)
Crude Birth Rate	per 1000 mid year pop	22.8	23.2	23.2(2010)
Crude Death Rate	per 1000 mid year pop	5.4	5.4	5.4 (2010)
Population Growth Rate		1.7	1.8	1.8 (2010)
Population by Age				
< 15	percent	24.8	24.6	24.8 (2010)
65+	percent	9.8	9.8	9.8 (2010)
Dependency ratio		52	52	52 (2010)
Unemployment Ratio (for ages 15-64)				9.2 (2007)
Total Fertility Rate				1.9 (2004)
Budgetary Resources Indicators				
Total GPD	Billion Leb. Pounds	52,650		52650 (2009)
Allocated to MOPH from Total Gov Budget	percent	2.7	2.5	2.5 (2010)
Annual Budget of MOPH	Billion Leb. Pounds	439.7	486.7	486.7 (2010)
Annual Budget of MOPH per capita	$US	73.3	82	82 (2010)
National Health Expenditure per capita	$US			460 (2005)
National Health Expenditure as % GDP	percent			8.3 (2005)
Manpower and Physical Resource Indicators	**per 10,000 population**			
Physicians		35.4	30.7	30.7 (2010)
Dentists		13.3	14.3	14.3 (2010)
Pharmacists		12.2	14.6	14.6 (2010)
Nursing and Midwifery Personnel		22.2	23.3	23.3 (2010)
Hospital Beds		34.5	34.5	34.5 (2010)
Coverage with Primary Health Care Indicators				
Infants Fully Immunized-DPT	Percent Immunized	96	94	94 (2010)
Infants Fully Immunized-OPV	Percent Immunized	93	94	94 (2010)
Infants Fully Immunized-Measles	Percent Immunized	93	95	95 (2010)
Infants Fully Immunized-Hepatitis B	Percent Immunized	96	94	94 (2010)
Population with Access to Safe Drinking Water	percent			100 (2004)
Married Women Using Contraceptives	percent			58 (2004)
Health Status Indicators				
Infant Mortality Rate	per 1000 Live Births			16.1 (2004)
Less than five mortality rate	per 1000 Live Births			18.3(2004)
Maternal Mortality Ratio	per 100,000 Live Births			23 (2008)
Selected Morbidity Indicators	**Number of Notified Cases**			
Cholera		0	0	0
Polio		0	0	0
Measles		23	11	11
Diphteria		0	0	0
Tetanus		2	2	2
Neonatal Tetanus		1	0	0
Malaria		47	66	66
AIDS		23	21	21

Sources of Information

Hospital Based reproductive Age Mortality Survey (RAMOS), 2008		
Household Survey 2007, MOSA/CAS		**PapFam 2004, MOSA/CAS**
National Vaccination figures (Public and Private)		**Economic Accounts of Lebanon 2009-Presidency of the Council of Ministers**
Estimated Population from the 2004 and 2007 Household surveys (CAS) in addition to Registered Births and Deaths at Dept of Statistics		
NHA 2004-2005	**National AIDS Program (NAP)**	**Syndicate Figures**
Epidemiological Surveillance Unit	**Malaria Control Program, MOPH**	**Government Budget** ارقام الموازنة العامة

** Excluding Palestenian Camps which gather around **227,000 residents** according to UNRWA latest figures.*

Table 2: MOPH Itemized Budget for the Past Three Years ('000 LBP)

موازنة وزارة الصحة العامة بحسب بنودها للثلاث سنوات الأخيرة (بآلاف الليرات)

	2010	2009	2008	
Hospitalization in private sector	320,000,000	305,000,000	256,000,000	نفقات استشفاء في القطاع الخاص
Public Hopsitals	12,000,000	12,000,000	15,000,000	مستشفيات حكومية
Drugs	91,000,000	66,000,000	52,500,000	ادوية
Contributions to NGOs	12,817,770	12,817,770	12,817,770	مساهمات للقطاع غير الحكومي
Salaries and other employees' benefits	27,472,900	27,522,100	24,052,860	ألمخصصات والرواتب والأجور
Other Expenses	18,593,039	13,936,228	11,047,403	نفقات اخرى
Central Laboratory (Part One)	977,500	948,500	992,192	المختبر المركزي جزء أول
Part Two (Central Lab+MOPH)	3,797,000	1,523,000	1,507,000	الجزء الثاني (وزارة الصحة + المختبر المركزي)
Total MOPH Budget	486,658,209	439,747,598	373,917,225	مجموع موازنة وزارة الصحة العامة
Total Government Budget	19,537,600,000	16,304,000,000	11,475,000,000	مجموع الموازنة العامة
Government Debt	6,860,120,314	6,441,000,000	4,650,000,000	ديون متوجبة الأداء
Total Government Budget Excluding Debt	12,677,479,686	9,863,000,000	6,825,000,000	مجموع الموازنة العامة بدون الديون المتوجبة
MOPH Budget out of Total Government Budget (with debt)	2.49	2.70	3.26	نسبة موازنة وزارة الصحة الى الموازنة العامة/مع خدمة الدين
MOPH Budget out of Total Government Budget (without debt)	3.84	4.46	5.48	نسبة موازنة وزارة الصحة الى الموازنة العامة/ بدون خدمة الدين

Source: Government Budget 2008,2009,2010

المصدر: الموازنة العامة، 2010-2009-2008

The total government budget has increased by almost 20% between 2009 and 2010, while the MOPH budget increase was only 10.67%. The hospitalization coverage which used to consume 72% of the MOPH budget in 2009, forms now 68% of the budget. On the other hand, the budgeted amount for drugs is increasing year after year, and has increased from 15% to 18% of the budget between 2009 and 2010.

الجمهورية اللبنانية
وزارة الصحة العامة

There were registered and reported 91,795 births in Lebanon during the year 2010. It is worth noting that three forms of data flaws are expected. First, there is a delay in registration which might affect the accuracy of the number given in a year. Second flaw refers to the under-reporting which might be due to the understaffed district departments in both the Ministry of Public Health and the Ministry of Interior. And the third flaw, there should always be consideration for the births occurring abroad.

Table 3: Number of Registered Births By Month and Qada, 2010

Qadaa	January	February	March	April	May	June	July	August	September	October	November	December	Total
Akkar	844	806	906	837	705	833	968	880	874	894	796	869	**10212**
Aley	184	167	216	83	328	236	201	180	232	183	195	144	**2349**
Baabda	238	172	169	120	158	112	232	183	192	143	163	178	**2060**
Baalback	685	692	724	86	613	761	671	478	648	610	447	511	**6926**
Batroun	76	87	82	75	67	100	75	68	90	95	49	97	**961**
Bcharri	68	49	80	62	59	60	96	82	234	237	100	145	**1272**
Beqaa gharbi	201	230	265	181	307	218	351	269	202	209	222	227	**2882**
Bint jbeil	353	366	376	315	293	387	382	423	382	346	334	325	**4282**
Chouf	268	290	318	278	336	389	436	381	456	365	291	301	**4109**
Hasbaya	76	85	89	85	85	125	93	117	107	106	87	94	**1149**
Hermel	60	89	154	146	91	91	103	136	140	115	141	148	**1414**
Jbeil	131	142	128	104	128	143	146	140	169	154	116	130	**1631**
Jezzine	87	79	83	92	83	96	110	105	106	87	105	91	**1124**
Kesserouan	108	82	119	101	110	133	147	139	124	114	100	134	**1411**
Koura	71	58	105	69	59	140	77	86	64	63	135	106	**1033**
Marje3yon	246	295	260	241	212	329	344	335	329	340	796	274	**4001**
Menieh-dennieh	353	375	396	279	257	246	380	385	348	397	195	454	**4065**
Metn	188	165	139	130	167	171	193	171	182	151	151	121	**1929**
Nabatieh	266	188	185	235	158	151	218	110	223	106	182	26	**2048**
Rachaya	300	82	124	71	123	86	84	121	74	78	177	76	**1396**
Saida	654	787	775	820	464	769	847	744	862	730	703	863	**9018**
Sour	490	454	523	362	335	419	685	549	518	461	389	570	**5755**
Tripoli	485	517	598	437	406	452	494	563	447	584	431	467	**5881**
Zahle	373	314	299	322	441	415	373	393	266	478	332	354	**4360**
Zgharta	103	83	124	107	97	148	210	190	138	94	113	116	**1523**
Beirut	748	840	645	759	739	759	829	831	700	719	589	846	**9004**
Total	**7656**	**7494**	**7882**	**6397**	**6821**	**7769**	**8745**	**8059**	**8107**	**7859**	**7339**	**7667**	**91795**

Table 4: Number of Births Occurring and Registered in 2010, By Qada

Qadaa	January	February	March	April	May	June	July	August	September	October	November	December	Total
Akkar	561	730	730	685	618	705	842	809	810	837	726	777	8830
Aley	66	104	178	78	193	199	167	153	205	169	175	132	1819
Baabda	73	96	121	93	124	87	169	148	164	127	143	163	1508
Baalback	417	502	629	16	562	632	582	417	529	461	389	421	5557
Batroun	32	43	59	56	51	61	61	62	74	51	47	62	659
Bcharri	24	32	42	33	31	41	48	36	45	70	41	35	478
Beqaa gharbi	87	111	115	127	167	160	187	192	173	168	151	135	1773
Bint jbeil	166	208	242	204	210	280	313	296	311	284	283	288	3085
Chouf	160	189	244	223	289	321	375	336	382	314	259	273	3365
Hasbaya	42	76	61	77	68	96	68	94	100	94	77	90	943
Hermel	60	86	154	129	91	89	101	129	127	110	140	144	1360
Jbeil	64	98	98	82	110	125	128	130	151	137	110	108	1341
Jezzine	25	51	65	58	58	79	90	87	93	67	84	78	835
Kesserouan	41	60	95	81	100	118	132	125	112	108	92	115	1179
Koura	34	34	48	44	49	96	61	62	57	61	61	63	670
Marje3yon	112	175	180	176	178	223	254	269	280	302	726	235	3110
Menieh-dennieh	230	277	266	233	227	214	299	308	287	343	293	297	3274
Metn	81	118	109	118	151	150	174	169	179	149	150	120	1668
Nabatieh	190	159	159	212	146	147	210	109	222	94	180	26	1854
Rachaya	42	47	67	53	61	53	74	75	72	46	82	57	729
Saida	322	455	360	430	464	347	442	389	430	318	391	495	4843
Sour	282	287	357	281	299	353	498	451	472	441	378	482	4581
Tripoli	310	325	413	354	345	376	427	492	426	535	403	440	4846
Zahle	208	226	193	263	375	365	322	307	228	458	286	319	3550
Zgharta	52	73	66	71	64	76	86	96	107	74	79	76	920
Beirut	748	840	645	759	739	759	869	821	846	728	579	858	9191
Total	**4429**	**5402**	**5696**	**4936**	**5770**	**6152**	**6979**	**6562**	**6882**	**6546**	**6325**	**6289**	**71968**

The births of 2010 that were registered in 2010 amount to 71,968. We should not forget, however, that there are still some births that have occurred in 2010 and were not registered yet by the end of the year.

There were 21,441 deaths that were registered and reported during 2010. For the deaths, the same concerns about data flaws of birth reporting and registration stand. With 91, 795 births, the Lebanese population has increased by around 70,000 citizens, some of them might be residing outside the country.

Table 5: Number of Registered Deaths By Month and Qada, 2010

Qadaa	January	February	March	April	May	June	July	August	September	October	November	December	Total
Akkar	122	155	165	123	106	122	120	124	121	136	122	166	**1582**
Aley	60	76	105	54	71	59	88	74	67	68	89	60	**871**
Baabda	75	79	61	44	32	56	56	66	66	66	57	53	**711**
Baalback	9	31	32	29	14	6	24	13	32	44	48	15	**297**
Batroun	43	44	47	36	30	33	34	38	33	32	43	48	**461**
Bcharri	16	19	22	17	12	18	18	24	26	24	30	28	**254**
Beqaa gharbi	38	41	35	39	45	31	34	41	45	51	38	53	**491**
Bint jbeil	59	50	82	56	48	64	64	73	57	73	57	65	**748**
Chouf	103	107	131	91	119	103	96	104	117	100	102	130	**1303**
Hasbaya	28	20	20	25	14	21	17	16	13	23	13	26	**236**
Hermel	18	15	39	29	12	20	20	24	27	28	23	20	**275**
Jbeil	47	52	74	53	47	43	50	58	53	53	60	46	**636**
Jezzine	30	40	48	33	26	37	27	34	31	41	26	31	**404**
Kesserouan	70	71	76	55	56	62	48	63	62	58	76	68	**765**
Koura	32	26	31	39	19	31	24	27	27	42	37	23	**358**
Marje3yon	48	61	59	49	26	46	51	39	56	42	122	59	**658**
Menieh-dennieh	50	53	50	66	51	41	60	35	60	53	45	72	**636**
Metn	99	95	123	97	86	95	99	94	101	88	80	99	**1156**
Nabatieh	30	27	65	49	38	59	61	69	55	23	50	18	**544**
Rachaya	24	16	23	21	32	25	25	25	16	19	30	35	**291**
Saida	162	166	216	167	59	133	146	122	179	169	148	171	**1838**
Sour	77	81	90	102	73	87	79	101	76	96	67	100	**1029**
Tripoli	94	106	135	96	95	100	73	92	108	99	97	97	**1192**
Zahle	91	67	101	77	76	82	61	76	87	85	85	87	**975**
Zgharta	31	32	49	42	24	42	27	44	45	41	31	39	**447**
Beirut	256	269	310	268	270	256	280	264	276	303	222	309	**3283**
Total	**1712**	**1799**	**2189**	**1757**	**1481**	**1672**	**1682**	**1740**	**1836**	**1857**	**1798**	**1918**	**21441**

Table 6: Resident Population Distribution By Mohafaza and Qada, 2004-2010*

Mohafaza	Qaza	Population 2004	Population 2005	Population 2006	Population 2007	Population 2008	Population 2009	Population 2010	Qada%total population
North	Akkar	226,752	230,119	233,546	227,217	234,328	241,012	249,642	6.30
	Minieh Danieh	112,303	113,971	115,668	112,159	115,004	118,293	121,722	3.07
	Tripoli	256,360	260,166	264,040	253,606	257,999	262,470	267,159	6.74
	Zgharta	56,868	57,712	58,572	55,980	56,638	57,403	58,479	1.48
	Koura	55,583	56,408	57,248	54,668	55,077	55,709	56,384	1.42
	Bchirreh	19,872	20,167	20,468	19,725	20,104	20,541	21,559	0.54
	Batroun	40,964	41,572	42,191	40,356	40,749	41,293	41,793	1.05
Total		768,702	780,116	791,732	763,712	779,900	796,722	816,739	**20.62**
Beqaa	Hermel	47,189	47,890	48,603	49,173	50,796	51,913	53,052	1.34
	Baalbeck	187,992	190,783	193,624	196,461	203,671	211,656	218,285	5.51
	Zahleh	141,358	143,457	145,593	145,723	148,384	151,257	154,642	3.90
	Rachaya	28,805	29,233	29,668	30,031	30,710	31,512	32,617	0.82
	West Beqaa	65,860	66,838	67,833	68,477	70,110	72,318	74,709	1.89
Total		471,205	478,202	485,322	489,865	503,671	518,656	533,305	**13.46**
Nabatieh	Nabatieh	99,487	100,964	102,468	110,609	113,244	115,199	116,703	2.95
	Hasbaya	21,000	21,312	21,629	23,408	24,223	25,157	26,070	0.66
	Marjayoun	44,239	44,895	45,564	50,368	53,408	56,333	59,676	1.51
	Bint Jbeil	57,119	57,967	58,830	64,846	68,218	71,703	75,237	1.90
Total		221,844	225,138	228,490	249,231	259,093	268,392	277,686	**7.01**
South	Saida	183,881	186,612	189,390	189,382	196,118	203,010	210,190	5.31
	Sour	194,622	197,512	200,453	197,907	202,400	206,875	211,601	5.34
	Jezzine	22,690	23,027	23,370	23,209	23,789	24,458	25,178	0.64
Total		401,193	407,151	413,213	410,487	422,307	434,343	446,969	**11.28**
Mount Lebanon	Jbeil	84,039	85,287	86,556	83,594	84,588	85,664	86,659	2.19
	Kesrouan	164,808	167,255	169,745	162,555	163,245	163,843	164,489	4.15
	Metn	483,783	490,967	498,278	476,979	477,851	478,737	479,510	12.10
	Baabda	483,973	491,159	498,472	477,299	478,616	480,074	481,423	12.15
	Aley	129,053	130,970	132,920	128,230	129,484	131,025	132,503	3.34
	Chouf	155,901	158,216	160,571	155,817	158,457	161,268	164,074	4.14
Total		1,501,556	1,523,853	1,546,543	1,484,474	1,492,241	1,500,611	1,508,658	**38.08**
Beirut	Beirut	390,499	396,298	402,199	361,366	366,907	372,743	378,464	9.55
Total		390,499	396,298	402,199	361,366	366,907	372,743	378,464	**9.55**
Total Population		3,755,000	3,810,758	3,867,500	3,759,135	3,824,118	3,891,466	3,961,820	**100.00**

*Excluding Palestinian Camps which gather around 227,000 refugees according to the latest UNRWA figures.

It is estimated that in 2010 there were 3,961,820 residents inside the country. The Mohafaza that is populated the most is Mount Lebanon (38.08%) comprising 6 districts, followed by the North (20.62%) with 7 districts. Both Nabatieh and South form 18% of the residents of Lebanon with 7 districts, 13.46% of the Lebanese reside in the Beqaa area in 5 districts, and the least populated area is Beirut (9.55%) considering its being a one-district Mohafaza. According to the latest UNRWA figures, there are 227,000 Palestinian refugees residing inside the camps of Lebanon. Accordingly, there are a total of 4,188,820 inhabitants residing in Lebanon.

Table 7: Resident Population Distribution by Age Group and Gender, 2010*

Age groups	Percent			Population 2010		
	M	F	T	M	F	T
0-4	3.6	3.3	6.9	142,626	130,740	273,366
5-9	4.3	4.1	8.3	168,377	160,454	328,831
10-14	4.9	4.5	9.4	194,129	178,282	372,411
15-19	5.2	4.5	9.8	207,203	179,074	386,277
20-24	5.1	4.7	9.8	202,053	186,206	388,258
25-29	3.9	4.2	8.1	154,511	166,396	320,907
30-34	3.5	3.8	7.4	140,248	151,342	291,590
35-39	3.0	3.7	6.7	118,855	146,587	265,442
40-44	2.7	3.5	6.2	108,158	138,664	246,821
45-49	2.5	3.0	5.6	100,234	118,855	219,089
50-54	2.2	2.5	4.8	88,349	99,046	187,394
55-59	1.8	2.0	3.8	71,313	79,236	150,549
60-64	1.7	2.0	3.7	67,351	79,236	146,587
65-69	1.6	1.7	3.2	63,389	67,351	130,740
70-74	1.4	1.4	2.8	55,465	55,465	110,931
75-79	1.0	0.9	1.9	39,618	35,656	75,275
80-84	0.6	0.6	1.2	23,771	23,771	47,542
85+	0.3	0.2	0.5	11,885	7,924	19,809
Total	**49.4**	**50.6**	**100.0**	**1,957,535**	**2,004,285**	**3,961,820**

***Excluding Palestinian Camps which gather around 227,000 refugees according to the latest UNRWA figures.**

Table 8: Resident Population Distribution by Age Group and Qada, 2010*

Qaza	%	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
Akkar	6.30	17,226	20,721	23,468	24,341	24,466	20,222	18,375	16,727	15,554	13,806	11,809	9,487	9,237	8,239	6,990	4,743	2,996	1,248	249,642
Minieh Danieh	3.07	8,399	10,103	11,442	11,869	11,929	9,860	8,959	8,156	7,584	6,732	5,758	4,626	4,504	4,017	3,408	2,313	1,461	609	121,722
Tripoli	6.74	18,435	22,175	25,114	26,049	26,183	21,641	19,664	17,901	16,645	14,775	12,637	10,153	9,885	8,817	7,481	5,076	3,206	1,336	267,159
Zgharta	1.48	4,035	4,854	5,497	5,702	5,731	4,737	4,304	3,918	3,643	3,234	2,766	2,222	2,164	1,930	1,638	1,111	702	292	58,479
Koura	1.42	3,891	4,680	5,300	5,498	5,526	4,567	4,150	3,778	3,513	3,118	2,667	2,143	2,086	1,861	1,579	1,071	677	282	56,384
Bchirreh	0.54	1,488	1,790	2,027	2,102	2,113	1,746	1,587	1,445	1,343	1,192	1,020	819	798	711	604	410	259	108	21,559
Batroun	1.05	2,884	3,469	3,929	4,075	4,096	3,385	3,076	2,800	2,604	2,311	1,977	1,588	1,546	1,379	1,170	794	502	209	41,793
	20.62																			
Hermel	1.34	3,661	4,404	4,987	5,173	5,199	4,297	3,905	3,555	3,305	2,934	2,509	2,016	1,963	1,751	1,486	1,008	637	265	53,052
Baalbeck	5.51	15,062	18,119	20,520	21,284	21,393	17,682	16,067	14,626	13,600	12,072	10,325	8,295	8,077	7,204	6,112	4,148	2,620	1,091	218,285
Zahleh	3.90	10,671	12,836	14,537	15,078	15,156	12,527	11,382	10,362	9,635	8,552	7,315	5,877	5,722	5,103	4,330	2,938	1,856	773	154,642
Rachaya	0.82	2,251	2,707	3,066	3,180	3,197	2,642	2,401	2,185	2,032	1,804	1,543	1,240	1,207	1,076	913	620	391	163	32,617
West Beqaa	1.89	5,155	6,201	7,023	7,285	7,322	6,052	5,499	5,006	4,655	4,132	3,534	2,839	2,764	2,466	2,092	1,420	897	374	74,709
	13.46																			
Nabatieh	2.94	8,038	9,669	10,950	11,358	11,416	9,436	8,574	7,805	7,257	6,442	5,510	4,427	4,310	3,844	3,262	2,213	1,398	582	116,703
Hasbaya	0.66	1,799	2,164	2,451	2,542	2,555	2,112	1,919	1,747	1,624	1,442	1,233	991	965	860	730	495	313	130	26,070
Marjayoun	1.51	4,118	4,953	5,610	5,819	5,849	4,834	4,392	3,999	3,718	3,300	2,823	2,268	2,208	1,969	1,671	1,134	716	298	59,676
Bint Jbeil	1.90	5,192	6,245	7,073	7,336	7,374	6,095	5,538	5,041	4,688	4,161	3,559	2,859	2,784	2,483	2,107	1,430	903	376	75,237
	7.00																			
Saida	5.31	14,504	17,447	19,759	20,495	20,600	17,026	15,471	14,084	13,096	11,624	9,943	7,988	7,777	6,937	5,886	3,994	2,522	1,051	210,190
Sour	5.34	14,601	17,564	19,892	20,632	20,738	17,141	15,575	14,178	13,183	11,702	10,009	8,041	7,830	6,983	5,925	4,021	2,539	1,058	211,601
Jezzine	0.64	1,737	2,090	2,367	2,455	2,468	2,040	1,853	1,687	1,569	1,392	1,191	957	932	831	705	478	302	126	25,178
	11.28																			
Jbeil	2.19	5,980	7,193	8,146	8,450	8,493	7,020	6,378	5,806	5,399	4,793	4,099	3,293	3,207	2,860	2,427	1,647	1,040	433	86,659
Kesrouan	4.15	11,350	13,653	15,463	16,039	16,121	13,324	12,107	11,021	10,248	9,097	7,781	6,251	6,086	5,428	4,606	3,125	1,974	822	164,489
Metn	12.10	33,088	39,802	45,076	46,755	46,995	38,842	35,294	32,129	29,875	26,518	22,682	18,222	17,743	15,825	13,427	9,111	5,754	2,398	479,510
Baabda	12.15	33,220	39,960	45,256	46,941	47,182	38,997	35,435	32,257	29,994	26,624	22,773	18,295	17,814	15,888	13,481	9,148	5,777	2,407	481,423
Aley	3.34	9,143	10,998	12,456	12,920	12,986	10,733	9,753	8,878	8,255	7,328	6,268	5,035	4,903	4,373	3,710	2,518	1,590	663	132,503
Chouf	4.14	11,322	13,619	15,424	15,998	16,080	13,291	12,077	10,994	10,222	9,074	7,761	6,235	6,071	5,415	4,594	3,118	1,969	820	164,074
	38.08																			
Beirut	9.55	26,115	31,414	35,578	36,902	37,092	30,657	27,857	25,359	23,580	20,930	17,902	14,382	14,004	12,490	10,598	7,191	4,542	1,892	378,464
	9.55																			
TOTAL	100.00	273,366	328,831	372,411	386,277	388,258	320,907	291,590	265,442	246,821	219,089	187,394	150,549	146,587	130,740	110,931	75,275	47,542	19,809	3,961,820

*Excluding Palestinian Camps which gather around 227,000 refugees according to the latest UNRWA figures.

It is well worth noting that the baseline population on which the estimates are calculated was drawn from a Household Survey considering the de-facto population at the time of survey. The births and deaths, however, from which the population increase is calculated belong to all Lebanese including the diaspora; accordingly, the Crude Birth and Death Rates are overestimated in the districts that experience high rates of internal or external migration. Surveys at the district level are needed to defy or confirm the numbers stated.

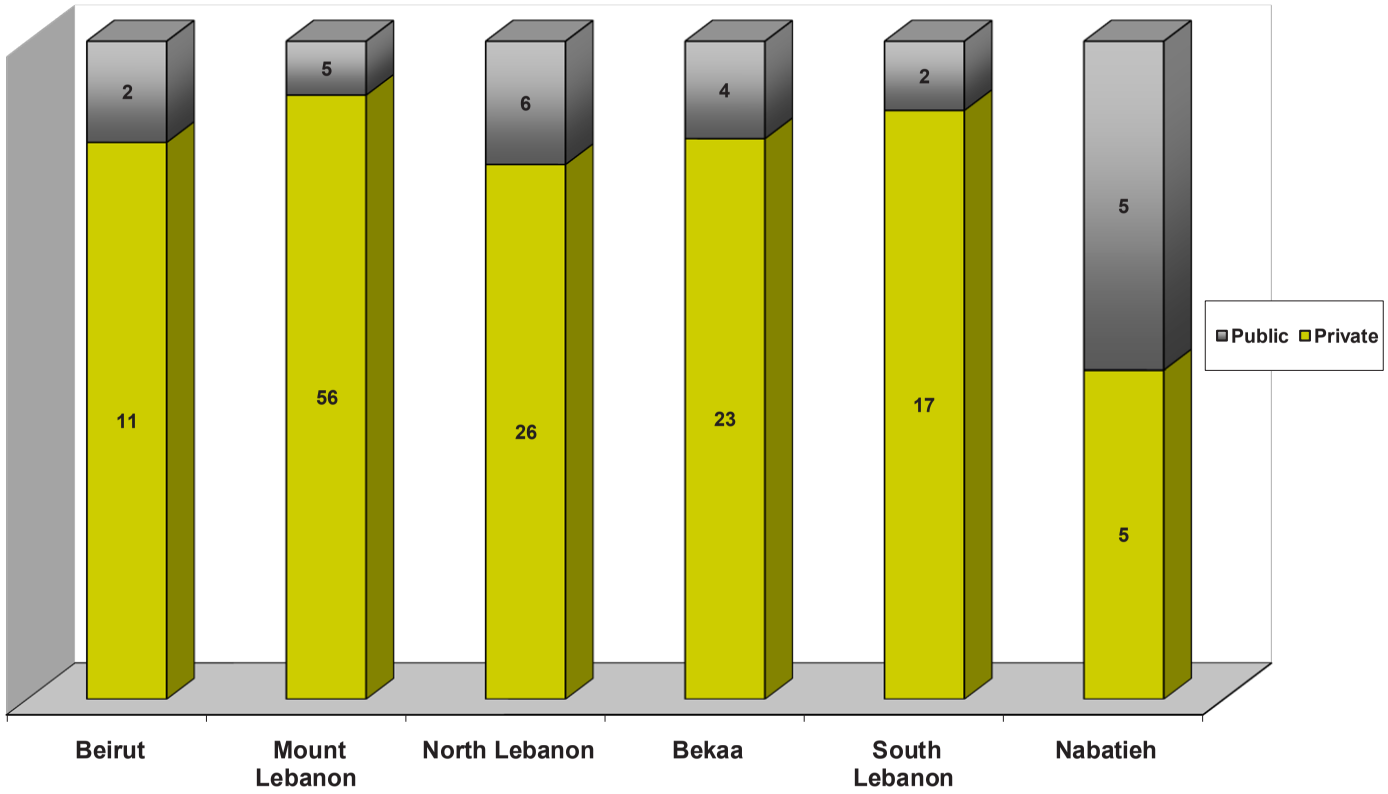
Table 9: Resident Population* Distribution by Age Group, Qada and Some Basic Indicators, 2010

Qaza	0-4	5-9	10-14	<15 years	>65years	Active Population**	Total Population	Births	Deaths	CBR	CDR	NGR
Akkar	17,226	20,721	23,468	61,415	24,217	164,010	249,642	10212	1582	40.91	6.34	3.46
Minieh Danieh	8,399	10,103	11,442	29,945	11,808	79,969	121,722	4065	636	33.40	5.23	2.82
Tripoli	18,435	22,175	25,114	65,725	25,916	175,518	267,159	5881	1192	22.01	4.46	1.76
Zgharta	4,035	4,854	5,497	14,387	5,673	38,420	58,479	1523	447	26.04	7.64	1.84
Koura	3,891	4,680	5,300	13,871	5,470	37,043	56,384	1033	358	18.32	6.35	1.20
Bchirreh	1,488	1,790	2,027	5,304	2,091	14,164	21,559	1272	254	59.00	11.78	4.72
Batroun	2,884	3,469	3,929	10,282	4,054	27,457	41,793	961	461	22.99	11.03	1.20
Hermel	3,661	4,404	4,987	13,051	5,146	34,854	53,052	1414	275	26.65	5.18	2.15
Baalbeck	15,062	18,119	20,520	53,701	21,175	143,409	218,285	6926	297	31.73	1.36	3.04
Zahleh	10,671	12,836	14,537	38,044	15,001	101,597	154,642	4360	975	28.19	6.30	2.19
Rachaya	2,251	2,707	3,066	8,024	3,164	21,429	32,617	1396	291	42.80	8.92	3.39
West Beqaa	5,155	6,201	7,023	18,379	7,247	49,082	74,709	2882	491	38.58	6.57	3.20
Nabatieh	8,038	9,669	10,950	28,656	11,299	76,747	116,703	2048	544	17.55	4.66	1.29
Hasbaya	1,799	2,164	2,451	6,413	2,529	17,127	26,070	1149	236	44.07	9.05	3.50
Marjayoun	4,118	4,953	5,610	14,681	5,789	39,206	59,676	4001	658	67.05	11.03	5.60
Bint Jbeil	5,192	6,245	7,073	18,509	7,298	49,429	75,237	4282	748	56.91	9.94	4.70
Saida	14,504	17,447	19,759	51,710	20,390	138,091	210,190	9018	1838	42.90	8.74	3.42
Sour	14,601	17,564	19,892	52,057	20,526	139,018	211,601	5755	1029	27.20	4.86	2.23
Jezzine	1,737	2,090	2,367	6,194	2,442	16,541	25,178	1124	404	44.64	16.05	2.86
Jbeil	5,980	7,193	8,146	21,319	8,406	56,933	86,659	1631	636	18.82	7.34	1.15
Kesrouan	11,350	13,653	15,463	40,467	15,956	108,066	164,489	1411	765	8.58	4.65	0.39
Metn	33,088	39,802	45,076	117,966	46,515	315,029	479,510	1929	1156	4.02	2.41	0.16
Baabda	33,220	39,960	45,256	118,437	46,701	316,286	481,423	2060	711	4.28	1.48	0.28
Aley	9,143	10,998	12,456	32,598	12,854	87,052	132,503	2349	871	17.73	6.57	1.12
Chouf	11,322	13,619	15,424	40,364	15,916	107,793	164,074	4109	1303	25.04	7.94	1.71
Beirut	26,115	31,414	35,578	93,107	36,713	248,644	378,464	9004	3283	23.79	8.67	1.51
TOTAL	**273,366**	**328,831**	**372,411**	**974,608**	**384,297**	**2,602,916**	**3,961,820**	**91,795**	**21,441**	**23.17**	**5.41**	**1.78**

****Excluding Palestinian Camps which gather around 227,000 refugees according to the latest UNRWA figures.***

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

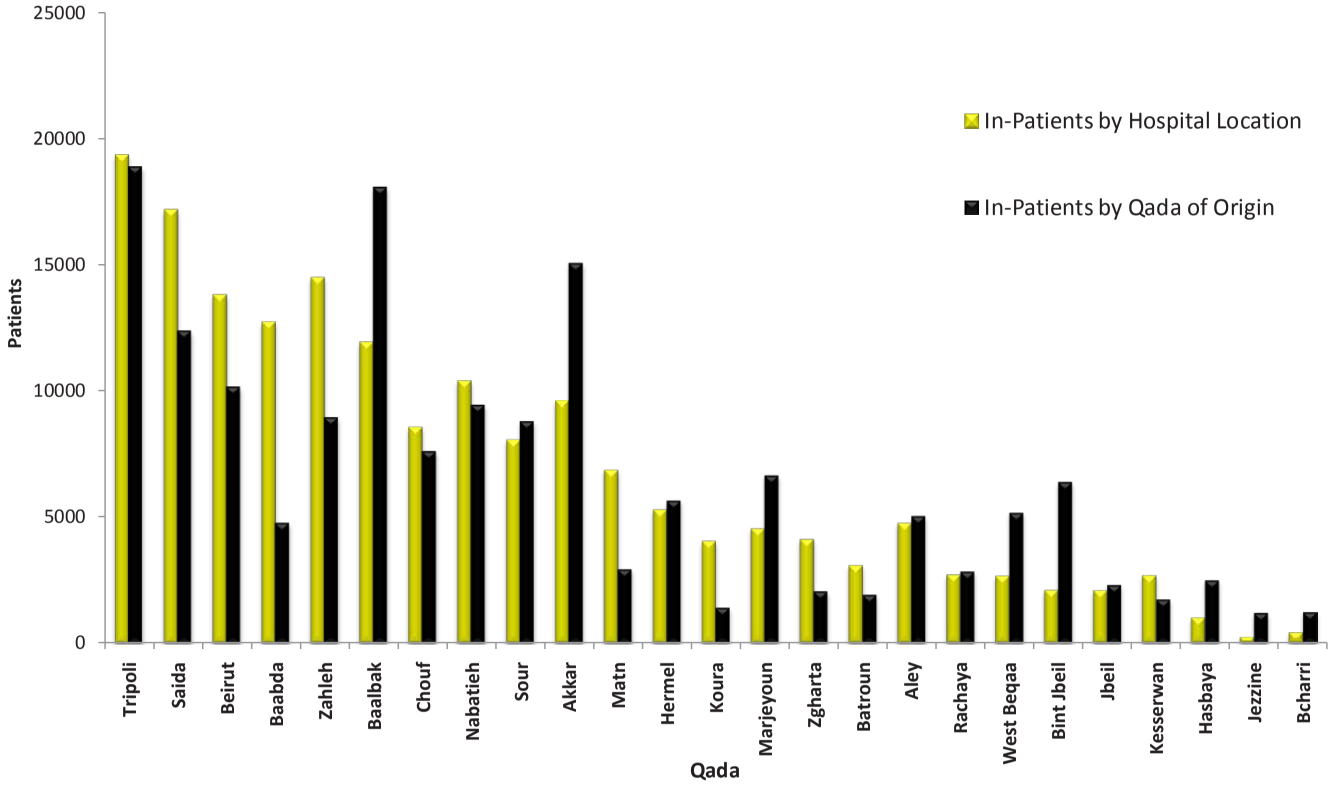
Graph 1: Number of Hospitals Contracting With The MOPH By Mohafaza and Type, 2010



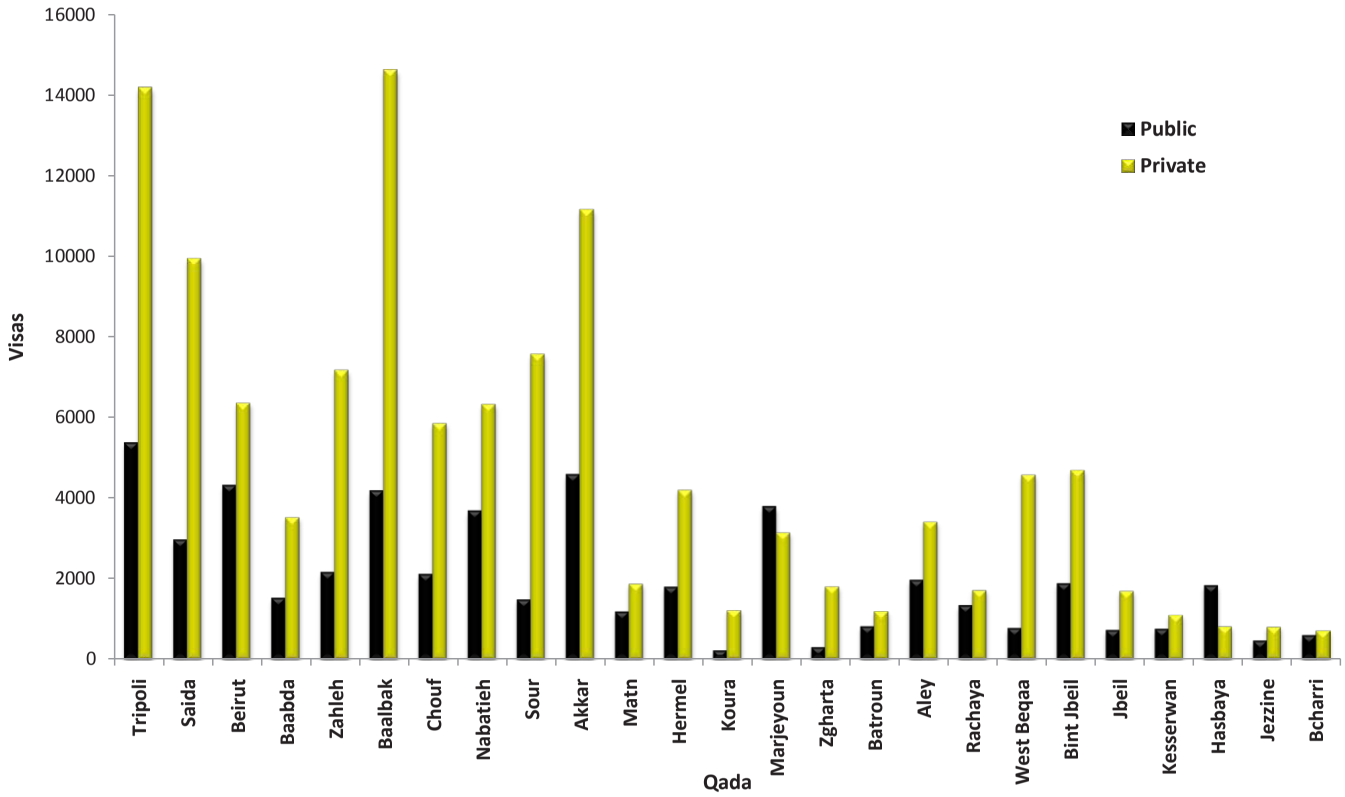
The Ministry of Public Health contracts with both the public and the private hospitals for the services it pays for with the aim of ensuring universal accessibility to services in an equitable distribution. Accordingly, the MOPH issues contracts with 138 private hospitals where the patient share is 15% of the hospital bill, and 24 public hospitals where the patient pays only 5% of the bill.

There are around 163,000 patients that benefited from MOPH hospital coverage in both the public and the private sector. Looking at the distribution of patients, we find that patients' number from a certain district are lower or higher than those seeking services in the hospitals of that same district which might reflect the actual place of residence of the patients. While patients who are originally from Tripoli, Baalback and Akkar were the highest in number; the patients admitted to hospitals in the districts of Tripoli, Saida, Zahleh and Beirut were the highest in number. This gives an idea about the free choice given to patients in choosing the place and provider of services under the MOPH coverage, irrespective of their place of origin and type of hospital.

Graph 2:Number of Subsidized In-Patients by Qada of Origin and Hospital Location, MOPH 2010



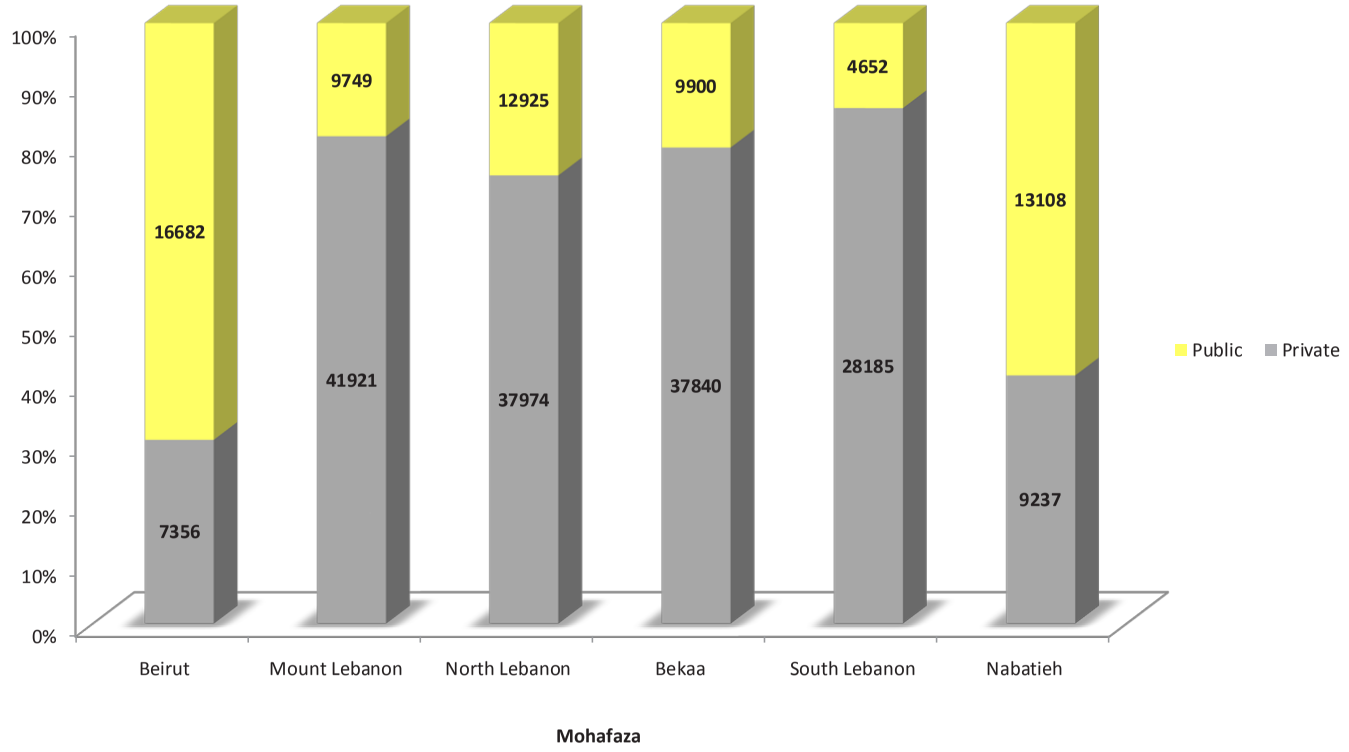
Graph 3: Number of MOPH Patients by Qada of Origin and Type of Hospital, 2010



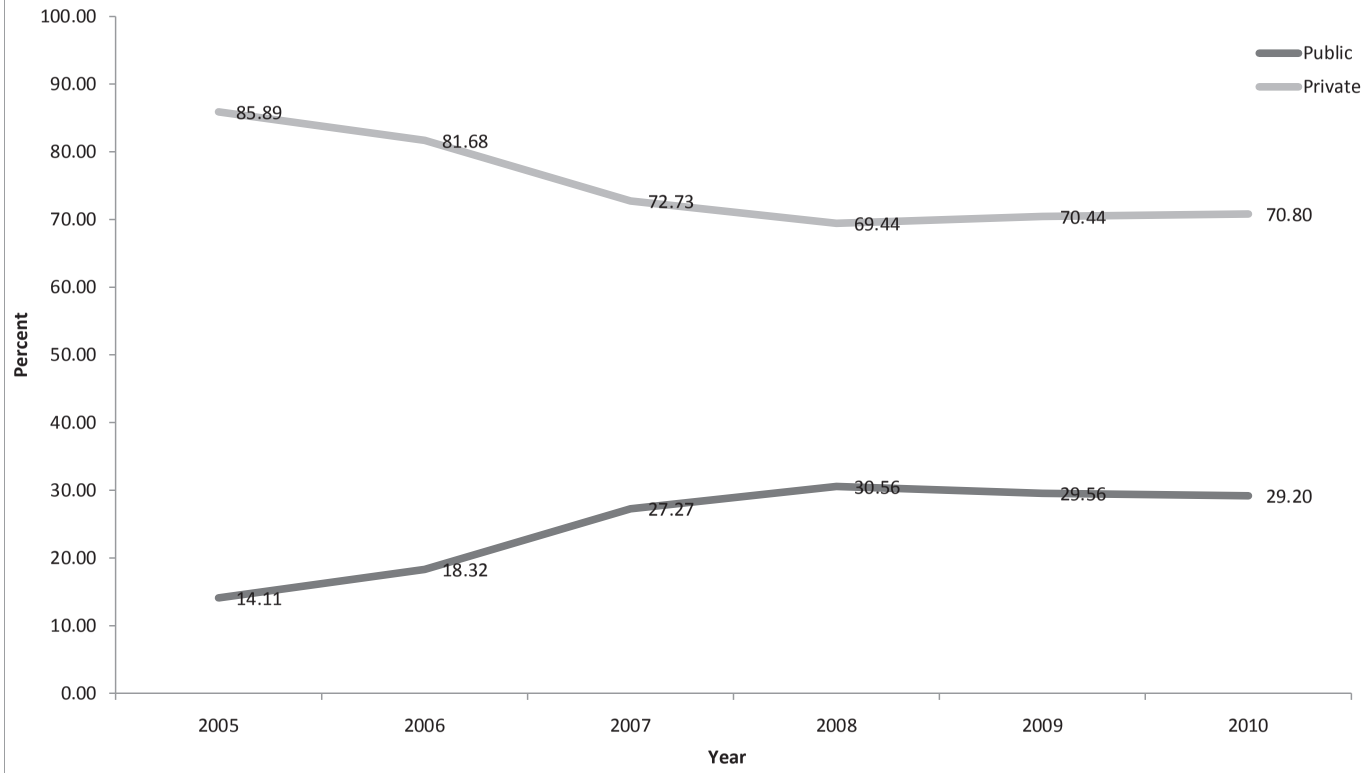
The number of patients who visit private hospitals is higher than the number of those who visit public hospitals. This is due to the fact that the private beds supply are in general higher in number so patients have more choice except in patients from remote districts where public hospitals are the only ones available like in Hasbaya and Marje'youn.

There were 229,529 MOPH subsidized admissions to hospitals during 2010; 162,513 in private hospitals, and 67,016 in public hospitals. As expected, in areas where there are active public hospitals, the number of admissions in public hospitals exceeds that in private hospitals.

Graph 4 : Number of Admissions by Type of Hospital and Location, MOPH 2010



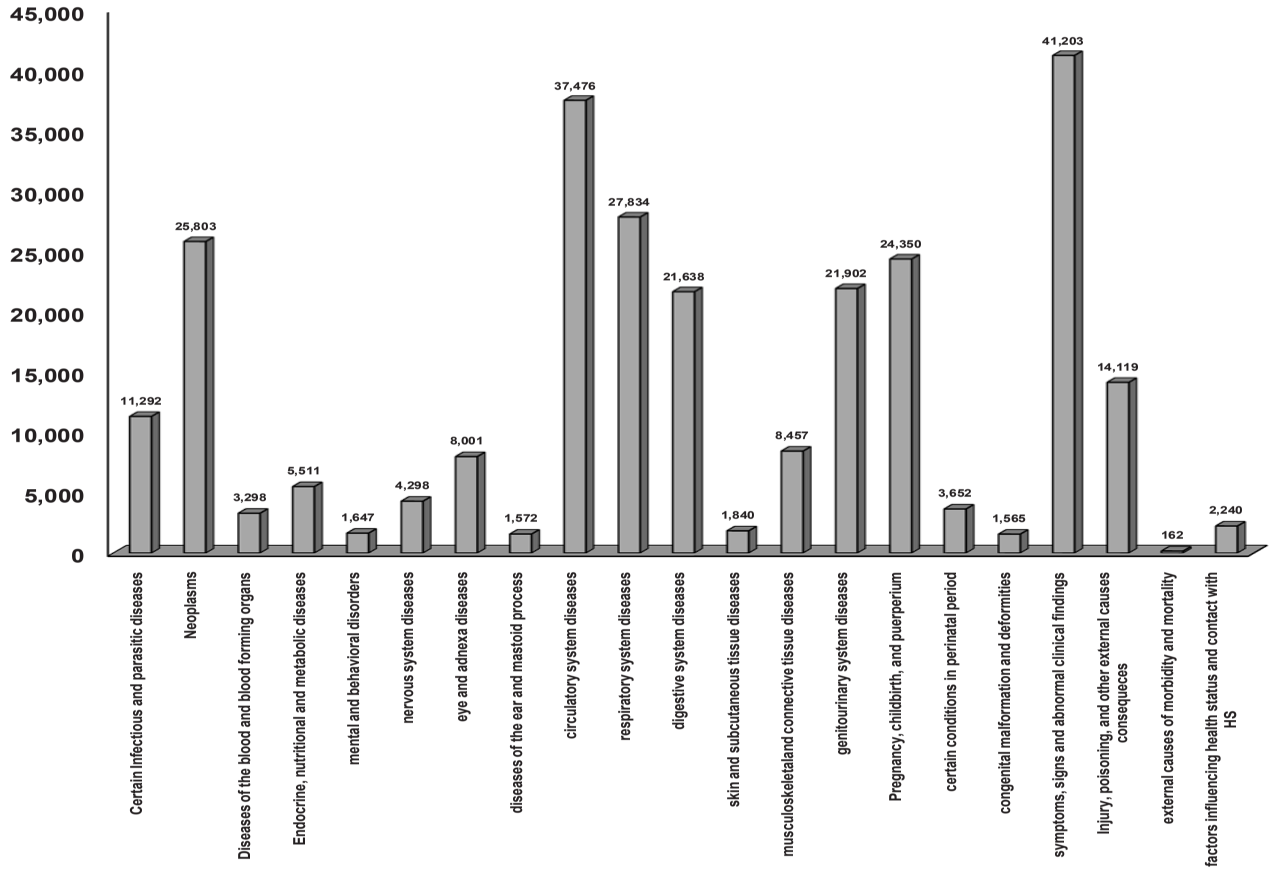
Graph 5: The Evolution of MOPH Subsidized Admissions in Public and Private Hospitals Between 2005 and 2010



Year after year, the public hospitals are continuing to offer an improving quality services, and their admissions have been increasing steadily. But, this increase has reached a plateau revolving around 30/70 ratio with the private sector. This is due to the fact that originally the number of public active beds is lower than that of the private beds in addition to reaching a maximum occupancy rate in the public hospitals.

The majority of the conditions presenting for hospitalizations fall under the circulatory system (37,476), the respiratory system (27,834), followed by neoplasms (25,803), and pregnancy and related conditions (24,350). It is worth mentioning that the trend is the same over the last 3 years in terms of conditions prevalence among subsidized population, although in nominal figures the circulatory conditions have increased from the previous year (35,831 vs. 37,476), while all the above mentioned others have decreased.

Graph 6: MOPH Subsidized Admissions By ICD10 Categories of Diagnosis, 2010



The Ministry of Public Health visa billing system uses the International Classification of Diseases 10th revision (ICD10) coding system. 267,860 ICD10 diagnoses were registered on admissions during 2010. The number of diagnoses issued for females (147,820), exceeds that for males (120,040) in all categories of diagnoses.

Table 10: MOPH Subsidized Hospital Admissions By Categories of Diagnosis and Gender, 2010

ICD10	Codes	Description	M	F	T
Chapter 1	**A00-B99**	**Certain Infectious and Parasitic Diseases**	**M**	**F**	**T**
	A00-A09	Intestinal Infectious Diseases	5,434	4,790	**10,224**
	A15-A19	Tuberculosis	16	12	**28**
	A20-A28	Certain zoonotic bacterial diseases	36	37	**73**
	A30-A49	Other bacterial diseases	297	300	**597**
	A50-A64	Infections with a predominantly sexual mode of transmission	11	8	**19**
	A65-A69	Other spirochaetal diseases	3	4	**7**
	A70-A74	Other diseases caused by chlamydiae	1	1	**2**
	A75-A79	Rickettsioses	4	1	**5**
	A80-A89	Viral Infections of the CNS	12	13	**25**
	A90-A99	Arthropod-borne viral fevers and viral hemorrhagic fevers	4	3	**7**
	B00-B09	Viral Infections characterized by skin and mucous membrane lesions	37	20	**57**
	B15-B19	Viral hepatitis	45	36	**81**
	B20-B24	Human immunodeficiency virus[HIV] disease	10	1	**11**
	B25-B34	Other viral diseases	12	11	**23**
	B35-B49	Mycoses	9	6	**15**
	B50-B64	Protozoal diseases	12	2	**14**
	B65-B83	Helminthiases	7	15	**22**
	B85-B89	Pediculosis, acariasis and other infestations	1	2	**3**
	B90-B94	Sequelae of infectious and parasitic diseases	2	0	**2**
	B95-B97	Bacterial, viral and other infectious agents	8	3	**11**
	B99	Other infectious diseases	32	34	**66**
Total			**5,993**	**5,299**	**11,292**
Chapter 2	**C00-D48**	**Neoplasms**	**M**	**F**	**T**
	C00-C97	Malignant Neoplasms	**9,510**	**13,278**	**22,788**
	C00-C14.8	*lip oral cavity and pharynx*	*223*	*168*	**391**
	C15-C26.9	*digestive organs*	*1,565*	*1,653*	**3,218**
	C30-C39.9	*respiratory and intrathoracic organs*	*1,980*	*789*	**2,769**
	C40-C41.9	*bone and articular cartilage*	*82*	*103*	**185**
	C43-C44.9	*melanoma and other malignant neoplasms of skin*	*81*	*66*	**147**
	C45-C49.9	*mesothelial and soft tissue*	*139*	*94*	**233**
	C50-C50.9	*breast*	*224*	*5,847*	**6,071**
	C51-C58	*female genital organs*	*108*	*1,086*	**1,194**
	C60-C63.9	*male genital organs*	*776*	*91*	**867**
	C64-C68.9	*urinary tract*	*950*	*343*	**1,293**
	C69-C72.9	*eye,brain, and other parts of CNS*	*269*	*166*	**435**
	C73-C75.9	*thyroid and other endocrine glands*	*69*	*150*	**219**
	C76-C80	*ill-defined, secondary, and unspecified sites*	*415*	*481*	**896**
	C81-C96.9	*lymphoid, haematopoietic and related tissue*	*2,625*	*2,239*	**4,864**
	C97	*independent (primary) multiple sites*	*4*	*2*	**6**
	D00-D09	In situ neoplasms	78	113	**191**
	D10-D36	Benign neoplasms	765	1,607	**2,372**
	D37-D48	Neoplasms of uncertain and unknown behavior	194	258	**452**
Total			**10,547**	**15,256**	**25,803**

ICD10	Codes	Description	M	F	T
Chapter 3	**D50-D53**	**Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism**	**M**	**F**	**T**
	D50-D53	Nutritional anaemias	241	335	**576**
	D55-D59	Haemolytic anaemias	517	359	**876**
	D60-D64	Aplastic and other anaemias	561	818	**1,379**
	D65-D69	Coagulation defects, purpura and other haemorrhagic	132	171	**303**
	D70-D77	Other diseases of the blood and blood forming organs	38	41	**79**
	D80-D89	Certain Disorders involving the immune mechanism	56	29	**85**
Total			**1,545**	**1,753**	**3,298**
Chapter 4	**E00-E90**	**Endocrine, Nutritional and metabolic diseases**	**M**	**F**	**T**
	E00-E07	Disorders of thyroid gland	181	864	**1,045**
	E10-E14	Diabetes mellitus	1,351	1,978	**3,329**
	E15-E16	Other disorders of glucose regulation and pancreatic internal secretion	28	44	**72**
	E20-E35	Disorders of other endocrine glands	88	120	**208**
	E40-E46	Malnutrition	13	12	**25**
	E50-E64	Other nutritional deficiencies	3	5	**8**
	E65-E68	Obesity and other hyperalimentation	88	180	**268**
	E70-E90	Metabolic disorders	278	278	**556**
Total			**2,030**	**3,481**	**5,511**
Chapter 5	**F00-F99**	**Mental and Behavioral disorders**	**M**	**F**	**T**
	F00-F09	Organic, including symptomatic, mental disorders	30	56	**86**
	F10-F19	Mental and Behavioral disorders due to psychoactive substance abuse	131	45	**176**
	F20-F29	Schizophrenia, schizotypal and delusional disorders	566	338	**904**
	F30-F39	Mood [affective] disorders	88	83	**171**
	F40-F48	Neurotic, stress-related and somatoform disorders	49	58	**107**
	F50-F59	Behavioral syndromes associated with physiological disturbances and physical factors	9	7	**16**
	F60-F69	Disorders of adult personality and behaviour	6	17	**23**
	F70-F79	Mental retardation	72	62	**134**
	F80-F89	Disorders of psychological development	5	11	**16**
	F90-F98	Behavioral and emotional disorders with onset usually occurring in childhood and adolescence	2	11	**13**
	F99	Unspecified mental disorder	0	1	**1**
Total			**958**	**689**	**1,647**
Chapter 6	**G00-G99**	**Diseases of the nervous system**	**M**	**F**	**T**
	G00-G09	Inflammatory diseases of the central nervous system	120	102	**222**
	G10-G13	Systemic atrophies primarily affecting the nervous system	21	22	**43**
	G20-G26	Extrapyramidal and mood disorders	38	32	**70**
	G30-G32	Other degenerative diseases of the nervous system	30	26	**56**
	G35-G37	Demyelinating diseases of the CNS	53	80	**133**
	G40-G47	Episodic and paroxysmal disorders	867	751	**1,618**
	G50-G59	Nerve, nerve root and plexus disorders	216	457	**673**
	G60-G64	polyneuropathies and other disorders of the peripheral NS	34	35	**69**
	G70-G73	Diseases of myoneural junction and muscle	8	16	**24**
	G80-G83	Cerebral palsy and other paralytic syndromes	569	530	**1,099**
	G90-G99	Others disorders of the nervous system	173	118	**291**
Total			**2,129**	**2,169**	**4,298**

The Ministry of Public Health visa billing system uses the International Classification of Diseases 10th revision (ICD10) coding system. 267,860 ICD10 diagnoses were registered on admissions during 2010. The number of diagnoses issued for females (147,820), exceeds that for males (120,040) in all categories of diagnoses.

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	102	128	**230**
	H10-H13	Disorders of conjunctiva	56	39	**95**
	H15-H22	Disorders of sclera, cornea, iris, and ciliary body	95	91	**186**
	H25-H28	Disorders of lens	2,679	3,433	**6,112**
	H30-H36	Disorders of choroid and retina	117	101	**218**
	H40-H42	Glaucoma	126	134	**260**
	H43-H45	Disorders of vitreous body and globe	156	114	**270**
	H46-H48	Disorders of optic nerve and visual pathways	4	3	**7**
	H49-H52	Disorders of ocular muscles, binocular movement accommodation and refraction	100	96	**196**
	H53-H54	Visual disturbances and blindness	72	67	**139**
	H55-H59	Other disorders of eye and adnexa	152	136	**288**
Total			**3,659**	**4,342**	**8,001**
Chapter 8	**H60-H95**	**Diseases of the ear and mastoid process**	**M**	**F**	**T**
	H60-H62	Diseases of the external ear	132	103	**235**
	H65-H75	Diseases of the middle ear and mastoid	544	455	**999**
	H80-H83	Diseases of the inner ear	92	200	**292**
	H90-H95	Other disorders of ear	22	24	**46**
Total			**790**	**782**	**1,572**
Chapter 9	**I00-I99**	**Diseases of the circulatory system**	**M**	**F**	**T**
	I00-I02	Acute Rheumatic fever	24	33	**57**
	I05-I09	Chronic rheumatic heart disease	100	93	**193**
	I10-I15	Hypertensive diseases	2,963	4,357	**7,320**
	I20-I25	Ischemic heart diseases	10,699	7,154	**17,853**
	I26-I28	circulation	43	38	**81**
	I30-I52	Other forms of heart disease	2,675	3,144	**5,819**
	I60-I69	Cerebrovascular diseases	1,277	1,226	**2,503**
	I70-I79	Diseases of arteries arterioles and capillaries	539	423	**962**
	I80-I89	Diseases of veins,lymphatic vessels and lymph nodes NEC	1,514	858	**2,372**
	I95-I99	Other and unspecified disorders of the circulatory system	109	207	**316**
Total			**19,943**	**17,533**	**37,476**
Chapter 10	**J00-J99**	**Diseases of the respiratory system**	**M**	**F**	**T**
	J00-J06	Acute upper respiratory infections	1,139	862	**2,001**
	J10-J18	Influenza and pneumonia	5,427	4,631	**10,058**
	J20-J22	Other acute lower respiratory infections	1,459	1,156	**2,615**
	J30-J39	Other diseases of upper respiratory tract	3,755	3,290	**7,045**
	J40-J47	Chronic lower respiratory diseases	1,921	1,677	**3,598**
	J60-J70	Lung diseases due to external agents	35	36	**71**
	J80-J84	Other resp. diseases principally affecting interstitium	738	908	**1,646**
	J85-J86	Suppurative and necrotic conditions of lower RT	29	11	**40**
	J90-J94	Other diseases of plura	172	138	**310**
	J95-J99	Other diseases of the respiratory system	249	201	**450**
Total			**14,924**	**12,910**	**27,834**

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	219	225	**444**
	K20-K31	Diseases of oesophagus, stomach and duodenum	1,508	1,911	**3,419**
	K35-K38	Diseases of appendix	967	921	**1,888**
	K40-K46	Hernia	4,103	1,431	**5,534**
	K50-K52	Noninfective enteritis and colitis	863	934	**1,797**
	K55-K63	Other diseases of intestines	1,371	997	**2,368**
	K65-K67	Diseases of peritoneum	178	192	**370**
	K70-K77	Diseases of liver	275	232	**507**
	K80-K87	Disorders of gallbladder, biliary tract and pancreas	1,510	3,216	**4,726**
	K90-K93	Other diseases of the digestive system	325	260	**585**
Total			**11,319**	**10,319**	**21,638**
Chapter 12	**L00-L99**	**Diseases of the skin and subcutaneous tissue**	**M**	**F**	**T**
	L00-L08	Infections of the skin and subcutaneous tissue	735	484	**1,219**
	L10-L14	Bullous disorders	2	2	**4**
	L20-L30	Dermatitis and eczema	8	12	**20**
	L40-L45	Papulosquamous disorders	10	1	**11**
	L50-L54	Urticaria and erythema	26	27	**53**
	L55-L59	tissue	1	1	**2**
	L60-L75	Disorders of skin appendages	25	16	**41**
	L80-L99	Other disorders of the skin and subcutaneous tissue	264	226	**490**
Total			**1,071**	**769**	**1,840**
Chapter 13	**M00-M99**	**Diseases of the musculoskeletal system and connective tissue**	**M**	**F**	**T**
	M00-M25	Arthropathies	**1,367**	**1,871**	**3,238**
	M0-M03	*infectious arthropathies*	*13*	*12*	**25**
	M05-M14.8	*inflammatory polyarthropathies*	*295*	*563*	**858**
	M15-M19.9	*arthrosis*	*386*	*637*	**1,023**
	M20-M25.9	*other joint disorders*	*673*	*659*	**1,332**
	M30-M36	Systemic connective tissue disorders	**39**	**67**	**106**
	M40-M54	Dorsopathies	**1,151**	**1,915**	**3,066**
	M40-M43.9	*deforming dorsopathies*	*25*	*33*	**58**
	M45-M49.8	*spondylopathies*	*101*	*134*	**235**
	M50-M54.9	*other dorsopathies*	*1,025*	*1,748*	**2,773**
	M60-M79	Soft tissue disorders	**495**	**659**	**1,154**
	M60-M63.8	*disorders of muscles*	*75*	*70*	**145**
	M65-M68.8	*disorders of synovium and tendon*	*141*	*319*	**460**
	M70-M79.9	*other soft tissue disorders*	*279*	*270*	**549**
	M80-M94	Osteopathies and chondropathies	**472**	**371**	**843**
	M80-M85.9	*disorders of bonedensity and structure*	*157*	*152*	**309**
	M86-M90.8	*other osteopathies*	*285*	*180*	**465**
	M91-M94.9	*chondropathies*	*30*	*39*	**69**
	M95-M99	Other disorders of the musculoskeletal system and connective tissue	**23**	**27**	**50**
Total			**3,547**	**4,910**	**8,457**

The Ministry of Public Health visa billing system uses the International Classification of Diseases 10th revision (ICD10) coding system. 267,860 ICD10 diagnoses were registered on admissions during 2010. The number of diagnoses issued for females (147,820), exceeds that for males (120,040) in all categories of diagnoses.

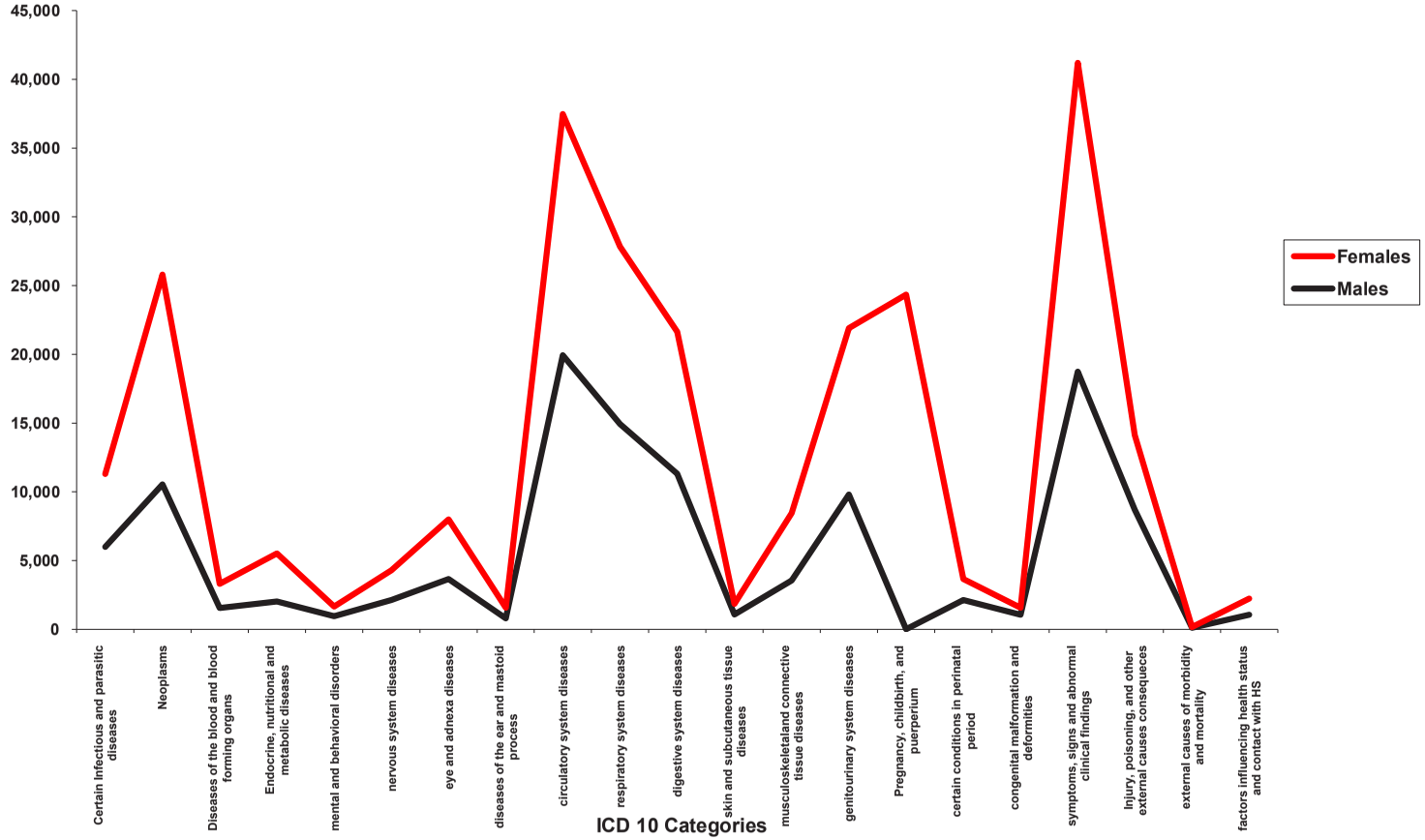
ICD10	Codes	Description	M	F	T
Chapter 14	**N00-N99**	**Diseases of the genitourinary system**	**M**	**F**	**T**
	N00-N08	Glomerular diseases	159	171	**330**
	N10-N16	Renal tubulo-interstitial diseases	536	716	**1,252**
	N17-N19	Renal failure	1,182	1,027	**2,209**
	N20-N23	Urolithiasis	4,281	2,937	**7,218**
	N25-N29	Other disorders of kidney and ureter	54	68	**122**
	N30-N39	Other diseases of the urinary system	1,265	1,803	**3,068**
	N40-N51	Diseases of male genital organs	2,313	0	**2,313**
	N60-N64	Disorders of breast	0	409	**409**
	N70-N77	Inflammatory diseases of female pelvic organs	0	378	**378**
	N80-N98	Noninflammatory disorders of female genital tract	0	4,588	**4,588**
	N99	Other disorders of the genitourinary system	5	10	**15**
Total			**9,795**	**12,107**	**21,902**
Chapter 15	**O00-O99**	**Pregnancy, Childbirth and puerperium**	**M**	**F**	**T**
	O00-O08	Pregnancy with abortive outcome	0	1,387	**1,387**
	O10-O16	Oedema, proteinuria and hypertensive disorders in pregnancy, childbirth and the puerperium	0	39	**39**
	O20-O29	Other maternal disorders predominantly related to pregnancy	0	199	**199**
	O30-O48	Maternal care related to the fetus and amniotic cavity and possible delivery problems	0	227	**227**
	O60-O75	Complications of labor and delivery	0	198	**198**
	O80-O84	Delivery	0	22,240	**22,240**
	O85-O92	Complications predominantly related to the puerperium	0	35	**35**
	O95-O99	Other obstetric conditions NEC	0	25	**25**
Total			**0**	**24,350**	**24,350**
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	25	111	**136**
	P05-P08	Disorders related to length of gestation and fetal growth	253	180	**433**
	P10-P15	Birth trauma	12	4	**16**
	P20-P29	Respiratory and cardiovascular disorders specific to the perinatal period	1,165	742	**1,907**
	P35-P39	Infections specific to the perinatal period	239	164	**403**
	P50-P61	Haemorrhagic and haematological disorders of fetus and newborn	323	249	**572**
	P70-P74	Transitory endocrine and metabolic disorders specific to fetus and newborn	47	35	**82**
	P75-P78	Digestive system disorders of fetus and newborn	29	11	**40**
	P80-P83	Conditions involving the integument and temperature regulation of fetus and newborn	11	4	**15**
	P90-P96	Other disorders originating in the perinatal period	29	19	**48**
Total			**2,133**	**1,519**	**3,652**

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	35	18	**53**
	Q10-Q18	Congenital malformations of eye, ear, face and neck	21	16	**37**
	Q20-Q28	Congenital malformations of the circulatory system	99	90	**189**
	Q30-Q34	Congenital malformations of the respiratory system	11	12	**23**
	Q35-Q37	Cleft lip and cleft palate	43	25	**68**
	Q38-Q45	Other congenital malformations of the digestive system	64	69	**133**
	Q50-Q56	Congenital malformations of the genital organs	466	39	**505**
	Q60-Q64	Congenital malformations of the urinary system	128	63	**191**
	Q65-Q79	Congenital malformations and deformations of the musculoskeletal system	141	142	**283**
	Q80-Q89	Other congenital malformations	24	15	**39**
	Q90-Q99	Chromosomal abnormalities, NEC	22	22	**44**
Total			**1,054**	**511**	**1,565**
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	4,412	4,790	**9,202**
	R10-R19	Symptoms and signs involving the digestive system and abdomen	7,022	10,609	**17,631**
	R20-R23	Symptoms and signs involving the skin and subcutaneous tissue	133	135	**268**
	R25-R29	Symptoms and signs involving the nervous and musculoskeletal systems	48	69	**117**
	R30-R39	Symptoms and signs involving the urinary system	929	478	**1,407**
	R40-R46	Symptoms and signs involving cognition, perception,emotional state and behaviour	564	815	**1,379**
	R47-R49	Symptoms and signs involving speech and voice	23	15	**38**
	R50-R69	General symptoms and signs	5,514	5,404	**10,918**
	R70-R79	Abnormal findings on examination of blood, without diagnosis	44	83	**127**
	R80-R82	Abnormal findings on examination of urine, without diagnosis	26	42	**68**
	R83-R89	Abnormal findings on examination of other body fluids substances and tissues, without diagnosis	8	6	**14**
	R90-R94	Abnormal findings on diagnostic imaging and in function studies, without diagnosis	12	13	**25**
	R95-R99	Ill-defined and unknown causes of mortality	6	3	**9**
Total			**18,741**	**22,462**	**41,203**
Chapter 19	**S00-T98**	**Injury, poisoning and certain other consequences of external causes**	**M**	**F**	**T**
	S00-S09	Injuries to the head	1,095	572	**1,667**
	S10-S19	Injuries to the neck	142	102	**244**
	S20-S29	Injuries to the thorax	119	60	**179**
	S30-S39	Injuries to the abdomen, lower back, lumbar spine and pelvis	195	94	**289**
	S40-S49	Injuries to the shoulder and upper arm	586	411	**997**

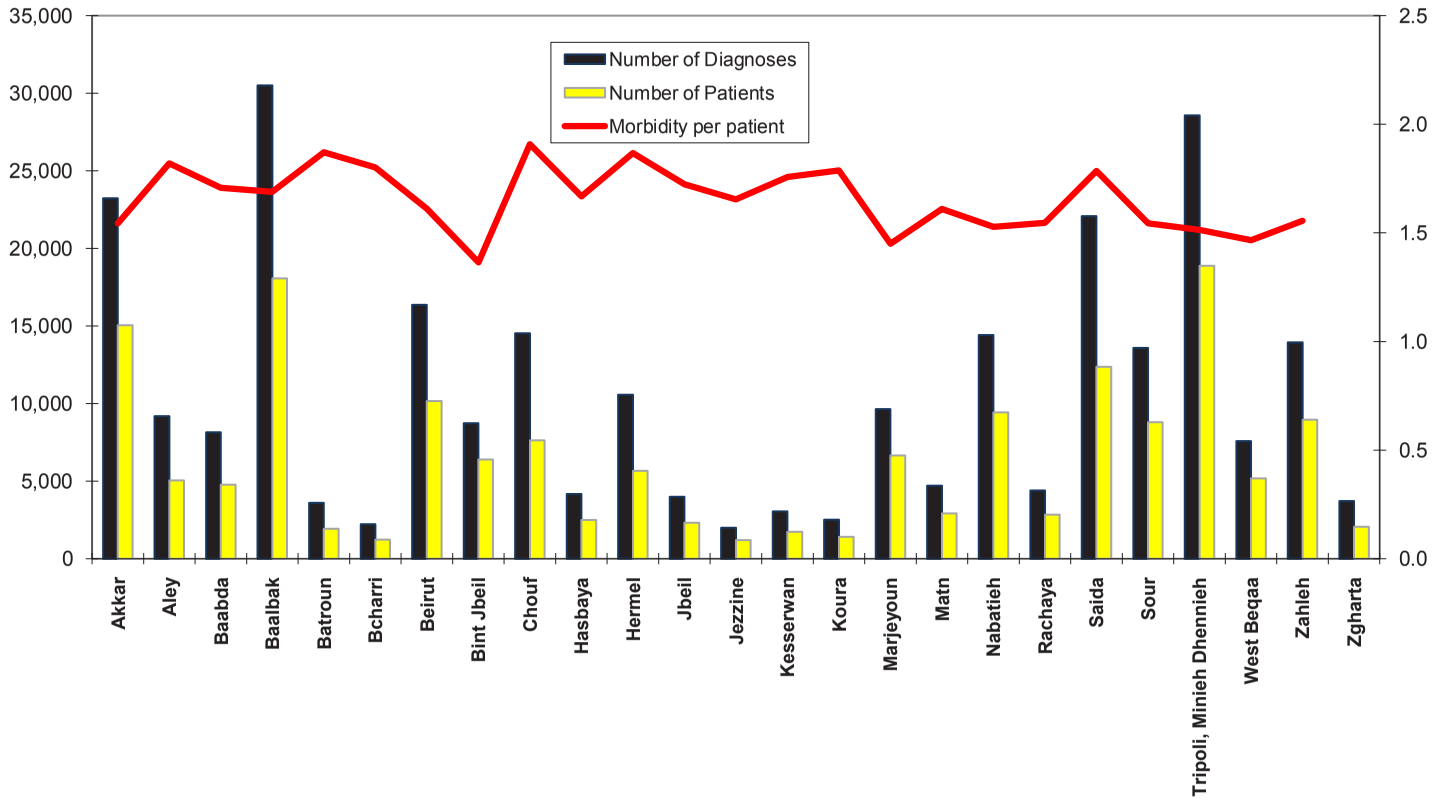
ICD10	Codes	Description	M	F	T
	S50-S59	Injuries to the elbow and forear	1,021	560	**1,581**
	S60-S69	Injuries to the wrist and hand	1,004	456	**1,460**
	S70-S79	Injuries to the hip and thigh	905	1,053	**1,958**
	S80-S89	Injuries to the knee and lower leg	1,073	586	**1,659**
	S90-S99	Injuries to the ankle and foot	329	171	**500**
	T00-T07	Injuries involving multiple body regions	1,306	689	**1,995**
	T08-T14	Injuries to unspecified part of trunk, limb or body region	291	158	**449**
	T15-T19	Effects of foreign body entering through natural orifice	40	31	**71**
	T20-T32	Burns and corrosions	129	71	**200**
	T33-T35	Frosbite	11	15	**26**
	T36-T50	Poisoning by drugs, medicaments and biological substances	17	36	**53**
	T51-T65	Toxic effects of substances chiefly nonmedicinal as to source	124	102	**226**
	T66-T78	Other and unspecified effects of external causes	94	60	**154**
	T79	Certain early complications of trauma	13	5	**18**
	T80-T88	Complications of surgical and medical care NEC	103	98	**201**
	T90-T98	Sequelae of injuries, of poisoning and of other consequences of external causes	102	90	**192**
Total			**8,699**	**5,420**	**14,119**
Chapter 20	**V01-Y98**	**External causes of morbidity and mortality**	**M**	**F**	**T**
Total			**110**	**52**	**162**
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	58	82	**140**
	Z20-Z29	Persons with potential health hazards related to communicable diseases	19	15	**34**
	Z30-Z39	Persons encountering health services in circumstances related to reproduction	18	364	**382**
	Z40-Z54	Persons encountering health services for specific procedures and health care	777	613	**1,390**
	Z55-Z65	Persons with potential health hazards related to socioeconomic and psychosocial circumstances	0	3	**3**
	Z70-Z76	Persons encountering health services in other circumstances	3	3	**6**
	Z80-Z99	Persons with potential health hazards related to family and personal history and certain conditions influencing health status	178	107	**285**
Total			**1,053**	**1,187**	**2,240**
Total Number of Hospitalized Diagnoses			**120,040**	**147,820**	**267,860**

In absolute numbers, the number of diagnoses recorded for MOPH services is higher for female admissions across all categories of ICD10. This might be due to multiple morbidities in females, or that the number of females is higher in the eligible (un-insured) category of patients. This needs further investigation.

Graph 7: MOPH Subsidized Admissions by Category of Diagnosis and Gender, 2010



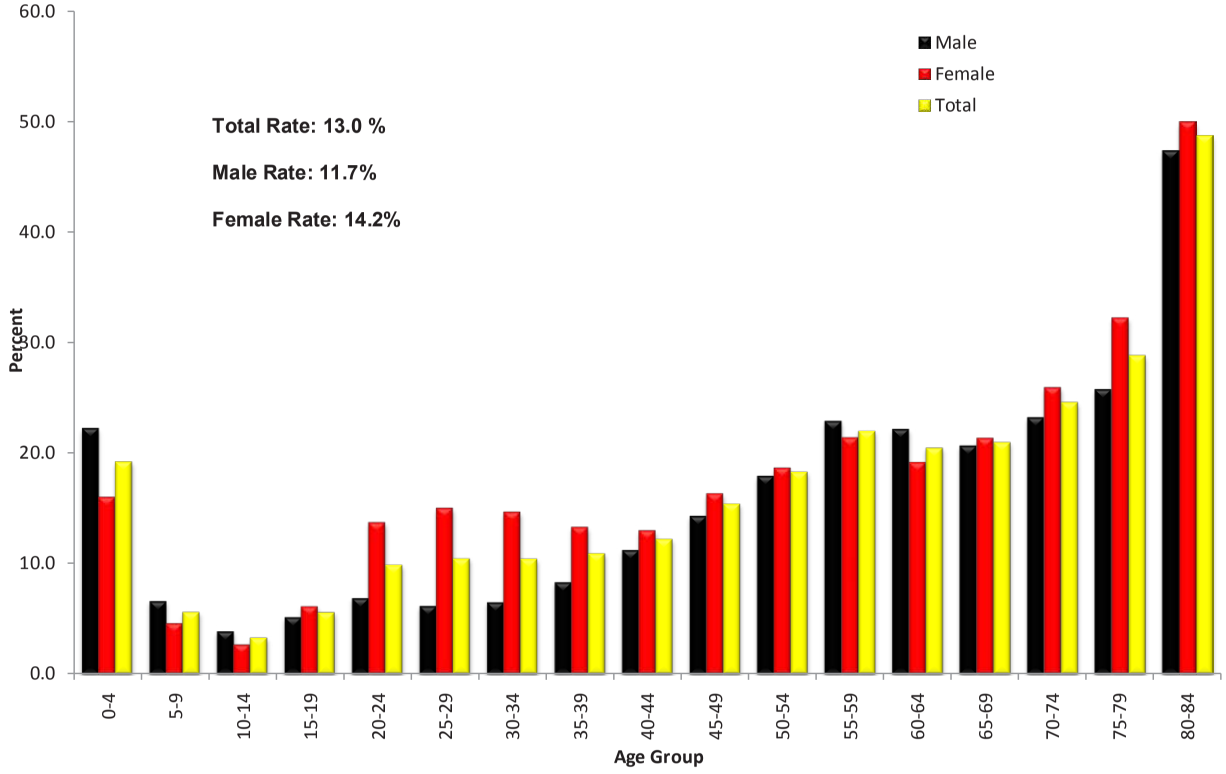
Graph 8: Number of Diagnoses, Number of Patients, and Morbidity per Patient By Qada, 2010



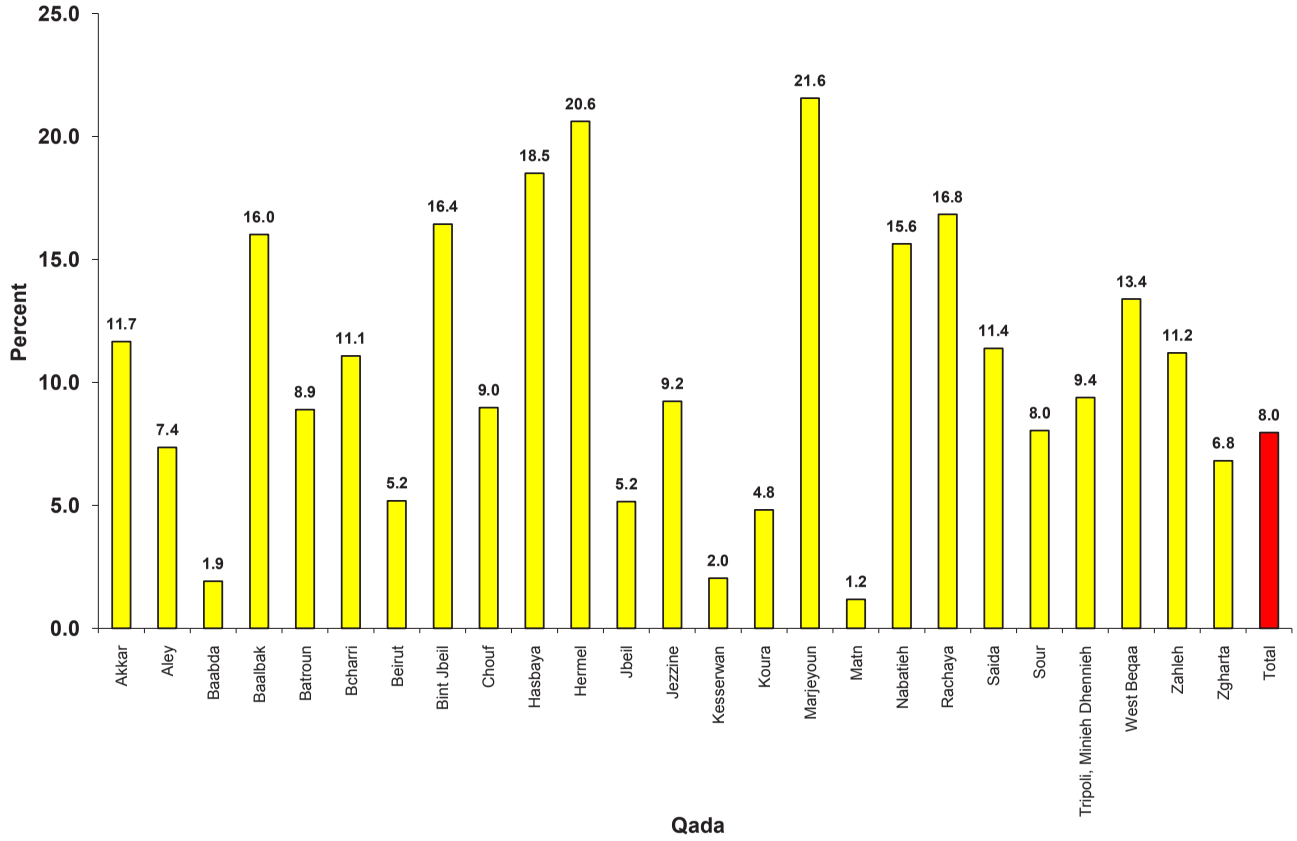
This graph shows that in looking for burden of disease across the districts, it is misleading to look only at the number of patients alone, or the diagnosed conditions alone. While the districts of Tripoli (including Minieh, Dhennieh) and Baalback exhibit the highest number of patients, and diagnoses, respectively, the Chouf district has the highest morbidity per patient (1.91) followed by Hermel and batroun(1.87 each). This might be due to high morbidity in some districts, but it could also reflect under-reporting of diagnoses in some other districts. This needs further investigation.

In 2007, the Household survey conducted by the Central Administration for Statistics provided the number of people who don't have any type of medical coverage across all age groups. These individuals are considered to be the eligible population for the MOPH services coverage. The prevalence of medical conditions among those reaches 13% (11.7% for males, and 14.2% for females). The pattern of service utilization for females probably follows delivery services in younger age groups, and the utilization for both genders increases with age as the proportion of the working population, and hence medical coverage which is largely related to the professional status, decreases.

Graph 9: Percent Hospitalized Morbidities Among Eligibles By Age Group and Gender, 2010

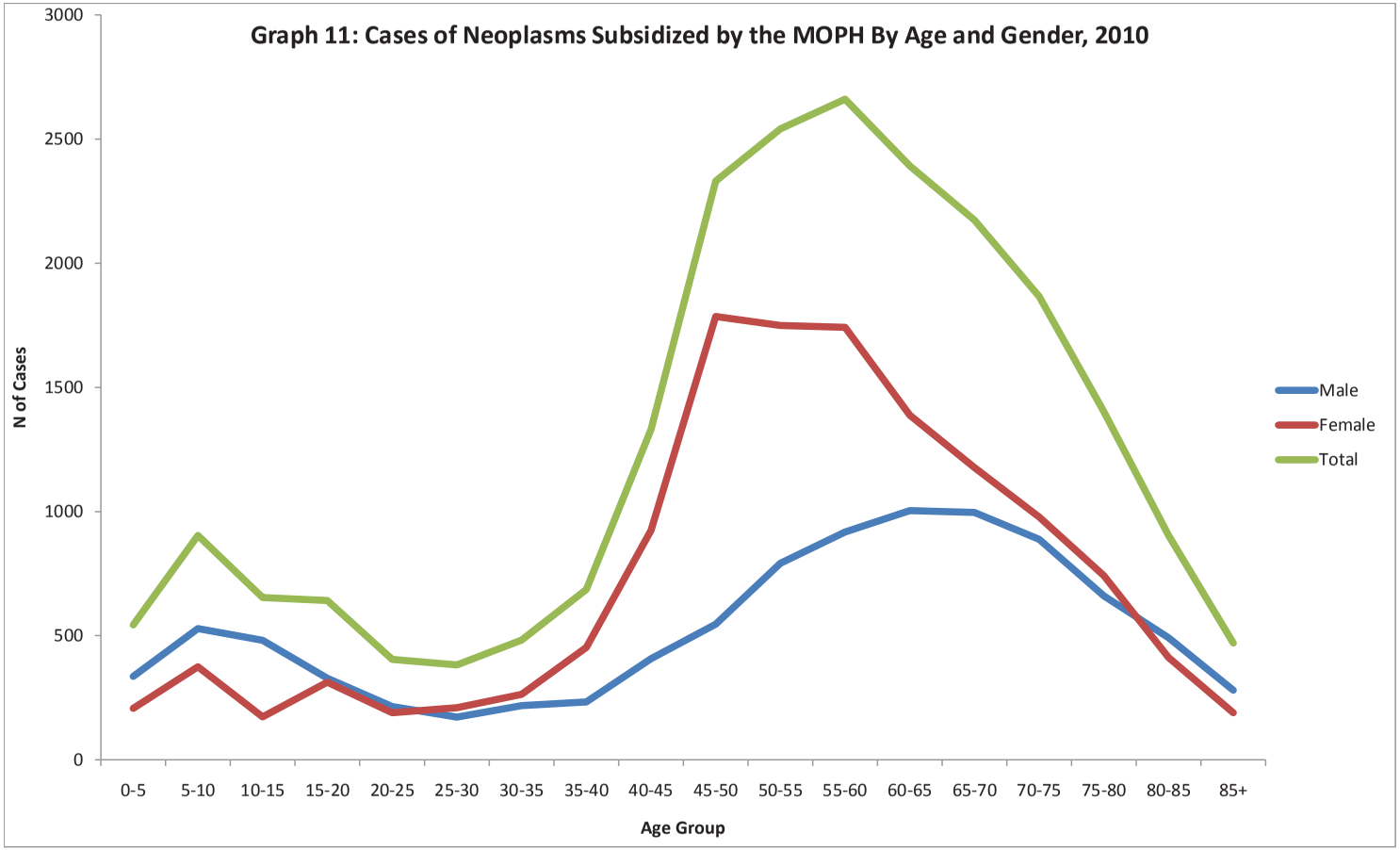


Graph 10: Percent Population Hospitalized Among Eligible Population By Qada, 2010

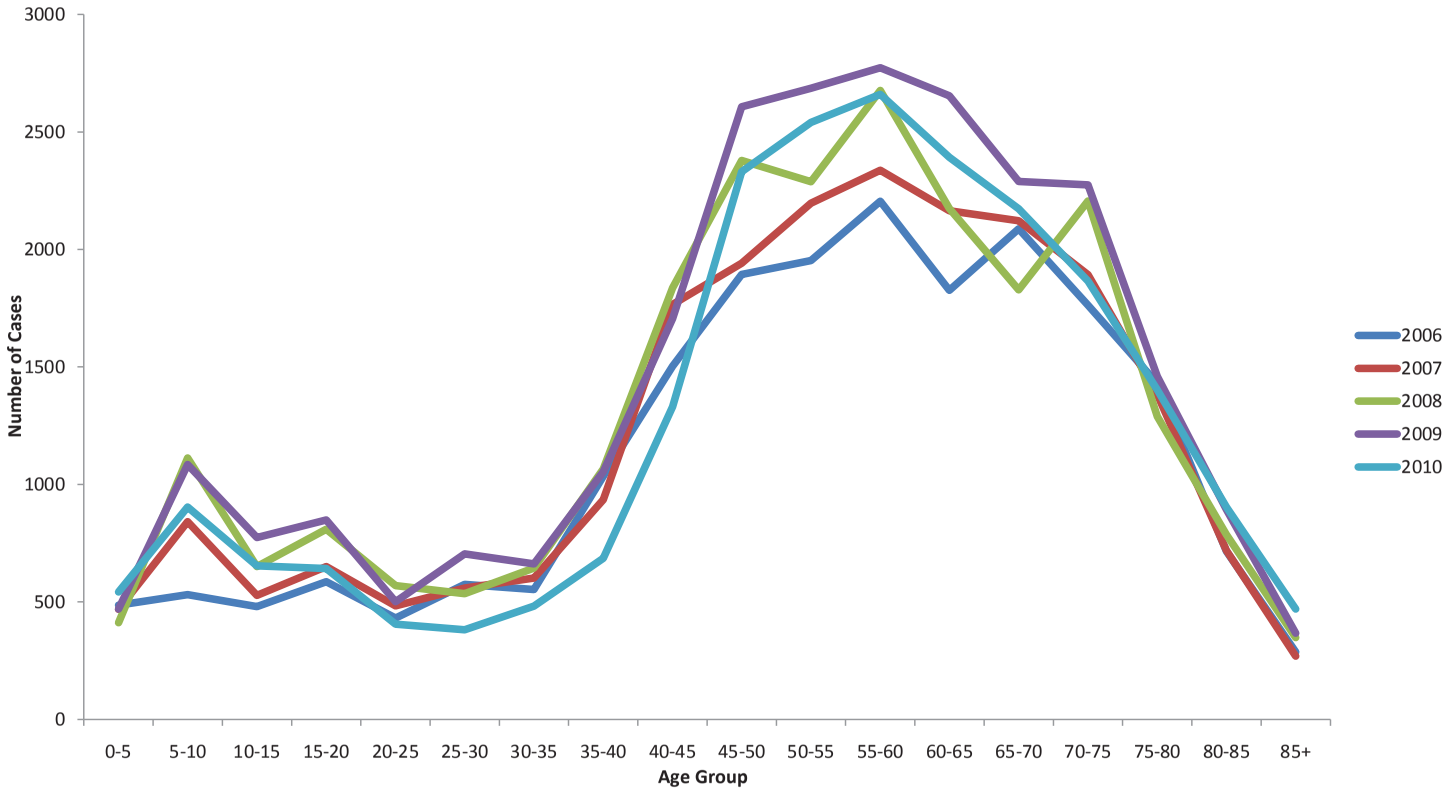


The CAS Household Survey reports the un-insured population by age group, but it does not provide this figure by district. Rather, for the total population it provides a figure of 51.7% who don't have any form of medical insurance. Thus assuming that those 51.7% are homogenously distributed across districts, the utilization rate of the district of Marjeyoun is the highest with 21.6% followed by Hermel with 20.6% and the lowest utilization of MOPH services is that of the Metn with only 1.2% of those eligible utilizing the MOPH services. 8% of the total eligible population utilize the MOPH services. This could reflect morbidity level, or the pattern of utilization across districts, but it needs further investigation.

Overall, the number of cases of hospitalized neoplasms is lower for males than females. The age group with the highest number of cases is 55-60 years old. Female cases peak at 45-50 years old, while male cases follow a smoother curve with a wider peak between 60 and 70 years old. This could reflect the dissimilar types of cancer that inflict the two genders. For children categories, those between 5-10 years old in both sexes have the highest incidence.

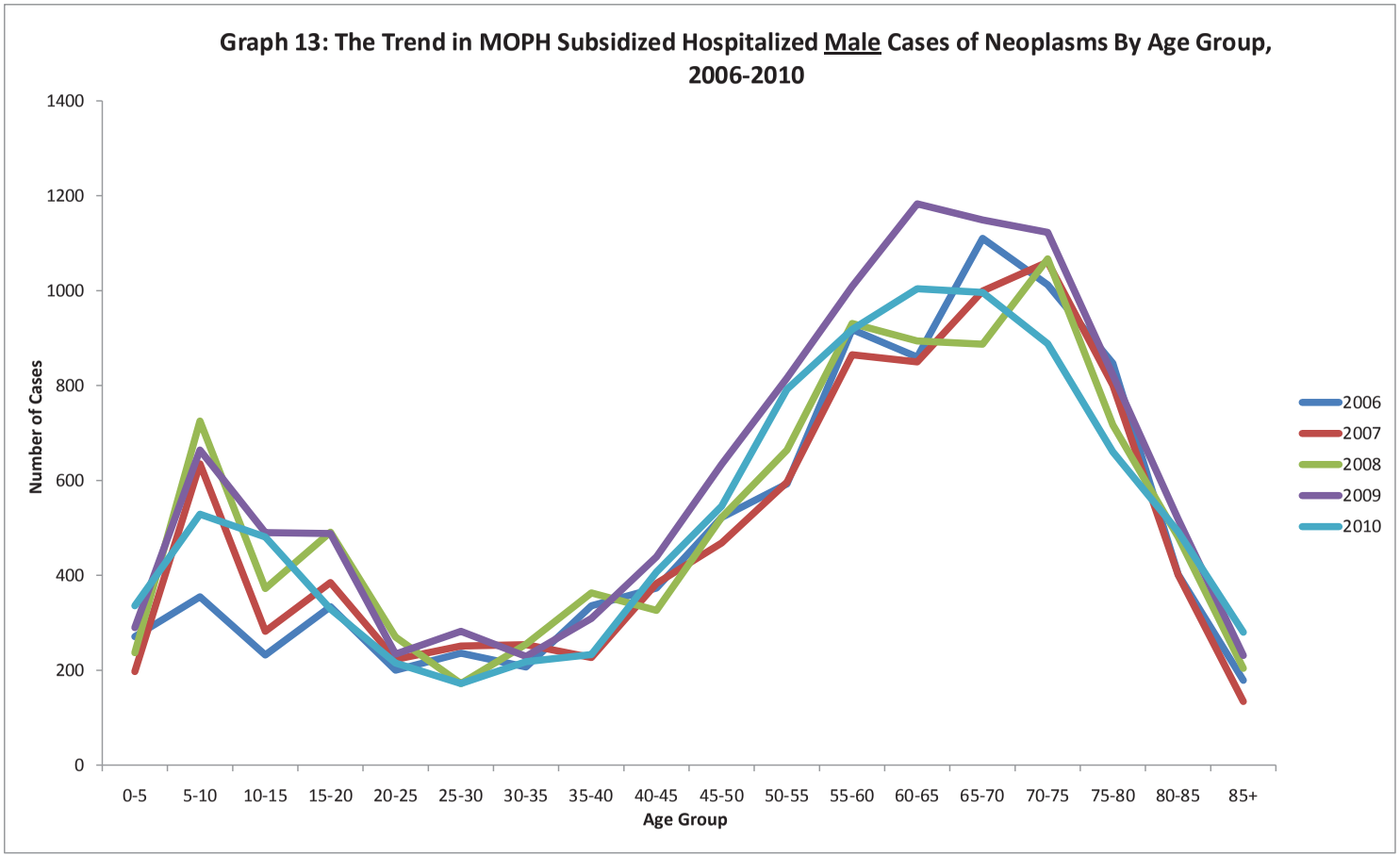


Graph 12: The Trend in MOPH Subsidized Hospitalized Cases of Neoplasms By Age Group, 2006-2010

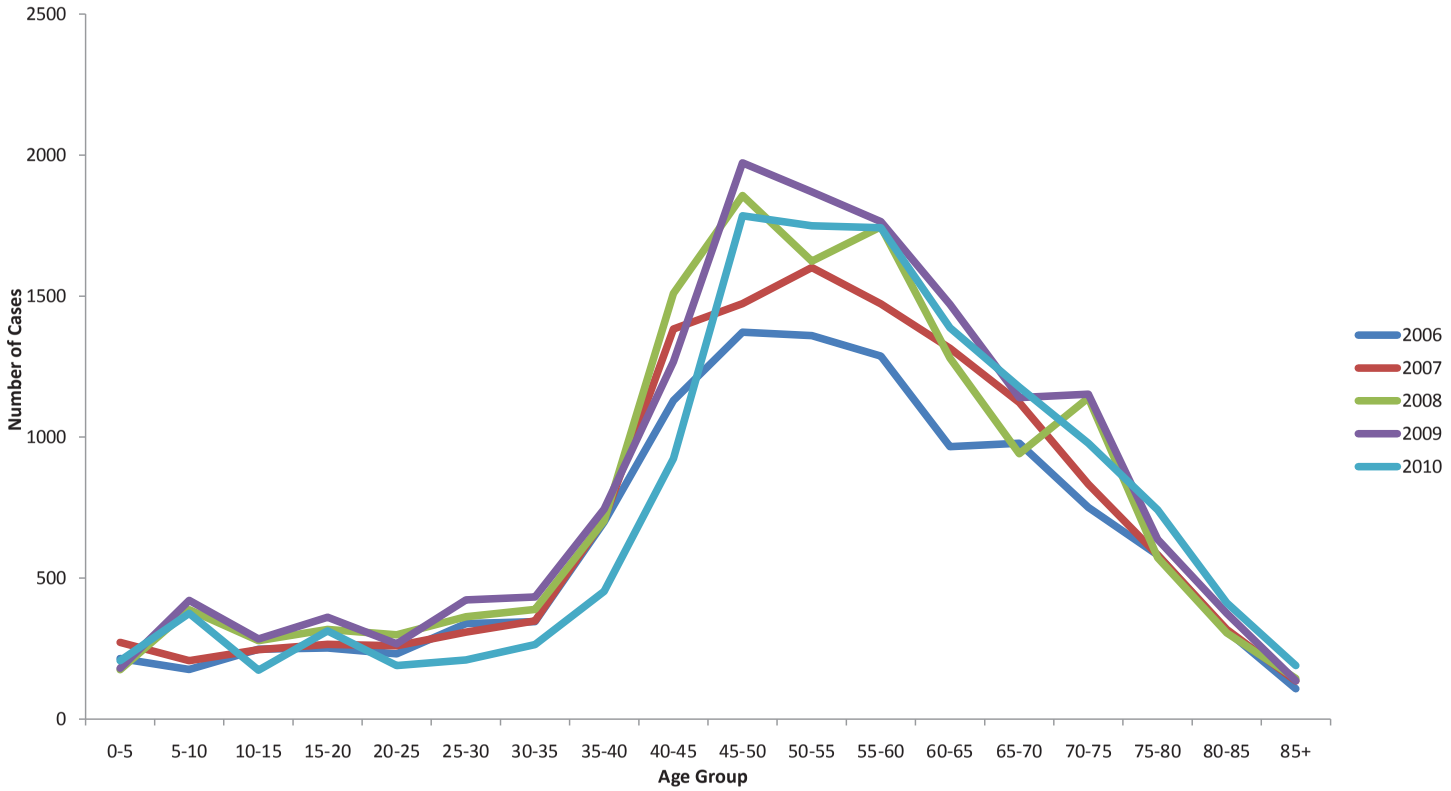


There is a drop in the total number of cases from last year (2009). This could be due to a true decrease in prevalence, which is not supported by other evidence; or could be a decrease in service supply or utilization. This calls for further investigation.

The drop in cases between 2009 and 2010 is higher for males in the older age groups.



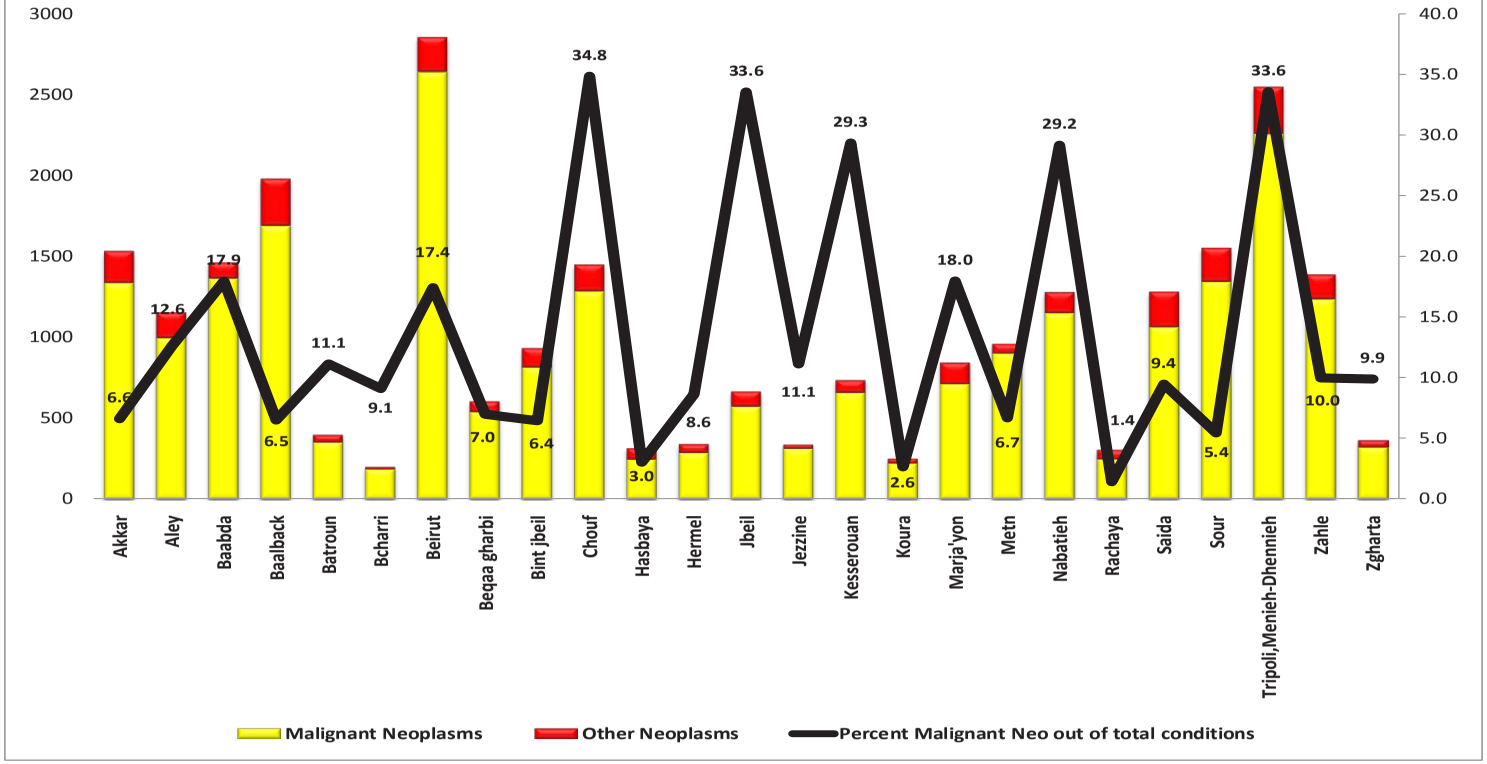
Graph 14: The Trend in MOPH Subsidized Hospitalized Female Cases of Neoplasms By Age Group, 2006-2010



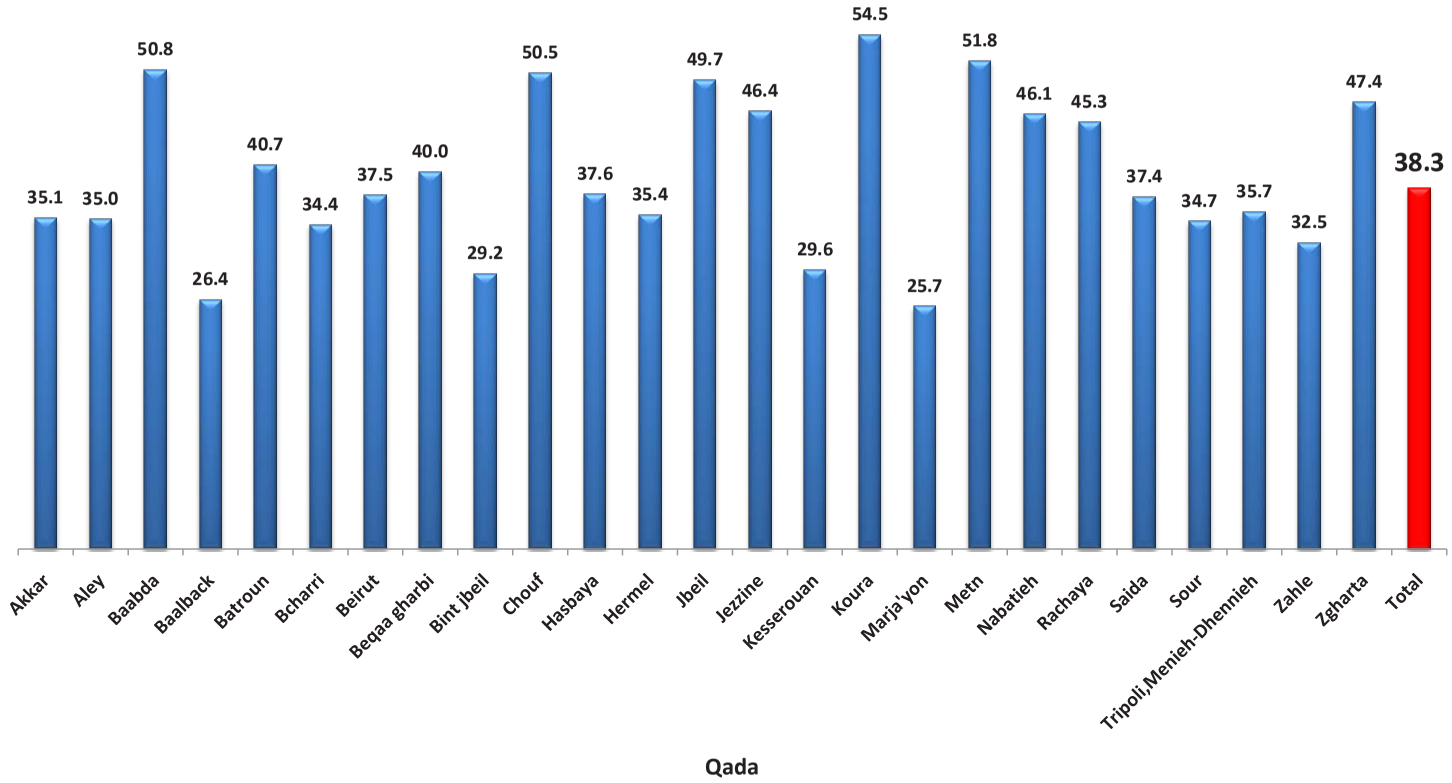
Although there is a decrease in number of cases between 2009 and 2010, but it is not as significant as that in the males group.

34.8% of hospitalized cases from the Chouf distict are for malignant neoplasms, followed by Jbeil and Tripoli with 33.6% while the lowest percent of malignant conditions is recorded for the Rachaya district with 1.2%. While this high percent should be alarming, one cannot disregard data problems, whereby some conditions, especially malignant neoplasms, are not well reported on the admission applications.

Graph 15: Total Hospitalized Neoplasm Cases and Percent Malignant out of Total Conditions By Qada, 2010



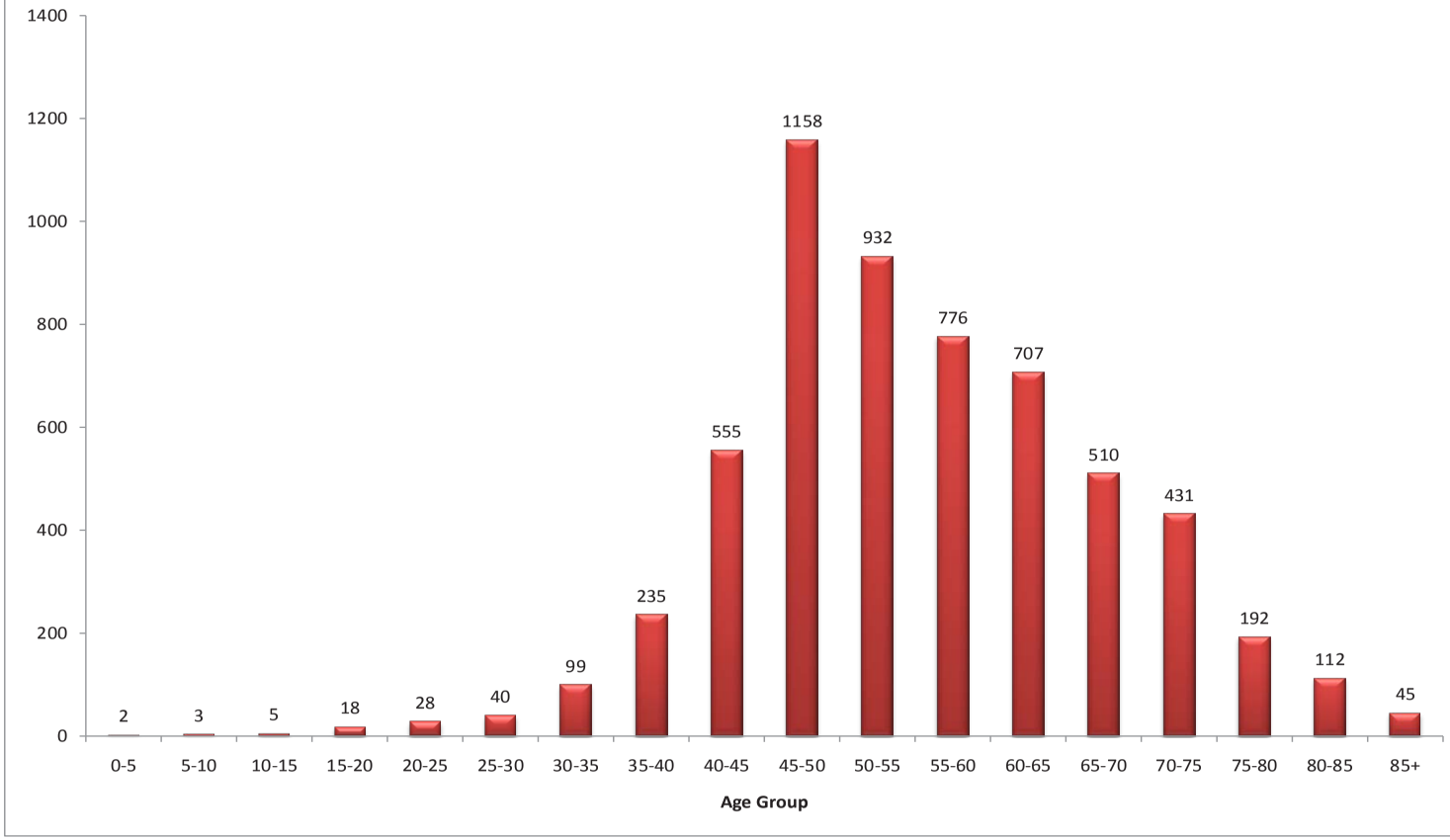
Graph 16: Percent Breast Ca out of total Female Neoplasms by Qada, 2010



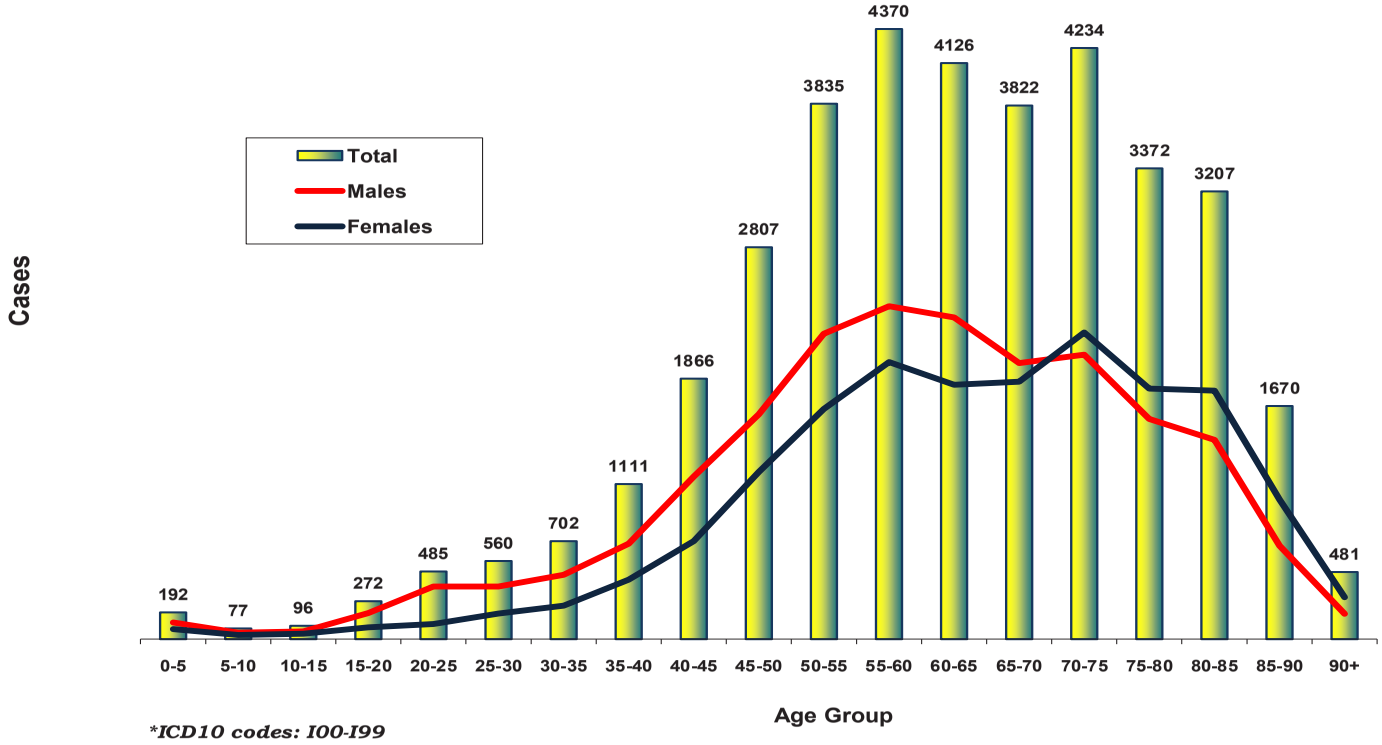
Investigating the females admitted for cancer by district of origin, it turned out that 38.3% of those are Breast cancer conditions with a proportion ranging from as low as 25.7% in Marjeyoun to as high as 54.5% in Koura. Comparing with last year's percents, the lowest percent ever recorded then was for Baalback (22.9%). Taking a quick look at the comparison between the two years 2009 and 2010, there are districts with a significant increase in percent of Breast Ca conditions out of total female cancers (Zgharta, Koura, Hermel, Chouf, Baabda, Baalback), while other districts experienced a significant drop in that percent (Akkar, Aley, Bcharri, Beqaa Gharbi, Hasbaya, and Kesserouan) with a National decrease by 2.4%.

Breast Cancer is spread over all age groups with a peak of cases in the age group 45-50. There were 1580 breast cancer female patients admitted 5847 times either for surgery or chemotherapy. The mean age of the cases was 52.5 years old; the median was 52 and the mode 47 years, with a standard deviation around the mean of 13.5 years.

Graph 17: Hospitalized Cases of Malignant Neoplasms of the Breast by Age, 2010



Graph 18: MOPH Subsidized Hospitalized Cardiovascular* Cases By Gender and Age Group, 2010

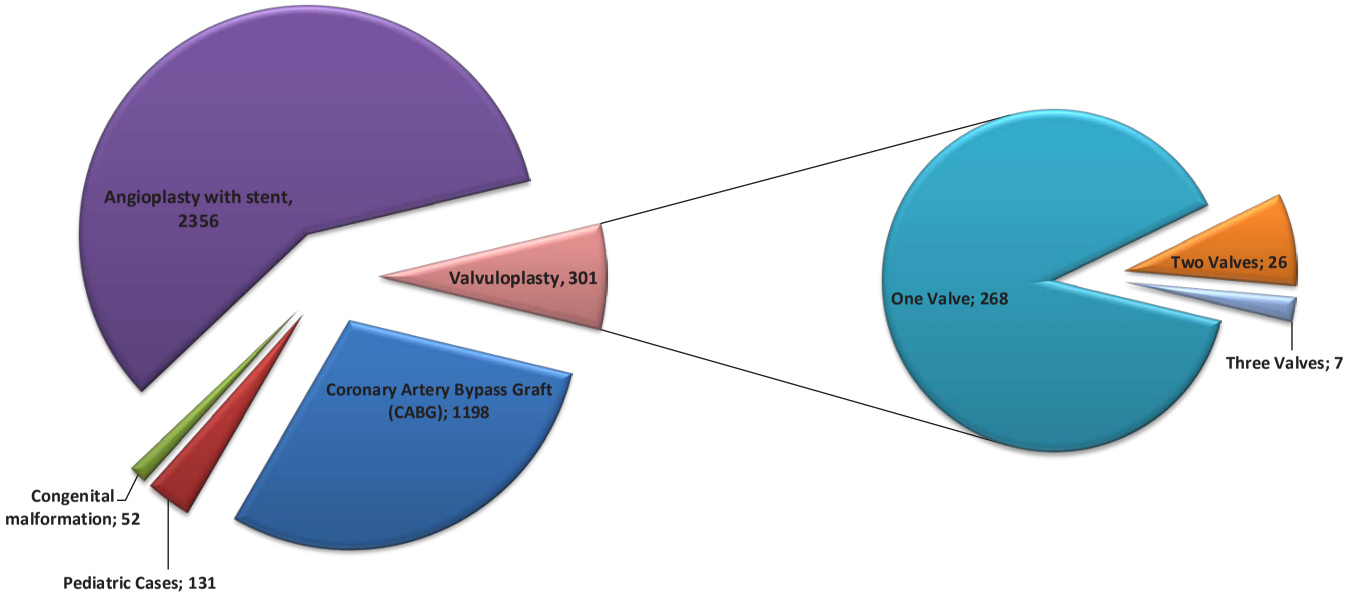


*ICD10 codes: I00-I99

The highest number of cardiovascular disease conditions occurs between the ages of 55-60 years old. The male cases peak in that age group, while female cases peak at a higher age (70-75 years old).

4178 applications for open heart surgeries were presented to the open heart committee at the MOPH during 2010. 140 were refused for different reasons and 4038 were accepted for coverage which costed the MOPH around 24 billion LBP. The cases were partitioned as 131 pediatric cases, 52 congenital malformations, 301 valvuloplasty, 2356 angioplasty with stent and 1198 Coronary Artery Bypass Graft (CABG).

Graph 19:Number of MOPH Subsidized Open Heart Surgeries By Category, 2010



There are 21 new cases of AIDS and 72 HIV reported to the National AIDS Program (NAP) till November 2010, 29% of whom have at recent travel history and 18% have an age less than 30.

Table 11: HIV/AIDS Incidence in Lebanon, 2010

Number of new Reported Cases up to November 2010 is 93	
Number of cumulative Cases till November 2010: 1346	
Stage of the Disease	
HIV	42.00%
AIDS	23.00%
Not specified	23.00%
Gender	
Males	89.00%
Females	11.00%
Age Group	
Less than thirty	18.00%
Between thirty one and Fifty	30.00%
Above fifty one	17.00%
Not specified	35.00%
Mode of Transmission	
Sexual	76.30%
Blood Transfusion	0.00%
IDU	0.00%
Perinatal	0.00%
Not specified	23.50%
Sexual Behavior	
Homosexual	19.35%
Bisexual	16.10%
Heterosexual	20.40%
Not specified	44%
Recent Travel History	
Yes	29.00%
No	71.00%

Table 12: Lifetable of the Lebanese Population based on 2009 Estimates

Total Population: Reported Deaths 20,858; Estimated Population=3,891,466											
Age	registered Deaths	Reported Population	Mortality Rate	Linearity Adjustmen	Years in Interval	Probability of Dying	Individuals Surviving	Deaths in Interval x	Years Lived in Interval x	Cumulative Years Lived	Expectancy of Life at Age x
x	$_5D_x$	$_5N_x$	$_nM_x$	a	n	$_nq_x$	l_x	$_nd_x$	$_nL_x$	T_x	ex
0-4	684	268511	0.0025	0.3	5	0.0183	100000	1830	493595	8154121	81.54
5-9	118	322992	0.0004	0.5	5	0.0018	98170	179	490403	7660526	78.03
10-14	133	365798	0.0004	0.5	5	0.0018	97991	177	489513	7170123	73.17
15-19	230	379418	0.0006	0.5	5	0.0030	97814	296	488329	6680611	68.30
20-24	256	381364	0.0007	0.5	5	0.0034	97518	327	486773	6192281	63.50
25-29	215	315209	0.0007	0.5	5	0.0034	97191	331	485128	5705508	58.70
30-34	250	286412	0.0009	0.5	5	0.0044	96860	422	483245	5220380	53.90
35-39	313	260728	0.0012	0.5	5	0.0060	96438	576	480748	4737136	49.12
40-44	418	242438	0.0017	0.5	5	0.0086	95861	823	477250	4256388	44.40
45-49	584	215198	0.0027	0.5	5	0.0135	95039	1282	471989	3779137	39.76
50-54	845	184066	0.0046	0.5	5	0.0227	93757	2127	463467	3307148	35.27
55-59	1018	147876	0.0069	0.5	5	0.0338	91630	3101	450396	2843681	31.03
60-64	1317	143984	0.0091	0.5	5	0.0447	88529	3959	432746	2393286	27.03
65-69	1856	128418	0.0145	0.5	5	0.0698	84570	5899	408102	1960539	23.18
70+	12621	249054	0.0507		5	1.0000	78671	78671	1552437	1552437	19.73

Female Population: Reported Deaths 9,238; Estimated Population: 1,968,693											
Age	registered Deaths	Reported Population	Mortality Rate	Linearity Adjustmen	Years in Interval	Probability of Dying	Individuals Surviving	Deaths in Interval x	Years Lived in Interval x	Cumulative Years Lived	Expectancy of Life at Age x
x	$_5D_x$	$_5N_x$	$_nM_x$	a	n	$_nq_x$	l_x	$_nd_x$	$_nL_x$	T_x	ex
0-4	332	128418	0.0026	0.3	5	0.0220	100000	2200	492300	8316216	83.16
5-9	54	157604	0.0003	0.5	5	0.0017	97800	169	488579	7823916	80.00
10-14	51	175116	0.0003	0.5	5	0.0015	97631	142	487802	7335338	75.13
15-19	51	175894	0.0003	0.5	5	0.0014	97490	141	487095	6847535	70.24
20-24	85	182899	0.0005	0.5	5	0.0023	97348	226	486177	6360440	65.34
25-29	72	163442	0.0004	0.5	5	0.0022	97123	215	485075	5874263	60.48
30-34	96	148654	0.0006	0.5	5	0.0032	96907	313	483754	5389188	55.61
35-39	116	143984	0.0008	0.5	5	0.0040	96594	387	482004	4905434	50.78
40-44	182	136201	0.0013	0.5	5	0.0067	96207	642	479433	4423429	45.98
45-49	249	116744	0.0021	0.5	5	0.0106	95566	1014	475292	3943997	41.27
50-54	348	97287	0.0036	0.5	5	0.0177	94551	1675	468570	3468704	36.69
55-59	388	77829	0.0050	0.5	5	0.0246	92877	2289	458660	3000135	32.30
60-64	498	77829	0.0064	0.5	5	0.0315	90587	2854	445801	2541475	28.06
65-69	694	66155	0.0105	0.5	5	0.0511	87733	4486	427451	2095673	23.89
70+	6020	120637	0.0499		5	1.0000	83247	83247	1668223	1668223	20.04

Male Population: Reported Deaths: 11,620; Estimated Population: 1,922,773											
Age	registered Deaths	Reported Population	Mortality Rate	Linearity Adjustmen	Years in Interval	Probability of Dying	Individuals Surviving	Deaths in Interval x	Years Lived in Interval x	Cumulative Years Lived	Expectancy of Life at Age x
x	$_5D_x$	$_5N_x$	$_nM_x$	a	n	$_nq_x$	l_x	$_nd_x$	$_nL_x$	T_x	ex
0-4	352	140093	0.0025	0.3	5	0.0148	100000	1480	494820	7985452	79.85
5-9	63	165387	0.0004	0.5	5	0.0019	98520	189	492128	7490632	76.03
10-14	82	190682	0.0004	0.5	5	0.0021	98331	210	491131	6998504	71.17
15-19	179	203524	0.0009	0.5	5	0.0044	98121	430	489530	6507373	66.32
20-24	171	198465	0.0009	0.5	5	0.0043	97691	420	487404	6017842	61.60
25-29	143	151767	0.0009	0.5	5	0.0047	97271	456	485214	5530438	56.86
30-34	154	137758	0.0011	0.5	5	0.0056	96815	540	482724	5045224	52.11
35-39	197	116744	0.0017	0.5	5	0.0084	96275	809	479352	4562501	47.39
40-44	236	106237	0.0022	0.5	5	0.0110	95466	1053	474697	4083149	42.77
45-49	335	98454	0.0034	0.5	5	0.0169	94413	1594	468081	3608451	38.22
50-54	497	86780	0.0057	0.5	5	0.0282	92819	2621	457543	3140370	33.83
55-59	630	70046	0.0090	0.5	5	0.0440	90198	3965	441077	2682827	29.74
60-64	819	66155	0.0124	0.5	5	0.0600	86233	5177	418223	2241749	26.00
65-69	1162	62263	0.0187	0.5	5	0.0892	81056	7226	387216	1823527	22.50
70+	6601	128418	0.0514		5	1.0000	73830	73830	1436311	1436311	19.45

The Life expectancy at birth of the Lebanese population based on the population estimates of 2009, and the reported deaths of 2009 is 81.54 years (F=83.16, M=79.85). The probability of dying in the first five years of life is taken from the latest U5MR calculated by the PAPFAM survey of 2004.

The Epidemiological Surveillance Unit at the MOPH receives notifications about vaccine preventable diseases, food and water borne diseases as well as other forms of diseases. 244 cases of Hepatitis B, 323 cases of Hepatitis A, 572 cases of typhoid fever, and 219 cases of Meningitis were reported during 2010. It is worth mentioning that the number of cases of Malaria is incomplete here with 33 reported cases, while the National number as delivered by the Malaria Control Office of the MOPH is 66 cases for 2010.

Table 13: Table Showing The Cases Of Notifiable Diseases Reported To The MOPH By Month, 2010

	TOTAL	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Vaccine Preventable Diseases													
Acute Flaccid Paralysis	**35**	4	3	4	1	3	1	3	2	1	8	4	1
Acute Poliomyelitis	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Diphteria	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Measles	**11**	1	1	1	1	1	1	2	0	0	0	1	2
Mumps	**28**	2	1	3	7	3	1	5	2	1	1	1	1
Pertussis	**19**	2	0	0	5	0	5	3	2	0	2	0	0
Rabies	**1**	0	0	0	0	0	0	0	1	0	0	0	0
Rubella	**5**	1	1	1	0	0	0	0	1	1	0	0	0
Tetanus	**2**	0	1	0	0	0	0	0	0	1	0	0	0
tetanus neonatal	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Viral Hepatitis B	**244**	11	19	18	25	19	28	17	20	25	17	21	24
Food & Water Borne Diseases													
Brucellosis	**303**	9	12	14	19	44	61	50	31	26	23	9	5
Cholera	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Dysentery	**252**	20	11	9	11	24	23	25	54	30	15	17	13
Food Poisoning	**483**	36	16	5	28	58	22	56	178	13	51	20	0
Hydatic Cyst	**14**	4	3	0	0	2	0	2	0	0	1	2	0
Parasitic Worms	**20**	1	2	2	3	1	1	1	2	3	0	0	4
Trichinosis	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Typhoid Fever	**572**	22	18	23	23	44	65	71	97	83	55	35	36
Viral Hepatitis A	**323**	47	27	22	16	20	16	12	24	32	28	37	42
Other Diseases													
Bilharziasis	**1**	0	0	0	1	0	0	0	0	0	0	0	0
Creutzfeld Jakob Disease	**1**	0	0	0	0	0	0	0	1	0	0	0	0
Ebola	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Gonorrhea	**5**	0	0	1	1	0	0	1	1	0	1	0	0
Leishmaniasis	**6**	1	0	0	0	1	0	1	0	1	1	0	1
Leprosy	**2**	0	1	1	0	0	0	0	0	0	0	0	0
Malaria	**33**	1	3	2	4	0	2	7	4	3	2	4	1
Meningitis	**219**	12	15	27	33	26	25	23	19	11	11	9	8
Plague	**0**	0	0	0	0	0	0	0	0	0	0	0	0
Syphilis	**8**	1	1	0	1	0	0	0	0	1	1	1	2
Typhus	**28**	0	0	4	0	1	3	6	4	2	7	0	1
Viral Hepatitis C	**100**	5	3	7	7	12	7	8	5	10	15	14	7
Yellow Fever	**0**	0	0	0	0	0	0	0	0	0	0	0	0

Table 14: Table Showing The Cases Of Notifiable Diseases Reported To The MOPH By Age & Gender, 2010

	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	**35**	8	8	5	4	6	3	1	21	14	0
Acute Poliomyelitis	**0**	0	0	0	0	0	0	0	0	0	0
Diphteria	**0**	0	0	0	0	0	0	0	0	0	0
Measles	**11**	8	0	0	3	0	0	0	4	7	0
Mumps	**28**	10	8	8	2	0	0	0	17	11	0
Pertussis	**19**	14	2	3	0	0	0	0	11	8	0
Rabies	**1**	0	0	0	0	0	1	0	0	1	0
Rubella	**5**	4	0	0	1	0	0	0	3	2	0
Tetanus	**2**	0	0	0	1	1	0	0	2	0	0
tetanus neonatal	**0**	0	0	0	0	0	0	0	0	0	0
Viral Hepatitis B	**244**	1	2	13	102	77	37	12	168	75	1
Food & Water Borne Diseases											
Brucellosis	**303**	15	27	48	69	84	57	3	149	154	0
Cholera	**0**	0	0	0	0	0	0	0	0	0	0
Dysentery	**252**	94	35	24	35	30	33	1	128	124	0
Food Poisoning	**483**	38	38	87	157	84	41	38	247	236	0
Hydatic Cyst	**14**	0	1	0	6	4	3	0	4	10	0
Parasitic Worms	**20**	1	3	2	4	7	2	1	8	12	0
Trichinosis	**0**	0	0	0	0	0	0	0	0	0	0
Typhoid Fever	**572**	125	59	88	164	65	62	9	283	289	0
Viral Hepatitis A	**323**	33	85	101	88	8	3	5	199	123	1
Other Diseases											
Bilharziasis	**1**	0	0	0	1	0	0	0	1	0	0
Creutzfeld Jakob Disease	**1**	0	0	0	0	0	1	0	0	1	0
Ebola	**0**	0	0	0	0	0	0	0	0	0	0
Gonorrhea	**5**	0	0	0	5	0	0	0	5	0	0
Leishmaniasis	**6**	1	0	0	2	0	3	0	3	3	0
Leprosy	**2**	0	0	0	0	1	1	0	1	1	0
Malaria	**33**	0	2	2	19	7	1	2	23	10	0
Meningitis	**219**	91	38	37	28	12	10	3	135	84	0
Plague	**0**	0	0	0	0	0	0	0	0	0	0
Syphilis	**8**	0	0	0	5	2	0	1	4	4	0
Typhus	**28**	2	4	8	9	4	1	0	16	12	0
Viral Hepatitis C	**100**	0	0	1	29	31	31	8	73	27	0
Yellow Fever	**0**	0	0	0	0	0	0	0	0	0	0

When analyzed by gender, it was shown that males are more than females in all reported diseases except for some like measles, Brucellosis, typhoid fever, parasitic worms and hydatid cyst, where the number of female cases exceed that of the males.

Table 15: Table Showing The Cases Of Notifiable Diseases Reported To The MOPH By Mohafaza, 2010

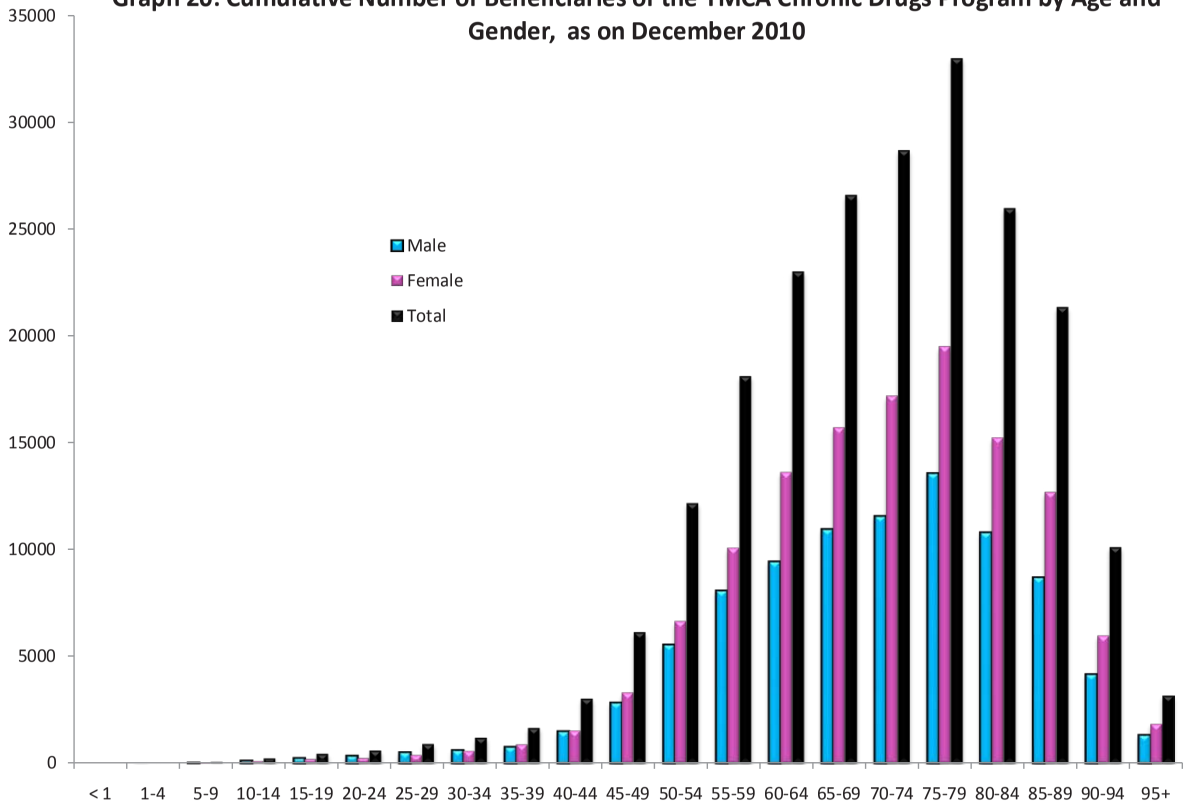
	TOTAL	North	Beqaa	Nabatieh	South	Mount-Lebanon	Beirut	Unknown
Vaccine Preventable Diseases								
Acute Flaccid Paralysis	**35**	9	2	3	1	13	7	0
Acute Poliomyelitis	**0**	0	0	0	0	0	0	0
Diphteria	**0**	0	0	0	0	0	0	0
Measles	**11**	3	2	1	2	3	0	0
Mumps	**28**	9	5	2	7	5	0	0
Pertussis	**19**	8	0	0	4	2	4	1
Rabies	**1**	0	1	0	0	0	0	0
Rubella	**5**	0	2	0	0	2	1	0
Tetanus	**2**	2	0	0	0	0	0	0
tetanus neonatal	**0**	0	0	0	0	0	0	0
Viral Hepatitis B	**244**	23	11	22	55	75	18	40
Food & Water Borne Diseases								
Brucellosis	**303**	53	39	23	46	120	14	8
Cholera	**0**	0	0	0	0	0	0	0
D senter	**252**	22	3	0	2	213	9	3
Food Poisoning	**483**	175	11	12	70	167	23	25
H datic C st	**14**	0	5	2	0	6	0	1
Parasitic Worms	**20**	0	0	0	0	2	18	0
Trichinosis	**0**	0	0	0	0	0	0	0
T phoid Feve	**572**	105	112	61	38	211	38	7
Viral Hepatitis A	**323**	73	111	27	19	78	10	5
Other Diseases								
Bilharziasis	**1**	0	0	0	0	1	0	0
Creutzfeld Jakob Disease	**1**	1	0	0	0	0	0	0
Ebola	**0**	0	0	0	0	0	0	0
Gonorrhea	**5**	0	1	0	0	3	0	1
Leishmaniasis	**6**	0	0	0	0	0	3	3
Lepros	**2**	1	0	0	0	0	0	1
Malari	**33**	7	0	2	1	15	4	4
Meningitis	**219**	72	19	22	32	61	13	0
Pla ue	**0**	0	0	0	0	0	0	0
S philis	**8**	0	0	2	1	2	1	2
Typhus	**28**	2	1	1	1	20	2	1
Viral Hepatitis C	**100**	15	2	10	13	28	18	14
Yellow Feve	**0**	0	0	0	0	0	0	0

The distribution of the diseases across the Mohafazats showed that the number of reported cases of Mumps, food poisoning and meningitis are highest in the North, and viral hepatitis A is highest in the Beqaa, while AFP, Typhoid fever, viral Hep B and C, typhus, Malaria, Dysentry and Brucellosis are highest in Mount Lebanon.

Table 16: National Immunization Coverage Rates For Polio by Qada, 2010		
Qada	**OPV3 %**	**القضاء**
Batroun	92	البترون
West Beqaa	97	البقاع الغربي
Chouf	97	الشوف
Koura	92	الكورة
Metn	94	المتن
Nabatieh	96	النبطية
Hermel	93	الهرمل
Bcharri	94	بشري
Baabda	95	بعبدا
Baalback	91	بعلبك
Bint Jbeil	94	بنت جبيل
Beirut	92	بيروت
Jbeil	95	جبيل
Jezzine	92	جزين
Hasbaya	91	حاصبيا
Rachaya	97	راشيا
Zahleh	93	زحلة
Zgharta	94	زغرتا
Sour	92	صور
Saida	94	صيدا
Minieh-Dhennieh	88	المنية الضنية
Tripoli	92	طرابلس
Aley	95	عاليه
Akkar	94	عكار
Kesserwan	97	كسروان
Marjeyoun	93	مرجعيون
Total	**94**	**المجموع**

OPV3 immunization rates are highest in west Beqaa, Chouf, Rachaya and kesserwan with 97%, while the lowest immunization rate is for that of Minieh-Dhennieh district with 88%. The national average is 94%. National averages for DPT3, measles and HBV3 are 94%, 95% and 94%, respectively. It is worth approaching the coverage figures with caution regarding possible denominator errors related to place of origin as compared to the actual place of residence of the population.

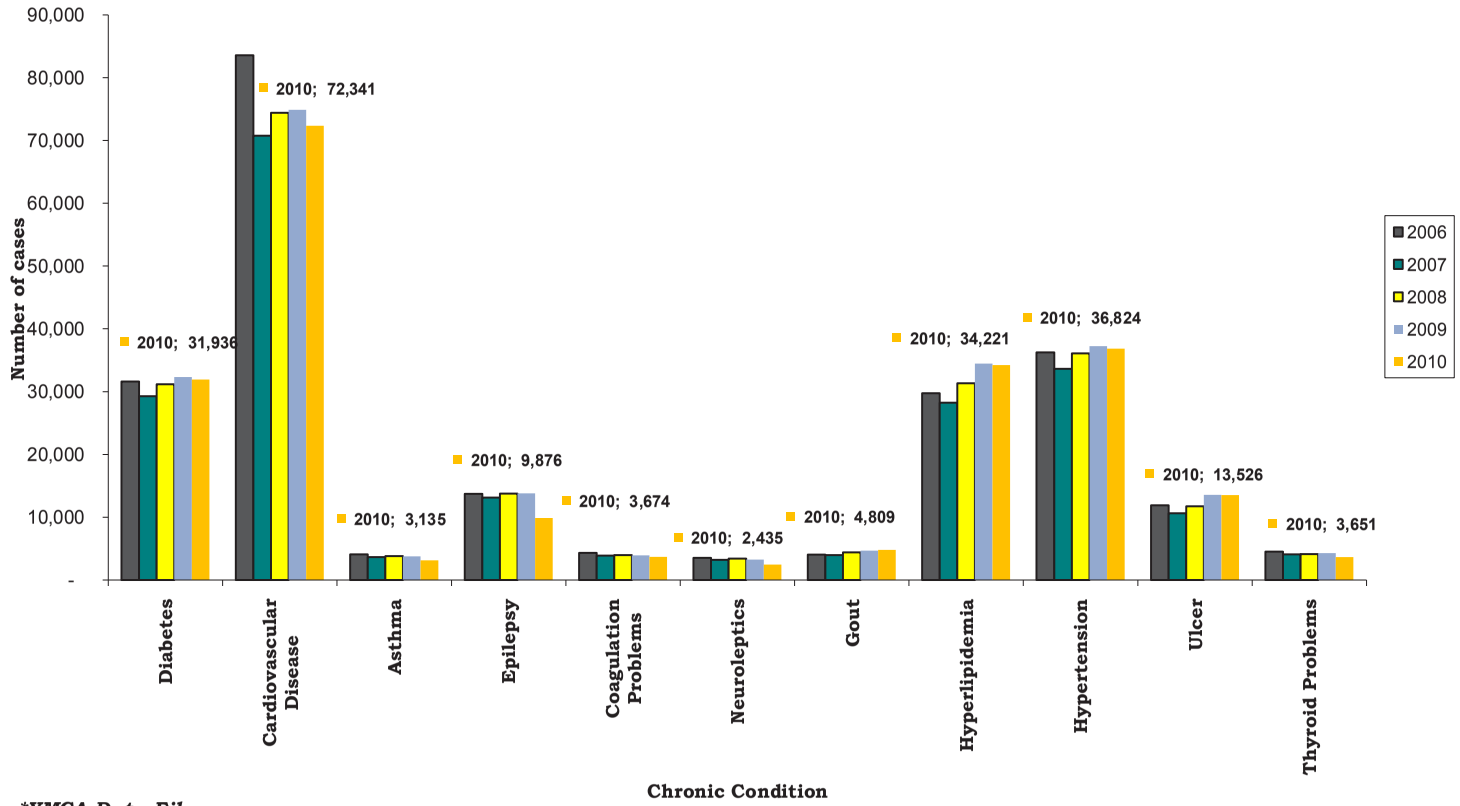
Graph 20: Cumulative Number of Beneficiaries of the YMCA Chronic Drugs Program by Age and Gender, as on December 2010



The MOPH contracts with the Young Male Christian Association (YMCA) to purchase and distribute chronic diseases drugs in health centers all over Lebanon. So far, beneficiaries belong mostly to the age groups 55 and older, and females benefit from the program more than males.

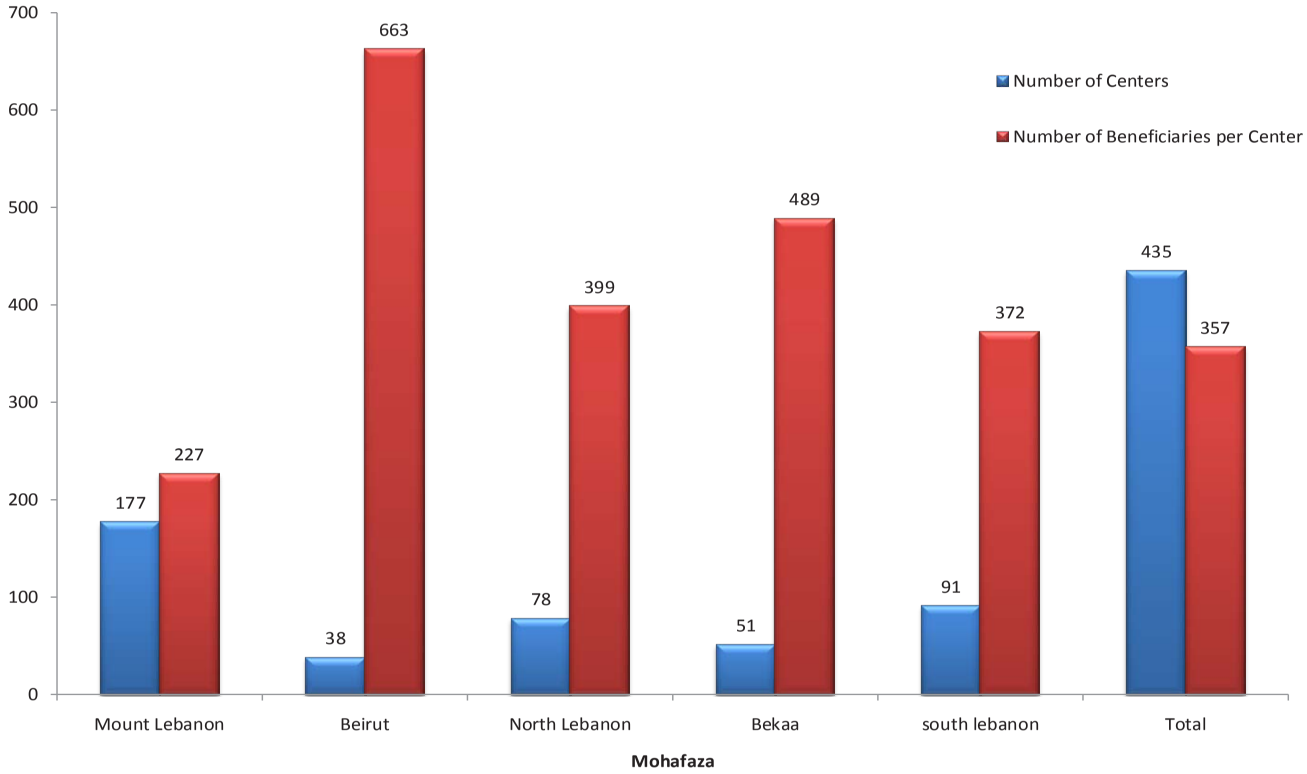
Over the years beneficiaries have slightly increased in number across all categories of chronic conditions, while keeping the same trend of prevalence with cardiovascular disease being the most prevalent followed respectively by Hypertension, Hyperlipidemia and Diabetes. The numbers of 2006 remain higher, though due to the 2006 war which resulted in higher unexpected coverage irrespective of eligibility.

Graph 21: Cases of Chronic Conditions*, 2006-2010



YMCA Data Files

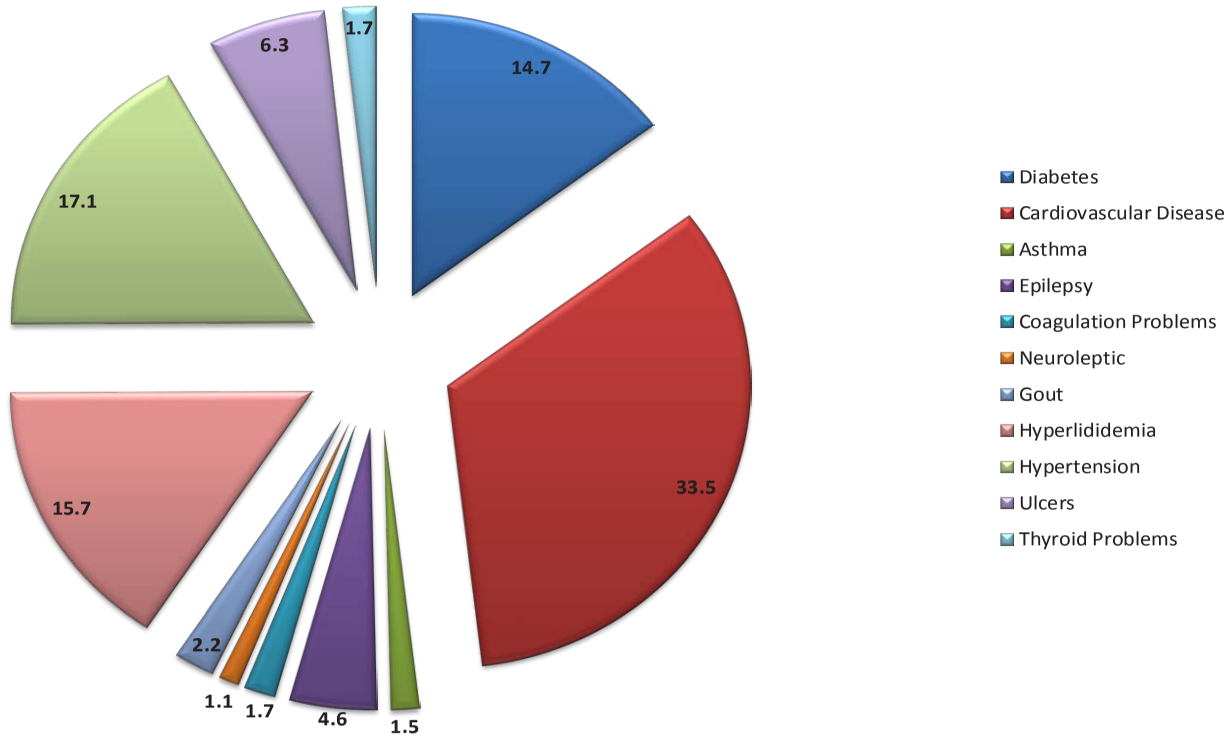
Graph 22: Number of Socio-medical Centers and Number of Beneficiaries Per Center by Mohafaza, YMCA, 2010



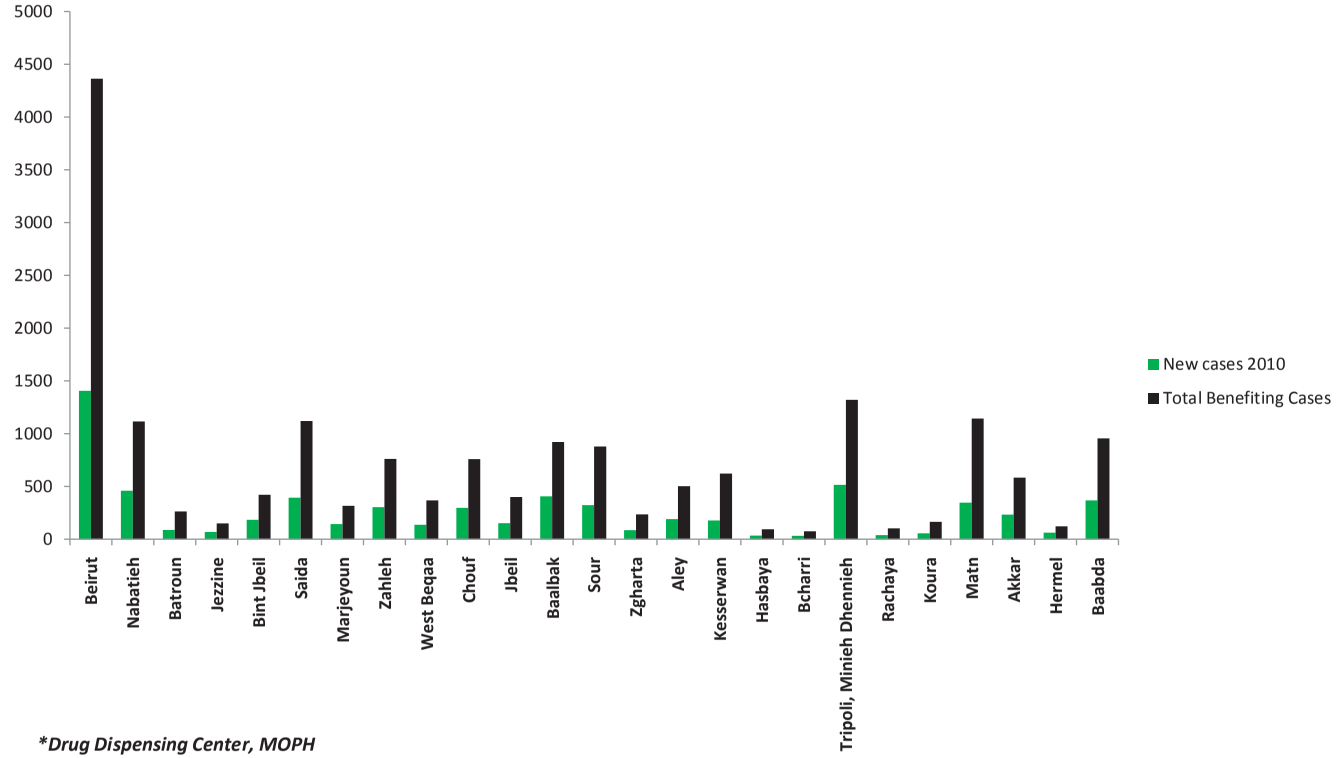
In 2010, there were 155,219 beneficiaries registered in the YMCA medical charts distributed over 435 centers in all Mohafazas with the majority in Mount Lebanon (177 centers). The Number of beneficiaries per center is highest in Beirut, though, and lowest in Mount Lebanon.

The prevalence of cardiovascular disease is highest among YMCA beneficiaries with 33.5 %, followed by Hypertension (17.1%), Hyperlipidemia (15.7%), and Diabetes (14.7%).

Graph 23: Percent Prevalence of Chronic Conditions Among Users, YMCA 2010



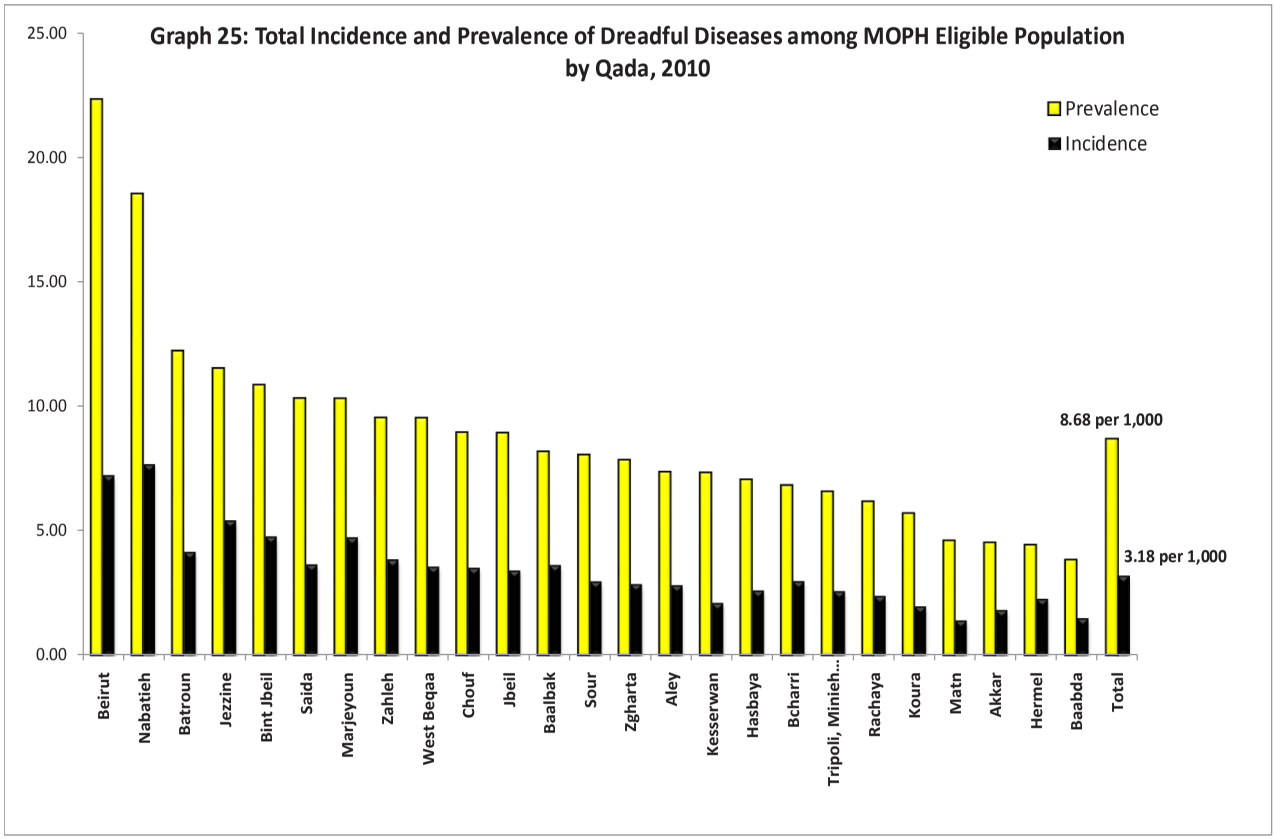
Graph 24: Total Number of Patients Benefiting from the DDC* and New Cases by Qada, 2010



*Drug Dispensing Center, MOPH

The Drug Dispensing Center (DDC) of the MOPH distributes drugs free of charge for all eligible patients across categories of dreadful diseases. The budget of drug procurement, which is increasing year after year, is still not enough considering the increase in the number of cases of some diseases from one part, and the increase in the prices of some imported drugs due to the change in currencies. Cancer cases are still consuming the majority of the budget. The majority of the beneficiaries are from Beirut, followed by Tripoli-Minieh-Dhennieh, and the lowest number of beneficiaries belongs to Bcharri.

Assuming that all those who have benefited from the dreadful disease drug supply program are still alive, the prevalence rate of those diseases in the eligible population for MOPH coverage is 8.68 per 1000. We have no data to support this prevalence rate, though; as no follow-up for these beneficiaries exist once they cease coming for their medication. Assuming all eligible for MOPH coverage benefit from the program, the incidence rate for these diseases among beneficiaries is 3.18 per 1000 with the highest rate occurring in Nabatieh , followed by Beirut, and the lowest is in Metn. Further investigation for these cases is needed to retain or correct the prevalence and incidence rates so stated.



الجمهورية اللبنانية
وزارة الصحة العامة

Notes