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HEALTH BEYOND POLITICS

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CONTENTS

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Health Beyond Politics

PREFACE

"Then render unto Caesar that which is Caesar's, and render unto God that which is God's"
Holy Bible: Mathew 22:21

۞And when my servants ask thee concerning Me, surely I am nigh۞.
Holy Quran: Baqarah (2):186

This work updates and complements "Health Financing and Reform in Lebanon" published in 2003. It comes in response to a need expressed by health professionals, universities and the WHO-Eastern Mediterranean Regional Office.

The past five years (2003-2008) did not witness any structural change in the health sector in Lebanon. However, a meaningful progress has been made in different components of health reform, thanks to the perseverance of dedicated health professionals working in different institutional settings, guided by science, professional ethics and human values. Those actors in public and private sectors, without necessarily knowing each others, and 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. Unlike other sectors in Lebanon, the health sector did not experience significant draw backs resulting from the persisting

economical and political crisis. In addition to achieving health goals, with undeniable indirect social and economic benefits, the health sector in Lebanon has been also directly contributing to sustainable development. It remains, for example, a major field for employment, representing for many families a source of income that is not to be underestimated. This has probably an important social and economic impact, especially in rural areas, by creating local economic circuits, pivoting around health facilities and involving many other sectors.

The stepwise managed change occurred progressively over the past years as planned, except for the financing component. This specific component was the most elaborated involving a structural reform and hence needed true political commitment. Different scenarios had been developed ranging from soft modular options for harmonizing public financing, to more radical ones aiming at pooling public funds under one management. Stakeholder analysis and political mapping were conducted for each option considering legislation reform, financial sustainability and political feasibility. The institutional ground was set, actors in the health sector were prepared and the public opinion was receptive for the change. Nevertheless, political players failed in changing a status quo with deep historical and confessional roots. This additional political failure is threatening the sustainability of health care financing, with serious consequences on people's health and increased exposure to impoverishment related to catastrophic health spending.

The hope that structural health reform could be achieved with the willingness and commitment of one minister or even the Council of Ministers, proved to be an illusion. The health system is an integral part of the confessional socio-political system. The multiplicity of public coverage funds was willingly designed by the political and confessional forces in the nineteen sixties to serve their interests. These same forces, sometimes with different names and faces, are still taking full advantage of the system's structural dysfunction, while raising radical reform slogans.

Majority and opposition political forces, of which few are religious and for the most merely confessional, are all sharing

power or influence over public funds and exploiting public resources for their political purposes. In addition, they possess their own “charity” funds, some of which benefit from important foreign financing, all of which are beyond any meaningful state control.

On the provision side, most health facilities, financed mainly by the Ministry of Public Health (MOPH) and other public funds belong directly or indirectly to religious congregations and confessional political forces. Hospitals and clinics by all the saints and prophets’ names are providing medical services using and sometimes abusing public money.

Those who play the role of intermediary between Allah and his servants in spite of God’s words “I am nigh”, impose themselves as an interface between the state and the citizens. Those who force their value system over the whole society are obstinately using what is Caesar’s to serve their confessional interests. Those powerful retrogressive forces have been preventing reform leaps, but have been unable to hinder progress and can never do, as long as free women and men living in this resilient society resist all forms of intimidation.

Chapter One

THE CONTINUING CHALLENGES

A health action is defined as any effort, whether in personal health care, public health services or through intersectoral initiatives, whose primary purpose is to improve health and health equity[1]. This implies expanding the definition of health systems outside the limits of health care. No matter to what extent we can plausibly stretch definitions, reaching out beyond the health system's boundaries will still be needed in order to have a significant and sustainable impact on health and health equity.

Health is widely understood to be both a center goal and an important outcome of development. There is also evidence that investing in health promotes economic development and poverty reduction[2]. Economic growth however, would not contribute to achieving health equity unless it is combined with appropriate social policies, as economic prosperity tends to benefit population subgroups that are already well-off, leaving the disadvantaged behind[3].

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[1] World Health Organization.2000.The World Health Report 2000. Health Systems: Improving Performance. WHO 2000, Geneva.

[2] World Health Organization. 2001. Macroeconomics and Health: Investing in Health for Economic Development. Report of the Commission on Macroeconomics and Health. WHO 2001, Geneva.

[3] World Health Organization.2008. Closing the Gap in a Generation. Commission on Social Determinants of Health. WHO. 2008, Geneva.

In its final report, the "Commission on Social Determinants of Health" calls for closing the health gap between and within countries, by improving the conditions of daily life, the circumstances in which people are born, grow, live, work and age. It recommends also to address the structural drivers of those conditions of daily life by tackling the inequitable distribution of power, money and resources.

It becomes an acknowledged fact that for the health authorities to assume their responsibilities, they should seek multisectoral approaches. Likewise, the functioning of a health system could not be understood, and its performance could not be fairly assessed without examining other sectors in the country, looking at the global social and economic picture and taking into account tragic events such as military conflicts or natural disasters.

This chapter tackles the challenges the health system in Lebanon has been facing during the past few years. It describes political struggles not without violence, pretentious building projects in times of economic austerity, military conflicts and devastating wars. In addition to these country-specific constraints, the health system had to adapt to globalization, respond to pandemic threats, bear an increased burden of disease and respond to the needs of an aging population.

Going through the rapid sequence of dramatic events in the following pages, sets the scene for the reader of the depressing and unsecure environment in which health professionals had to exercise and the presumable consequences on their performance. It also stimulates pondering over the duties of heath authorities to intervene in such circumstances to "improve the conditions of daily life" and to "tackle the inequitable distribution of power, money and resources"! Nevertheless, the very importance of this chapter stems rightfully from the recognition and the well founding of social determinants of health.

1- OVERVIEW

Historically, the rugged mountains and valleys of Lebanon have given refuge to all kinds of dissident groups. Lebanon is

inhabited by more than seventeen sects and ethnicities. Although confessional conflicts take up most of the pages in the history book of Lebanon, these remain relatively short periods in the course of a long lasting pacific and harmonious coexistence between religious communities. Religious and cultural diversity lies behind the freedom of belief, speech and assembly, making of Lebanon a unique Arab country in terms of civil rights' protection. The pluralistic society has been the guarantor of democracy and the instigator of alternation in political power. The Lebanese constitution promulgated in 1926 stipulated that all Lebanese citizens are equal before the law, possess the same rights and duties, and are equally admissible to all public offices, without any distinction. However, influential confessional political leaders at the eve of Independence came to an unwritten agreement, the "National Pact", on the distribution of political power among sectarian communities. The "National Pact" was replaced in 1989 by the Taef Agreement which is currently under scrutiny by confessional forces seeking bigger shares of political power. Sectarianism in whatever formula will still constitute a major obstacle preventing the establishment of a modern state in Lebanon. In addition to dividing up the state wealth and power, confessional communities preserve their own code of personal status laws and religious courts.

The Republic of Lebanon, a democratic parliamentarian state, is administratively divided into six provinces (Mohafazats): Beirut, Mount Lebanon, North Lebanon, the Bekaa, South Lebanon and Nabatieh. These provinces are further divided into 25 districts (Qadas). The central administrative power is devolved to the Governor (Mohafez) of each province. Municipalities that are elected by local communities are the expression of decentralization. Lebanon has a long tradition of free market economy, unrestricted capital mobility, openness to investment and trade and complete foreign exchange convertibility.

The Lebanese civil society is very active with powerful professional Orders, Syndicates and NGOs. Trade unions however, fell victim of the political discord, became divided and lost their influence.

Traditionally, Lebanon maintains a good educational system. Gross school enrollment ratio is 98.6% for the first level and 95.2% for the second level. The literacy rate 10 years and above is 91.2% (94.4% for males and 88.2% for females)[4]. The high unemployment rate estimated at 26.4% of the active labor force[5] contributes to emigration and "brain-drain".

2- THE POLITICAL DEADLOCK

Thirty three years after the outbreak of the civil war in April 1975, and 19 years after the Taef Agreement that put an end to the fratricidal conflicts in 1989, Lebanon remains in political turmoil, unable to reach an agreement on a national constitutional project.

Events took a particularly dramatic course after the adoption of the UN-Resolution 1559, in September 2004, which called for an end to the Syrian interference and military presence in Lebanon, as well as the election of a new president and the disarmament of all remaining militias on Lebanese soil. Despite this resolution, the National Assembly voted a constitutional amendment by which the mandate of President Lahoud was extended for three more years. Since then, a series of bomb attacks occurred against political figures, targeting first Minister Marwan Hamadeh in October 2004.

On February 14, 2005, former Prime Minister Hariri was assassinated in a truck-bomb attack which killed 16 and wounded 100. Hariri's murder triggered international pressure on Syria that together with immense demonstrations and public protests, led to the resignation of Prime Minister Omar Karami and a call for new elections. The Syrian troops and intelligence services withdrew in April 2005, after 29 years of military and political dominance. Parliamentary elections took place in summer 2005 and the anti-Syrian coalition won the majority of seats, which was reflected in

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[4] Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004.

[5] UNDP. 2002. Country profiles: Lebanon [online], available at www.undp.org

the composition of the new government headed by PM Fouad Seniora.

Following the Syrian withdrawal, car bomb assassinations of Lebanese anti-Syrian politicians and journalists continued, killing in 2005 the An-Nahar journalist Samir Kassir, the former secretary of the communist party Georges Hawi and MP Gibran Tueini. Minister Elias ElMurr and journalist May Chediac miraculously survived car bomb explosions in 2006. Car bombing targeting political figures continued in 2007, killing MP Walid Eido and MP Antoine Ghanem. A remote-controlled car bomb killed also the army commander General Francois el-Hajj late in 2007, and ISF captain Wissam Eid early in 2008.

The series of bomb explosions in residential areas targeting civilian's properties designed to evoke panic and material damages marked a dangerous turn in Ain Alak (Feb 13, 2007); where bombs targeted two buses carrying people on their way to work, killing three and wounding a dozen others.

A permanent sit-in camp held by the opposition in Beirut city center, to force the resignation of the government, was set up in December 2006, paralyzing the area's business. Opposition demonstrations in January 2007, led to violent street confrontations with rival groups attempting to reopen the roads.

The extended mandate of the president ended on October 24, 2007. General Emile Lahoud, President of the Republic and previous commander-in-chief of the Army, left the Baabda presidency palace on November 23 at midnight, despite the fact that a new president had not yet been elected. Against all odds, Lebanon remains a country where a president leaves office at the end of his mandate to become an ordinary citizen, which is indeed unique in this part of the world.

Eight months after the constitutional deadline, a new president was not yet elected. The disagreement went beyond a consensus on the president's name and extended to an explicit dispute over the division of shares in the new government and the new electoral law. Political statements however, disguised a deeper

discord related to the constitution. "When parties do not agree about the system they constitute, the conflicts are particularly contentious to settle"[6]. Lebanon's political system, is built on a balanced division of powers between Muslims and Christians within the cabinet and Parliament, where majority and opposition alliances are balancing each other out. This leads to a political deadlock.

Tragic events had to happen in May 2008, before reaching a political agreement among Lebanon feuding leaders in Doha on May 21. The protest camp in Beirut's central district was dismantled and a new President elected on May 25. A "National Unity Government" could not be formed before July 11, while episodic violence resumed in the Bekaa and the North, announcing this time an unambiguous confessional sectarian war. Those defeated by May 7th military fights were certainly not worth a battle that released the "monster" of fundamentalist sectarianism. One leader virulently asserted at that time that "Lebanon after May 2008 events is not the same as Lebanon of before", indeed.

The discord is widening among different political and confessional fractions. Hatred mounts, fed by demagogic speeches barely concealing clans leaders opportunism and the retrograde confessional background. In this climate of obscurantism and intolerance, free people who are able to discuss their problems with open minds and without prejudices, ought to face fundamentalism, totemism and sacrality in order to rebuild a free pluralistic and fraternal society endowed with a modern impartial state, guarantor of human rights. In the mean time, in health as in other sectors, unknown professionals in public and private institutions preserve commitment and harmony, and represent a driving force to keep moving forward.

3- MILITARY CONFLICTS

The modern history of Lebanon is a series of destructive wars and continuous efforts for rebuilding the infrastructure and

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[6] Kriesberg, L. Constructive Conflicts: From Escalation to Resolution, p.16, Rowman & Littlefield, 1998.

the economical and social sectors. Lebanon has been for the last three decades, the only Arab country where the Arab-Israeli conflict episodically reaches a ferocious military expression. In addition to being a small country with a fragile political power and weak state military forces; pluralism, democracy and freedom, ironically aggravated Lebanon's vulnerability to international and regional powers interference, turning it into a ground for settling of scores.

The health sector is most critical in a state of war because it has to intervene in emergency battlefields, to deal with recovery periods as well as long term medical, physical and financial consequences. After the end of the civil war (1975-1989), two Israeli military agressions are worth mentioning for their devastating health effects: the 1996 Grapes of Wrath operation and the 2006 war.

On April 11, 1996 Israel launched the Operation Grapes of Wrath that resulted, within a two-week period, in the killing of more than 150 civilians and the injuring of more than 350, in addition to massive destructions and the displacement of more than 400,000 people. Seven thousand persons took refuge on the premises of UNIFIL battalions, believing they were protected under the UN flag. The UNIFIL compound in the village of Qana was shelled by Israeli artillery killing 106 civilians. While the 1996 Qana massacre is still commemorated, this same village witnessed another massacre 10 years later, when Israeli air strikes hit a residential building, killing more than 40 civilians, half of them children in July 2006.

Throughout the period of hostilities, relief work was severely hampered by continuous shelling of the coastal highway. The cease fire came into effect on April 27. The overwhelming majority of the displaced were able to relocate over the next two days. Notwithstanding this situation, the Government has continued its pursuit of national reconstruction focusing on rehabilitating the country's infrastructure, facilitating the return of internally displaced persons, building its human resources and achieving balanced regional development.

Between July 12 and August 14, 2006, Lebanon was the victim of intense military aggressions, causing severe destruction to public infrastructure, including health facilities, a heavy human toll and large scale environmental damage. A total of 1,190 people were killed and around 4,400 injured, while more than 1.2 million people were displaced as a direct result of indiscriminate attacks on civilians, civilian property and infrastructure, and the prevailing climate of fear and panic. Up to one half of the displaced were children. About 150,000 were accommodated in schools while others sought shelter with families, friends, or in open spaces such as parks. Forced to live in crowded and often insecure conditions with limited access to safe drinking water, food, sanitation and electricity, displaced children suffered from respiratory diseases, diarrhea and skin infections.

Housing, water facilities, schools, medical facilities, TV and radio transmission stations, historical, archaeological and cultural sites were targeted, with 127 factories, 109 bridges and 137 roads damaged. The destruction of the land transportation network had a huge impact on humanitarian assistance and on the free movement of displaced civilians.

Medical facilities were not spared: 50% of outpatient facilities in the conflict area were either completely destroyed or severely damaged. In Tibnin, the governmental hospital was bombarded while sheltering some 2000 civilians, and in Marjayoun the electrical and electronic equipment of the public hospital was damaged. All hospitals had to operate while dealing with shortages of fuel, power supply and drinking water. The Red Cross relief activities were directly hit, one volunteer killed, 14 staff members injured, three ambulances destroyed and four others damaged despite clear emblems.

Like all other state departments, the Ministry of Public Health was taken by surprise by the sudden and violent outbreak of the July 2006 war. Provisions of drugs, medical supplies and fuel were not sufficiently available to face 33 days of military actions and shelling and subsequent blockade. However, the Lebanese health system characteristics related to the important role of private

hospitals and NGOs, on one hand, and to the devolution of administrative power, through contracting arrangements and public hospitals autonomy, on the other, led to a rapid and spectacular response in dealing with emergency cases as well as in meeting the needs of the displaced population. After only one week of hostilities, the MOPH with the help of WHO, was able to mobilize donations and provide health facilities in the South and Bekaa with emergency kits, drugs and fuel needed, relying on the UN means of transportation. Directives were given to tertiary care hospitals in Saida and Beirut to discharge patients in non critical conditions, keeping beds vacant for referred casualties. An emergency operation room with appropriate telecommunication means was set up at the Rafic Hariri University Hospital (RHUH). More than 4000 wounded were admitted to hospitals. RHUH alone treated 2000 emergency cases and performed 110 surgical operations. Unfortunately, many injured persons' access to medical care was delayed because of the shelling of roads, the destruction of transportation networks and the movement limitations imposed by the Israeli army, in addition to the deliberate targeting of ambulances.

Responding to the health needs of the displaced was a major challenge. District health physicians led sanitary inspection visits, and distributed hygiene kits, sanitary products and chlorine for water safety. Medical visits were also organized with the active participation of NGO volunteers, and essential drugs were distributed. National Drugs Programs had to adapt to the emerging situation, and additional dispensaries were affiliated to respond to the medication needs of the displaced. Patients with cancer and serious medical conditions were identified among the displaced and provided with drugs. Dialyzed patients were also referred to centers supplied with additional filters, solutions and kits for hemodialysis.

As soon as hostilities stopped, the MOPH in collaboration with WHO conducted an assessment of health facilities and service availability in the affected areas. It launched an immunization campaign against polio and measles reaching 21,000 displaced

children, and conducted two spraying campaigns to control insects and rodents.

The magnitude of mental problems after July 2006 war was particularly alarming. A study was conducted in the South, Nabatieh and the Southern suburb of Beirut. It consisted of mapping psychosocial service providers, and assessing the psychosocial needs of school students. Of the 500 mapped facilities, 89 were providing psychological treatments: individual, family, group therapy, referrals, and psychosocial activities such as recreation and support groups, as well as workshops and training. Needs assessment was conducted on a sample of 1000 students selected from a total of 230,294 students registered in public and private schools of the selected regions. Among frequently recorded environmental psychosocial stressors, the two items that ranked highest for adolescents (12-18 yrs) were seeing a lot of violence on TV (74.7%) and witnessing explosions during the war (67.0%). About a third of adolescents reported that a close person who was dear to them had been killed during the war and 25.8% had witnessed people dying[7].

Military conflicts have a long lasting impact on the population health. Many cases of depression and post traumatic stress syndrome resulting from military violence are still under treatment. The health sector will have still to deal for many years to come, with victims of unexploded bombs and land mines as well as with the consequences of environmental damages of the war.

Although hostilities ceased on August 14, the presence of lethal cluster bombs, mines and Unexploded Ordnances (UXOs), spread throughout the South of Lebanon, are still causing deaths and injuries. The use of cluster munitions, 90 percent of which were fired by the Israeli army during the last 72 hours of the

[7] The Institute for Development, Research, Advocacy and Applied Care (IDRAAC), August 2007. Assessment Study of Psychological Status of Children and Adolescents in the South of Lebanon and Southern Suburbs of Beirut After the July 06 war (SSSS), Beirut: IDRAAC.

conflict was deliberate to turn large areas of fertile agricultural land into "no go" areas for the civilian population[8].

The oil spill from the premeditated bombing of the tankers of the Jiyyeh power plant had a devastating environmental effect on two thirds of Lebanon's coastline. A 10 km-wide oil slick covered 170 km of the Lebanese coastline. Between 10,000 and 15,000 tons of oil spilled into the eastern Mediterranean Sea. Damaged power transformers, collapsed buildings, attacks on fuel stations, and the destruction of chemical plants and other industries may have leaked or discharged hazardous substances to the ground, such as asbestos and chlorinated compounds. These hazardous substances may gravely affect underground and surface water supplies, as well as the health and fertility of arable land.

UNSCR 1701 was unanimously approved by the UN Security Council on August 11, 2006. The resolution called for an immediate cessation of hostilities. For the first time in almost 40 years, the Lebanese Armed Forces were deployed to the South, with new UNIFIL forces accompanying them.

In addition to Israeli military aggressions, Lebanon has also to face internal terrorism threats. On May 20, 2007, heavy fighting erupted in the northern city of Tripoli between Lebanese military forces and the Fatah al–Islam terrorist gang. This triggered a devastating battle in the Nahr Al Bared Palestinian refugee camp. It lasted more than three months, and led to the death of hundreds of Fatah-al-Islam fighters and 168 Lebanese soldiers.

4- THE ECONOMIC CRISIS

The outbreak of the destructive civil war in 1975 has put an end to the prosperity and economic growth witnessed in Lebanon since the 1950s, and had a catastrophic impact on both the private and the public sectors. The 1990s witnessed ambitious

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[8] Report of the Commission of Inquiry on Lebanon pursuant to Human Rights Council Resolution S-2/1. "Implementation of General Assembly Resolution 60/251 of 15 March 2006 entitled "Human Rights Council". Human Rights Council. Third session. Item 2 of the provisional agenda. 23 November, 2006.

infrastructure rehabilitation projects in different sectors: electricity, water supply, sanitation and waste disposal, roads, and telecommunications, as well as construction of education and health facilities. These projects were largely funded by treasury bills.

Along with investing in construction, the Government had to maintain recurrent costs of the oversized public administration and to bear the financial burden of its inefficiency. In particular, recovering Electricité du Liban's yearly deficit represented a huge and continuous financial drain. This, in addition to the determination of the Government to maintain low inflation rates and a stable currency, led to important budget deficits and the escalation of the public debt.

Table I-1: Financial indicators (1 USD = 1507.5 LBP)

	2002	2003	2004	2005	2006
GDP (at market prices) in billion LBP	28,190	29,849	32,411	32,411	34,220
GDP (at market prices) in Million USD	18,700	19,800	21,500	21,500	22,700
Growth rate of Real GDP (%)	3.3	4.0	7.4	1	0
Growth of Nominal GDP (%)	9.4	5.9	8.6	0.3	5.6
Budget Deficit (billion LBP)	3,875	2,125	3,000	3,083	2,783
Deficit/GDP (%)	13.75	7.12	9.26	9.51	8.13
Government's Debt (in billion LBP)	47,276	50,285	54,061	58,048	60,880
Net Debt/GDP (%)	167.7	173.8	151.5	161.5	165.0

Sources:- *Ministry of Economy and Trade.2007. Selected Economic Indicators 2002-2006 [Online].www.economy.gov.lb*
- Ministry of Finance. 2007. Fiscal Accounts 1993-2006 report. [Online]. www.finance.gov.lb

In 1998, the net public debt stood at 4776 USD per capita, and debt servicing accounted for 13% of the Gross Domestic Product (GDP). In 2000, the net public debt amounted to 127% of GDP, and in 2002 it was estimated at 31 billion USD representing 8000 USD per capita, making the debt service almost equal to total public revenues. The GDP that increased from USD 7.54 billion in 1993 to USD 16.17 billion in 1998[9], has shown no significant

[9] Banque du Liban -Quarterly Bulletin, Fourth Quarter 1998. www.bdl.gov.lb

increase until 2003 to reach USD 19,800 million. By the end of December 2007, gross public debt reached 42.06 billion USD[10].

The Lebanese economy enjoyed a certain stability in 2004, and GDP increased by 7.4%. The persistent trade deficit was reduced and its financing secured by international capital inflows and high foreign exchange reserves of local banks. The growth rate of the public debt decreased markedly. The "Paris II" "soft-loans" allowed the conversion from domestic treasury bills to Eurobonds at reduced rates of interest. However, the political situation prevented the Government from implementing meaningful administrative reforms, especially the privatisation program, a precondition for the funds allocated at the Paris II donors' conference. The economic growth was halted again by the 2005 tragic events. The tourism sector was hit by a significant decrease of the number of incoming tourists. Compared to 2004, exports were reduced by 22% in the third quarter of 2005. Episodic Syrian border closings came to aggravate the situation. Since 2004, despite slight increases of GDP at market prices, the real GDP growth rate decreased to almost zero in 2006.

The minimum wage of 200 USD[11] lying far below monthly minimum expenses, has remained unchanged since 1996 despite a registered inflation of 70% ever since. Almost 30 percent of the population has been living below the poverty line since 1995[12]. The widespread poverty situation has been worsening recently due to the continuous price increases of basic commodities due to high oil prices, the appreciation of the Euro, and the high unemployment rate.

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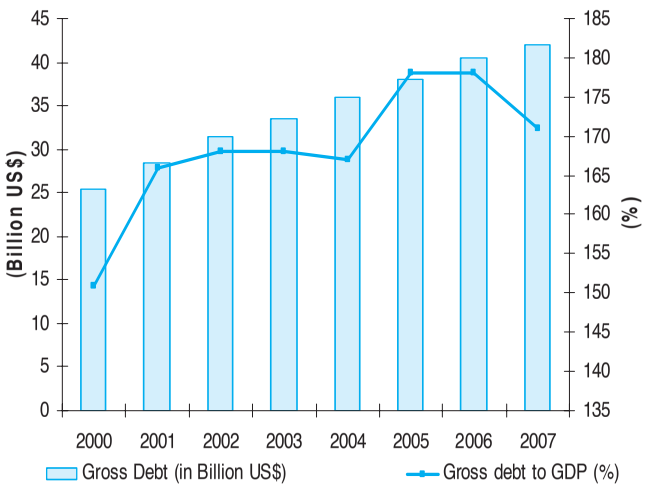
[10] Debt and Debt Markets, Quarterly Bulletin of the Ministry of Finance, issue No. 3, quarter IV 2007.

[11] A new minimum wage of 500,000 LBP was decreed by the government starting May 2008.

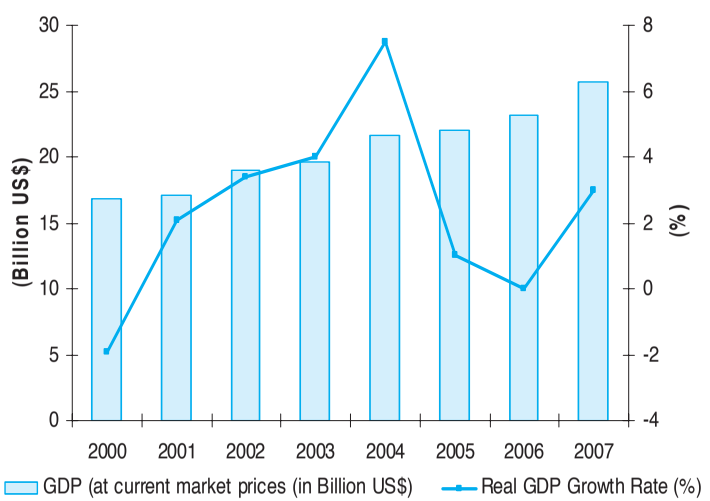
[12] Haddad, A. 1996. Poverty in Lebanon. Report prepared in 1995 for the United Nation Economic and Social Commission for Western Asia (ESCWA). Beirut.

Fig I-1: Gross Public Debt and Gross Debt to GDP 2000-2007



Source: Ministry of Finance, Banque du Liban (BDL).
Note: *2007 figures are based on GDP estimate from BDL.*

Fig I-2: GDP and Real GDP Growth Rate 2000-2007



Sources: 2000-2003 are National Account Committee figures
2004-2006 are Banque du Liban (BDL) figures
2007 figures are the latest BDL estimates

After the cessation of hostilities in August 2006, pledges of $940 million made at the International Conference on Early Recovery hosted by Sweden, doubled the amount that the Government of Lebanon had originally requested.

In January 25, 2007, the international community met in Paris for a "Paris III" Economic Conference, securing 7.6 billion USD for Lebanon's new economic plan. Unfortunately pre-required legislation reform and privatization were hindered again by the political deadlock and the shutting down of the Parliament.

There is no doubt that the political crisis and military conflicts are behind the economic drawbacks. In its turn, the economic deterioration has undeniable adverse effects on the security and the political situation, pushing the country into a vicious circle. Some even believe that the continued problems in Lebanon are mainly due to the lack of economic stability, which has tied the hands of those responsible for the political climate[13].

With a share not exceeding in any year 4% of the total government budget, the MOPH has to cover the hospitalization cost of the uninsured and provide them with expensive treatments that represent catastrophic payment for the households. Persistent recession worsens unemployment and thus raises the number of those uninsured.

Reimbursement of curative care, payment of salaries and other MOPH administrative costs, leave derisory amounts for health promotion and prevention. However, the MOPH cannot give away its responsibility in protecting the population's health and has to use those scarce available resources in the most efficient way to face public emerging health threats.

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[13]Erin Fitz P. The Globalization of Democracy Building: A polyarchic Dilemma. December 10, 2003.

Table I-2: Budgetary resources indicators (MOPH 2005)

	Value
MOPH allocated Budget (% of total government budget)	3.60
MOPH allocated Budget (% of government budget without debt)	6.67
MOPH Expenditure as % GDP	1.01
Public Expenditure on Health as % of GDP	2.35
Public Expenditure on Health as % of total Health Expenditure	28.4
Annual MOPH budget (USD per capita)	63.97
Total Public Expenditure on Health (USD per capita)	124.32

Source: Ministry of Public Health. National Health Account 2005
Note: Treasury figures from the Ministry of Finance. www.finance.gov.lb

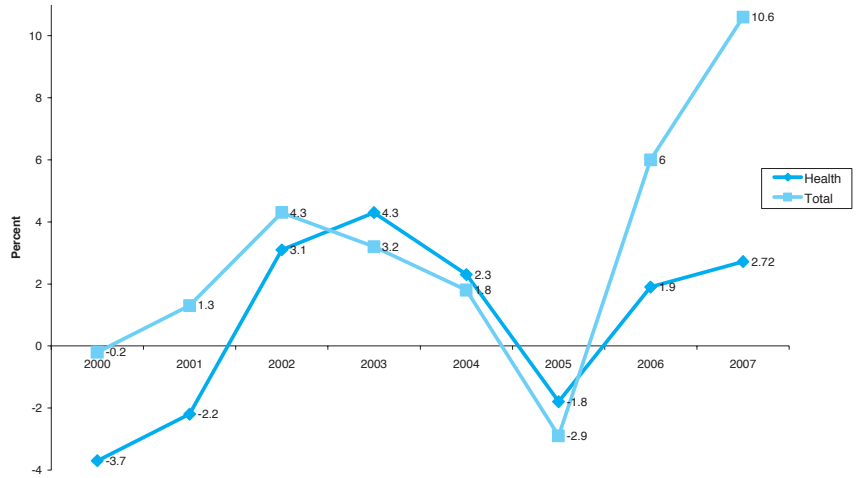
One of the most important regulation mechanisms of the MOPH is related to tarification of hospital services and periodic issuing of drugs price index. These revealed to be relatively effective when comparing health related goods and services to other sectors commodities as denoted by the evolution of the consumption price index (CPI). The CPI issued periodically by the Central Administration of Statistics (CAS) considers a package of services and commodities including health. This index showed important fluctuations in recent years, especially a high peak in 2006-2007, due mainly to increased currencies exchange rates against US dollars and Lebanese Pounds, and international oil prices. Health related prices that follow roughly the CPI with some delay, showed remarkable braking of price increase in the two last years, which reflects the effect of the MOPH regulation.

A 2007 report[14] of Ministry of Social Affairs (MOSA) and UNDP draws a profile of poverty based on money metric poverty measurements and calculates a national poverty line based on household expenditures. This report states that 28.50% of the population is poor with less than 4 USD consumption per capita per day, including those living in extreme poverty (8%) with less than 2.4 USD. The Gini Coefficient[15] that measures inequality is

[14] Ministry of Social Affairs, October 2007. Poverty, Growth & Inequality in Lebanon. Beirut: UNDP.

[15] Gini Coefficient (GC) is a measure of statistical dispersion, most prominently used as a measure of inequality of income distribution. It is defined as a ratio

estimated at 0.37 which corresponds to the MENA countries average value.



Source: Central Administration of Statistics, consumer price index reports.

Fig I-3: Consumer Price Index: %change, health versus total basket (1998 base year)

The link between poverty and ill-health has been arousing much interest and debate in the international community. The WHO Commission on Macroeconomics and Health provided evidence that this link is functioning in both directions. In its report, it stresses the importance of investing in health to promote economic development and reduce poverty. It states that the world should initiate a partnership of rich and poor to prove that globalization can work to the benefit of all humankind[16].

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with values between 0 and 1: a low GC indicates more equal income (0= everyone having exactly same income) while a high GC indicates more unequal distribution (1= one person has all the income, while everyone else has zero income).

[16]Report of the Commission on Macroeconomics and Health. 2001. Macroeconomics and Health: Investing in Health for Economic Development. Geneva: WHO.

At the Paris III Donors' Conference, the government committed to a Social Action Plan that places the objective of poverty reduction, social justice and equity at the heart of the reform process. The protection of individuals from impoverishment to which they are exposed in reimbursing health services; remains a major challenge in this period of economic austerity. Reforming the health financing system from this perspective is becoming a priority, along with strengthening primary health care services and preventive programs to achieve the Millennium Development Goals.

5- GLOBALIZATION CHALLENGES

Globalization that started first with monetary and then trade concerns, has evolved to include also social and political purposes. That is how the Bretton Woods Conference, that aimed in July 1944 at establishing a System of Exchange Rate Management, had led to the creation of the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD)[17]. These two institutions became rapidly involved in shaping the economical and political profiles in many countries. The World Bank in particular, intervenes more and more powerfully in all social sectors including health. The General Agreement on Tarifs and Trade (GATT) was introduced at the Bretton Woods Conference with the objective of regulating trade by focusing in its first phase (1947-1959) on freezing existing tariff levels, then in a second phase (1959-1979) on reducing tariffs, to be extended in a third phase (1986-1994) to new areas such as Intellectual Property, Services, Capital and Agriculture. The whole process leading to the creation of the World Trade Organization (WTO) included agreements on: Technical Barriers to Trade (TBT), Trade-Related Aspects of Intellectual Property Rights (TRIPS), Sanitary and Phyto Sanitary agreement (SPS), and the General Agreement on Trade in Services (GATS). These agreements would not only have an impact on all countries'

[17]IBRD known as the World Bank (WB).

policies, but would also touch all aspects of every individual life on the globe.

As more and more countries are joining WTO, a rising concern is taking place, among health officials in Developing Countries, about the implications of this process on health, especially regarding the accessibility of the poor to health services and drugs. The TRIPS agreement in particular, is seen as a major source of concern. The "Doha Declaration on the TRIPS Agreement and Public Health", which came as a result of a process initiated by developing countries, is seen by those countries as a victory for its legal implications, especially when considering cases in which private interests in intellectual property rights are subordinate to more compelling public interests[18]. However, while developing countries argued that the Declaration was designed to allow states to address all public health issues, the developed countries argued that it was really designed to address three major epidemics, HIV/AIDS, tuberculosis and malaria, and others of similar magnitude[19].

On the other hand and along with affirming governments rights to use TRIPS Agreement's flexibilities, original brand manufacturing countries and pharmaceutical firms have been emphasizing test data protection against "Unfair Commercial Use" according to article 39.3 of the TRIPS Agreement, and requesting countries to provide at least five years of data exclusivity. In such a case, generic competitors must repeat costly tests for marketing approval, instead of submitting bioequivalence data. This kind of "TRIPS-plus" requirements creates a "patient-like" barrier delaying generic marketing and hampering competition[20]. The TRIPS Agreement's flexibilities includes Compulsory Licensing,

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[18] Doha Declaration, Nov. 2001, paragraphs 1 and 4, with reference to Article 8 of the TRIPS agreement.

[19] Dr. Heinz Klug, the Doha Declaration and Public Health: global view. WHO report on consultative meeting on TRIPS and Public Health, Amman, Jordan. December, 2003.

[20] Access to Medicines at Risk Across the Globe: what to watch out for in free Trade Agreements with the United States. New York: Médecins sans Frontières; 2004, pp. 4-5.

Parallel Imports and Early Working Exception. Compulsory licensing was thought not to be a beneficial option for countries like Lebanon, because of, on one hand, the weak national manufacturing capacity, and on the other, the high risk investment involved with limited return, considering the small size of the local market and the restriction on exporting compulsory licensed drugs. However, for some developing countries the issue is worth reconsidering in light of the WTO General Council Decision of 30August 2003 that provides for economies of scale by allowing the export of products produced through this system to countries within a regional trade agreement so long as at least half the members of the regional agreement are presently on the UN list of Least Developed Countries (LDCs)[21]. Nevertheless, for most Developping Countries parallel import and Early Working Exception may have an important impact on increasing drugs accessibility, promoting competition and containing cost. These flexibilities provided by TRIPS articles 6 and 31 respectively, should be integrated in the country's legislation.

Lebanon is one of the original signatories of the 1947 General Agreement on Tariffs and Trade (GATT). In February 1999, Lebanon submitted its request for accession to the World Trade Organization (WTO), was granted the status of observer in April 1999, and is expected to become a member of the WTO in 2009.

Lebanon has signed bilateral trade and economic agreements with more than 30 countries. These agreements provide Most Favored Nation (MFN) treatment and deal primarily with trade in goods, whereas trade in services is only tackled in general provisions that call for enhancing cooperation. On the other hand, Lebanon is a signatory of at least 120 sector-specific bilateral agreements including tourism, post, telecommunication, culture and health. These agreements contain general provisions on

[21] WTO, General Council Decision of 30 August 2003: Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health. (pre-Cancun Agreement) (paragraph 6.i)

facilitating trade in services without reference to any specific mechanisms.

Free Trade Agreements have also been signed with the European Union (EU) the European Free Trade Association States (EFTA) and the Gulf Cooperation Countries (GCC). Lebanon is also a signatory of the "Taysir" agreement (Feb. 1981) and the Greater Arab Free Trade Area (GAFTA) (Jan. 2005). Bilateral free-trade area agreements have been signed with Egypt, Kuwait, Syria and the United Arab Emirates. Lebanon is involved as well in the Euro-Mediterranean Partnership (The Barcelona Process) launched in 1995 between EU Member States and 12 Mediterranean Partners; and in the EU's Neighborhood Policy.

The agreement signed with EFTA states (Iceland, Liechtenstein, Norway and Switzerland) that came into force on January 1st 2007, is of particular importance, because of the meaningful concessions made by Lebanon. This agreement sets a higher standard for the protection of intellectual property rights, such as patents, copyrights, undisclosed information, industrial designs and geographical indications, in some cases going beyond the WTO agreement on TRIPS requirements. The Lebanon-EFTA agreement states that the Parties are committed to protecting undisclosed information, in accordance with Article 39 of TRIPS: "The Parties shall prevent applicants for marketing approval for pharmaceuticals and agricultural chemical products, from relying on or referring to undisclosed tests or other undisclosed data submitted by prior applicants to the competent approval authorities of the respective Parties for a period, from the date of approval, of at least six years, except where approval is sought for original products, or unless the first applicant is adequately compensated"[22]. This constitutes an example of the concessions that would undoubtedly be referred to in future negotiations with other partners.

[22] The EFTA Agreement, Annex V; referred to in Article 24: Protection of Intellectual Property. Lebanese Official Gazette May 25, 2006.

Globalization remains one of the biggest challenges for Lebanon. Major difficulties are encountered in accessing WTO and in coping with its regulations on goods such as food, drugs and medical supplies, in addition to health related services. The TRIPS agreement would have a great impact on the availability and cost of drugs, as well as on the development of the domestic pharmaceutical industry. Like other Developing Countries, Lebanon has also problems meeting the sanitary and phytosanitary requirements set by Developed Countries, while lacking the appropriate technology and expertise to control imported products.

6- THE INCREASING BURDEN OF DISEASE

According to the 2005 households' survey[23], Lebanon's population is estimated around 3,755,000 inhabitants, excluding Palestinians inside refugee camps. Almost 80% of the population resides in urban areas. The country is witnessing a demographic transition: 27.3% of the population falls under 15 year of age, and 7.4% over 65. Demographic studies[24] show that the population's natural increase rate is 1.46%, and the total fertility rate 1.9. Infant mortality has decreased from 33.5 per thousand in 1999[25] to 16.1 in 2004[26] with no gaps between males and females. This could not have been achieved without substantial reduction of the 1999 higher mortality rates in the North (48.1) and the Bekaa (39.8), and the lowering of regional disparities. Life expectancy at birth is estimated at 78 years.

The 1999 NHHEUS figures revealed that 20% of the population above 60 have been hospitalized at least once over a one-year period, and have used ambulatory care at a rate of 6.3 visits per person per year. This is compared to the population mean

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[23] Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004.

[24] MOPH Vital Statistics Department. 2007. Statistical Bulletin 2006. Beirut: Ministry of Public Health.

[25] MOPH, League of Arab Stage. 1996. The Pan Arab Project for Child Health (PAPCHILD) 1996.

[26] CAS, MOSA, League of Arab States. 2006. The Pan Arab Project for Family Health (PAPFAM) 2004.

values of 10.2% for hospitalization and 3.6 visits for ambulatory care[27]. With the ageing of the population, different and additional needs for health services would arise. The health sector is not the only one to adapt to the needs of the elderly but is the prime promoter of new concepts such as aging friendly cities.

Table I-3: Indicators of the demographic transition in Lebanon

	1996-1997	2004-2005
Crude Birth Rate	25	19.8
Crude Death Rate	7	4.9
Infant Mortality Rate	33.5	16.1
Child Mortality Rate	36.5	18.3
Population <15 years	28	27.3
Population >65 years	6.5	7.4
Dependency Rate (%)	62.8	53.3
Total Fertility Rate	2.5	1.9
Natural Increase Rate (%)	1.8	1.46

Sources: Housing and Population Data Base. 1996. CAS Households Living Conditions Survey.1997. CAS Department of Vital Statistics. 2006. MOPH Household Survey. 2004. CAS

While being in the midst of demographic transition, Lebanon is towards the end of its epidemiological transition phase: Infectious diseases are constantly loosing of their health and financial impact, whereas the incidence and cost of non-communicable diseases are on the rise and are affecting more and more the poor. Unhealthy lifestyles including new dietary habits with excessive fatty, sugary and salty food, lack of physical activity and cigarettes and narghileh smoking, are common risk factors for obesity, diabetes, cardiovascular diseases and cancer. In 1997, the prevalence of diabetes was estimated at 13% of the adult population, and 17.7% of males and 23.1% of females between 30 and 64 years suffered from hypercholesterolemia (≥ 240 mg/dl). In the same age-group, 26% had a systolic blood pressure of 140 mm Hg and above. This percentage exceeded 64% for those aged above

[27]CAS, MOPH, WHO, WB. 2001. National Household Health Expenditures and Utilization Survey 1998-1999.

64[28]. A 2003 population-based study[29] showed that prevalence rates of overweight for children 3 to 19 years are 22.5% for boys and 16.1% for girls. In this age group 7.5% of boys and 3.2% of girls are considered obese. For adult men and women (age ≥ 20 years), the prevalence rates of overweight are 57.7% and 49.4%, respectively, whereas obesity (BMI ≥ 30 kg/m^2) is higher among women (18.8%) than men (14.3%). These high prevalence rates of overweight and obesity are comparable with those observed in Developed Countries such as the United States.

The changing epidemiological profile of diseases is putting traditional health systems under stress. The increasing burden of non-communicable chronic diseases requires additional resources and health services to adapt to the emerging needs. In addition to fighting communicable and non communicable diseases, the MOPH had to develop a national preparedness plan for critical situations such as the avian flu pandemic threat, and to cope with International Health Regulations.

7- HEALTH SYSTEM ADJUSTMENTS

Within a context of political deadlock, economic austerity and intermittent military conflicts, the health system has to face globalization challenges and respond to the increasing demand for health services, resulting from the growing need of the aging population, bear the increasing financial burden of the epidemiological shift and face market failure complexities.

One important aspect of market failure is unnecessary demands induced by oversupply of manpower, hospital beds and sophisticated services. Health services are abundantly available in Lebanon and the majority of the population can reach an outpatient

[28]Salti, I et al. Epidemiology of Cardiovascular Risk Factors Among Adult Lebanese Population. Lebanese Technical Reports. Lebanese National Council for Scientific Research, 1998.

[29]Sibai AM, Hwalla N, Adra N, Rahal B. prevalence and Covariates of Obesity in Lebanon: Findings from the First Epidemiological Study. Obesity Research vol. 11 No. 11 November 2003.

facility within 10 minutes walk, and a hospital within 20 minutes drive[30].

Table I-4: Distribution of households by availability of health services within a ten-minutes walking distance (n= 879,855 households)

	At least one available	None available	Don't know
Hospital	30.5	69.1	0.4
Pharmacy	72.2	27.8	0.1
Private Clinic	66.2	32.8	1
Dispensary	58.2	39.4	2.3

Source: The National Survey of Household Living Conditions 2004, CAS.

The MOPH should fulfill its responsibilities, despite the continuously decreasing number of staff. Over the past 10 years, 25% of the MOPH employees retired without being replaced. The core category of full-time civil servants staff was hit the most by retirement (37%).

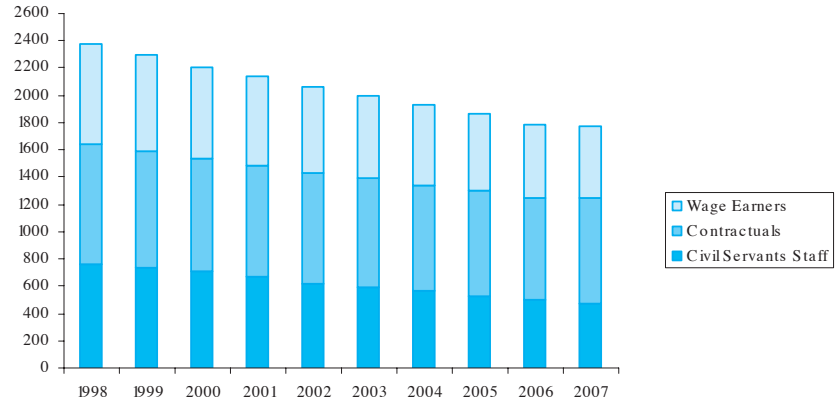

Fig I-4: MOPH employees by employment categories 1998-2007

All these challenges could not be faced by short sighted health policy, nor wait for a radical reform to be achieved. A vision was needed with some strategic orientations and a sense of direction to enlighten a step-wise approach reform process.

[30]Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004/5.

The health system development has to reconcile two competing values: efficiency and equity. Politicians are more concerned by equity defined in its strictest sense as equal accessibility, a definition which neglects fairness of financial contribution. In this regard, equity should not be considered only in its vertical dimension between different groups defined by age, sex, region or income, but also in its horizontal dimension, i.e. between individuals within the groups. This is a critical issue considering its implication on the design of the social security system[31]. More attention should also be paid to efficiency, starting from the organization of the health system, through the different contractual approaches within the system, ending with incentives for quality improvement and cost containment. A health system could hardly be fair if it is not efficient.

The system should respond to the legitimate expectations of the population[32]. This involves a cultural dimension where the patient and the user in general should be considered as an adult with dignity, who knows his/her needs, is able to claim his/her rights, and should be empowered as a consumer. This is a key element in improving quality, rationalizing cost, and promoting equity.

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[31]Report of the Scientific Peer Review Group on Health Systems Performance Assessment. WHO, Geneva 2002.

[32]Health Systems: Improving Performance. The World Health Report 2000. WHO, Geneva 2000.

Chapter Two

PROVISION AND PROVIDERS OF HEALTH SERVICES

This chapter gives an overview of the development of health provision starting by facility-based health services delivery, including hospitals and ambulatory care facilities. A particular attention is given to the distribution of services as a determinant of equitable accessibility, while analyzing the role of the public sector in this regard. The health delivery system is in general curative-oriented and technology-driven, except for Primary Health Care (PHC) that is emphasized as community-based services oriented towards promotion and prevention. PHC is considered by the MOPH as a strategy that involves the NGO sector to provide for the poor an affordable alternative to the expensive private ambulatory care. Vertical public health programs are also tackled as necessary interventions that complement and empower PHC, while targeting specific populations and health conditions. The public-private mix at all levels of health care and the remarkable input of the non-profit sector required a particular attention. Finally, this chapter examines human resources development that has a particularly important impact on health provision.

1- HOSPITAL CARE

The role of government in providing hospital care in Lebanon was subject to a vivid debate in the early 1990s. Private services were

considered expensive and inequitably distributed, whereas public hospitals, that were part of the organizational structure of the MOPH were hopelessly inefficient. Public provision proponents put forward the un-affordability of costly private care in light of the prevailing economic situation and the necessity of ensuring equitable accessibility, as a rationale for government intervention in remote areas. Opponents argued that better regulation may create incentives for private investment in underserved areas while containing cost through better control of demand and supply. As usual, a technical difference is settled according to political interests. Most often the political decision is rather made prior to the technical debate which is then sought only to provide arguments justifying the decision.

1.1 Public Hospitals Development

The provision of health services by the Government has witnessed a meaningful decline during the long years of civil strife and socioeconomic disturbances that have hit the financial and institutional capacities of the public sector. By the end of the civil war, only half of the 24 public hospitals were left operational, with an average number of active beds not exceeding 20 per hospital. The government 1993 reconstruction plan aimed at rehabilitating and building public hospitals in order to have at least one in each district. Whereas building public hospitals in underserved districts such as Akkar, Dnieh, Hermel, Rachaya, and Hasbaya was technically justified; those built in Zahleh, Saida, Tripoli and most of Mount Lebanon districts had no rational justification and merely served political and confessional interests. Nevertheless, the distribution of public hospitals and beds (table II-1) ended up being more equitable than the private ones (table II-2).

Table II-1: Distribution of public hospitals and beds by mohafazat

	Beirut	ML	SL	Nab	NL	Bekaa	Total
Hospitals	2	6	3	5	7	5	28
Beds	595	430	235	365	455	470	2550

The total cost incurred in construction and equipment amounted to 320 million USD covering a total number of 30 hospitals with a capacity of 2700 beds. The initial investment cost was only the tip of the iceberg, as the government had to deal with increasing operational

costs recurring every year. Nevertheless, whether a public hospital was worth the investment in a district rather than another was totally irrelevant considering the prevailing public sector inefficiency. The main challenge was how to improve medical, paramedical and most of all, managerial functions in order to provide quality and cost-effective public services. This is an example of how to bear the consequences of self-interested political decisions and find ad hoc solutions. Public hospitals autonomy was sought as a mean to free hospital managers from the public administration bureaucracy. The needed law was drafted but was subject to lengthy negotiations and reviews by finicky bureaucrats who slowed down the procedure. MOPH was racing to obtain the issuance of this law even as massive building work was ongoing. The law was issued in 1996 and was subsequently subjected to several modifications, whereas the applications decrees had to come successively during the following years. This law enhanced tremendously the performance of public hospitals by granting them financial and managerial autonomy and flexibilities for better procurement and recruitment of qualified personnel. The law proved to be vital for the development of public hospitals, giving them the opportunity to be not only complementary but also competitive with the private sector.

Currently, all public hospitals have acquired an autonomous administration board appointed by government decrees, except for the Tyr hospital, located inside the Palestinian refugee camp, and run by an Army officer. Twenty two of these hospitals are currently operational and the remaining is expected to open before the end of 2008.

The administrative and financial autonomous status allows the hospital's Administration Board to set up contracts with financing agencies including the MOPH. The hospitalized uninsured patient pays 5% of the bill, in comparison to 15% paid in private hospitals and the MOPH reimburses 85%. The public hospital prices are thus 10 percent lower than those of the private. The contracting of the MOPH with its own hospitals is an interesting financing modality where the financial risk is shifted down to the hospital management level. Financial breakeven is a condition for survival. This creates incentives for developing policies to attract patients and reduces transfer as compared

to the old system's reverse incentives that prevailed before the implementation of the law of autonomy. The share of public hospitals in admissions has been increasing to exceed, in 2008, 30% of the total admissions on the account of the MOPH.

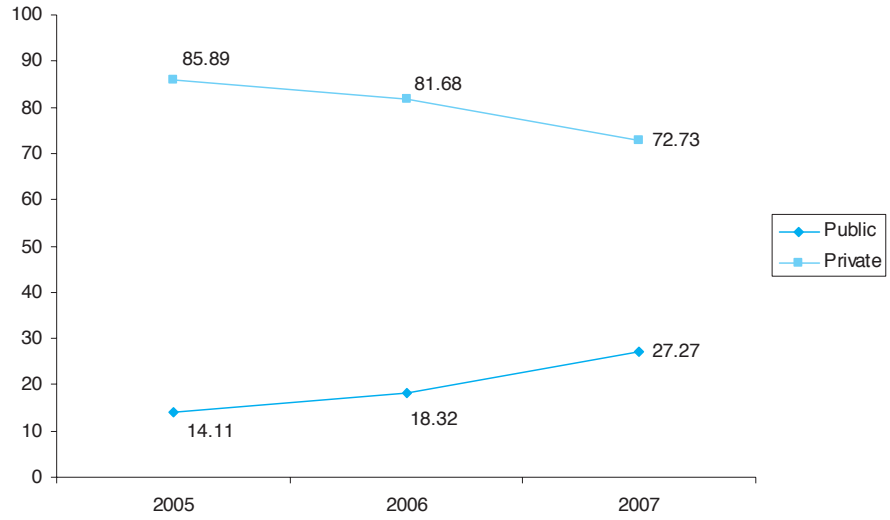

Fig II-1: MOPH-subsidized admissions to public and private hospitals

It is worth mentioning that the MOPH does not provide any preferential treatment to public hospitals and respects the patient's freedom in choosing the physician and the hospital. A public hospital is strictly not allowed to select patients nor to impose extra fees. Being less expensive and more equitably distributed than the private, public hospitals are contributing to resolving both cost and equity problems and are expected to play a gate-keeping role through a well-defined referral system.

1.2 Private Hospitals

The private hospital sector development was relatively less affected by the civil disturbances and continued to grow both in number and capacity to represent more than 90% of the total number of hospital beds in the 1990s. This percentage decreased later with the opening of new public hospitals to 80%. However, investment in

private hospitals continued irrespective of the public sector rebuilding plan.

A number of smaller private hospitals are owned by physicians who are considered eminent figures in their community. Most large hospitals often belong to philanthropic or religious congregations, and have a determining role inside the powerful "Association of Private Hospitals". The business community has become increasingly involved in obtaining shares in existing hospitals or investing in new ones. This development in hospital ownership has led to further growth of the sector in an unregulated manner, which has worsened the pre-existing oversupply and induced a greater demand and use of in-patient health services.

Private providers have been investing in areas allowing profit maximization. Poorer regions were not attractive, and remained for a long time relatively underserved, thus exacerbating the inequity problem. Nonetheless, regional discrepancies started becoming less striking by the end of 1990s, as private investment in hospitals increased along with government projects in most of the previously deprived districts. However, the highest availability of beds remains in Beirut and surrounding localities of Mount Lebanon (table II-2).

Table II-2: Distribution of private hospitals according to bed capacity by mouhafazat (2007)

	Less than 100 beds # hosp	100-200 beds # hosp	More than 200 beds # hosp	Total # hosp
Beirut	15	4	4	**23**
Mount Lebanon	43	12	1	**56**
North Lebanon	24	3	1	**28**
South Lebanon	21	2	1	**24**
Nabatieh	9	0	0	**9**
Bekaa	23	5	0	**28**
Total	**135**	**26**	**7**	**168**

The MOPH attempts to rationalize the supply distribution remain unavailing in the absence of pertinent legislations. The MOPH disposes of a database on the availability and distribution of health facilities and equipment, within a geographic information system (GIS). This database is known as the “Carte Sanitaire” and it was developed as a tool to control the supply. The law project proposed by

Table II-3: Distribution of MOPH contracted hospitals and allocated budget by mouhafazat

	Total Lebanon		Contracts with MOPH			Yearly ceiling (1000 LBP)	Percent allocation
	# hosp	(%)	2000	2002	2007*		
Beirut	23	(13.7)	22	8	11	28.248.000	13.4
Mount Lebanon	56	(33.3)	50	23	43	61.885.200	29.4
North Lebanon	28	(16.7)	22	17	25	45.547.200	21.6
South Lebanon	24	(14.3)	19	11	15	30.904.800	14.7
Nabatieh	9	(5.4)	4	5	9	10.921.200	5.2
Bekaa	28	(16.7)	23	12	22	33.151.200	15.7
Total	**168**	**(100.0)**	**140**	**76**	**125**	**210.657.600**	**100.0**

* *Including public hospitals*

Table II-4: Per capita allocation of MOPH hospitalization budget by mohafazat (LBP)

	Population*	MOPH Budget Allocation/year	
		2007**	Per capita allocation
Beirut and Mount Lebanon	1,892,073	90,133,200,000	48,000
North Lebanon	768,709	45,547,200,000	59,000
South and Nabatieh	623,043	41,826,000,000	67,000
Bekaa	471,209	33,151,200,000	70,000
Lebanon (total)	**3,755,034**	**210,657,600,000**	**56,000**

* *Households Survey 2004. CAS* ** *Decree No. 22/1 January 2007, MOPH*

the MOPH to link licensure of new health care facilities to open geographical locations on the Carte Sanitaire is still "on freeze" in the Council of Ministers.

Whereas inequitable accessibility may partially result from disparities in regional availability of hospital services, it is mostly related to variations in the insurance coverage and the ability to pay among the population. These inequalities were somewhat compensated through more equitable MOPH budget allocation to contracted hospitals as shown in table II-3.

The MOPH aims at providing equal accessibility for the uninsured by contracting with providers in all regions, while trying to adjust per capita allocation of budget between regions according to needs (table II-4). This proved to have, as shall be explained later, an important impact on the accessibility of the poor to hospital services.

Efficiency has been a major concern since the 1990's[1]. The majority of private hospitals (135 out of 168) are general and multidisciplinary with less than a 100-bed capacity, and are still encountering difficulties in achieving economies of scale while offering acute care of appropriate quality. Imposing extra fees on MOPH patients was and is still not an uncommon practice.

The availability of "high-tech" services and heavy equipment in relation to the population size is comparable with, and sometimes exceeds, those of Developed Countries. Oversupply in hospital beds and equipment lead to a smaller market share per service and thus to a higher cost per unit. This occurs despite the supplier-induced demand and unnecessary increase in volume, and the consequent inflated bills.

Behind the rapid and continuing growth of private hospitals and their oversized equipment during the eighties and nineties, lie financial incentives generated by contracts with public funds. This explains why long-stay hospitals lacking such incentives, do not attract the private

[1]Van Lerberghe, W; Ammar,W; Mechbal, A.H. De l'impasse à la réforme: La crise du secteur de santé au Liban. Studies in Health Services Organization and Policy, 2,1997.

for-profit sector and remain strictly the domain of religious congregations and philanthropic associations. Twenty hospitals with 3600 beds belong to this category which includes elderly homes and geriatric services, rehabilitation and long term physiotherapy, mental health and other chronic conditions. These services are under-priced with a per diem-based reimbursement from MOPH and Ministry of Social Affairs (MOSA.)

Table II-5: Availability of "high-tech" services and heavy equipment (2005)

	Lebanon		OECD**
	Number of units	Units per million*	Units per million
Open heart surgery departments	22	5.7	
Cardiac catheterization laboratories	32	8.3	3.3
Dialysis centers	55	14.2	5.2
Organ Transplant centers	5	1.3	
Bone marrow transplant units	3	0.8	
Specialized burns centers	1	0.3	
In-Vitro Fertilization centers	12	3.1	
Radiotherapy	8	2.1	6.2
Lithotripsy	31	8.0	2.2
CT scan	104	26.9	20.6
PET scan	3	0.8	0.6
MRI	38	9.8	9.8

***Sources**:* Ministry of Public Health. 2007 and Syndicate of Private Hospitals, 2007*
*** Organization for Economic Co-operation and Development (OECD), Health data, 2007*

The Ministry of Public Health has been struggling to improve the quality of hospital care and to establish hospital regulation mechanisms. The most successful experience in this domain was the use of accreditation as a tool to improve quality and at the same time to rationalize MOPH contracting with hospitals. The classification system that ranked hospitals according to their capacity, technology advances and level of hotel services, shifted with the beginning of this decade to an accreditation system that focuses more on process and performance.

Over the past 8 years, external auditing of hospitals against explicit quality standards has been promoting, a culture of quality improvement, while providing financing agencies with objective criteria for selecting hospitals. The MOPH was to a large extent capable of restricting contracts to accredited hospitals despite all

pressures. Table II-3 shows the important decrease in number of contracted hospitals in 2002 compared to 2000 as a result of linking contracting to accreditation. The argument that the MOPH policy would be detrimental for the poor as peripheral hospitals are not prepared for accreditation was refuted by the auditing results as shown in table II-6.

Table II-6: Accreditation of private hospitals by mohafazat (December 2006)

	A	B	C	D	Total	(%)
Beirut	3	2	5	1	11	(18.4)
Mount Lebanon	11	3	11	14	39	(35.0)
North Lebanon	4	2	10	3	19	(20.4)
South Lebanon	1	2	13	21	18	(17.5)
Bekaa	3	2	7	4	16	(15.5)
Total	22	11	46	24	103	(100.0)

This topic as well as other regulation mechanisms such as hospitals performance assessment and control of supply would be developed more in depth later on. Nevertheless, the hospital sector in Lebanon operating in a market economy environment, still needs further regulatory measures in order to improve its efficiency and limit its disproportionate growth.

2-AMBULATORY CARE

Outpatient care is provided by a multitude of health facilities ranging from physicians in solo practice to multidisciplinary polyclinics. High technology is also invading outpatient facilities, including medical laboratories, radiology and other non-invasive diagnostic centers, physiotherapy and dental care clinics, as well as a wide range of same-day treatment clinics, such as dermatology and cosmetic clinics using laser techniques.

It is worth mentioning that these out-patient facilities are beyond any effective control. The practice license provided to medical and paramedical professionals allows them to open a center and to acquire any kind of equipment they deem necessary to provide services within their competencies. Except for medical laboratories, radiology, and physiotherapy, out-patient facilities as such are not subject to licensing.

Table II-7: Medical facilities licenses: distribution by type and region (MOPH, Dec.2007)

	Beirut		Mount Lebanon		North Lebanon		South Lebanon		Nabatieh		Bekaa		Total	
Private hospitals*	21	(11.1%)	64	(33.9%)	34	(18.0%)	24	(12.7%)	10	(5.3%)	36	(19.0%)	189	(100%)
Public hospitals	2	(6.7%)	6	(20.0%)	7	(23.3%)	4	(13.3%)	6	(20.0%)	5	(16.7%)	30	(100%)
Dispensaries	136	(12.5%)	402	(37.1%)	219	(20.2%)	113	(10.4%)	63	(5.8%)	152	(14.0%)	1085	(100%)
Imaging centers**	27	(12.9%)	87	(41.6%)	38	(18.2%)	22	(10.5%)	8	(3.8%)	27	(12.9%)	209	(100%)
Medical laboratories**	45	(15.6%)	102	(35.3%)	37	(12.8%)	30	(10.4%)	16	(5.5%)	59	(20.4%)	289	(100%)
Pathology laboratories **	6	(15.4%)	13	(33.3%)	7	(17.9%)	8	(20.5%)	1	(2.6%)	4	(10.3%)	39	(100%)
Blood banks ***	5	(20.0%)	10	(40.0%)	5	(20.0%)	2	(8.0%)	0	(0.0%)	3	(12.0%)	25	(100%)
Dental laboratories	41	(12.9%)	163	(51.1%)	37	(11.6%)	37	(11.6%)	12	(3.8%)	29	(9.1%)	319	(100%)
Physiotherapy centers	73	(16.6%)	208	(47.2%)	83	(18.8%)	37	(8.4%)	13	(2.9%)	27	(6.1%)	441	(100%)
Prosthetic & orthotic workshops	3	(10.0%)	15	(50.0%)	6	(20.0%)	5	(16.7%)	0	(0.0%)	1	(3.3%)	30	(100%)

* Including long-stay hospitals

** Including those inside and outside hospital facilities

*** Excluding Lebanese Red Cross transfusion centers

During the civil war years of 1975-1990, a big number of dispensaries were licensed, belonging to Non Governmental Organizations (NGOs) and political forces, filling the gap caused by the absence of the public sector. Their services were most of the time limited to the distribution of donated medicines. These dispensaries have been able to survive mostly by relying on the support of MOSA and international donors, and on the collection of fees for service. The decline in international donations and the lack of volunteers in the after-war period have forced many to increase patients' charges. Most of the NGOs facilities were single room understaffed dispensaries with irregular working hours. Only a few were well staffed health centers with modern equipment, such as EKG, US and X-ray machines, and medical laboratories. Medical personnel were available on a part-time basis, and the presence of qualified licensed nurses was uncommon.

Over the 15 years following the end of the civil war, almost all of the dispensaries operating in the country have been receiving vaccines free-of-charge from the MOPH, and most of them have been benefiting from the MOPH-YMCA joint program on drugs for chronic illnesses, in return for a nominal contribution.

According to the 1997 Households Living Conditions Survey, twenty six per cent of interviewed households declared seeking services from public and NGOs dispensaries, which represented the only affordable option for the most deprived[2]. More evidence shows a continuous increase of this percentage with the enlargement of the PHC network under the leadership of the MOPH[3].

The ambulatory care benefits' package varies according to the insuring agency. Among the insured population 15.7% and 60.8% declared not being covered for medical consultations and dental care respectively. Considering the number of uninsured[4], almost 60% and 80% of the population respectively do not receive any reimbursement

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[2]Central Administration of Statistics. 1997 Households Living Conditions.

[3]Reports analysis, PHC monitoring system, MOPH.

[4]Center Administration for Statistics. 2001. National Households Health Expenditures and Utilization Survey 1999.

for medical consultation and dental care, which highlights further the need for services provided by the PHC network.

3- COMMUNITY BASED HEALTH SERVICES

3.1 The Role of NGOs

During the years of the civil strife, UN agencies played a major role in conducting essential health programs in joint coordination with NGOs. Activities of NGO's centers depended heavily on the availability of drugs. MOPH and UNICEF used those donated drugs as incentives to encourage preventive programs among NGOs.

When the MOPH regained leadership over these programmes in the early 1990's, new incentives were introduced through contractual agreements[5]. Programs are now run through a network composed of MOPH, MOSA, and NGOs' PHC centers, that covers the whole country.

NGOs have been contributing successfully to joint preventive programs carried out by the MOPH and UN agencies, such as the diarrhea and respiratory infection prevention programs of the 1990s. NGOs actively participate to the activities of the Expanded Program for Immunization (EPI), AIDS control and reproductive health programs.

In addition to the provision of services, some NGOs play a meaningful supporting role in the health system by conducting surveys or training workshops, or by providing logistical support through purchasing, stocking and distributing essential drugs to a vast network of PHC centers, thus ensuring the follow-up of chronically ill patients[6]. The contract with the Lebanese Red Cross (LRC) for car accidents and emergency transportation is another example of cost-effective services provided through a contractual relationship with an NGO.

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[5]Ammar, W. Health Care Market in Lebanon: Government-NGO Cooperation. Paper prepared for WHO and presented at the Seminar on New Partnerships for Health Development in Developing Countries: The Contractual Approach, a Policy Tool, Geneva 1998.

[6]Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO.

3.2 The Primary Health Care Network

A first National Conference on Primary Health Care was held in Lebanon in 1991. It was inspired by the Alma Ata declaration on "Health for All" in 1978. This was the starting point of a series of consultative meetings held by the MOPH with all stakeholders that led to the elaboration of the PHC National Strategy. A comprehensive assessment of health centers and dispensaries, operating all over the country, was conducted in 1996. The purpose was to identify those able to provide a comprehensive minimal package of PHC services including prevention activities. Among more than 800 facilities, only 29 health centers (19 NGOs, 8 MOPH and 2 MOSA) were selected to form the nucleus of a National Network that evolved to encompass 86 centers in 2005, 109 in 2006 to reach 120 centers in 2007. To this end, the MOPH had to deploy important efforts in many directions including the development of guidelines and health education materials, training activities, developing incentives through contractual agreements, purchasing and distribution of vaccines, drugs, medical supplies and sometimes equipment. In addition, the MOPH used international donations to build and equip 28 health centers that are currently run by NGOs and municipalities, and to transform 5 public rural hospitals into advanced PHC centers.

Each health center has a defined catchment area with an average of 30,000 inhabitants, with some exceptions in under populated rural areas where the number of potential beneficiaries should however not be lower than 15000. The center provides general medical care including pediatrics, cardiology, reproductive health and oral health. Efforts are put on the integration of mental health in the package and to emphasize home care. The center should also play an important role in immunization, school health, health education, nutrition, environmental health and water control. Provision of vaccines, essential drugs and other kinds of support are linked to the pattern of activities that are regularly reported to the MOPH and are subject to analysis, evaluation, and feedback. It is worth mentioning that the PHC centers in the MOPH network do not differentiate between "insured" and "uninsured" in terms of nominal fees. The MOPH policy is to provide an alternative to all those who seek affordable essential services through its network.

The MOPH has learned from its experience with private hospitals to avoid perverse incentives generated by linking reimbursement to the volume of services. The ministry's contracting with NGOs has been a success because it did not involve money transactions for purchasing services. The approach adopted focused on encouraging NGOs to improve the community health status while benefiting from the ministry's assistance in medical paramedical and management training, in providing vaccines, essential drugs, medical and educational supplies, and from other in kind deliverables.

PHC targets horizontally a whole community using a polyvalent care-givers team and through well established relationships within the health system's hierarchy. Vertical heath programs on the other hand, focus on disease or service-related objectives and may target a specific age group or sex or region. Clinical guidelines, training programs and education material are developed by one national team of specialized staff that serves all the PHC centers involved with the program. Therefore, the PHC horizontal approach and vertical programs cross cut and complement each other. The vertical approach allows however shifting emphasis between and within programs objectives according to changing priorities.

4- VERTICAL HEALTH PROGRAMS

4.1 Expanded Immunization Program

The Expanded Program for Immunization (EPI) is financed and led by the MOPH. UNICEF, MOSA and NGOs are active partners. Immunization is routinely conducted in almost all health centers and dispensaries operating in the country. The National Calendar includes vaccinations against poliomyelitis (OPV), diphtheria, tetanus, pertussis (DTP), measles mumps, rubella (MMR). The hepatitis B vaccine (Hep. B) was introduced in 1998 and became with the Hemophylus influenza B vaccine (Hib) a part of the Penta vaccine (DPT, Hib, Hep. B) since mid 2006. The number of centers involved in EPI activities has reached in 2007 a total of 109 public and 540 NGOs centers. This partnership has successfully achieved the targeted objectives of the program, as shown in table II-8. The objectives were set however, in

considering that private for-profit physicians' clinics cover around 50% of the immunization activities. This should be subject to reassessment especially that wide district variations probably exist in terms of public private mix.

Table: II-8: Immunization coverage reached by routine activities in 2006 and 2007

Vaccine	Under one year population	Number reached		Coverage*	
		2006	2007	2006	2007
DTP 3	65405	30100	33918	46%	57%
OPV 3	65405	29980	33984	46%	57%
MCV1**	65405	31763	35998	48.5%	55%
Hep B 3	65405	30100	33918	46%	52%

* Only immunization coverage reached through the public and NGOs facilities.
** MCV= measles containing vaccine.

In addition to routine vaccinations, the EPI program started implementing since 1995 National Immunization Days (NID), twice a year. Table II-9 shows the coverage achieved over the last 3 consecutive years based on district health officers reporting.

Table II-9: Achieved coverage through National Immunization Days as reported by districts' officers

Year	Target 0-59 months	Number reached	Percent coverage reached
1995	375,000	359,605	95%
1999	375,000	365,212	97%
2005	324,215	297,410	92%
2006	335,000	321,212	97%
2007(1)	84,079	81,611	97%

(1) 2007 campaign was a **Sub-National campaign** targetting the Qadas bordering Syria (Hermel, Baalbeck, Zahleh, West Bekaa, Rashaya, Akkar).

Immunization coverage assessment studies however, provide evidence that at least in remote areas the coverage is far from being ideal, as important disparities exist among and within districts.

The last confirmed indigenous case of polio in Lebanon in the 1990s was reported in 1994. Since then, however one locally infected case

was reported in 2003. The virological culture and genotyping confirmed an infection caused by wild poliovirus type 1 (PV1), South Asia (SOAS) genotype. Epidemiological investigation indicated that the father of the index case was probably the vehicle of the virus, as he had recently travelled to India.

In 2006, measles' outbreak occurred, with 905 reported cases and 2 deaths. Consequently, the EPI technical committee re-introduced in 2006 the monovalent measles vaccine at 9 months to improve the measles national coverage. Considering that two significant measles outbreaks have occurred in the country over the past five years, and in line with the global commitment in eliminating measles and controlling rubella by year 2010, the Ministry of Public Health, conducted a measles and rubella (MR) Catch-up Campaign in spring 2008 targeting around 900,000 children aged 9 months to 14 years. The MOPH experience in this catch-up campaign is worth emphasizing for its relevance for both the regional and the country levels (Box II-1).

As the deadline for achieving the Millennium Development Goals is coming close, the MOPH has to overcome the variability caused by vaccinations conducted in the private sector. It had to find a way to guarantee effective immunization coverage. Setting nominal checklists of target children was thought to be an effective approach, its feasibility is still, however, under the test of time, as it would be explained in chapter six.

Along the same line, the MOPH has developed in 2006 a software to monitor the cold chain temperature. The system was designed to archive, and real-time monitor temperatures of different locations of vaccines stocks. The system archives all temperature values at any set sequence, and could be accessed by computer dial-up connection. It also generates dial up voice message in any alarm case, alerting four ministry officials and a technical person, specifying the location of the breakdown and keeps alarming until corrective measures are taken.

Box II-1: The 2008 Measles and Rubella (MR) catch-up campaign

This catch-up campaign gathered the highest number of stakeholders ever reached in Lebanon. In addition to traditional collaboration with other ministries, the NGOs and the scientific societies, the association of private schools and the syndicate of specialized nurseries were also actively involved. Two hundred vaccination teams were organized with licensed trained personnel, to cover some 1,400 public and 2,000 private schools across the country.

WHO- EMRO recommendation was to vaccinate all children of the target age-group irrespective of the child's immunization status and measles illness. As for most EMR countries, previous history of vaccination and disease is impossible to assess during the campaign. The MOPH was reluctant to comply in the absence of scientific evidence on the added value of additional injection of vaccine for those who have already completed their vaccination on one hand, and the usual non-compliance of private schools on the other. Upon the insistence of WHO and in light of an encouraging meeting held with the association of private schools, the MOPH finally agreed to adopt the EMRO strategy. However, during the campaign school directions showed tremendous resistance to comply, and insisted on having the consent of the parents who, in turn, needed to refer to treating physicians. A tremendous effort was put to contact schools' directors and physicians in order to convince them to accept "a useless additional injection" to children, they were sure had already completed their vaccination. Needless to say this effort would have been better channeled to fill the vaccination gaps in poor city suburbs and remote villages. Obviously such a campaign could never, in the Lebanese context, reach its set targets. This experience is worth mentioning to highlight the importance of adapting interventional strategies to the national context, as they depend on many local factors such as mothers' education, her knowledge about her child's vaccination and her ability to provide a correct answer. Other factors include the importance of the private sector's role in both education and health, and, most importantly, how stringent can the health authority be in imposing controversial health measures. What happened next is also informative: A WHO expert came to assess the campaign, and we had to undertake a usual procedure of evaluation for a campaign, that we knew had failed, and we even knew the reasons behind its failure!

4.2 Tuberculosis Control Program

The MOPH takes full charge of tuberculosis patients including non-Lebanese legal residents. Services are provided through 8 TB centers and include diagnostic, therapeutic, close follow-up and prevention activities.

In 1998, the TB program started implementing the Directly Observed Treatment Strategy (DOTS). The average number of one thousand cases treated yearly in the early nineties, has been going down to 700 in 1998 to reach 570 active TB cases in 2001, and 473 cases in 2007. Twenty five percent of TB patients in 2007 were non-Lebanese, 54% females and 46% males, and 3 cases were HIV positive. DOTS approach is currently widespread, and an active surveillance system is in place. The recovery rate has reached 91% of treated patients.

Table II-10: Distribution of TB cases by age group (2007)

	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65+	Total	(%)
Pulmonary / Smear positive	0	1	29	49	26	17	14	7	**143**	**(30.23)**
Pulmonary / Smear negative	10	7	29	32	18	8	7	7	**118**	**(24.95)**
Extrapulmonary	6	16	59	61	22	20	15	13	**212**	**(44.82)**
Total	**16**	**24**	**117**	**142**	**66**	**45**	**36**	**27**	**473**	**(100.00)**

4.3 Reproductive Health Program

The Reproductive Health Program was launched by MOPH in September 1998, in collaboration with UNFPA and MOSA. Its activities include providing health centers with supplies and drugs, medical equipment, as well as training and to some extent physical rehabilitation. By year 2000, 430 centers had been included in the program, of which 86 had adequate equipment, including 10 with ultrasound machines, and 42 were physically rehabilitated. Sixteen training workshops have been held, whereby 420 health professionals and health workers received training. Currently, 183 centers have been selected as “Centers Of Excellence” (COE), to provide higher standard reproductive health (RH) services in all districts.

Table II-11: Distribution of centers benefiting from the reproductive health program by mohafazat (2006)

Region	MOPH Run by NGO	NGOs	MOPH	MOSA	Muni-cipalities	Total	(%)
Beirut	1	12	1	2	0	**16**	**(8.74)**
Mount Lebanon	10	17	2	11	2	**42**	**(22.95)**
North Lebanon	2	19	5	7	0	**33**	**(18.03)**
South Lebanon	3	8	3	15	0	**30**	**(16.40)**
Nabatieh	4	23	2	1	0	**29**	**(15.85)**
Bekaa	8	16	2	7	0	**33**	**(18.03)**
TOTAL	**28**	**97**	**14**	**41**	2	**183**	**(100.00)**

In addition to offering quality medical services, the COE addresses RH determinants such as unsafe sexual behavior and sexual dysfunction. The scope of services includes: prevention, early detection and treatment of STDs and HIV, basic antenatal, postnatal and post partum care, menopause and post menopause counseling and treatment; family planning activities and adolescent counseling and care. Normative tools such as clinical protocols and management guidelines have been developed and training sessions conducted. A monitoring system is in place with regular reporting, data analysis and feedback.

4.4 National AIDS Control Program

This program was launched by MOPH and WHO in 1989. In the 1990s, a yearly MOPH budget of over 400 million LP was devoted to this program, as a trust fund managed by WHO. This provided better disbursement flexibility and allowed the program to undertake nation-wide preventive and educational campaigns largely covered by the media. NGOs and especially youth associations are actively involved in anonymous testing and counseling activities. The trust fund was reduced in 2000, to 100 million USD, as the MOPH started in 1998 allocating more funds for purchasing multi-therapy drugs. However, the program was capable to mobilize financial resources from international donors.

In this regard, a national HIV/AIDS monitoring, surveillance and evaluation system was established with the World Bank

Table II-12: Chronic illnesses drugs program: distribution of health centers and beneficiaries by type and region

Region	NGOs Centers	MOPH Centers	MOSA centers	MOSA subsidised NGOs Centers	Total number of centers	Number of beneficiaries
Beirut	37	1	1	1	40	25574
Mount Lebanon	153	5	3	11	172	39706
North Lebanon	66	2	1	6	75	28898
South Lebanon	81	3	11	1	96	36557
Bekaa	47	3	4	3	57	27110
TOTAL	384	14	20	22	440	157845

Source: Young Men Christian Association (YMCA) 2007.

Table II-13: Epidemiological profile of beneficiaries and their distribution by co-morbidity and multiple therapy in% (N= 157,845 patients in 2007)

Epidemiological Profile						
Diagnosis	Cardiovascular	Hypertension	Diabetes	Hyperlididemia	Epilepsy	Others
Beneficiaries %	34.6	16.4	14.3	13.8	6.4	14.5
Co-morbidity						
No. of Illnesses	1	2	3	4	5	≥ 6
Patients %	43.2	30.9	16.7	6.8	2.0	0.5
Multiple Therapy						
Drugs per prescription	1	2	3	4	5	≥ 6
Patients %	30.9	24.3	18.2	12.3	7.3	7.0

Source: Young Men Christian Association (YMCA) 2007.

Institutional Development Fund. This system involved 350,000 USD in 2006 and is currently operational.

The program received also 200,000 USD from the UN Office for Drugs and Crime in 2007, to increase access to prevention and care services for drug use and HIV/AIDS in the prison settings. UNAIDS approved a budget of 40,000 USD for reinforcing voluntary counseling and testing services during 2008. So far, the program has been successfully achieving the set objectives for these grants.

The program, in collaboration with UNICEF is currently working on the identification and promotion of successful models for a comprehensive response to HIV/AIDS, especially for vulnerable young populations.

Ninety two new HIV cases were notified in 2007, making a cumulative number of 1057 cases recorded since 1989, with 82% males, most of them between 31 and 50 years. Seventy percent got infected through sex, namely heterosexual relations (56% of all cases). The mother to child transmission accounts for 2.2% of all cases. Since 1999, only 3 cases of blood transfusion HIV infection were reported and occurred outside the country.

4.5 Medication for Chronic Illnesses Program

This program is financed and supervised by MOPH, while purchasing, storage, and distribution of drugs are delegated to YMCA. Drugs are dispensed by public and NGOs' health centers to chronically ill indigent patients. The social and financial status of beneficiaries and their families is assessed by professional social assistants. By the year 2007, 440 centers have been affiliated with the program, while the cumulative number of beneficiaries has reached 157,845 patients. The total budget of this program is over 10 billion L.P. including 3.9 billion paid yearly by MOPH for procurement of drugs. It is to be noted that during the July-August 2000 war, 57 additional dispensaries joined the program to meet the needs of the chronically ill displaced persons.

The program is also an important source of information on morbidity and prescribing behavior. The beneficiaries' epidemiological

profile shows that 34.6% live with cardiovascular conditions, 14.3% with diabetes, 16.4% are treated for hypertension, 13.8% have hyperlipidemia and 6.4% are epileptic cases. Twenty six percent are suffering from 3 diseases or more, and 26.6% are treated with more than 3 drugs.

4.6 School Health Program

School Health is a joint Program between WHO, the MOPH and the Ministry of Education (MOE), and is implemented in close cooperation with the Orders of Physicians and Dentists. It involves three components: The first relates to *healthy school environment* which includes water control and sanitation, safe accessibility, and general safety measures of the building and the playground. It includes also the inspection of food and beverages sold inside the school and in the surroundings that influence unhealthy lifestyles and eating habits. The second tackles the promotion of *healthy lifestyles* through the integration of health education in the curriculum, and the promotion of extracurricular health activities. And the third is the *medical care* dimension that includes routine check-ups, immunization, oral health and others.

Guidelines to standardize the medical exam have been developed and 470 school doctors trained. A referral system is established by linking schools to neighboring PHC centers network for medical and oral health care. An assessment of the school health environment is also planned according to international standards, and shall be followed by interventions to improve resources for environmental safety such as filtration of drinking water, lighting and ventilation. A school health inspection guidebook has been produced and a training for health inspectors is being conducted. Teachers have been trained on health e-learning in schools and IT equipments procured to 10 private, 20 public and 10 UNRWA schools.

In addition to ongoing school health activities, a Global School Health survey was conducted and revealed interesting features that would impact the program's activities for the coming years (box II-2).

Box II-2: Global School-Based Student Health Survey*

A Global School Health Survey was conducted in October 2005, targeting students in grades 7-9 in 100 schools across Lebanon. The survey included questions on alcohol and other drug use, dietary behaviors, hygiene, mental health, protective factors, violence and unintentional injuries, and attitudes towards sexual and reproductive health and HIV related knowledge. Surprisingly, 20% of students had never heard of HIV/AIDS, and 19.5% had at least one drink containing alcohol in the month proceeding the survey. Almost 40% of students felt sad or hopeless in the last 12 months to the extent of being unable to carry out their usual activities. In relation to violence, 40% of students had been physically attacked by a parent, and 25% by a teacher.

*WHO Country Report. Lebanon, 2005.

4.7 School-based Oral Health Program

In June 2006, the MOPH adopted a five-year strategic plan after a large consultation process that included the MOE, the two Orders of Dentists and the NGO sector, with the participation of WHO and UNICEF. In 2006, the program focused on developing education materials and training of the MOE health educators. A dental check-up was performed by 560 dentists on 195,633 students in public schools. Results were alarming: 82% had gum and dental problems and 76% needed treatment. In 2007, workshops were organized to train health educators on teaching oral hygiene and tooth brushing techniques. A second oral check-up campaign was launched targeting 166,691 public school students, and confirmed previous observations. The results of the two campaigns were discussed with MOE and school directors, and communicated to the parents. More than 100,000 tooth brushes and toothpastes were distributed. In 2008, the program launched the "Fluor rinse Campaign" that targeted 30,000 students of the elementary grade-four classes in public schools. Children mouthwashed on a daily basis with fluoride solution, under supervision. This campaign will be repeated targeting the same cohort of students for 3 consecutive years.

4.8 Non Communicable Disease Program

The MOPH has been facing the increasing incidence of NCD, mainly through secondary prevention activities provided through the national PHC network. Patients with chronic diseases such as diabetes

and hypertension, are regularly followed up and provided with needed essential drugs. Expensive drugs are also dispensed for free by the MOPH drug warehouse to patients suffering from cancer, renal failure, epilepsy, multiple sclerosis, mental illness and other chronic conditions. The program aims at establishing a link with the MOPH coverage of needed episodic hospitalization of the chronically ill that include diabetic complications, heart attacks, strokes, dialysis and others, in order to ensure a continuum of care.

Nevertheless, the MOPH has to intervene in primary prevention as well, since this remains the most cost-effective control measure. Facing financial constraints as well as the scarcity of qualified human resources, the MOPH decided to launch a common NCD preventive program, knowing that most chronic illnesses share the same risk factors related to lifestyles and eating habits, and respond therefore to the same preventive measures and awareness campaigns.

Unfortunately, all efforts put and the progress made in treating the chronically ill at the PHC level as well as secondary and tertiary care, contrast with modest achievements on the promotion and prevention fronts. The MOPH and its partners are lagging behind the powerful commercial and media forces promoting unhealthy life style and advertising for harmful products. On the other hand, even though Lebanon had signed and ratified the Framework Convention on Tobacco Control (FCTC), little progress was made at the legislative level, and any serious policy measure has yet to be taken.

5-HUMAN RESOURCES FOR HEALTH

As an almost universal problem of the developing world, regional discrepancies and imbalance in human resources still exist in Lebanon. The most meaningful component of this imbalance has been the surplus of physicians, accompanied by a shortage of nurses. By 2007, physicians registered in the two existing Orders represented more than 3 per 1000 inhabitants. In that same year, all categories of nurses did not reach two per 1000 inhabitants[7]. These figures are striking for their impact on both cost and quality of care. However,

[7] Order of Nurses, 2007

having a look on the licenses delivered by the MOPH to medical and paramedical professionals, we can satisfactorily notice that while all professions are keeping almost a constant trend, all categories of nurses' licenses have been increasing during this decade (table II-14). However, one in five of the nurses who receive a bachelor of science in nursing migrates out of Lebanon within one or two years of graduation[8].

5.1 Physicians

During the 1990s, the number of physicians grew by 8.3% per year, in comparison with a population growth rate of 1.6%[9]. The number of registered physicians had exceeded 11,000 in 2007, of which more than 70% were registered as specialists. The physician-to-population ratio is currently 6.5 per thousand in Beirut, and less than 1.8 per thousand in the Bekaa. The ratio of hospital beds per physician is 1.3, while this ratio is between 2 and 3 in most countries, and 2.3 globally[10].

Medical graduates have to pass the Colloquium exam carried out by the Ministry of Education (MOE) in order to get the MOPH license to practice. Medical practice is not allowed before registration in one of the two existing Orders of Physicians. Currently, 9,900 physicians are registered in the Order of Physicians of Lebanon in Beirut, and 1,286 in the Order of Physicians of the North.

The proportion of physicians registered in Lebanon who are practicing abroad is unknown and was estimated by the National Provider Survey as falling somewhere between 15 and 20%[11].

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[8] El-Jardali F., et al. Migration of Lebanese nurses: A questionnaire survey and secondary data analysis. International Journal of Nursing Studies. October 2008, 45 (10), pp. 1490-1500.

[9] Daher, M; Husseini, H; Kasparian, R; Kasparian, C. 1998. La Démographie Médicale au Liban: pléthore, féminisation et rajeunissement. Journal Médical Libanais, 46 (1): 43-46,

[10] World Health Organization. World Health Statistics 2008.

[11] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO

Fig II-2a: Physicians Registered from 1950 through 2000

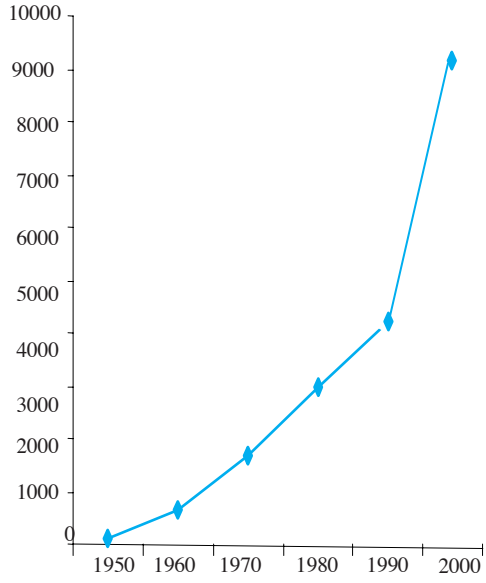
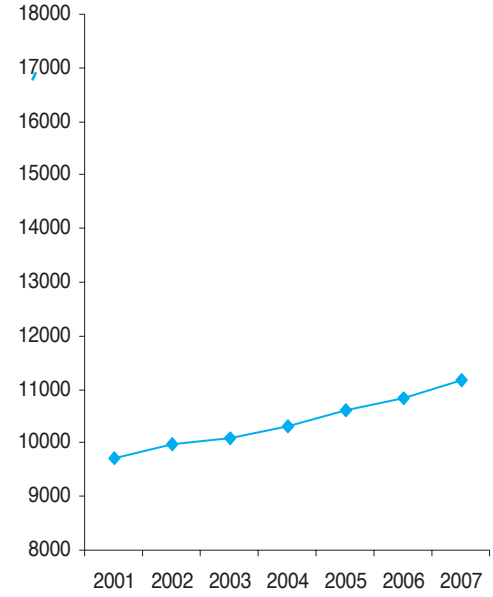


Fig II-2b: Physicians Registered from 2001 through 2007



***Source**: Lebanese Order of Physicians (LOP)*

In principle, physicians residing in North Lebanon register in the Order of the North, and those residing in all other regions, register in the Order of Lebanon located in Beirut. However, this is not a rigid rule, and political alliances may influence some physicians' decisions in this respect. Electoral purposes may lie behind the registration of physicians from the North in the politically more influential Order of Beirut, whereas the reverse may be explained by the lower enrollment fee in the Order of the North.

Fellowships and grants to study medicine abroad especially in the former Soviet Union and Arab countries have contributed to the tremendous rise in the number of physicians. Besides its effect on over supply, the multiplicity of graduating countries has an impact on quality of care. It is particularly hard to reach a consensus on common standards and clinical protocols among physicians with wide educational background variations.

Table II-14: Distribution of physicians by mouhafazat and specialty (2007)

Mouhafazat	Surgical Specialties	Medical Specialties	Pediatrics	General practice	Total specialties	Total	(%)
Beirut	801	944	278	767	**2,790**	**2,632**	**(23.53)**
Mount Lebanon	1,504	1,550	445	1,454	**4,953**	**4,804**	**(42.95)**
North Lebanon	400	379	238	452	**1,469**	**1,494**	**(13.36)**
South Lebanon	517	397	175	319	**1,408**	**1,382**	**(12.35)**
Bekaa	317	218	78	274	**887**	**874**	**(7.81)**
Total	**3,539**	**3,488**	**1,214**	**3,266**	**11,507**	**11,186**	**(100.00)**

Source: *Orders of Physicians.*

Table II-15: Physicians registered in the Lebanese Order of Physicians by country of graduation (2007)

Graduation Country / Region	General Practitioners		Specialists	
	n	%	n	%
Lebanon	3945	40.0	2010	27.7
Eastern Europe	3085	31.4	1952	26.9
Western Europe	1405	14.3	2221	30.6
Arab Countries	1103	11.2	275	3.8
North America	59	0.6	692	9.5
Others	243	2.5	105	1.5
Total	**9840**	**100.0**	**7255**	**100.0**

Source: *Lebanese Order of Physicians (LOP).*

5.2 Dentists

The Order of Dentists was established in 1949, but was split in 1966 into two Orders, similar to the two Orders of Physicians. There are currently 4366 dentists registered in the Order of Dentists of Lebanon, of whom 3708 are currently practicing in the country, and another 615 registered in the Order of Dentists of North Lebanon.

Table II-16: Distribution of dentists by Mohafazat in 1994, 2000 and 2007 and ratio per 100,000 population (2007)

	1994		2000		2007		
	n	(%)	n	(%)	n	(%)	%000
Beirut	828	(28.7)	1045	(25.7)	966	(21.2)	24.74
Mount Lebanon	1331	(46.2)	1798	(44.3)	2018	(44.5)	13.44
North Lebanon	270	(9.4)	450	(11.1)	634	(13.9)	8.25
South Lebanon	233	(8.1)	347	(8.5)	633	(13.9)	10.16
Bekaa	43	(1.5)	233	(5.7)	297	(6.5)	6.30
Unspecified	178	(6.2)	188	(4.6)	0	(0)	
Total	**2883**	**(100)**	**4061**	**(100)**	**4548**	**(100)**	12.11

Source: *Orders of Dentists.*

In 1994, Doughan and Doumit[12], reported a high concentration of dentists in Beirut and Mount Lebanon. Regional discrepancies still prevailed in 2007 as 86% of the specialty dentists (surgery, restorative and aesthetic dentistry,…) are concentrated in Beirut and Mount Lebanon[13]. This reflects the financial preference of dentists for the more affluent regions of the country, especially that dental care is not as extensively covered by insurance agencies as medical care.

Graduates from universities in Lebanon made up 45% of the pool of dentists, and 58% of the specialized dentists in 2007. The Saint Joseph University and the Lebanese University graduate each some 40 new dentists yearly, while graduates from abroad, mainly Eastern Europe, France and Arab countries, return to Lebanon at the rate of almost 150 every year.

12Doughan, B; Doumit, M. Oral Health in Lebanon: A Situation Analysis, 1994.

13Order of Dentists 2008 report.

Dentists face a similar situation as physicians in terms of oversupply and multiplicity of educational backgrounds.

Table II-17: Distribution of specialized dentists by country of specialty (2007)

	n	%
Lebanon	377	57.7
Romania	45	6.9
Ex-USSR	104	15.9
France	32	4.9
Syria	21	3.2
Egypt	9	1.4
Bulgaria	7	1.0
Other countries	59	9.0
Total	654	100.0

Source *Orders of Dentists, 2007.*

5.3 Pharmacists

The current number of registered pharmacists at the order of Pharmacists is 4667 of whom 3562 are in practice. The total number of pharmacies licensed by MOPH has reached 1940 by 2007. Numbers of pharmacists and pharmacies have grown from 1995 to 2000 by 46% and 64% respectively, while the growth from 2001 till 2006 was only 23% for pharmacists and 24% for pharmacies.

Table II-18: Evolution of the number of licensed pharmacists and pharmacies (2001-2007)

	2000	2001	2002	2003	2004	2005	2006	2007
Pharmacists	3414	3626	3492	3707	3950	4227	4446	4667
Pharmacies	1445	1512	1575	1629	1700	1778	1868	1940

Source: *Order of Pharmacists.*

Pharmacies are better distributed by mohafazat than medical and dental clinics as a result of regulations' enforcement. The 1994 Pharmacy Practice Law specifies a minimum distance between pharmacies to be respected in providing new licenses. This distance is 200 meters in crowded cities and 300 meters in rural areas. This should have more significant impact on the distribution within rather than between districts and mohafazat. The less meaningful discrepancies in pharmacies distribution in comparison to other health facilities

provides a typical example of the impact of supply regulation on the equitable distribution of health services.

Table II-19: Pharmacists and pharmacies per 10,000 inhabitants and by mouhafazat (2007)

	Pharmacies*			Drugstores*
	n	**(%)**	**‰**	**n**
Beirut	207	(10.7)	5.3	4
Mount Lebanon	896	(46.2)	5.97	12
North Lebanon	297	(15.3)	3.86	2
South Lebanon	201	(10.4)	5.01	1
Nabatieh	114	(5.8)	5.14	0
Bekaa	225	(11.6)	4.77	1
Total	**1940**	**(100.0)**	**5.17**	**20**

**According to MOPH database, only from 2001 till 2007, drugstores are wholesalers.*
***Source**: - Order of Pharmacists (2007). - MOPH Department of Pharmacy (2007).*

5.4 Nurses

Traditionally, the shortage of nurses used to result from the unattractive professional status, and the short career life, as many single nurses preferred to quit the profession after getting married. Unsuitable working conditions contributed as well to career instability. Within this context, the creation of the Order of Nurses in 2002 gave a sense of belonging to a body that stands for the nurses rights and safeguards professional standards. The revision of the salary scale in public hospitals under the "Law of Autonomy" led to a better financial status for nurses. The improved competitiveness of governmental hospitals vis-à-vis the private sector in terms of nurses' recruitment, contributed in turn to salary increases also in most private hospitals.

A National Nursing Survey was conducted in 2004, with 6439 respondents between 17 and 64 years of age, with a mean of 31.92 years. Of nurses, 83% were females and 57.8% were single. Compared to a 1994 study[14], this survey revealed that a higher percentage of nurses continued to work after marriage. This probably reflects, in addition to the growing financial need, improved working conditions and professional status. Non-Lebanese nurses practicing in Lebanon

[14]Mansour, A, and Akhatcharian, R. Nursing workforce in Lebanon 1994. Unpublished Study Report.

accounted for 5.3%. This percentage is probably underestimated due to the fact that most non-Lebanese nurses working without permit declined to complete the survey questionnaire for fear of legal consequences.

Table II-20: Distribution of diplomas among participants in the 2004 National Nursing Survey

Diploma	n	%
No diploma / no formal education	595	10.1
Brevet Pratique (BP)*	961	16.3
Baccalaureate Technique (BT)*	1516	25.8
Technicien superieur (TS)*	994	16.9
Bachelor of Science (BS)**	1426	24.2
Higher degrees**	394	6.7
Total	**5886**	**100**

* Vocational education diploma ** University diploma

The survey also showed that 63.6% and 38.6% of respondents have consecutively less than 10 and 5 years of work experience. More than 90% of nurses work in hospitals and 5% in PHC centers, the remaining have an administrative job (1.3%), or an academic career (1.1%), or are working in schools (0.7%) and nurseries (0.3%). The ratio of head nurses to attending nurses, 1 to 5, is comparable to most of the industrialized countries. Of the nurses 93% have full time jobs, 54% earn less than 600,000 LBP (400 USD) per month and those earning more than 1,500,000 LBP (1000 USD) do not exceed 2%.

In 2007, 3233 nurses graduated with a university degree, 2100 nurses with a TS degree (Technique Superieur), 1598 nurses with a BT degree (Baccalaureate Technique) with a total of 6931 nursing personnel[15]. The ratio of qualified nurses to population is one to 560 compared to one per 1600 persons in 2002[16].

The nursing education program that the MOPH implemented with the Lebanese University, and the formation of the Order of Nurses

[15]Société de Recherche Santé et Environnement (SRSE). In collaboration with Amal Mansour and Fouad Ziadeh. Nursing workforce in Lebanon 2004. Unpublished Study Report.

[16] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO

and Midwifery in 2002, have played an important role in improving the nursing status.

Table II-21: Distribution of nurses by mohafazat (2007)

Mohafazat	n	%
Beirut	665	9.6
Mount Lebanon	2028	29.3
North Lebanon	1535	22.1
South Lebanon	627	9.0
Nabatieh	872	12.6
Bekaa	1204	17.4
Total	**6931**	**100.0**

Source: *Order of Nurses, 2007*

The Faculty of Public Health (FPH) at the Lebanese University (LU), in addition to the BS degree, has designed special master-equivalent degrees to fill certain identified gaps in the paramedical professions. Between the years 2000-2006, a total of 246 such degrees were granted, of whom 41 DESS in intensive care, 35 DESS in operating rooms, 13 DEA in public health, 50 DESS in hospital administration and 106 DESS in community health.

In addition to the FPH at the LU and the already existing nursing schools at AUB, USJ, and Balamand University, more than five additional university nursing schools were established since 2000. Nursing technical institutes are spread all over the country to prepare technical nurses at the BT and TS levels. Other nursing programs exist but are mostly hospital-based.

Table II-22 shows the numbers of nurses and other paramedical personnel who graduated from the Lebanese University between 2000 and 2006. The overall national impact is illustrated in figure II-3 revealing that the category of nurses with university degree is the one that has increased the most.

The ratio of hospital beds to nurses probably exceeded 2 in 2008, which compares well with a ratio ranging from less than 1 to 1.5 beds per nurse in most Western European countries[17]. As a result of the

[17] WHO. World Health Statistics 2008.

Fig II-3: Licenses issued by the MOPH for nurses and midwives by category, 1994-2007.

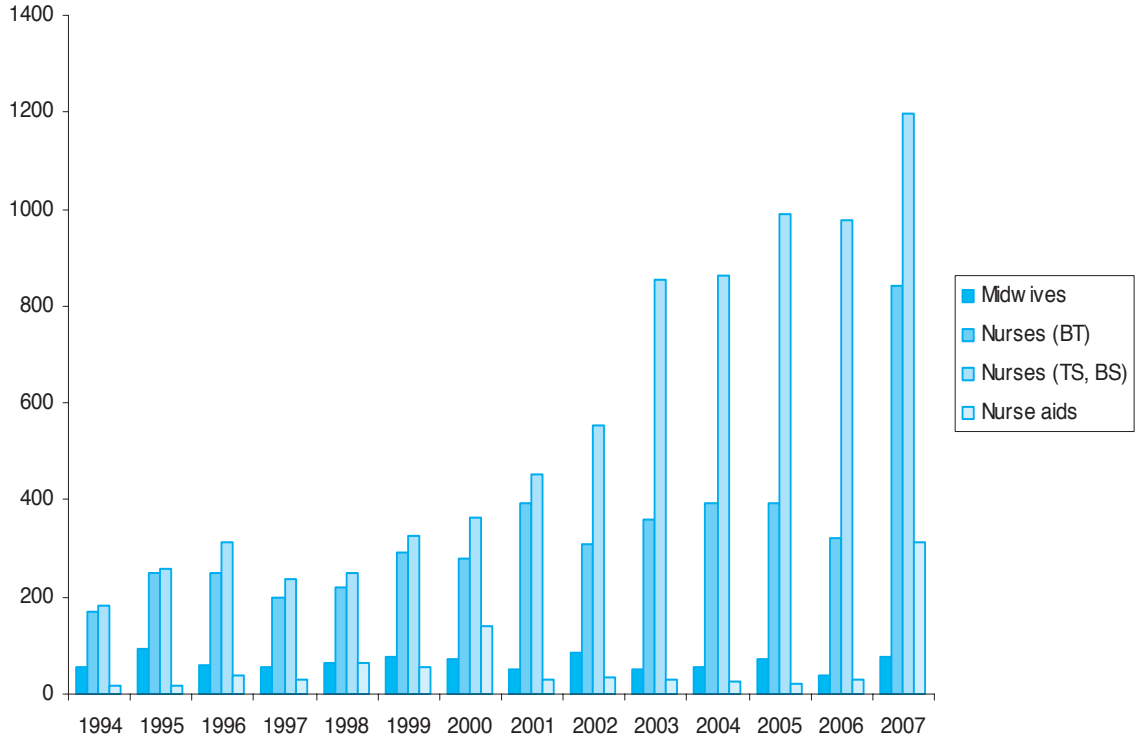


Table II-22: Lebanese University: Public Health Faculty graduates (2000-2006)

	00-01	01-02	02-03	03-04	04-05	05-06	Total	(%)
Nursing	169	187	151	180	222	208	**1117**	**(45.02)**
Medical Laboratory	74	65	63	77	75	67	**421**	**(16.97)**
Physiotherapy	39	55	39	42	43	55	**273**	**(11.00)**
Midwifery	63	59	34	66	59	45	**326**	**(13.14)**
Social Assistance	21	24	20	49	63	61	**238**	**(9.59)**
Orthophony	11	12	9	12	11	11	**66**	**(2.66)**
Ergotherapy	10	8	-	8	7	7	**40**	**(1.61)**
Total	**387**	**410**	**316**	**434**	**480**	**454**	**2481**	**(100.00)**

development of the nursing profession hiring of non-registered nurse "auxiliaries" has become quite unjustified in most hospitals.

6- CONCLUSION

Regulation of the supply of human resources could not have a significant impact unless it targets the admission of entrants to universities and technical schools. The most common approach, that proved to be effective in selecting a limited number of students, is the numerus clausus. Restrictive measures of this kind cannot be implemented in Lebanon for two main reasons. First, because it is considered culturally and politically as an unacceptable interference with personal freedom of career choice. Second, because an important number of Lebanese health professionals are yearly graduating from foreign universities, and can hardly be subjected to national control mechanisms. Lebanese Diaspora, that counts more than the number of residence, is particularly out of reach in this regard.

In the absence of an up stream control, down stream measures such as licensing requirements and the colloquium exam have meaningless effect on the supply volume of concerned professionals. Incapable of playing a meaningful role in reducing oversupply, the MOPH was only able to focus on addressing shortages, particularly that of nurses. MOPH interventions in financing university education programs, in conducting training, in creating and supporting the Nurses' Order and in improving their financial and work conditions, had a remarkable impact on promoting the nursing profession. Fig II-4 illustrates how in a liberal health system, where government control is ineffective, oversupply can only be partially adjusted by market mechanisms (the slightly declining medical practitioners curve), whereas the regulation authority may intervene and have a significant impact by filling specific gaps (the mounting curve of nurses production).

Finally, As a result, Lebanon's indicators related to health care provision are comparable to developed countries. Physicians, pharmacists, dentists and hospital beds ratios to population, are close to those of most OECD countries. However, two striking differences

prevail: the availability of high-tech equipment is much higher, while despite all efforts, nurses to population ratio remains much lower in Lebanon compared to OECD countries (table II-22).

Fig II-4: Licenses provided to medical practitioners, dentists and nurses 1994-2007

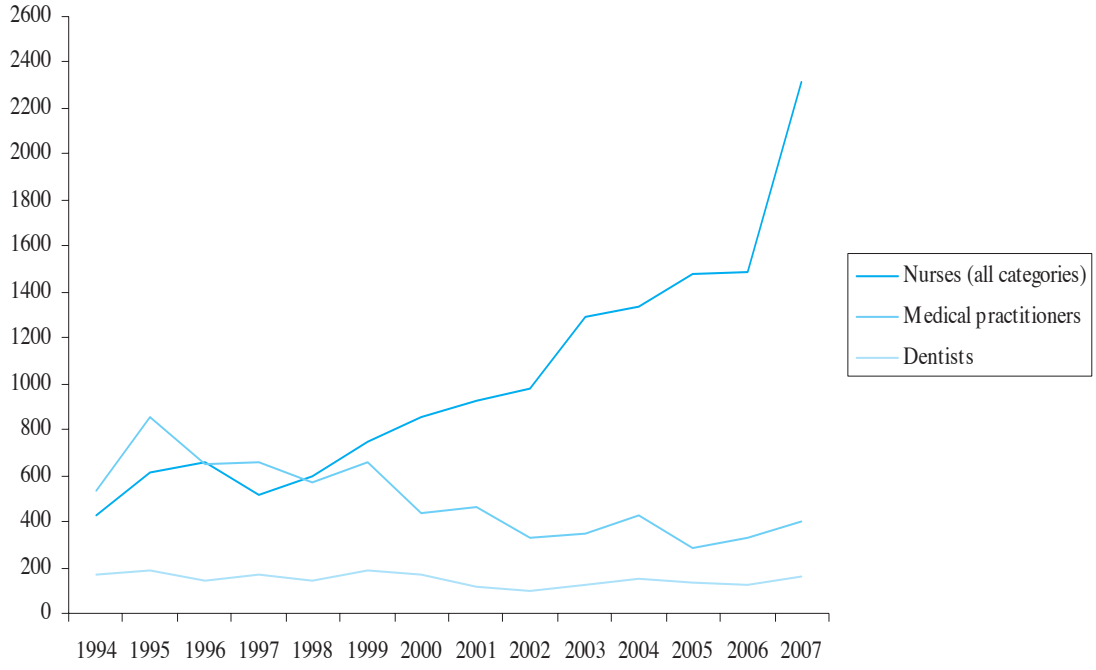


Table II-23: Health Resources compared to Selected OECD countries (2006)

	Physicians per 1000 population	Nurses per 1000 population	Pharmacists per 1000 population	Dentists per 1000 population	CT Imaging Scanners per Million	MRI Imaging Scanners per Million	Hospital Beds per 1000 population
Canada	2.1	9.9	0.7	0.6	10.8	4.9	3
UK	2.3	9.2	0.5	0.5	7.0	5	3.7
Spain	3.4	7.4	0.9	0.5	13.3	7.7	2.8
Germany	3.4	9.6	0.6	0.8	15.4	6.6	6.6
France	3.4	7.5	1.1	0.7	7.5	3.2	3.8
Lebanon	**2.9**	**1.8**	**1.2**	**1.1**	**27.0**	**9.8**	**3.5**

Chapter Three

HEALTH SYSTEM FINANCING

Health financing in Lebanon is characterized, on one hand by a mixture of funding sources involving the Treasury, employers and employees' contributions and households out of pocket; and on the other, by a multiplicity of financing intermediaries including public agencies, private insurance, mutuality funds and the Ministry of Public Health. This financing fragmentation is further marked by the diversity of supervising authorities, making regulation and coordination very complicated.

There are six employment-based social insurance funds publicly managed in Lebanon. The largest one, the National Social Security Fund (NSSF) is a mandatory insurance for the formal sector employees, except civil servants and uniformed forces, who are covered respectively by the Civil Servants Cooperative (CSC) and four military schemes. The CSC is under the tutelage of the Presidency of the Council of Ministers and the other funds are overseen by three separate ministries other than MOPH, whereas two additional ministries supervise private insurances and privately-held mutuality funds.

1- THE NATIONAL SOCIAL SECURITY FUND NSSF

The NSSF was created in September 1963[1], under the tutelage of the Ministry of Labor and Social Affairs, to constitute the foundation of a Bismarckian social security system financed mainly by employers' and employees' contributions with state subsidies. The final aim was to establish a universal mandatory insurance following the French model that starts by enrolling the workers in the formal private sector as a first step.

The NSSF includes three separate branches: the maternity and sickness fund, the family allowances fund and the end-of-service indemnities fund. All these branches are under the management of one Director General and overseen by a 26-member Board of Directors: 10 representing the employers, 10 the employees, and the remaining 6 are appointed by the Government.

The NSSF is considered a public institution although most of its financing is private and comes from employers and employees participations. NSSF contributions are related to the salary, up to a monthly revenue of 1,500,000 LBP, except for end-of-service indemnities which have no deductible ceiling. The employer's share is equivalent to 21.5% of the salary and is attributed as follows: 7% for sickness and maternity, 6% for family allowances and 8.5% for end-of-service indemnities. The employee contributes only to the medical scheme with 2% of the salary. Government subsidies amount to 25% of the total expenditures of the sickness and maternity fund.

Currently, the NSSF covers in addition to employees of the private formal sector, other categories such as: contractual and wage earners of the public sector, employees of autonomous public establishments not subject to civil service protection, teachers in private schools, taxi drivers, newspaper sellers, university students, elected mayors and physicians. The NSSF coverage expands to the adherents' dependents that include the spouse, children up to 25 years if single and still in formal education, and parents over 60 years living in the same household who cannot support themselves. Upon retirement or when the adherents lose their job for any reason, they get

[1] Social Security Law enacted by Decree # 13955, September 1963.

end-of-service indemnities and afterwards, neither they nor their dependents can benefit anymore from the medical coverage.

In August 2000, Law 248 was issued, establishing a "voluntary" health insurance plan for the elderly. Eligible persons were those above 64 years of age and their dependents, provided they had no other form of insurance. The contribution was set at 6% of the official minimum salary which was 200 USD at that time. It was to be paid by one spouse to cover both spouses. No Executive Decrees were ever promulgated, and this law remains unenforced.

Based on article 11 of the 1963 NSSF original law, stating that a voluntary enrollment scheme is to be established in each of the three branches, a decree No. 7352 was issued in February 2002, creating a "voluntary" section in the sickness and maternity branch. This scheme targets former adherents who lost their eligibility after retirement, employers and their relatives employees excluded from the mandatory scheme, liberal professions and self-employed persons. The elderly are not eligible unless they had been previously enrolled in the NSSF. This voluntary scheme covers also family members living with the adherent including children till 18 years. However the spouse of a female adherent is not entitled to coverage unless he is handicapped or unemployed. The contribution is set at 90,000 LBP (60 USD) per month for employees and self-employed and 135,000 LBP (90 USD) for employers. Revenues and expenses are managed in a special account with the legal requirement to remain financially balanced.

As it should have been expected, the voluntary scheme attracted self-selected high risk adherents. This is an ideal arrangement for a rapid bankruptcy. The number of voluntary adherents has reached more than 30,000 in 2005, 27,613 in 2006, and 24,756 in 2007. The budget deficit resulting from the influx of low-paying high-demanding adherents has worsened the previously existing administrative delays in hospital reimbursement. Consequent growing arrears had direct negative impact on admissions, quality of care, patient satisfaction, and client's trust. This explains the decreasing number of "voluntary" adherents after 2005.

Table III-1: Distribution of NSSF beneficiaries, 2008

	Adherent		Dependents			Total
Beneficiaries	**Workers**	**Students**	**Spouses**	**Children**	**Parents**	
n	444,212	55,675	179,586	388,962	50,825	1,119,260
%	39.69	4.97	16.05	34. 75	4.54	100
	499887			**619373**		DR= 1.24*

* DR: Dependency Ratio (Dependents/Adherents) = 1.24, DR excluding students = 1.394

Table III-2: NSSF variations in utilization and spending (1998-2005)

	NSSF		
	1998	**2005**	**% increase**
Number of beneficiaries*	905,434	1,077,683**	19
Number of adherents	378,843	492,085	29.9
Number of hospital admissions	110,397	211,533	91.6
Cost of hospital admissions (1000 LBP)	107,708,000	278,927,987	159.0
Cost of ambulatory care (1000 LBP)	89,700,000	200,987,933	124.1
Total cost (1000 LBP)	197,408,000	479,915,920	143.1

* Number of beneficiaries = number of adherents + number of dependents

** Including 30,084 voluntary adherents and 51,350 university students, excluding 11,307 non-Lebanese.

According to the 2004/5 Household Survey[2], 23.4% of interviewees declared benefiting from the NSSF which makes a total number of beneficiaries of 878,670 compared to 712,890 found by the 1998 NHHEUS. The NSSF, however, has never declared a number below 1,200,000 for the past 15 years. Considering the MOPH database on public funds beneficiaries, the number of enrollees was probably under estimated by the households surveys. This "under estimation" may be explained by the fact that a number of NSSF enrollees do not actually benefit from health coverage, either because they are not considered eligible for the medical scheme, as in the case of double coverage or in the case of non-Lebanese, or they lack knowledge about their eligibility.

Workers in the formal private sector represent 63% of the NSSF adherents, those who joined the voluntary scheme never exceeded 6.5% of the total in any given year, and represented only 5% of the total in 2007.

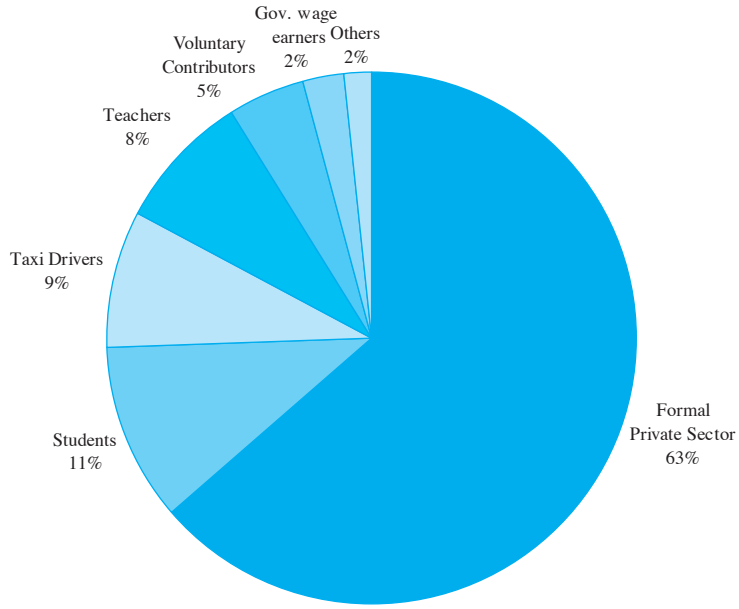


Fig III-1: Distribution of NSSF adherents by category

[2] Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004.

The NSSF pays directly 90% of hospital bills, and reimburses the patient 85% of fees paid for ambulatory care including medications, except for cancer drugs that are reimbursed at 95%. Dental care is still not covered despite its inclusion in the benefits package by virtue of the Decree 5104 that should have come into force in July 2001. NSSF adherents are neither covered for occupational health nor for workplace injuries.

From 1998 to 2005, the NSSF accrual spending on hospital care increased by 159% and on ambulatory care by 124%, making expenditures grow by 2.4 times, for an increase of only 19% in number of beneficiaries in the same period (table III-1). No significant change in the NSSF tarification occurred during this period. The share of voluntary adherents coverage counted for less than 7% of the total expenditure in 2005, and therefore had only a minimal contribution to spending inflation.

The budget deficit for 2005 based on accrual accounting has exceeded 22 billion LBP.

2- THE CIVIL SERVANTS COOPERATIVE

The CSC was established as a public institution with administrative and financial autonomy by virtue of the Decree no. 14273 issued in October 1963, one month after the issuing of the NSSF law and by the same cabinet. It covers the regular staff of the public sector and their dependents.

The CSC medical scheme was set originally for a transitional period, the time needed by the NSSF to cover the civil servants by virtue of Article 4 of the aforementioned Decree. Most of the CSC financing comes from the government budget (the employer), while civil servants contribute 3% of their salaries, amounting for almost 13% of the total budget. In addition to medical coverage, the CSC provides educational and family allowances and marriage and birth assistance.

Unlike the NSSF, the CSC covers male spouses, female children as long as they are single, the adherent's parents, irrespective of their age, as well as brothers and sisters in certain conditions, and

most importantly, eligibility extends after retirement. These differences may explain the high CSC dependency ratio of 2.15 compared to 1.24 for the NSSF (2008).

CSC adherent benefits are set at 90% of hospitalization costs and 75% for out patient services including dental care. For dependent family members, hospital and ambulatory care are only covered to the rates of 75% and 50% respectively. The CSC is the only public fund that imposes a fixed deductible payment upon admission and a progressive copayment ceiling for hospital care. As of February 2008, the number of CSC adherents reached 61,460 civil servants with a total number of 193,860 beneficiaries.

CSC expenditures on hospital and ambulatory care have almost doubled over a 7-year span (1998-2005) for an almost constant number of beneficiaries in that period. The increase in hospital cost (72.4%) was double that of admissions (35%). Ambulatory care witnessed however the highest cost increase rate. Since 2005 its costs have become bigger than those of hospital care.

Table III-3: CSC variations in utilization and spending (1998-2005)

	CSC		
	1998	**2005**	**% increase**
Number of Beneficiaries	198,450	197,392	-0.5
Number of Adherents	63,000	62,664	-0.5
Number of Hospital Admissions	18,341	24,762	35.0
Cost of Hospital Admissions (1000 LBP)	24,200,000	41,713,443	72.4
Cost of Ambulatory Care (1000 LBP)	19,800,000	45,808,209	131.4
Total Cost (1000 LBP)	44,000,000	87,521,652	98.9

* CSC enrollees not benefiting from the medical scheme are excluded.

3- MILITARY SCHEMES

Uniformed staff members and their dependents are covered by four military schemes. The most important one is managed by the Army Medical Brigade, and hence is under the supervision of the Ministry of Defense. It currently covers 236,100 beneficiaries including retirees (2008). The other three military schemes are under the jurisdiction of the Ministry of Interior, and cover Internal Security Forces (ISF), General Security Forces (GSF) and State Security Forces (SSF). These cover respectively 126,677; 16,285 and 5,645

beneficiaries (as of May 2008). It is worth mentioning that the ISF scheme includes also 5201 prisoners.

All military schemes are financed through the Government budget and have the same coverage rules for hospital and ambulatory care, with 100% reimbursement for the uniformed members, 75% for the spouse and children, and 50% for dependent parents. From 1998 to 2005, for an almost constant number of adherents, the cost increase of the military schemes altogether was less than 16%, parallel to a similar increase in the hospitalization rate.

Hospitalization rates are relatively high for all military schemes, especially the ISF fund that remains an outlier in this respect. However, the average ISF cost per beneficiary has decreased from 554,722 LBP in 1998 to 476,381 LBP in 2005.

Table III-4a: Military schemes: Hospitalization rates and costs per beneficiary (2005)

	Hospitalization rate %	Cost per beneficiary (1000 LBP)		
		Hospital care	Ambulatory care	Total
Army	23	253	57	310
ISF	34	318	158	476
SSF	22	286	419	705
GSF	13	283	370	653
Total	25	270	102	372

High costs per beneficiary for the SSF and GSF are not worth a particular attention in light of their volume. Such small funds cannot allow for efficient risk pooling and cost sharing. In all cases military schemes should at least be pooled altogether if we are keen on preserving military specificities. It is quite interesting to compare the ambulatory share of total costs among the public funds. It amounts to an average of 27% for all military schemes compared to 42% for NSSF and 52% for CSC. This indicates a cost shifting from ambulatory towards hospital care and explains the high hospitalization rates averaging 25 admissions per hundred beneficiaries for all military funds.

Table III-4b: Military schemes: Utilization and cost of hospital and ambulatory services (1998-2005)

		Number of beneficiaries	Number of adherents	Number of hospital admissions	Cost of hospital admissions (1000 LBP)	Cost of ambulatory care (1000 LBP)	Total cost (1000 LBP)
	1998	234,000	90,000	44,253	50,094,000	8,373,000	58,467,000
Army	**2005**	225,250	85,000	51,663	56,920,752	12,909,356	69,830,108
	Increase (%)	-3.7	-5.6	16.7	13.6	54.2	19.4
	1998	66,700	23,000	23,000	24,000,000	13,000,000	37,000,000
ISF	**2005**	77,609	26,762	26,718	24,675,000	12,296,434	36,971,434
	Increase (%)	16.3	16.4	16.2	2.8	-5.4	-0.1
	1998	5,700	1,463	1,200	1,450,000	950,000	2,400,000
SSF	**2005**	5,645	1,447	1,219	1,614,141	2,368,451	3,982,520
	Increase (%)	-1.0	-1.1	1.6	11.3	149.3	65.9
	1998	10,526	3,800	1,700	3,500,000	2,500,000	6,000,000
GSF	**2005**	14,310	5,300	1,800	4,046,134	5,299,790	9,345,924
	Increase (%)	36.0	39.4	5.9	15.6	112.0	55.8
	1998	316,926	118,263	70,153	79,044,000	24,823,000	103,867,000
Total	**2005**	322,814	118,509	81,400	87,256,027	32,874,031	120,129,986
	Increase (%)	1.9	0.2	16	10.4	32.4	15.6

Box III-1: Tutelage, entitlement, coverage and sources of financing of funding agencies

Fund	Tutelage	Entitlement	Benefits	Funding
NSSF Maternity and sickness fund	Ministry of Labor	- Employees of the formal private sector - Contractual and wage earners of the public sector - Employees of autonomous public establishments - Teachers in private schools, janitors in public schools, taxi drivers, newspaper sellers, university students, mayors and physicians. - Voluntary enrollees.	- Hospital care (90% direct payment to hospitals) - Ambulatory care (reimbursement to user) 95% for cancer drugs and 85% for all other drugs and services. - Dental care (not reimbursed yet)	- Employer: 7% of salary - Employee: 2% of salary (up to 1.5 million LBP.) - Government: 25% of total expenditures + the employer's share for government contractual and wage-earners + contributions for taxi drivers and mayors.
CSC Health fund	Presidency of the Council of Ministers	Regular staff of the public sector and dependents	- Ambulatory and dental care (75% reimbursement for employee, spouse and children, 50% for parents) - Hospital care (90% direct payment to hospitals for the employee, 75% for family members)	- Government budget (of which less than 15% comes from a 3% payroll deduction)

Army Medical Brigade	Ministry of Defense	Army members and their dependents	- Ambulatory and hospital care (100% for the member, 75% for the spouse and children, 50% for dependent parents)	Government budget
ISF, SSF, GSF Health departments	Ministry of Interior	Other uniformed staff and dependents	Same	Same
MOPH	Ministry of Public Health	Lebanese citizens with no coverage (Upon request)	- Hospital care (85% direct payment to hospitals, 15% co-payment with some exemptions) - Dispensing expensive drugs for catastrophic illnesses - Providing vaccines and essential drugs to public and NGOs health centers	Government budget
Private Insurance	Ministry of Economy and Trade	Voluntary enrollment	Variable	- Households (risk-based premiums) - Employers and employees for complementary insurance
Mutual Funds	Ministry of Agriculture	Voluntary enrollment	Variable	- Households - Government subsidies

Table III-5: Distribution of residents by covering fund according to their eligibility

	Household Survey 2005*		MOPH Estimates 2005	
Agency	**% of residents**	**# beneficiaries**	**# adherents**	**# beneficiaries**
NSSF	23.4	878,670	492,085	1,077,683
CSC	4.3	161,465	62,664	197,392
Military Schemes	9	337,950	118,509	322,814
Private Insurance Total	6.6	247,830	491,042	491,042
(Private Insurance +NSSF)			(175,793)	(175,793)
Mutual Funds Total	0.8	30,040	152,961	152,961
(Mutual Funds as complementary)			(37,744)	(37,744)
Other schemes**	0.9	33,795	33,795	33,795
MOPH***	53.3	2,001,415	1,629,015	1,629,015
Others****	1.7	63,835	63,835	63,835
Total	100	3,755,000		3,775,000

* Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004.

** Includes 0.8% who benefit from UNRWA, and 0.1% from abroad.

*** Are considered MOPH beneficiaries those with no other formal coverage.

**** Includes local arrangements such as municipalities financing.

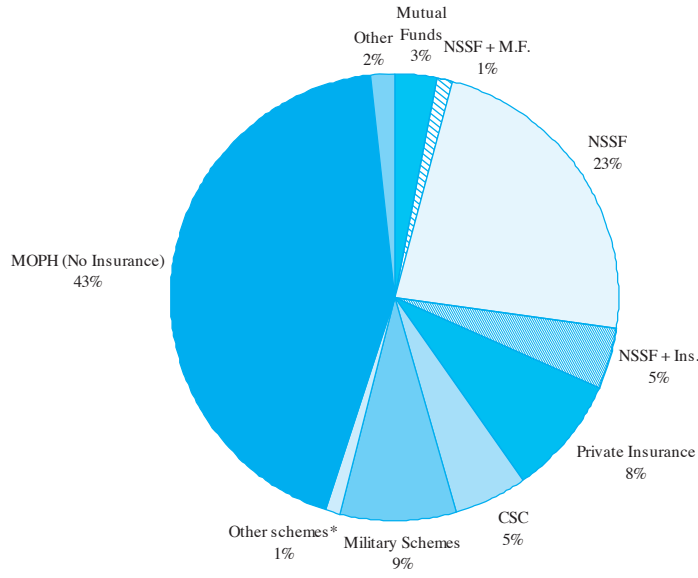
4- THE MOPH COVERAGE

The Government allocates in the budget of the Ministry of Public Health special allotments for covering the uninsured population, with the aim of ensuring universal accessibility to health services. These allotments have been growing over years with the development of the Ministry's financing function, leaving scarce resources to prevention, public health and regulation functions.

According to the 2004/5 National Household Survey, 46.7% of the interviewed population declared being covered by one or more public or private insurance schemes. The declared beneficiaries were distributed as follows: 50.1% covered by the NSSF, 9.2% by the CSC, 19.3% by military schemes altogether, 14.2% by private insurance, 1.7% by Mutuality Funds and municipalities, and 5.6% by various other funds including UNRWA's fund for Palestinian refugees. Accordingly, 53.3% of residents are not formally covered by any public or private agency, and hence, more than two million people are entitled for MOPH coverage, regardless of their ability to pay. Estimates based on the MOPH beneficiaries' database and adjusted by dependency ratios calculated from a representative sampling, indicate that about 1.6 million are eligible for MOPH coverage (table III-5).

The MOPH covers what may be considered a catastrophic payment for households i.e. hospital care and drugs with exorbitant prices. It reimburses contracted hospitals for 85% of the bill, dispenses expensive drugs free-of-charge directly to the uninsured citizens suffering from cancer, mental illness, multiple sclerosis, and other financial duress diseases. It finances the procurement of drugs for chronically ill patients, and provides vaccines and essential drugs to public and NGOs health centers. In return, those centers are required to provide immunization services free of charge, while they are allowed to collect a nominal user fee for consultations and essential drugs.

Fig III-2: Distribution of residents by covering fund according to their eligibility (MOPH estimates 2005)



During the 1990s, after almost two decades of civil unrest resulting in weakened public institutions, the MOPH was working on asserting its authority in the health sector. Among all the ministry's functions, covering the hospital expenses for uninsured was perceived by the population as the most important. In addition to being largely inclusive about coverage eligibility, the MOPH has been consistently expanding its basket of covered services. This led to a growing utilization of hospital services, fueled by a supplier-induced demand in a period where MOPH control capabilities were still weak. As a result, MOPH expenditures on hospital care have been growing sharply from 1994 to 2001, most of the time exceeding the set budgets. During that period, the Ministry had been contracting with almost all private hospitals operating in the country. According to the contract, a predetermined number of beds were reserved for patients referred by MOPH, with prior authorization. The limited number of beds assigned to each contracted hospital was supposed to contain costs under a certain ceiling.

Table III-6: Ministry of Public Health Budget (2002-2007) (1000 LBP) [1507.5 LBP=1 USD]

	2002	2003	2004	2005	2006	2007
Salaries and indemnities	28,130,000	25,251,000	23,980,000	24,730,000	24,535,092	24,173,000
Drugs	27,816,000	28,500,000	40,800,000	44,880,000	48,000,000	50,000,000
Contracted hospitals (private + public)	210,000,000	210,000,000	229,864,000	241,357,000	238,875,000	250,000,000
Public hospitals subsidies (± advances)		2,000,000	30,000,000	20,000,000	12,054,000	15,000,000
Contribution & support to NGOs	12,107,000	10,293,000	10,893,000	10,893,000	13,417,770	12,617,770
Others	8,393,000	6,672,000	6,871,000	8,644,000	9,189,638	7,950,800
Central Laboratory (recurrent)	1,268,000	1,148,000	1,157,000	1,198,000	1,145,500	990,100
Part II Ministry + Central lab. (investment)	1,786,000	1,236,000	1,035,000	8,598,000	1,572,000	900,000
Total MOPH budget	289,500,000	285,100,000	344,600,000	360,300,000	348,789,000	361,631,670

A separate budget line was created in 1999 for autonomous public hospitals to provide them in the launching phase with the necessary operational capital. The original plan was to shift MOPH hospitalization funds from contracting private hospitals to public ones progressively, as new public hospitals were becoming functional. This revealed to be unrealistic, largely due to the powerful position of the private hospitals on the political and confessional scene. Payments to public hospitals from the subsidies budget line turned into advances to be deducted when reimbursing hospitalization bills, within the framework of the contractual agreement with the MOPH.

The MOPH budget has increased by 25% over the past five years. Disregarding debt servicing, MOPH budget in 2007 represented, 5.21% of the government budget (3.05% of the total with debt service). Needless to mention that budget increases are almost exclusively related to hospitals' reimbursement and expensive drugs purchasing.

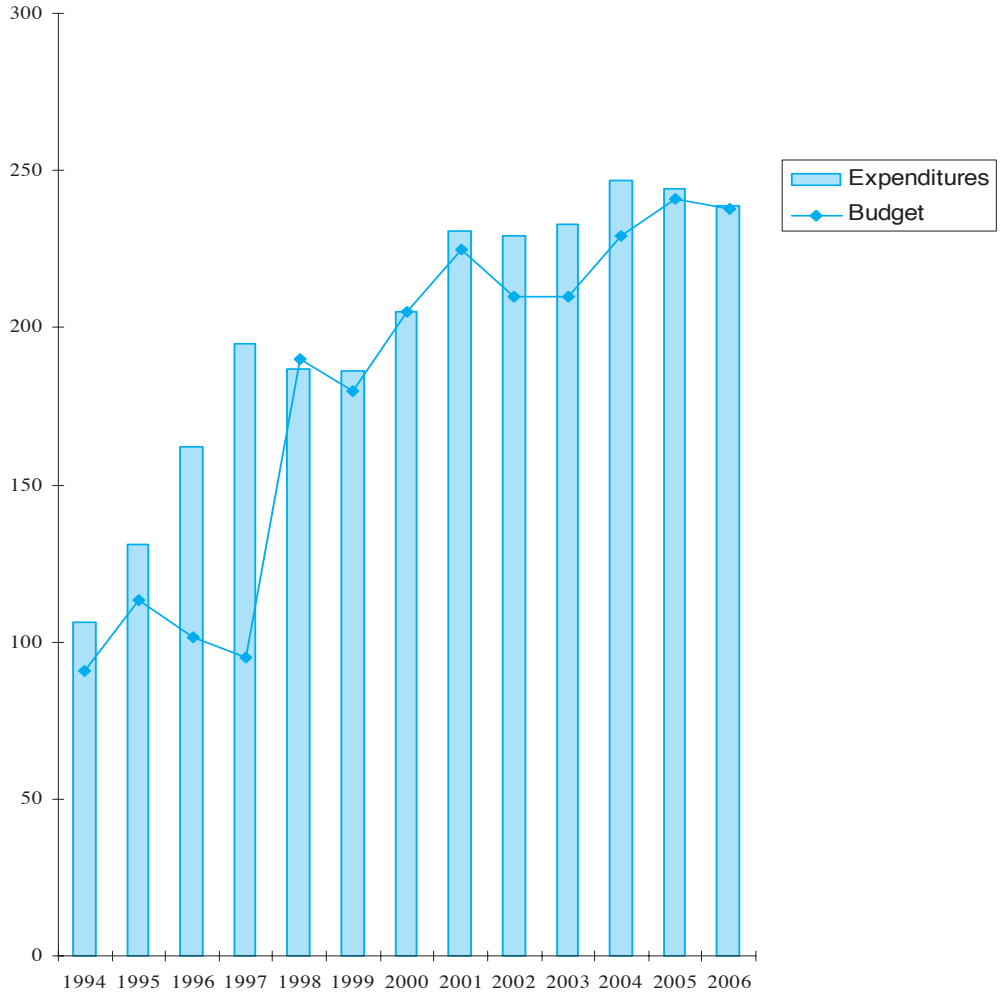
Table III-7: Government budget, Debt servicing and MOPH share 2002-2007 (1000 LBP)

	2002	2003	2004	2005	2006	2007
Total Government Budget	9,375,000,000	8,600,000,000	9,400,000,000	10,000,000,000	11,195,000,000	11,840,000,000
Debt servicing	4,500,000,000	4,000,000,000	4,300,000,000	3,900,000,000	4,653,000,000	4,900,000,000
MOPH share of the total government budget % (excluding debt services)	3.09 (5.94)	3.32 (6.20)	3.67 (6.76)	3.60 (5.91)	3.12 (5.33)	3.05 (5.21)

At the end of 1997, the MOPH introduced a flat rate reimbursement method for surgical procedures, and cancelled the co-payment exemption for open-heart surgery and organ transplantation. The impact of these measures was remarkable on the 1998 and 1999 MOPH expenditures, as shown in figure III-2. Unfortunately, this effort was over-shadowed by a steep increase in the number of contracted beds in 2000 and 2001[3].

[3] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO

Fig III-3: MOPH accrual spending on hospital care and budget allocations 1994-2006



Since 2001, the cost incurred by contracted hospitals has been rather stabilized with slight variations, as a result of a better control of demand and an efficient cost containment policy. The number of admissions showed in fact a slight increase from 174,691 in 2001, to 186,624 in 2006 (6.8%), whereas related expenses have only increased from 229 to 239 billion LBP (4.3%) in the same period. This could only be attributed to serious measures taken by the MOPH to control

admissions and contain the cost of hospital care. This included the setting of a financial ceiling for each provider explicitly stated in the contract, the automation of admissions authorizations and bills auditing, and the activation of staff accountability mechanisms. Hospitals' compliance with contracting rules has been closely monitored, and the MOPH medical controllers were trained and held responsible for any abuse. On the other hand, fig III-3 highlights the impact of the enhanced MOPH capabilities for budget control, revealed by the significant reduction of budget deficits. These did not exceed 4 billion LBP in 2005, to become almost nil in 2006, and probably reversed in 2007.

Table III-8: Breakdown of MOPH accrued expenses on curative care in 2005 (1000 LBP)

	Number of cases	Incurred cost
Medical	93,463 admissions	83,822,020
Surgical (except open heart surgery)	87,148 //	93,110,491
Heart surgery	2,754 //	18,119,044
Burns	34 patients	689,937
Dialysis	1,246 //	19,107,398
MRI	794 //	2,060,911
LDH apheresis	37 //	1,056,000
Long stay	1,385,968 days	26,795,885
Total		**244,761,686**

From the 2005 budget, 244.7 billion LBP were spent on different contracted providers as revealed by table III-8. In addition, subsidies to public hospitals amounted to 11,150 billion LBP that same year, whereas the incurred cost of expensive drugs was 45,257 billion LBP dispensed to 7,284 patients suffering from cancer and other diseases necessitating exorbitant treatment.

In 2007, 87% of the MOPH budget was allocated for curative care and distributed as follows: 15.8% for purchasing expensive drugs, 79.3% to reimburse contracted private and public hospitals, and the remaining 4.9% to subsidize public hospitals.

Among 1.6 million eligible citizens, almost 190,000 seek MOPH authorization yearly for hospital admission and expensive treatment with an average cost of 190 million USD. Among these expenditures, 27.5 millions are spent on some 4,600 patients

undergoing open-heart surgery, renal dialysis, LDL apheresis and linear accelerator radiotherapy. In addition, some other 9,200 patients are receiving expensive drugs for a cost of 33.3 million USD. As a result, 87% of the ministry's budget is spent on 5% of the population, of whom 7% (0.37% of the total population) are benefiting from one third of this budget share.

This is certainly not an effective way of allocating the MOPH resources but is an inevitable result of the Ministry's role as a financing agency. This role originally defined as that of an "insurer of last resort", has evolved to cover more and more sophisticated services, to meet ever growing expectations fed by unrealistic promises and continuously inflated by demagogic political speech. Useless to say that the MOPH cannot be "luxuriant" to every body, everywhere, all the time, which causes necessarily equity and sustainability problems. In the case of providing expensive drugs, for example, it leads sometimes to selective generosity and often to running out of stocks with serious health consequences.

5- PUBLIC FUNDS COORDINATION AND DUPLICATION

All public agencies contract out for hospital care, based on a tarification set by MOPH and the NSSF for 3rd class hospitalization. Military officers and civil servants of the 2nd and 1st categories are entitled for treatment in a higher hospitalization class.

The diversity of benefit packages among public funds leads to shifting eligibility, in particular towards MOPH. Chemotherapy is an example where obtaining expensive drugs for free from the Ministry's drugstore remains an option preferred by the insured patient to purchasing them from a private pharmacy and getting 95% reimbursement by the NSSF, or even less by the CSC, several months later. Some expensive drugs are not even reimbursed at all. A meaningful number of adherents to the NSSF or the CSC used to submit yearly "certificates of ineligibility" signed by both agencies, enabling them to benefit fraudulently from MOPH for some better covered services. This practice has been substantially reduced with the improvement of the electronic database on public funds beneficiaries, even though exceptions are still made at the discretion of the Minister of Public Health. Discussions are taking place to unify benefit

packages and to set mechanisms that enable public funds to procure drugs with prohibitive public prices to be dispensed directly for patients, following the example of the MOPH.

Workplace injuries and occupational health, not included in the NSSF medical plan, are covered by the MOPH. And, in case of health emergencies such as natural disasters, military conflicts or disease outbreak, it is the MOPH who has to call upon hospitals to treat hard shipped citizens, on the full charge of the Ministry, irrespective of their insurance status and without prior authorization.

The population covered by the NSSF is relatively young, mainly due to the fact that upon retirement the adherent is excluded after getting his/her indemnities. Thus, the NSSF relieves itself from its aging beneficiaries when their health needs become greater and more costly. In addition, citizens ineligible to NSSF are in general among the most deprived segments of the population, such as seasonal workers, farmers, retired and unemployed citizens. Consequently, the MOPH welfare fund covers on average an older and poorer population with higher health needs. Higher hospitalization rates and length of stay, and more complicated and expensive interventions are to be expected for the MOPH covered population.

The wide variations in spending averages per beneficiary reflect among others the difference in benefit package where the share of inpatient bills is 84% for MOPH as an example compared to an average of 53% for the other funds.

The NSSF average cost for medical insurance is 295 USD per beneficiary. Should the Government consider a universal prepaid health coverage plan, this could be taken as a reference figure for public insurance. It compares favorably with the 2005 private insurance cost, considering both the average gross premium of 450 USD and the average paid claim of 363 USD per person-year.

The average hospitalization rate of the population covered by public funds including the MOPH welfare fund is 16.4 admissions per hundred populations. The cost per admission is the highest for Civil Servants Cooperative and the lowest for all security forces.

Table III-9: Public expenditures on health services provided by the private sector (2005) [1507.5 LBP = 1 USD]

Financing agency[a]	Number of beneficiaries[b]	Expenditures[c] (1000 LBP)	Expenses per beneficiary[d]	
			LBP	USD
MOPH[e]	1,629,015	301,168,561	184,878	123
NSSF	1,077,683	479,915,920	445,322	295
CSC	197,392	87,521,652	443,390	294
AF	225,250	69,830,108	310,011	205
ISF	77,609	36,971,434	476,380	316
GSF	14,310	9,345,924	653,104	433
SSF	5,645	3,982,592	705,507	468
TOTAL	***3,226,904***	***993,462,191***	***307,868***	***204***

Sources: Financing agencies for expenditures, MOPH estimates for beneficiaries' numbers.

a) Palestinian refugees and other non-Lebanese are excluded as well as adherents to private insurance.

b) Estimates derived from the beneficiairies database: The number of beneficiaries includes adherents and their dependents.

c) Covering hospital and ambulatory services for public funds MOPH expenses include hospitals reimbursement, drugs cost and public hospitals subsidies.

d) Administrative costs excluded.

e) For the MOPH; uncovered Lebanese are considered beneficiaries.

Table III-10: Acute Inpatient Care (2005)

	MOPH	NSSF	CSC	Army	SF*	TOTAL
Admissions	183,365	247,907	24,762	51,663	29,737	537,434
Hospitalization Rate	11.3%	23%	12.5%	22.9%	30.5%	16.6%
Acute inpatient cost (1000 LBP)	214,039,909	278,927,987	41,713,443	56,920,752	30,335,275	621,937,366
Cost per admission (1000 LBP)	1,167	1,125	1,684	1,102	1,020	1,157

*SF: Security Forces including ISF, GSF and SSF

Table III-11: Public expenditures breakdown (2005) [1507.5 LBP = 1 USD]

	MOPH	NSSF	CSC	Army	Security Forces
In-patient care (1000 LBP)	244,761,686 [(a)]	278,927,987	41,713,443	56,920,752[(b)]	30,335,275
Ambulatory services	45,256,875[(c)]	200,987,933	45,808,209	12,909,356	19,964,675
Administrative costs for medical coverage	11,632,479	42,177,766	3,226,116	13,112,568	2,793,032
Total (1000 LBP)	301,651,040	522,093,686	90,747,768	82,942,676	53,092,982
Total (US Dollars)	*200,100,000*	*446,330,800*	*60,198,000*	*550,200,000*	*35,219,225*
Administrative Costs (%)	3.9	8	3.6	15.8	5.3

(a) Hospital care including public hospitals and long stay.
(b) Including military hospital.
(c) Excluding Primary Health Care.

Being the insurer of last resort for the most disadvantaged, the MOPH contributes to some extent to solving accessibility and equity problems. This was confirmed by the 1999 NHHEUS, and more recently the Households Living Conditions Survey done by CAS in 2004-2005.

In 2005, the MOPH spent 301.6 billion LBP on private and public hospital care and ambulatory services including administrative costs. This sum went for medical coverage of 1,629,015 uninsured, which represents an average of 123 USD per eligible citizen. It is worth noting that although the uninsured are eligible for MOPH coverage irrespective of their ability to pay, they do not all seek MOPH services for a variety of reasons. In addition, the MOPH spent around 50.6 billion LBP on public health activities and general services, to the benefit of all the 3,755,000 Lebanese citizens. This represents an additional 9 USD per citizen.

6- PRIVATE INSURANCE

The 2004/5 National Survey on Households Living Conditions revealed that 6.5% of residents hold a private health insurance policy. Of those 2.6% declared paying directly the total amount of premiums, whereas 3.9% declared being enrolled into a private plan through an institution, a syndicate or an employer. This indicates that 60% of the privately insured are probably not bearing the whole premiums.

Analysis of data provided by selected private insurance companies especially those of the MedNet Liban group, indicates that 35.8% of the privately insured are at the same time NSSF adherents and are divided into 26.1% covered for hospitalization only and 9.7% covered for additional ambulatory care, with an average premium of 228 USD. Those adhering to private insurance alone are in majority covered for hospital care and varying packages of out-patient services, with an average premium of 464 USD.

Table III-12: Private Insurance adherents by type of coverage (in USD)

	Private Insurance alone		Private Insurance complementary to NSSF		TOTAL	
Hospitalization only (%)	30,445	(6.2)	128,162	(26.1)	**158,607**	**(32.3)**
Hospital and ambulatory care (%)	284,804	(58.0)	47,631	(9.7)	**332,435**	**(67.7)**
TOTAL	**315,249**	**(64.2)**	**175,793**	**(35.8)**	**491,042**	**(100)**

Table III-13: Private Insurance premiums and claims 2005 (in USD)

	Private Insurance alone		Private Insurance complementary to NSSF		
	Premiums	**Claims**	**Premiums**	**Claims**	
Hospitalization only	18,066,972 (9.7)	6,689,648 [5.8]	13,783,051 (7.4)	5,766,938 [5.0]	(100%)
Hospital and ambulatory care	128,145,121 (68.8)	85,927,368 [74.5]	26,262,299 (14.1)	16,954,710 [14.7]	[100%]

Considering the total premiums of 186,257,443 USD published by the Association of Private Insurance (ACAL) for 2005[4], and assuming that the study sample is representative; the total number of private insurance policy holders would be 491,042 with the characteristics represented in table III-12.

According to the Ministry of Economy and Trade (MOET), the total declared premiums for medical insurance in 2005 was 166 million USD. This does not include car accidents mandatory insurance estimated at 40 million USD premiums per year, composed of medical coverage and accidents' indemnities.

Private insurance companies are taking full advantage of the system for selecting younger, healthier, and better-off clientele. The chronically ill patients suffering from diabetes, heart disease, renal failure, cancer, among others, are discouraged by prohibitive premiums to join the insurance. In addition to cream skimming, expensive interventions such as open-heart surgery, chemo- and radiotherapy, organ transplantation and dialysis are most often excluded, and their burden ends up being shifted on the MOPH. Ill regulation of the private insurance becomes a serious concern regarding the protection of adherents' rights as well as the future development of the sector. Abuse is particularly noxious in car accidents insurance where settling contentions at the door of the emergency room is not an easy job for the MOET or the MOPH. Mandatory insurance for car accidents has shown to be particularly inefficient and should be revisited at both the legislative and the administrative levels.

Total claims declared by private insurance amounted to 115,34 million USD in 2005 representing 62% of the same year premiums published by ACAL. This provides enough room for improving both premiums and benefits, which in return will probably have a positive impact on the expansion of the insurance business. Hence, improving regulation capabilities of the supervising ministry together with consumer's protection and empowerment, remain critical factors to promote constructive competition and better efficiency in the insurance industry.

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[4]Associations des Compagnies d'Assurances au Liban. 2006. Annual Report, available at: www.acal.org.lb

Table III-14: Mutualities adherents and contributions by type of coverage (2005)

	No other coverage (%)		Complementary to NSSF or MOPH (%)		Total	(%)
Adherents	115,065	(75.3)	34,744	(24.7)	152,809	(100)
Contributions (1000 LP)	43,739,642	(77.4)	12,771,523	(22.6)	56,511,165	(100)

Table III-15: Government subsidies for Mutual Funds (1000 LBP) (2005)

Source of Financing	Mutual Fund for Members of Parliament	Mutual Fund for Parliament employees	Mutual Fund for judges	Mutual Fund for the Lebanese University professors
Government Budget[1]	9,200,000	1,600,000	8,500,000	17,438,000
Contributions [2]	—	—	5,502,000	5,900,000

[1] *Ministry of Finance*
[2] *Mutual Funds Association*

7- MUTUAL SOCIETIES AND SELF-FUNDED SCHEMES

Only 0.8% of interviewed households declared adhering to a mutual society (2004/5 survey). However, data derived from the Association of Mutual Funds (AMF) revealed a number of adherents that exceeded 170,000 for 2004, and 150,000 for 2005. Following the private insurance example, some funds are contracting-out patients' management to a Third Party Administrator (TPA). The consequent increase in administrative cost may be worth the TPA professional added value, considering that non-profit organizations are lacking the needed expertise in actuary and insurance management. Data from TPA sources confirm the AMF figures about adherents and contributions that are estimated at 40.13 and 35.33 million USD for 2004 and 2005 respectively.

Based on TPA-managed mutuality data related to adherents with no other form of insurance, the average disbursement is about 133 USD per person per year for an average premium of 184 USD (72%).

Some funds define their mission as complementary to NSSF or MOPH by covering only the co-payment. This type of coverage concerns less than 25% of the total number of adherents. Some others receive government subsidies that amounted to a total of 24.37 million USD in 2005, with more than 50% devoted to cover health services (table III-15). In 2005, contributions and paid claims amounted to 37,674,110 USD and 35,287,992 USD respectively. Considering administrative fees, these figures confirm the non-profit nature of these mutual societies. Average paid claims per adherent are 231 USD for self-managed mutual societies compared to 133 USD for those having a TPA. However, those figures should be considered with caution as benefits are not standardized and the benefits mix may differ between the two categories.

In addition to mutual societies, there exist self-funded schemes that are either self-managed or contracted-out to a TPA. The total number of their adherents is believed not to exceed 20,000 beneficiaries with an average cost of 272 USD per person per year for in and out-patient services.

Table III-16: Distribution of health expenditures by households and intermediaries 1998 and 2005 (1000 LBP)

	1998	%	2005	%	Increase (decrease)	% (%)
MOPH	310,919,302	10	364,081,361	14	53,162,059	17
NSSF	315,524,000	10	522,093,686	19	206,569,686	65
Other Public Funds	188,215,522	6	226,783,426	8	38,567,904	20
Private Insurance	376,013,035	13	280,786,953	10	(95,226,082)	(25)
Others	42,222,926	1	129,412,465	5	87,189,539	206
Households OOP*	1,780,623,000	60	1,157,672,000	44	(622,951,000)	(35)
TOTAL	**3,013,517,785**	**100**	**2,680,829,891**	**100**	(332,687,894)	(11)

* Out-of-pocket

Table III-17: Average expenditures per household and share of health spending: 1998 and 2004 (LBP)

	1998	2004[(1)]	Increase (decrease)
Total household expenditures	18,551,000	19,294,559	4%
Health spending including insurance	2,609,000	1,780,110	(32%)
OOP on Health (without prepayment)	2,230,695	1,312,030	(41%)
Prepayment (contributions & premiums)	378,305	468,080	24%
Share of health spending[(2)]	14.06%	9.23%	(4.83%)

(1) Source: Households Survey 2004/5, except for insurance premiums calculated from other sources.
(2) In % of total household spendings

8- NATIONAL HEALTH ACCOUNTS

Having examined so far how the money flows through financing intermediaries, we will in this section have a look on where does the money come from (sources of financing) and how is it distributed among providers. Sources of funds are generally analyzed by focusing on the public-private mix. For the sake of strategic analysis we will consider an approach that emphasizes rather the prepaid modalities versus out-of-pocket (OOP) direct payments.

8.1 Sources of Funds

Total health expenditures have decreased by 221 million USD (11%) between 1998 and 2005[5]. This was achieved mainly through an important reduction of households OOP payments reaching 413 million (35%), and would not have been possible without an increase in spendings from treasury source by 119 million (33%).

Most of the treasury funds increase was demand driven rather than preplanned reallocation of resources. As a result of miscalculated budget allocation, both MOPH and NSSF experienced accrual deficits in their 2005 budgets amounting to 3.78 and 22.7 billion LBP respectively. That of NSSF was mitigated by a treasury transfer in 2005 which included arrears and exceeded the government contribution incurred for that particular year.

Nevertheless, based on 1998 NHA[6] results, the MOPH adopted a clear strategic plan for rationalization of health expenditures, targeting specifically the households OOP payments. The 2005 NHA provided evidence on the pertinence and success of the MOPH strategy in lowering the households' financial burden as shall be explained in chapter six. However,

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[5] National Health Accounts for 2005 are based on financing intermediaries' data for 2005, and that of the 2004/5 Households Living Conditions Survey. This survey was launched in February 2004 and the data collection was achieved in April 2005.

[6] Ammar, W., et al. Lebanon National Health Accounts 1998. WB-WHO: Beirut. December 2000.

efficiency of public financing remains an issue to be addressed, mainly at the allocative level.

Households direct spending on health, amounted to 1,157,676,230,650 LBP in 2004 with an average of 1,312,000 LBP per household, the equivalent of about 200 USD per capita per year.

While total households expenditures have increased by 4% between 1998[7] and 2004, those related to health have decreased by 32%, and the OOP share decreased by 41% in the same period (table III-17). The 1998 survey focused on health and emphasized health related expenditures while perhaps, underestimating the rest of households' spendings[8]. It is worth mentioning that prepayment share of households spending on health that represented 14.5% in 1998, was estimated at 26.3% in 2004 (table III-20).

It would be particularly informative to compare the results of two Households Living Conditions Surveys, conducted in 1997 and 2004/5. Since insurance premiums were included in 1997 results, but not in those of 2004, they were deducted from the 1997 households spendings for the sake of comparability, and in order to focus on OOP i.e payment made at the point of getting the service. On the other hand, in the absence of complete National Health Accounts (NHA) for 1997, no plausible estimation of Total Health Expenditures (THE) exits for that year. Hence, no comparison could be made in terms of OOP share in THE nor THE share in GDP. Therefore comparing the 1997 OOP share in GDP to that of 2004, is considered instead, for having the same relevance.

Table III-18 shows that household's OOP health spending has significantly decreased in 2004 compared to 1997, both in absolute figures and in % of GDP. During that period, OOP health spending has decreased by more than 10%, from 1,469,588 to 1,312,000 LBP per household, representing a

[7] Kasparian C; Ammar, W.; Mechbal, A.; Nandakumar, A.K.; National Household Health Expenditures and Utilization Survey 1999. MOPH in collaboration with: CAS, WHO, WB. October 2001

[8] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO

decrease in its GDP share by more than 34% (3.56 compared to 5.47%).

Table III-18: Households health (HH) out-of-pocket (OOP) spending, 1997 and 2004 (in LBP)

	1997*	2004**
HH OOP	1,469,588***	1,312,000
Number of households	834,375	879,855
Total OOP health spending	1,226,187,487,500	1,154,369,760,000
Total GDP**	22,412,003,000,000	32,411,000,000,000
Total HH OOP health spending as % of total GDP	5.47	3.56

* Household Living Conditions Survey 1997
** Household Living Conditions Survey 2004/5
*** HH spending 1,724,000 – insurance premiums 254,412
**** Ministry of Finance

From a household's budget perspective, 2004 OOP direct payment for health represented on average 6.8% of the total households expenditures. This percentage is however more important for the poorest ones, reaching 14.1 percent for the lowest income category. Households were spending less in 2004 on health than in 1998 both in absolute figures and in percentage of their total expenditures. However, discrepancies between households income categories, in terms of proportions of their budget devoted to health, were wider in 2004/5 compared to 1998. This may be explained to a large extent, by the exclusion of private insurance premiums that would have weighed more on the highest income categories shares, if taken into account in the 2004/5 survey.

Table III-19: Health share in households spending (in%) by income category 1998-1999 and 2004-2005

Monthly household income	1998-1999*	2004-2005**
< 300	19.9	14.1
300-499	18	9.8
500-799	16.1	7.26
800-1199	14.8	6.85
1200-1599	14	6.3
1600-2399	14.1	5
2400-3199	11.4	
3200-4999	10.7	4.2
>5000	8.1	
Total	**14.1**	**6.8**

* Insurance premiums included ** Insurance premiums excluded

Table III-20: Distribution of financing by sources and intermediaries (1000 LBP) (2005)

FINANCING	FUNDING SOURCES					EXPENDITURES
INTERMEDIAIRIES	Households		Employer	Treasury	Extra budgetary	Disbursement (Fund balance)[1]
	Fees for Services (out of pocket)	Contributions/ Premiums	Contributions/ Premiums		Donations / Loans	
MOPH				360,300,000		293,799,922[2] (66,500,078)[3]
NSSF		169,309,291	199,564,115	145,000,000		479,915,920[2] (33,957,486)[4]
CSC				90,747,768		87,521,652 (3,226,116)
Army				83,000,907		69,887,340 (13,113,567)
SF				53,092,982		50,299,950 (2,793,032)

Private Insurance		187,192,305	93,594,645			173,873,165 (106,913,785)
Mutual Funds		56,511,165		28,884,000		85,395,165
International Organizations					700,000	700,000
Households	1,157,672,048					1,157,672,048
						2,399,065,162 **(226,504,064)**
TOTAL	**1,157,672,048**	**413,012,761**	**293,158,760**	**761,025,657**	**700,000**	**2, 625,569,226**

(1) Including Administrative cost, investments, surplus or deficit.

(2) Accrual

(3) The result of +70,281,439 public health functions + administrative cost + investment – 3,781,361 deficits.

(4) The result of +42,177,766 administrative cost – 8,220,280 deficit and reconciliation of government arrears.

8.2 Distribution of Health Expenditures

Almost half of households health expenditures go to purchasing drugs! Medical and dental consultations represent less than 20%, and hospital services account only for 15.15% of households OOP expenses[9]. Unfortunately the 2004/5 survey results do not provide information on insurance premiums as part of households health spending items.

Table III-21: Households annual health expenditures by spending item (LBP) (2004-2005)

	Average per household	%	Total
Drugs	632,020	48.17	557,666,007,100
Other pharmaceutical products	7,310	0.56	6,450,015,050
Eye glasses and contact lenses	26,630	2.03	23,497,113,650
Denture and appliances	63,760	4.86	56,258,954,800
Other appliances + maintenance	5,540	0.42	4,888,246,700
Physicians consultations & services	154,600	11.79	136,412,083,000
Dentists consultations & services	96,200	7.33	84,953,139,400
Medical lab. Analysis	78,270	5.96	69,061,925,850
Imaging	40,110	3.06	35,391,259,050
Paramedical services	8,730	0.67	7,702,959,150
Hospital services	198,780	15.15	175,394,526,900
Total	**1,312,030**	**100**	**1,157,676,230,650**

***Source**: Central Administration for Statistics, unpublished data.*

In 2005, national total expenditures on hospital care, spent by all financing agencies as well as by households, amounted to 1006.56 billion LBP including the price of in–hospital used drugs. Out hospital costs of drugs and other pharmaceuticals have reached respectively 831 and 89 billion LBP. Aggregated data from IMS, the Syndicate of Drugs Importers and the Syndicate of Private Hospitals, reveal that in-hospital consumption of drugs and other pharmaceuticals (medical supplies and consumables) amounted to 145.95 and 65.43 billion LBP respectively. This indicates that pharmaceuticals represent on average 21% of the hospital bill divided into 14.5% drugs, and 6.5% medical supplies and consumables.

[9] Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004/5.

Table III-22: Spending on hospitals and pharmaceuticals by households and intermediaries in 2005 (1000 LBP)

	Total Hospitals (including Pharmaceuticals)	Hospitals (excluding pharmaceuticals)	Pharmaceuticals (outside hospitals)	Total pharmaceuticals
Intermediaries	831,166,818	656,621,786	271,601,836	446,146,868
Households	175,390,341	138,558,369	648,760,826	685,592,798
Total	1,006,557,159	795,180,155	920,362,662	1,131,739,666
% of total health expenditures	37.55	29.66	34.34	42.22

Table III-22 shows that pharmaceuticals purchased through pharmacies, public bids and hospitals, including drugs, medical supplies and consumables, totaled to 1131.74 billion LBP in 2005 representing 42.2% of total health expenditures! Whereas expenditures on hospitals excluding pharmaceuticals accounted for 29.6% only. This indicates clearly the priority of actions for the coming years.

Table III-23: National Health Accounts summary statistics (LBP)

	1998		2005	
Total population estimate	4,005,000		3,870,000	
Total health expenditure	3,013,517,785,000		2,625,569,226,000	
Per capita expenditure	752,438		678,442	
Total GDP	24,300,000,000,000		32,411,000,000,000	
Health expenditure as % GDP	12.4		8.1	
Percent GOL budget allocated to MOPH	6.6		5.9	
Sources of funds (%)				
Public	18.22		28.98	
Private	79.84		70.99	
Households		70.65		59.82
Employers		9.19		11.17
NGO	1.94		0.03	
Distribution of health care expenditures (%)				
Hospitals including drugs &medical supplies	*24.5*		*38.0*	
Private non-institutional providers	*41.0*		*21.0*	
Pharmaceuticals	*25.4*		*32.0*	
Others	*9.1*		*9.0*	

9- CONCLUSION

The 2005 National Health Accounts (NHA) reveals that 460 USD were spent on health per capita, representing 8.2% of the GDP estimated at 5,555 USD per capita. This brings Lebanon to the norms of the Eastern Mediterranean Region after being within the European range for years.

Although funds from private sources have been reduced by almost 10 points in 2005 (70.99%) compared to 1998 (79.84%), health expenditures from private sources in percent of GDP remain the highest in the region. This would have not been at all a concern if it had reflected only institutionalized private contributions. The problem lies in the fact that private funding still comes mainly from households' direct payment at the purchasing point.

Efforts made by the MOPH have been contributing to lower significantly OOP spending. However, in light of NHA results, and in order to be conclusive, efforts should be more oriented towards containing the cost of pharmaceuticals.

Nevertheless, better regulation and cost control would not provide alone enough protection from impoverishment induced by health spendings. Reforming the health financing system with the aim of ensuring a universal coverage based on prepayment modalities, through one fund or more, remains the only envisegeable solution for social protection and equitable accessibility to health care. The NSSF is facing basic problems to enlarge its coverage. It lacks for example the capacity to assess the uninsured ability and willingness to pay, and to set and collect contributions in the absence of employer identification outside the formal economy. The whole health sector is still paying the price of the NSSF voluntary enrollment failed attempt. Repercussions of this failure were unbearable for the providers and most of all by the deceived adherents. Any partial solution would have similar catastrophic consequences and should be discouraged. The government should seriously consider comprehensive reform scenarios[10] although a soft and modular option may be chosen.

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[10] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO: Health Financing Scenarios pp.133, 139.

Table III-24: International comparison of health expenditures per capita and as a percentage of GDP

Country or Region	GDP per capita (USD)*	Health Expenditure (per capita USD, exchange rate)**	Health Expenditure (per capita USD, PPP)**	Health Expenditures as percentage of GDP**		
				Total	Public Sources	Private Sources
Yemen	880	39	88	5.1	2.1	3.0
UAE	30,881	833	625	2.6	1.9	0.7
Tunisia	3,000	158	477	5.5	2.4	3.1
Qatar	53,125	2186	1283	4.1	3.2	0.9
Egypt	1,449	78	279	6.1	2.3	3.8
Morocco	2,144	89	258	5.3	1.9	3.4
Jordan	2,564	241	649	10.5	4.8	5.7
Iran	3,108	212	677	7.8	4.4	3.4
Lebanon (2005)* **	**5,555**	**460**	**584****	**8.2**	**2.4**	**5.8**
East. Med. Region**	2,184	107	242	4.9	2.5	2.4
France	36,674	3819	3314	11.2	8.9	2.3
Greece	27,784	2580	2955	10.1	4.3	5.8
European Region**	19,200	1652	1649	8.6	6.4	2.2

Source: ** World Bank. 2006. World Development Indicators 2006. [Online] available at: www.worldbank.org*
***WHO.2005. World Health Statistics 2005. Geneva: WHO*
****Ministry of Public Health Lebanon National Health Accounts 2005. (unpublished work)*

Chapter Four

PHARMACEUTICALS

Pharmaceuticals being the major item of health spending, far ahead of hospitals and physicians' fees, stand on the top of policy makers' priority list. On the other hand, quality arose as a public concern with the divulgation of seizures of counterfeit and smuggled drugs, sometimes blown up out of proportion by the media.

The number of currently registered drugs slightly exceeds 5000, of which almost one thousand are manufactured locally, and the others are imported by 101 agents and distributers from 580 manufacturers spread over the world, especially in Europe.

The distribution of prescribed pharmaceuticals by therapeutic class shows that cardiovascular drugs are on the top of the list with almost 20% of market share, including 11% antihypertensive medications. Antibiotics lie in the second position (12%) followed by anti-inflammatory and analgesic drugs (9%). Psychotropic medications represent 5.5% of the market, including 3.5% anti-depressive and 1% tranquilizers and sedatives. It is worth mentioning that vitamins, mineral supplements and "tonics" amounted to 26.8 billion LBP in 2007. Needless to say that most of the time, these additives bring no significant benefit to the patients' health and obviously constitute a waste of resources.

Finally, anti-diabetic drugs represent 3.5% of the market and medications for asthma and COPD 2.3%.

1- THE PHARMACEUTICAL MARKET

Pharmaceuticals account for an important share of the Lebanese market with a sales volume exceeding 900 million USD in 2007. Households annual OOP spending on drugs was estimated at 100 USD per capita in 2005.

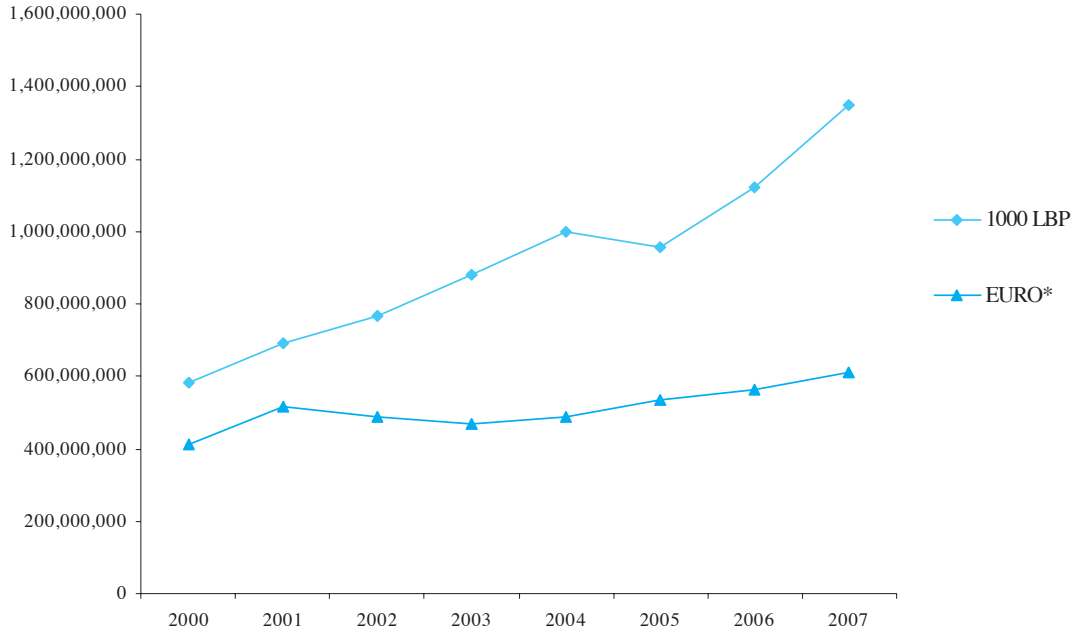
Pharmaceutical prices are set in application of a Ministerial Decision. This decision is issued following a relatively complicated procedure that involves all stakeholders and concerned ministries as well as the State Council. It sets a price structure that defines freight and mark-ups on landed costs of the imported drugs, including profit margins for importers and drugs handlers. It provides also for an updating mechanism, whereby a price index is issued regularly to take into account currency exchange rates. In addition, the MOPH watches over price decreases in the exporting country, and compares prices with neighboring importing countries in order to lower the market price accordingly. The MOPH Pharmaceutical Inspection Department controls drug prices in the market, and sanctions are taken against pharmacies practicing over-pricing.

As the public price of drugs is closely tied to the importation currency, the mix of countries exporting to the Lebanese market impacts most of the national pharmaceutical bill items. Calculated in percent of total number of registered non domestic drugs, those imported from EU countries represent as much as 79.42% compared to 5.75% from the United States, and 9.59% from Arab countries, more than half of which are manufactured in Jordan.

Table IV-1: Distribution of the number of registered drugs by exporting country (2008)

	Euro Zone countries	Other EU countries	Arab countries	USA	Others	Total
Number of registered dugs	2213	1018	390	234	213	4068
%	54.40	25.02	9.59	5.75	5.24	100%

Imported drugs volume, calculated at public price in Lebanese Pounds has been steadily increasing, giving the impression that the volume and cost are increasing at the same speed. Fig IV-1 shows clearly however, that the slope of the curve of importation converted into EURO, is much narrower. This indicates that constant price increase in nominal LBP can be largely attributed to inflation.



* Euro calculation is based on the yearly end of period exchange rate of Banque Du Liban

Fig IV-1: Volume of imported medicines at public price 2000-2007

Total drugs market in 2005, amounted to 677,376,000 USD, with 80% sold in pharmacies, 14% consumed in hospitals and 6% purchased directly by the MOPH, the Army and the Internal Security Forces. For the same year, household out-of-pocket purchasing of medicines amounted to 374.2 million USD, representing more than half of the total market.

It is worth mentioning that, while households total spending on health was significantly lower in 2005 compared to 1998, those related to drugs remained almost the same.

Maintaining almost the same amount in LBP disbursed by households for purchasing drugs, despite significant increasing price, indicates clearly that cheaper sources of supply have become available for at least part of the population. This reflects probably the role of PHC centers and essential drugs programs, as well as the growing free provision of expensive drugs by the MOPH.

Table IV-2: Spending on drugs by households and intermediaries in 1998 and 2005 (1000 LBP)

	1998*	2005*	% increase
Intermediaries	199,093,247	267,099,296	34.2
Households	560,000,000	564,121,023	0.7
Total	759,093,247	831,220,319	9.5
% total households spending**	25.35	31.01	5.7

* Medical supplies, consumables as well as drugs consumed within hospitals are not included.
** Households spending on drugs in % of total households spending on health.

One of the most important characteristics of the pharmaceutical market is the predominant role of medical professionals. This issue is particularly critical in Lebanon because of the absence of any framework for medical prescription accountability. The quasi-absolute freedom in prescribing medicines gives treating physicians a tremendous power over the demand side, and constitutes a major obstacle to cost rationalization. Pharmaceutical firms have a determining influence over all forms of post-university medical education, through financing research and related publications, as well as through sponsoring medical conferences and seminars. Physicians who do not attend scientific events are targeted through marketing campaigns providing each one with selective information and a variety of incentives. The total pharmaceutical bill is sensitive to the marketing of new molecules, particularly when promotion goes beyond the approved indications for the patented drug, without necessarily showing solid evidence of added effectiveness.

In addition to the information asymmetry that gives the prescribers power over demand, unfair competition practiced by pharmaceutical firms contributes also to market failure. That is how, upon patent expiry and registration of a less expensive

generic, the originator company, instead of competing by reducing the price, floods physicians with free samples, and offers generous bonuses to pharmacists reaching sometimes one hundred percent. This practice is against fair competition. It also favors big pharmacies, capable of purchasing bigger quantities with higher bonuses, to the detriment of small ones.

Over prescribing branded drugs becomes a particularly serious issue with the incredibly exorbitant prices of innovative medicines witnessed lately, exceeding easily one thousand dollars for a month treatment. The case of Glivec®, for example, that costs more than four thousand USD for one patient's monthly treatment is revealing. This medicine is effective to stop the disease[1] as long as it is administered, but does not cure it. This leads to an ever increasing number of consumers resulting from additional new cases, without dismissing old ones that are neither healed nor deceased. Simple arithmetics shows that in few years the whole MOPH drugs' budget would barely suffice for purchasing this single medicine. It is only legitimate to ask why this medicine is so unrealistically expensive? It is so, in comparison with other "orphan drugs"[2]. And for how long? The Orphan Drug Act guarantees the developer of an orphan product seven years of market exclusivity[3].In any case, this issue should also be dealt with in light of the Doha Declaration that emphasized the relationship between TRIPS and public health and clarified the meaning of Article 8 of the TRIPS agreement. Particularly in considering that patent protection should not be used as a means for merely extracting high rates of return on pharmaceutical investments, but rather as a means to encourage the development of new medicines[4]. It is noteworthy that the Glivec generic competitor has been duly registered by the MOPH more than a year ago but is still not marketed in Lebanon!

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[1] Chronic Myelocytic Leukemia with Philadelphia chromosome.

[2] The term "orphan drug" refers to a product that treats a rare disease affecting, fewer than 200,000 Americans in the USA, and less than five persons in 10,000 population in the EU.

[3] The Orphan Drug Act was signed into US law in on January 4, 1983.

[4] TRIPS Agreement, Article 8. The Doha Declaration on the TRIPS Agreement and Public Health, Paragraph 3, 14 Nov. 2001.

2- REGISTRATION AND QUALITY OF DRUGS

The Department of Pharmacy is the MOPH regulatory arm for pharmaceuticals and drugs handlers. Professional associations and universities are actively involved in quality assurance and registration of drugs through a technical committee chaired by the MOPH Director General in accordance with the 1994 Pharmacy Practice Law. Although the law stipulates that decisions are taken by a majority vote and in case of a tie, the Chairman has the casting vote, the Director General has never used this prerogative for the past 15 years. As a matter of fact, it is extremely rare to have a vote, as decisions are almost always reached by consensus.

Box IV-1: Registration Requirements for original drugs (new molecules)

- Manufacturing Plant: Filled questionnaire and GMP certificate.
- Free sale certificate, Certificate of Pharmaceutical Product (CPP).
- Attestation of origin of raw material with GMP certificate for each related manufacturer.
- Certificate of Analysis mentioning the quantity and purity of raw material and methods of analysis.
- Pharmaceutical studies (disintegration, dissolution, pH) and stability data for 3 different batches.
- Complete and detailed bioavailability of active ingredients issued by the source which carried out the study.
- Complete studies on drug efficacy (pharmacodynamic data).
- Complete studies on toxicological effect of the drug (toxicological data) including: teratogenecity and carcinogenicity.
- Pharmacokinetic studies.
- Clinical trials and if available post-marketing study.
- Summaries of toxicological, pharmacological and clinical information from published scientific literature.
- Patent certificate (with the closet expiry date).
- Certificate of analysis issued from a recognized laboratory.
- Six (6) samples of the product.
- Supporting research bibliography.

Registration of drugs, as defined by the 1994 law, became outdated with changes occurring in the pharmaceutical sector at the international level. A large movement of mergers and acquisitions between multinationals took place in the last two decades along with globalization and WTO empowerment. This large scale

structural change in the pharmaceutical industry and trade, resulted in fragmentation of manufacturing and involvement of multiple industrial and commercial parties, in a manner that complicates and disperses responsibilities related to commerce, quality and price. Like health authorities in other Developing Countries, Lebanon was relying on quality control and pricing as done by the "Country of Origin" considered as a reference, and entrusted for certifying all documents required for registration. The "Country of Origin" is a key notion in the 1994 law stipulating, as a prerequisite for registration, that the product conforms to the same specifications as registered and marketed in the country of origin, including the tradename, pack form and size as well as pharmaceutical characteristics. The purpose was to make sure that the manufacturer is not dedicating a production line with lower requirements for export to Developing Countries. The technical committee is challenged by the fact that nowadays, the same drug is sold in different countries with different names, sizes and forms, and the notion of one "country of origin" does not apply anymore, as many countries can be involved in the manufacturing and commercialization processes.

Box IV-2: Registration requirements for generic drugs

- Manufacturing plant: Filled questionnaire and GMP certificate.
- Free sale certificate, certificate of pharmaceutical product (CPP).
- Attestation of origin of raw material with GMP certificate for each related manufacturer.
- Certificate of analysis quantity and purity of raw material and methods of analysis.
- Pharmaceutical studies (disintegration, dissolution, pH) and stability data for 3 different batches.
- Complete and detailed bioequivalence issued by the entity which conducted the study.
- Certificate of analysis issued from a recognized laboratory.
- Six (6) samples of the product.
- Supporting research bibliography.
- Optional: - Letter stating that the drug is marketed in at least 2 countries other than its country of origin.
  - Post-marketing clinical studies
  - Drug approval and recognition of the manufacturing plant by other countries.

For the MOPH to face these challenges, a legislation amendment was deemed necessary. Law number 530, issued in

2003 to amend the 1994 law introduced new concepts, aside of the "country of origin", to be considered as a responsible party. These include the "manufacturer", "marketing authorization holder" and "applicant for certificate"; whereby the responsible country would be the country of residence of the responsible party. It is worth mentioning that five years of consultations with stakeholders were needed to reach a seeming agreement on an application decree for Law 530. The emphasis was put on the manufacturer of the pharmaceutical form (MPh.F), the responsible party for batch release and quality control, if different from MPh.F, and their related country (ies).

On the other hand, the MOPH has adopted a clear policy focusing on quality and cost of pharmaceutical products. In the absence of an operational public laboratory for drug analysis, the technical committee decided to impose a certificate of analysis from an internationally recognized laboratory as a prerequisite for registration. Local industry was required to conduct a bioequivalence study similar to imported generics. Prior to marketing, imported drugs are subject to direct inspection, and batch analysis' certificates are required. Biopharmaceuticals and biosimilar products are subjected to strict requirements and more scrutiny.

Box IV-3: Additional requirements for biopharmaceuticals and biosimilar products.

- Registration certificate of the manufacturing plant, GMP certificate, and official statement indicating the Inspecting Authority.
- Detailed information on the ability of the plant to manufacture biological material, including Genetic Chemistry, Animal Cell Culture, Protein Chemistry (Extraction, Purification, Analysis, Fixation, Dose Determination, and source of material used in production (Cells. Fixation material…) with GMP for this source.
- Product Studies: Chemical Analysis, Clinical Studies, Comparative studies with the originator drug. Stability studies, Studies confirming compliance of different batches to unique standards, Study of side effects among which is secretion of antibodies after use.
- Post-marketing study on therapeutic and side effects, comparative post-marketing clinical studies with the brand drug including efficacy and side effects.
- Six (6) samples of the product.
- Supporting research bibliography.

Twenty five additional pharmacists were recruited in 2007 to strengthen the MOPH inspection body in Beirut and provinces. Regular inspection of pharmacies and drugstores was scaled-up and led to a significant number of confiscations of counterfeit and smuggled drugs, in addition to disciplinary measures and referral to court. During the first 6 months of 2008, 65 ministerial decisions were issued for withdrawal of illicit drugs; of which 51 were smuggled including 3 narcotics, and 14 counterfeit including one narcotic.

Despite the closing of the Central Laboratory, the strict regulation of drug registration guarantees to some extent the quality of imported and domestic pharmaceuticals. Exceptions are related to parallel import and relatively small quantities of drugs donated to NGOs that bypass the system and reach dispensaries after obtaining a special permit from the Minister of Public Health.

Box IV-4: Requirements for parallel import

- Importation of registered medical and pharmaceutical products is not restricted to any importer or agent, and is allowed any duly licensed entity.
- Importation from countries other than the registered exporting country (country of origin) is conditioned by the presentation of a certificate stating that, the product is registered and sold in the concerned country (Free Sale Certificate) as it is registered and is sold in the manufacturing country, without restrictions.
- Both the manufacturer and the manufacturing country must be registered in Lebanon [(1)].
- Drugs imported through parallel channels are subject to:
  1) The same inspection and control mechanisms as regularly imported drugs.
  2) Their public price is based on the invoice price and would follow the price index variations[(2)]
- Narcotics and other restricted drugs and those with similar locally produced products cannot be imported through this process.

(1) This condition was not provided for by the original decision # 90/1 of 13 March 1992, it was introduced by Decision # 539/1 of 25 Aug. 1998.
(2) Originally, Decision # 539/1 of 25 Aug. 1998 imposed at least 25% discount on the original product price. This condition was removed by Decision # 96/1 of 13 Feb. 2002.

3- COST CONTAINMENT

Facing the high cost incurred in satisfying an ever increasing demand, mostly induced by suppliers and innovative

medicines, and considering the information asymmetry and the failure of market mechanisms to adjust, the MOPH had to adopt a multidirectional cost containment policy.

3.1- Modifying the price structure

Until recently, pricing was based on decision 208/1 issued in 1983. The price-dependent profits, in fixed percent for all categories, encouraged importation and dispensing of expensive drugs. The margin allocated in the price structure for clearance and commission was exaggerated considering variable custom exemptions on imported drugs. Shipping and insurance expenses were uniformly calculated for both far and close countries. The freight percentage set as an average for USA, Canada, Australia, European and other countries, led obviously to over-pricing, as most of pharmaceuticals are imported from nearby European countries. Moreover, the freight was calculated as a percentage of the price, not in relation to shipment fees which are based on volume. This means that expensive drugs, with small volume and high price, generate more profit than less expensive ones. This phenomenon was further magnified by the cumulative margins of the price structure (Box 5).

In order to reverse incentives, a degressive scale for profit margins had to be considered. Two ministerial decisions issued in June 2005 had a direct impact on drugs' prices. The first, decision # 301/1 imposes adjustment of prices based on a price comparison with Jordan and KSA. Among 1102 drugs common with KSA and 1006 with Jordan, 872 drugs were priced in Lebanon based on an ex-factory price higher than the other two countries. Re-pricing led to variable decreases reaching for some drugs 40%.

The second, decision # 306/1 provides for a new pricing structure that lowers the mark-ups set in 1983 in a degressive way i.e profit margins decrease as ex-factory prices increase. The new scheme features four classes of products, where pharmacy mark-ups range from 24 to 30 and importer/ wholesale mark-ups from 8 to 10 percent. This decision introduced for the first time a mechanism for periodic price revision. It widened the country basket for ex-factory price comparison to 14 countries besides the

country of origin. Two other radical measures were also introduced: the first stated that public price in Lebanon must never be above the pharmacy retail price in any one of the reference countries, and the second stated that if any company abstains from delivering on time the requested documents for periodic re-pricing, the concerned drug would be subject to automatic price reduction with variable percentages depending on whether the drug is a patent, off-patent brand or generic, and on how long it has been put on the market.

Box IV-5: Comparison of pricing structures

Pricing structure according to Decision # 208/1 - 1983

		Shipping & Insurance		Customs Clearing comm.		Importer profit	Pharmac. profit
	FOB	x 7.5%	= 107,5	x 11,5%	= 119.8	x 10% = 131,8	x 30% = 171,4

Pricing structure according to Decision 306/1 - 2005

A	0-10$	x 6%	= 106	x 10%	= 116,6	x 10% = 128,26	x 30%= 166,73
B	10-50$	x 4.5%	= 104,5	x 8,5%	= 113,38	x 10% = 124,72	x 30%= 162,13
C	50-100$	x 3.5%	= 103,5	x 7,5%	= 111,26	x 9% = 121,27	x 27%= 154,02
D	> 100$	x 2.5%	= 102,5	x 6,5%	= 109,16	x 8% = 117,89	x 24%= 146,19

Unfortunately, under pressure exercised by multinationals and importers, the decision # 306/1 was amended a few months later[5] to increase the freight and customs mark-ups, which nevertheless remained inferior to those of 1983. Most importantly the amendment decision, replaced the comparison with each European country by a comparison with the median price of European countries, which practically excludes extreme prices such as those of Portugal. This comparison is only applicable for drugs imported from Europe. The amendment decision canceled also the above mentioned “radical measures” of public price ceiling and automatic price decrease.

[5] Decision #51/1 dated 24 January 2006.

Box IV-6: Drug pricing according to decision 51/1

The public price is set by the application of rules of conversion of the registered exfactory price (table b).

- Price conversion indexes are calculated based on foreign currencies exchange rates as issued by the Banque Du Liban. Exchange rates are re-considered when a change of the average rate for 2 consecutive weeks of at least 3% occurs upward or downward.
- The registered price is split into segments according to table a. if the registered price is in a currency other than US Dollars, the amount thereof is converted into Dollars.
- Public price calculated according to the segment to which the product is assigned, pursuant to table 1 in the following manner:

- The amount of freight and insurance expenses (column 2) and the amount for clearing, customs duties and other expenses (column 3) is added to the registered FOB price. Clearing, customs duties and other expenses are added to the registered CIF price (column 3).
- The entire sum is multiplied by the base mentioned in column 6 and resulting from the profit margin of the distributor (column 4) and the profit margin of the pharmacist (column 5).

Table a: Registered Price Segments

Segment	Registered FOB price		Registered CIF price	
A	0$	10$	0.00$	10.70$
B	10$	50$	10.70$	52.50$
C	50$	100$	52.50$	104.00$
D	100$	and above	104.00$	and above

Table b: Basis of Conversion of the Registered Price to a Public Price

1	2	3	4	5	6
Section	**Freight and insurance expenses (only for FOB price)**	**Clearing, customs duties and other expenses**	**Profit margin of the importer**	**Profit margin of the pharmacist**	**Base**
A	7.00%	11.00%	10.00%	30.00%	143.00
B	5.00%	10.00%	10.00%	30.00%	143.00
C	4.00%	9.00%	9.00%	27.00%	138.43
D	3.00%	8.00%	8.00%	24.00%	133.92

The implementation of decision 301/1 led to price reductions on 872 drugs by an average of 20%, with an expected total saving reaching 24 million USD per year. The application of the revised decision 51/1 on the other hand, led to a price decrease per drug ranging from 3 to 15%, and cumulating to an approximate total of 27 million USD yearly. However, a long term impact of this decision is expected to result from the price revision mechanism. In application of this decision, price revision of drugs registered between 2001 and 2006 was achieved as provided for,

targeting 1109 drugs in 2007, and resulting in lowering the public price of 360 drugs with a yearly saving exceeding 10 million USD.

It is worth mentioning that throughout the lengthy procedure of regulations amendment led by Minister Khalifeh, an unremitting fierce campaign was orchestrated through the media, blaming the Ministry for "high cost" and "bad quality" of drugs and accusing the public administration of corruption. It is really a strange coincidence that such campaigns always accompany reform attempts. The campaign has started by over emphasizing the power of the "pharmaceuticals mafia" that is capable of dismissing a health minister! In allusion to the resignation of Minister Emile Bitar in 1971. Not yielding to intimidation, Minister M.J.Khalifeh issued the amending decisions. Then the attacks turned against civil servants accusing them of not being capable nor willing to implement any reform. In a press conference held to announce the impact of regulation amendments on the pharmaceutical bill, the minister of health emphasized: "once the political decision is made, the administration has proved its ability to execute"[6].

3.2- Promoting generic drugs

The MOPH succeeded in imposing exclusively generic drugs in PHC facilities and in making essential medicines widely available in health centers and dispensaries. This could not have a better result than maintaining the 2005 households' related spending at almost the same level as 1998. However, total spending on pharmaceuticals kept increasing as the Ministry failed in changing physicians' prescribing habits or creating accountability mechanisms that could have increased substantially the generics market share.

Physicians are not used to prescribe generic drugs mainly because of their university and post university education and hype promotion campaigns that constitute the main source of information on pharmaceuticals for many of them. Manufacturers

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[6] Minister Mohamad Jawad Khalifeh Press release # 9478/2005, MOPH 22 Sept. 2005

"scientific bureaus" are very active and adopt persuasive marketing techniques that are sometimes ill-founded scientifically, and may even be unethical.

In addition to the influence of pharmaceutical firms, other factors are contributing to the avoidance of generics by the physician as well as the patient. The confiscation of the Central Laboratory building, neighboring the residential palace of the Speaker of the Parliament, without relocation of the Chemistry Branch that is responsible for drug analysis, had a negative impact on professionals and public confidence in generic drugs. In addition, slanderous episodic and probably premeditated media campaigns, damaged the image of the MOPH by affecting public confidence in the whole registration process, and thus reorienting the demand towards branded drugs manufactured by "entrusted" multinational companies. Ironically, one constant allegation of the repetitive campaigns has been the civil servants' "conspiracy" with the "international drugs mafia" against generics and national products. Interestingly, the Order of Pharmacists, and sometimes the Order of Physicians, have been participating in the propaganda, despite the fact that they have a determinant role in drug registration! The two Orders are represented in the committee by four members out of seven, and the Chairman has never used his tipping voting prerogative.

Nevertheless, the MOPH has produced a National Drug Formulary indicating generic alternatives for each brand, that was largely distributed and published on the MOPH website. This would help physicians who are willing to make the effort of looking for cheaper alternative treatments for their patients. It would undoubtedly be most useful for pharmacists, once the legislation allowing them for substitution of prescribed drugs is passed.

3.3- Reforming legislations to enhance competitiveness

Article 80 of the 1994 Pharmacy Practice Law requires pharmacists to adhere to prices set by the Ministry of Public Health. An amendment of this article was issued in Dec 2002 by Law 480 considering the price set by the MOPH as a ceiling not to

be exceeded, but that could be lowered. This amendment had probably a meaningful impact on households' spending on drugs, especially when considering its added effect with other measures taken by the MOPH. However, allowing the pharmacists to substitute a prescribed drug by a less expensive generic would have an even more significant impact. While a Bill supported by the MOPH is now under discussion in Parliament to bring this change, another one was submitted by the Order of Pharmacists' lobby proposing to revoke the above mentioned amendment brought by Law 480.

The application decrees to Law 530 will remain controversial for many years to come. In addition to setting quality requirements for registration, these decrees would also deal with the commercial aspect that would have a determinant effect on the market. What is considered undisclosed information in the application file? What would be the responsibility of the MOPH in data protection, and how would it be assumed? These are questions that the application decrees have to provide with clear answers. Regardless of whether data exclusivity are considered, as additional requirements to TRIPS binding agreements and therefore may be rejected; bilateral negotiations will still be depending most of all on the balance of power. Tremendous pressures are put to extend the data exclusivity period, and at the same time to expand the notion of undisclosed information to include even published (i.e. made public) information in scientific journals or on Internet! In addition, while elaborating the implementing regulations of Law 530, attempts were made to include provisions whereby Lebanon would waive its right to do its own scrutiny and accept certificates of registration issued by foreign authorities such as FDA and EMEA. In this case, Lebanon shall be asked by the USA and the EU to protect data that were submitted to foreign authorities, which overlooks the principle of territoriality of intellectual property.

On the other hand, one has to wonder why Europe is still the main source of drugs for Lebanon, while almost all pharmaceutical mother companies own factories in other countries including the United States that produce the same drugs with cheaper ex-factory prices in US Dollars? Drug importers claim that

they are not allowed to choose the importation country, such a decision is taken by the concerned pharmaceutical firm. In this case, how legitimate is the fact of imposing one particular production site, in light of the basic trade agreements' principle of free movement of goods and money? This concern even extends to products with exhausted patent.

With regard to patented products, an amendment to the Lebanese Patent Law may be required. Under the "national exhaustion of rights" adopted in that law, the rights of the owner of the patent would be exhausted only in respect to goods that have been put on the market in the country with its consent[7]. The World Intellectual Property Organization (WIPO) suggested in this regard that Lebanon may adopt a mechanism of "controlled international exhaustion", under which the authorities would have the competence to decide when it is convenient or not to allow the introduction of goods protected by (exhausted) intellectual property rights abroad through parallel channels of commerce. The Doha Declaration reaffirmed the right of members to adopt an international principle of exhaustion of rights with respect to parallel importation under Article 6 of TRIPS[8]. Regarding off-patent products however, imposing territorial restrictions on licenses as regards the origin of supplies should be dealt with in the framework of competition and antirust legislations.

In all cases, parallel import as currently regulated and practiced in Lebanon, could not be expected to have a meaningful competitive position on the market. As a result of largely mediatised criticisms, the famous parallel import ministerial Decision 90/1 of 13 March 1992 was amended by Decision 539/1 of 25 August 1998, to add strict quality requirements, while

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[7] TRIPS Agreement, Article 28 (Rights Conferred): 1. A patent shall confer on its owner the following exclusive rights: (a) where the subject matter of a patent is a product, to prevent third parties not having the owner's consent from the acts of: making, using, offering for sale, selling, or importing* for these purposes that products;

*[footnote]: This right, like all other rights conferred under this Agreement in respect of the use, sale, importation or other distribution of goods, is subject to the provision of Article 6".

[8] Doha Declaration on the TRIPS Agreement and Public Health, Paragraph 5.a. Nov. 2001.

maintaining the imposition of a price reduction by at least 25% compared to the registered original product. These requirements that include the submission of a free sale certificate and an original certificate of analysis, have contributed to narrowing significantly the range of parallel import products. However, the strike that hit badly the competitive effect of parallel import came from Decision 96/1 of 13 February 2002 that kept "a discount" requirement but removed the threshold of 25%. This decision was also issued under mediatised pressure on the ground that the 25% threshold excludes many drugs that could be sold with 20 or 15% reduction and that any discount would be beneficial for the "poor Lebanese". Those "compassionate" for the people do not cease to impress us by their struggle for the public well-being. We are also enchanted by politicians who immediately respond to these compassionate cries. No wonder these compassionates are always reelected with vast majority.

As a result of the "well-intended" militancy, parallel imported drugs ended up being sold at a barely lower price than the original registered product! We cannot wrap up this section without recognizing the "constructive patriotic role" of the media in reaching this end-result.

4- THE NEED FOR A MULTIDIMENSIONAL APPROACH

The registration of drugs is based mainly on the examination of filed documents. MOPH's Technical Committee relies on site inspections performed by the drug regulation authority of the exporting country, as well as drug analysis done in a reference laboratory. Imported drugs do not clear Customs unless the MOPH Inspection Department verifies for each batch, the existence of an analysis certificate duly legalized. There is an obvious and urgent need for a national reference laboratory for drug analysis, an issue that is currently subject to political wrangling. Recruiting the necessary qualified staff remains an important issue in light of existing low public administration salaries. Institutional strengthening is critical for the MOPH to regulate the pharmaceutical market, especially if this requires performing new tasks such as assessing physicians prescribing patterns.

This brings us to the issue of reforming professional Orders by removing the unionist function from the concerned legislation. As a matter of fact, unionism of both physicians and pharmacists Orders, is not only getting ahead, but also hindering disciplinary action and professional promotion, that are essential functions from an Order perspective.

On the other hand, developing national capacity for bilateral and international agreement negotiations is becoming increasingly important with globalization and the accession of Lebanon to WTO.

Finally, the ethical dimension of drugs marketing was never given the importance it deserves, save for mediatised moral preaching. Evidence shows that drug promotion influences prescribing and is associated with increased medicines sales; that samples stimulate prescribing; and that doctors rarely acknowledge these facts[9]. Doctors who receive drug company funds tend to request additions to hospital formularies. Drug company sponsorship influences the choice of topics for continuing medical education, the choice of research topics and the outcome of research[10]. A draft code of honor setting ethical standards for marketing practices was developed by the MOPH in 2004 for voluntary adherence of interested parties. This code was inspired from pharmaceuticals associations' codes of ethics. It proposed a regulation mechanism based on self-assessment of the pharmaceutical industry. Evidence suggests that such a code has failed to deter promotional excesses and that self regulation seems to be a service to pharmaceutical associations rather than to the public[11]. A revised version of the code of ethics was recently proposed[12] and published on the web for debate. New ethical

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[9] Norris, P; Herxheimer, A; Lexchin, J; Mansfield, P. "Drug Promotion what we know, what we have yet to learn". World Health Organization and Health Action International. 2005.

[10] Idem

[11] Herxheiner, A; Collier, J. Promotion by the British Pharmaceutical Industry, 1983-8: a critical analysis of self regulation. BMJ 1990; 300:307-311

[12] Ammar, W. The code of ethical standards for drug promotion in Lebanon, and the surveillance and appeal mechanisms. Letter to the Minister of Public Health # 14546/4/08 October 7, 2008.

standards were introduced in response to particular promotion and prescribing practices in Lebanon. Most importantly, the proposed code provides for surveillance of promotional and prescribing patterns and for appeal mechanisms that involve professional orders and the MOPH. It also calls for disclosure of complaints and non-compliance files, in case the violating party abstains from taking convincing corrective measures. This is meant to foster public accountability of pharmaceutical firms and health professionals.

Box IV-7: Highlights from the proposed code of ethical standards for drug promotion.

- *Information* provided should be clear, accurate and limited to what is published in the leaflet upon which the registration was based. No allegations on drug safety or efficiency should be made without scientific evidence. Health care professionals should be provided with complete information on contra-indications and side effects, in order to allow them to make an informed choice of drugs and be able to warn the patient for his best interest. Providers are also requested to report on adverse events that are rare or not mentioned by the producer.
- *Promotional items* should not have an important money value, should be related to professional practice and of benefit to patient care. Cash money or equivalent payments are strictly forbidden.
- *Samples* should be packaged and cleared as such by the pharmaceutical inspection, should be supplied in moderate quantities to prescribers to familiarize them with the products. Drugs packaged for marketing purposes cannot be subject to any kind of donation or bonuses for private clinics or pharmacies.
- Support of drugs companies to *congress, symposia and medical education* is also scrutinized. In kind support such as travel tickets, and accommodation should be restricted to the health care professional in person. Such activities should be planned and communicated in advance, and the concerned professional order should be notified of the event, the organizers, and the list of its participating members. In addition, ethical standards are also set for the information provided, as well as for the selection and reimbursement of consultants.
- No *grants, scholarships, subsidies, support, consulting contracts* should be offered to a health care professional in exchange for prescribing products. Any transaction between pharmaceutical firms and care givers should be transparent and explicit.
- The system of remuneration of medical representatives should not influence adversely the proper prescribing or dispensing of drugs, or be in anyway related to prescribing or dispensing patterns.
- Pharmacists are forbidden from divulgating information on physician's prescribing patterns, and are held responsible if such disclosure occurs.
- The code makes provision for *enforcement mechanisms* including monitoring, investigation, and a three level appeal procedure, involving concerned professional orders, pharmaceutical firms, drug importers and the Ministry of Public Health.

Chapter Five

ACCREDITATION OF HOSPITALS

Advances in medical technology and continuous integration of expensive techniques, are putting health systems under constant pressure. Ensuring equitable accessibility to modern and quality medical services remains the most tedious challenge for middle and low income countries in light of the scarcity of resources. The situation of some developing countries like Lebanon, with important private care delivery is particularly delicate because on one hand, the private sector has not reached yet the stage of having an inherent culture of quality improvement like in developed countries; while on the other hand, governments have limited regulation capabilities, especially when it comes to controlling private for-profit providers.

Lebanese entrepreneurs have always enjoyed the freedom to conduct business with minimal government control. Provision of hospital services is considered a private enterprise activity, where profit is pursued without enough concern for the quality of the services provided, or for client satisfaction. The functioning of private hospitals has been determined largely by a supply-driven market, with practically no control over the proliferation of medical technology nor on its proper use.

The situation is further complicated by an oversupply of physicians, graduates from many different countries, with significantly different backgrounds. In the absence of national clinical protocols, this has led to differences in medical diagnosis and treatment, compounded by the lack of transparent policies and procedures at the administrative and financial levels.

Contracting with the MOPH and other financing agencies is vital for hospitals, and they use all means to that end, including social and political pressure. While the MOPH may use its financing role as a leverage for regulating private provision and inducing change. In this respect, hospital accreditation may be considered as one of the mechanisms that could reorient private providers' behavior in a climate of market failure, aggravated by political interference in health financing.

The quality assessment of hospital care in Lebanon has seen a paradigm shift since May 2000, from a traditional focus on physical structure and equipment to a broader multidimensional approach, emphasizing managerial processes, performance and output indicators. In the absence of an effective consumer voice, the impetus for change has come from the Ministry of Public Health, which has induced and supported the development of an accreditation programme for hospitals[1].

1- THE CLASSIFICATION SYSTEM

Originally, an alpha-star classification system for hospitals existed, based on a 1983 decree. The alpha rating reflected the level of medical services: the greater the quantity and complexity of clinical services offered by a hospital, the better its alpha rating. The number of stars reflected the level of hotel services provided by the hospital. In the alpha system, any hospital failing to fit in classes A, B, C or D fell into class E. Consequently, no hospital was declared unclassified or failed. It is worth mentioning that the tariffs of medical services were set by the MOPH according to the hospital class. This system provided a strong financial incentive for

[1] Ammar, W., Wakim, R. and Hajj, I. 2007. Accreditation of Hospitals in Lebanon: A Challenging Experience. Eastern Mediterranean Health Journal, Vol.13 (1): 138-149.

hospitals to invest in sophisticated equipment and to venture into high-tech services without rational planning.

2- THE ACCREDITATION SYSTEM

The accreditation of hospitals aimed at creating incentives for continuous quality improvement by developing a new external evaluation system. Particular emphasis was put on patient and staff safety, reporting data on morbidity, mortality, utilization and workload, as well as infection control mechanisms and patient advocacy. The final evaluation would lead to the formulation of explicit recommendations and quality action plans[2].

The introduction of an accreditation system in Lebanon has been possible on the basis of a 1962 legislation[3] amended in 1983[4]. Article 7 states, "the MOPH has to evaluate, classify and accredit hospitals according to their status, field of specialty and range of services provided". The amended law sets a "Committee for Evaluation, Classification and Accreditation of Hospitals" chaired by the Director-General of Health, which includes high-level representatives of the MOPH, the Syndicate of Private Hospitals, the Order of Physicians, the Army Medical Brigade, the National Social Security Fund, and University Medical Centers. The 1983 law stipulates that the Committee may seek the assistance of external expertise and that accreditation results should be tied to contractual agreements with hospitals.

2.1 Developing the first version of Standards

In May 2000, and following an international bidding process, an Australian Consultant Team was contracted to set up accreditation standards and to develop guideline manuals for hospitals in Lebanon.

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[2] McGregor, P. February 2001. *Evaluation and Accreditation of Hospitals in Lebanon. Final Report*. Beirut: Ministry of Public Health.

[3] Republic of Lebanon, *Law enforced by the executive decree # 9826*, June 22, 1962.

[4] Republic of Lebanon, *Legislative decree # 139*, September 16, 1983.

In setting standards, the MOPH sought consensus among different stakeholders. A two-tiered system of standards was developed: basic standards to compensate for the lack of basic requirements for licensing in legislation, and accreditation standards, based on the principles of total quality management. The basic standards were viewed as the minimum required to provide a safe environment of health care delivery for patients and staff, with special emphasis on infrastructure, waste disposal, electrical and biomedical equipment and fire safety, among others. The accreditation standards were designed to test the ability of hospitals to provide quality care to patients and to set up information systems assisting management in the planning and provision of services[5]. The standards were pilot-tested in 6 hospitals, chosen with consideration to their geographical distribution and size, the profit and non-profit mix, and the public/private status.

2.2 The Survey and Accreditation Award

Conducting the accreditation survey required the use of a standardized tool by a multidisciplinary team. The survey was carried out in a professional educative and non-threatening manner, respecting confidentiality. A simple unitary scoring system by department was adopted: for basic standards it was either compliance (one point) or non compliance (zero point), whereas for accreditation standards, 0.5 may be given if compliance needed improvement. The passing mark was defined as a combined score (all departments) of 80% for the basic and 60% for the accreditation standards.

The consulting team started the first national hospital survey on 18 September 2001 and finished it on 1 July 2002. The survey included 128 hospitals throughout Lebanon. As the survey progressed, some hospitals hired private consultants to assist them in complying with the standards, such as writing policies and procedures. At the end of the first survey, only 47 hospitals out of 128 surveyed (37%) were awarded accreditation.

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[5] McGregor, P. February 2001. *Evaluation and Accreditation of Hospitals in Lebanon. Final Report*. Beirut: Ministry of Public Health.

These were rather shocking results, considering the historical good reputation of private hospitals in Lebanon. As expected, small hospitals with 100 beds and fewer, which accounted for the majority of hospitals in Lebanon, were generally operating below standards. Hospitals with a 101- to 200-bed capacity achieved a somewhat better average score than larger hospitals with more than 200 beds[6]. This was possible because the scoring system does not penalize for a lack of technology or the absence of a service. At this stage, only available techniques and services were scored i.e included in the denominator. The purpose was to avoid pushing hospitals for adventuring in providing services and performing techniques they are unable to handle properly, only to improve their scores. It is worth mentioning that only 2 autonomous public hospitals were fully operational at that time, and were hence included in the survey, and both achieved a relatively good score.

A follow-up audit started in October 2002 and ended in June 2003. It included the upper half of hospitals that did not meet the requirement in the first survey, as well as new hospitals not included in the first survey. Of 39 surveyed hospitals, 45 (87%) passed the accreditation.

Uptill this stage, although accreditation was a requirement for contracting, tarification had still not been linked to accreditation scores. Results were given to each hospital separately and were not made available to the public. Some hospitals, however, published their results in the newspapers for marketing purposes. This prompted the MOPH to change the new accreditation system into a system of awards, with no scores attached, to avoid any future misinterpretation or perverse use of results in the media.

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[6] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO

2.3 Revision of standards and comprehensive re-auditing survey

The high success rate achieved in the follow-up audit gave a strong signal to the MOPH that hospitals were becoming committed to the Accreditation Program and that the Ministry can go ahead and start upgrading the system.

The original standards and concomitant scoring system emphasized the existence of documentation such as medical files, policies and procedures, committees' meetings minutes, etc… but did not require, except for the medical file, thorough assessment of their content. Proper implementation was not evaluated for all written policies and procedures nor was the measurement of expected outcomes. It became imperative, therefore, for the revised standards to be written in such a way that hospitals are required to provide evidence that policies and procedures are appropriately executed to improve quality. On the other hand, the intention to tie accreditation with payment implied that results should reflect not only the quality, but also the complexity of services provided by the hospital. Specific standards have been produced for 5 additional specialty areas: chemotherapy, renal dialysis, psychiatry, cardiac catheterization and intensive care units.

For the third national survey (2004–05), the revised standards were scored differently, some remaining with unitary scoring and others with variable weights. Weights allocation took into account areas of concern identified in the previous surveys, such as documentation, infection control, clinical nursing, blood bank, biomedical services, staffing, laundry, pediatric services and central sterilizing department. These areas were highly weighed in order to encourage urgently needed reforms. In addition, the "not applicable" rating for unavailable services was removed to avoid financially penalizing advanced hospitals, and to prevent hospitals from concealing low-quality departments on the day of the survey to help their total score, as had happened on several occasions during the first 2 surveys.

For the third survey, accreditation was awarded differentially in 4 bands depending on the hospital score, and tarification was linked to these bands. The score thus became of no importance in differentiating hospitals within the same band. Most importantly, accreditation was awarded in a specific band for a variable period that is determined according to each hospital specific situation. The hospital should be re-audited within the set period of time, otherwise it loses its accreditation status.

The third round of hospital surveys launched in October 2004 included 144 hospitals, 85 (58.6%) of which were awarded accreditation [7] (table V- 1).

Although no recourse process was formally established, hospitals' queries submitted to the MOPH were subject, together with the auditing team feedback, to careful analysis by a committee of national experts. The committee received petitioners one by one for lengthy discussions to clarify controversial issues, related most of the time to a misunderstanding of the process and misinterpretation of the results.

Accreditation significantly improved the perceived quality of care, and at this stage, a better perception was generally observed in small and medium-sized hospitals[8]. This may be considered as a result of the emphasis put by the MOPH to improve service delivery in poorly performing hospitals that led to accreditation standards being tailored to induce a greater change in small and medium–sized hospitals. On the other hand, these hospitals depend more on public financing and considered accreditation as a serious threat for losing their contracts[9].

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[7] Buckley, P., Barett, N., Abi Chahine, K., Nayler, D., Dyer, E. November 2005. *Evaluation and Accreditation of Hospitals in Lebanon. Final Deliverable*. Beirut: Ministry of Public Health.

[8] El Jardali, F., Jamal, D., Dimassi, H., Ammar, W., Tchaghchghian V. 2008. The Impact of Hospital Accreditation on Quality of Care: Perception of Lebanese Nurses. International Journal for Quality in Health Care 2008; pp.1-9.

[9] Buckley, P., Barett, N., Abi Chahine, K., Nayler, D., Dyer, E. November 2005. *Evaluation and Accreditation of Hospitals in Lebanon. Final Deliverable*. Beirut: Ministry of Public Health.

Table V-1: Comparison of the third accreditation survey results (Nov. 2005) with the old classification system

Hospital class/band	Old classification system		Third accreditation survey	
	n	%	n	%
A	32	25.4	15	10.4
B	34	27.0	8	5.6
C	24	19.0	36	25.0
D	19	15.1	26	18.1
E	17	13.5	-	-
Failed	0	0	59	41.0
Total	126	100.0	144	100.0

As the contract with the Australian Team came to an end, the MOPH decided to revisit the accreditation procedure to rely more on national capacities in terms of auditing. Some hospitals that felt able to improve their status within a short period of time, and did not want to wait for the new system to be set, expressed their interest to be re-audited within a year by the same team. The MOPH agreed for an additional voluntary survey provided that candidates bear the cost, and on the condition that financing is channeled by the Syndicate of Private Hospitals. Accordingly 33 hospitals were re-audited and most of these were capable to improve their situation.

Table V-2: Accreditation status pre and post voluntary auditing (n=33) and final results as of Dec. 2006 (n=144)

	A	B	C	D	Failed	Total
Previous status of voluntary candidates	0	1	7	4	21	33
Results of the voluntary survey	8	4	15	3	3	33
Final results as of Dec. 2006	23	11	44	25	41	144

2.4 Accreditations of public hospitals

It was unfair to include all public hospitals in the auditing survey, as most had just started to operate and was still in a period of staff recruitment. The MOPH insisted however on subjecting these hospitals to auditing against the same upgraded standards applied to private hospitals in order to convey a strong message to the Administration Boards that, in terms of quality assurance, no special treatment whatsoever would be granted. It goes without

saying that the MOPH did not penalize public hospitals that failed the accreditation at this stage.

However, the MOPH considered of its duty to support developing government hospitals capacities as most of these were new and lacked experience. For that purpose, a cooperation agreement was signed with the Higher Health Authority[10] on July 2006 to conduct a training program on total quality management. Physicians were introduced to evidence-based medicine and clinical protocols. Administrators and managers were trained on designing and analyzing policies and procedures and assessing customer satisfaction, and all staff learned about performance measurement, cost-effectiveness concepts and teamwork.

The educational program combined theoretical modules and field visits. Before the end of 2008, and upon completion of a self-assessment process, public hospitals will be audited by HAS experts against the current standards on the same footing as private hospitals.

3- THE NEW ACCREDITATION SYSTEM

According to the MOPH - HAS agreement, HAS provided also technical assistance to the MOPH to upgrade the accreditation policies and procedures and to develop a new system for accreditation awards.

The new system is in line with international standards while using the available expertise in the private sector in the field of hospital audits. It consists of prequalification and selection of non-governmental auditing bodies by an independent expert committee[11], based on published terms of reference. Selected bodies would subsequently be authorized by the MOPH to officially perform hospital auditing against the national standards. The candidate hospital would have to contract and reimburse one of these authorized auditing bodies[12]. The auditing report would be

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[10] La Haute Autorité de Santé (HAS).

[11] The names of international experts are proposed by HAS and the committee is formed by a Ministerial Decision.

[12] Organismes Agrées d'Audit.

submitted to the MOPH together with a self assessment report done internally by the concerned hospital. The two documents would be examined by the independent expert committee for analysis and advice, before being deliberated in the National Accreditation Committee. Accreditation will still be awarded by a ministerial decree based on the committee's opinion as stated by law.

Regarding the standards, two areas of concern were identified as needing additional development. The first relates to the evaluation of professional practices, the second deals with risk management and patient safety. However, the bulk of national standards would remain the same as issued by decree[13] in 2005.

Three documents have already been developed: The terms of reference for selecting the auditing bodies, the new accreditation policies and procedures, as well as the addenda to the accreditation standards. These documents are posted on the MOPH website for public consultation and debate. All stakeholders were invited to provide their comments, that were integrated within the original documents. All three documents have been subject to consensus in a national conference before final and official adoption.

4- LEBANESE PARTICULARITIES AND CHALLENGES

4.1 From a Quality Management Perspective

The old Classification System focused on the physical structure and equipment with no consideration to staff competencies[14]. Tariffs set according to the hospital class provided financial incentives for purchasing sophisticated equipment often without conducting feasibility studies or developing business plans. This induced an increase in utilization of new technology, and led to the raising of the overall hospitalization cost.

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[13] Republic of Lebanon, Decree # 14263, March 4, 2005.

[14] Jencks, S. F. 1999. *Managing Quality of Care for the Lebanese Health Care System*. World Bank unpublished consultation. Beirut: Ministry of Public Health.

The old Classification System promoted the belief that unless a hospital provided "the full options" – that is a complete range of the latest sophisticated medical technology – then it was not considered a good hospital. Scant attention was paid to whether market opportunities warrant a wide range of equipment, or indeed, whether the hospital can afford the qualified staff to operate such equipment safely and efficiently. In addition to perverse incentives this system presented a typical example of inducing opportunistic behaviors by hospitals that deployed an exceptional, on the spot effort for the survey visit to get a higher classification[15]. The audit tools and procedures were unable to reveal inconsistent adherence to a continuous quality improvement plan after the visit was over.

Providing good quality medical services has been an assumption based on impressive equipment and reputable physicians, because health care managers lacked the knowledge and tools for objective quality measurement and evaluation. However, some hospitals have been working towards the achievement of ISO certification, which was a good exercise for building blocks of a quality management system, but did not provide enough emphasis on health care quality.

In *the original accreditation standards (*2000) emphasis was put on the organizational aspects and staff qualification and skills. Written policies and procedures that were deemed necessary for all areas of work, and more specific information, were required for medical files. Data collection on utilization and workload was introduced to assist with planning.

While the original standards focused on tools and procedures to generate evidence for managerial as well as clinical decision-making, the 2004 revised standards (2nd version) stressed on making sure that decisions are made based on policies, procedures and provided evidence, and leading to improved output. Collected data are analyzed to monitor management functions as

[15] Pomey, M-P., Francois, P., 2005. Contandriopoulos, A-P., Tosh, A., Bertrand, D. "Paradoxes of French Accreditation". *Quality and Safety in Health Care,* 14 :51-55.

well as clinical care, and information is used to improve quality. New concepts were also introduced such as performance appraisals and competency testing, making quality improvement a daily concern for all staff. The *addenda* developed lately, aimed at raising concern for patient safety and strengthening risk management, while stressing the importance of outcome-based evaluation of professional practice. The purpose was to foster the creation of a new culture in hospital management and quality assurance without bringing dramatic change in standards that would expose hospitals to excessive stress in a period of financial constraints.

The evolution from *the rating system* of the first two surveys into a *system of awards* was meant to avoid misconceptions and to discourage opportunistic approach[16]. Most of the revised standards require long term implementation, and compliance necessitates continuous quality improvement efforts. On the other hand, the audit methodology allows, to a large extent, for the detection of emerging performance. However, the accreditation program would still need further development to gear the system towards deep rooting quality practice.

The transition from the old classification to the last version of standards, then the addition of two chapters later on, was smooth and progressive. No legislation had to be amended and requirements were planned to be incremental and feasible to most hospitals. The evolutionary path helped sustaining quality improvement activities, inducing cultural shifts and ensuring a long-lasting impact.

4.2 From a Health System Perspective

Lebanon has benefited from the experience of other countries where governments became a prime user of accreditation or even had a proactive role in quality assurance with direct regulatory implications. The MOPH has developed the accreditation programme as part of its efforts to strengthen its

[16] Shortell, S.M., O'Brien, J.L., Carman, R.W., et al. 1995. Assessing the Impact of Continuous Quality Improvement / Total Quality Management: Concepts versus Implementation. *Health Services Research,* 30:2.

regulation capabilities and to attain better value for money in terms of hospital care financing. However, accreditation was intentionally presented as an activity independent of the government and other stakeholders. The neutral international expertise was sought to foster elements of objectivity and probity among hospitals that embraced this process and collaborated with the various audit teams, all through the different phases, up to the announcement of the third survey results.

The reconstitution of the accreditation committee, at the beginning of the process, has been a very useful platform for dialogue between key stakeholders. This helped convincing private hospitals that accreditation is needed for future development, to allow Lebanon to regain its historical position as a center of excellence for medical care in the Middle East. Actually, the hospital sector is taking advantage of this system to market itself by creating a new image, thus attracting clients from abroad and regaining its historical role.

The Lebanese experience presents many strengths: the representation of major stakeholders in the supervising committee and their active involvement in the whole process; the large consultation sought for standards development; and the stepwise approach and transition from the old classification system to a new one. The neutral and independent international expertise was also critical for success in this diversified country. As argued in the literature[17], the National Committee as well as the independent survey team, granted both a relative protection from political interference, and reduced the influence of politics. In the recently developed accreditation procedure, giving a role to domestic institutions as authorized auditing bodies was considered with extreme caution. In order to ensure an irrefutable neutral process, it was decided that prequalification and selection would be done by independent international experts, according to explicit TOR published a few months prior to document submission and agreed upon among stakeholders.

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[17] Pink, GH, Leatt, P. 2003. The use of "arms-length" organizations for health system change in Ontario, Canada: some observations by insiders. Health Policy, 63: 1-15.

However, major problems were also encountered. Some were anticipated, such as the financial impact of the third survey threatening the survival of hospitals not awarded accreditation, but others were unexpected, such as the severe reaction to the unintended publication of the results in the media. Voluntary participation in accreditation is considered a critical element for success in developed countries as it reflects the willingness and commitment to quality improvement. This is a debatable issue in Lebanon for two reasons. The first is cultural, and is related to the strong belief that the hospital image depends mostly on its physical structure, the sophistication of its equipment, and the qualifications of its physicians. The second is the weak role of the consumer, who is often uninformed or even misled, which deprives the system of an important driving force towards better quality. On the other hand, linking hospital classification with both the contracting and the payment system, which is based on the 1983 legislation, has influenced the development of the hospital sector. The issue of abolishing this link has to be tackled with the greatest caution as it necessitates a lengthy legislative amendment, and could deprive the system of a powerful leverage for reform. It is particularly risky to remove financial incentives in the absence of an inherent culture of quality improvement, and while the consumer is still powerless.

4.3 From Social and Political Perspectives

The Lebanese experience in hospitals accreditation would undoubtedly continue to have positive repercussions in many EMR countries. Its conception and design, and the implementation method would have also an internal impact on other sectors in Lebanon. It ought to provide a philosophical and political inspiration in the never-ending, undeclared confrontation, between professionalism and confessionalism. Before the year 2000, the MOPH had the obligation of contracting with all existing private hospitals belonging to, and protected by confessional and political powers. This obligation was not derived from a written text of law, but from an implicit pact between confessional parties that is much harder to break. Some of the contracted hospitals were dangerously malpracticing, and even when an irrefutable proof against one of

these existed, and before attempting to breach a contract, the MOPH had to face confessional allegations of being partial for not taking the same measures against other potentially dangerous hospitals. While it was obvious that the MOPH was unable to assess all hospitals at the same time for reasons related to the confessional system itself. Regardless of whether the job was properly done or not, accusations of partiality always prevail because everyone belongs inevitably to a confession that he can be accused to favor. And, consequently all efforts crumble down, while demotivation and fatigue prevent any new attempt.

Decision makers at MOPH decided to take the challenge all the way: Every hospital has to be assessed against the same standards by un-confessional outside experts. The same rules would be applied on all hospitals without any kind of favoritism or discrimination, and every action would be documented. The system was carefully designed to avoid confessional allegations as much as could be. Nevertheless, interests at stake are tremendous and are not only of financial nature. The ferocious attacks aroused by the third accreditation survey were not only in reaction to the accreditation results per se, but were mostly triggered by the publication of results in a newspaper. The argument was stressed repeatedly in every judicial recourse that results publication was undignifying for "the establishment" (and the confessional community behind). The formation by the Minister of Health[18] of a "committee of claims" to examine hospital queries, and the scientific lengthy discussions with petitioners, brought the contention from the political – confessional emotional field, back to professional grounds.

For the first time in the history of its relationship with private hospitals, the MOPH was able to select hospitals for contracting, and to reject the contracts with those non complying with explicitly set criteria. The selection process has been in place since 2004, and is still effective, despite intimidation and slanderous media campaigns undertaken against those standing behind the system. It started by political and religions pressures, and continued by the media, without ending by claims against the

[18] Mohamad Jawad Khalifeh. Decision # 33/1 of January 9, 2006.

State. As a matter of fact, applications for judicial review of administrative action, and court actions of damages, were filed but all rejected by the State Council, except for one action that is still pending.

5- CONCLUSION

Accreditation has been considered as being both a process that organizations use to evaluate and improve the quality of their health services, and a regulatory tool for the state to guarantee quality care to the population[19]. The Lebanese experience reveals another regulatory dimension for accreditation; that of selecting providers to control supply and to get a better value for money in terms of hospital reimbursement.

The evolutionary path of the Lebanese accreditation experience has followed roughly the quality management movement described by Donabedian[20], by focusing initially on structures and processes and involving outcomes later on. The development of the accreditation process came as a result of a visionary strategy by MOPH officials that facilitated its introduction by promoting consensus among key stakeholders.

Whether accreditation should be mandatory and whether it should be linked to reimbursement mechanism, were extensively debated[21]. We remain positive, that at the time of its conception, in the absence of quality concerns among providers, and in a context of quasi inexisting consumer pressure, it would have been naıve to expect any compliance on a voluntary basis and without financial incentives. We believe however that the situation has changed. At least a new culture has been introduced and genuine quality improvement practices initiated, which may allow henceforth a less coercive, even possibly voluntary adherence. The accreditation

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[19] Pomey, MP, Contandriopoulos, AP, François, P, Bertrand, D. 2004. Accreditation: a tool for organizational change in hospitals? Int J Health Care Qual Assure; 17 : 113-24.

[20] Donabedian, A. 1980. The Definition of Quality and Approaches to Its Management. Ann Arbor, Mich, Health Administration Press.

[21] El-Jardali, F. 2007. Hospital Accreditation in Lebanon: It's potential for quality improvement. J Med Liban; 55 (1): 39-45.

procedure that was introduced recently, is somehow more democratic, in a sense that it allows the hospital to choose the auditing body, and the time of the auditing visit that suits the organization. It enhances good governance by giving importance to the self assessment report considered as a document almost as equally important as the auditor's report, and by introducing a formal appeal process.

In most countries, the linkage between accreditation and contracts has taken a number of years to develop. Even though the MOPH was reserved about the impact of accreditation on contracting and reimbursement, enthusiasm for accreditation was boosted by the hospitals' interest in contracting with the MOPH and other public funds and getting a better payment.

Despite the skepticism about the willingness and ability of the MOPH to cease contracts with hospitals that fail to pass accreditation[22], the Ministry was not only capable of enforcing its regulation, but also to drag other public funds on the same path. Accreditation award is currently a well-established basic requirement for contracting with all public funds as well as private insurance.

Achieving accreditation does not guarantee that care is optimal. At such an early phase of the accreditation process in Lebanon, the focus has been on establishing a framework and foundation for a consistent quality practice. However, the gradual introduction of new outcome indicators over the coming years, will reflect more and more directly the quality of hospital care delivery.

Nevertheless, according to experts' opinions[23], thanks to accreditation, hospitals in Lebanon made a great leap in quality improvement. Although it is early and indeed complicated to assess quality outcomes, improvement was clearly perceived by health professionals. A study aiming at assessing nurses'

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[22] idem.

[23] Buckley, P., Barett, N., Abi Chahine, K., Nayler, D., Dyer, E. November 2005. *Evaluation and Accreditation of Hospitals in Lebanon. Final Deliverable*. Beirut: Ministry of Public Health.

perception of quality, showed that hospital accreditation was considered by Lebanese nurses as a good tool for improving quality of care[24].

The sustainability of the programme depends to a great degree on the commitment of hospitals and their sense of ownership of the process. A general re-education of health professionals and the community towards creating an inherent culture of quality improvement is still needed.

[24] El Jardali, F., Jamal, D., Dimassi, H., Ammar, W., Tchaghchghian V. 2008. The Impact of Hospital Accreditation on Quality of Care: Perception of Lebanese Nurses. International Journal for Quality in Health Care 2008; pp.1-9.

Chapter Six

ASSESSMENT AND PROSPECTS OF HEALTH STRATEGIES

The Ministry of Public Health has been implementing an ambitious health reform plan[1] for more than one decade. Redesigning the social security system was the plan's most controversial issue, as this needed strong political commitment and implied structural adjustment. This reform component would not be tackled in this chapter as it did not witness any meaningful progress since a previous report[2] in 2003. That report exposed, among others, two major achievements: the political mapping[3] based on stakeholder analysis and the establishment of a unified public funds' beneficiaries database.

The remaining health reform components have each its own path and proper goals, but share all one common objective, that is lightening the households' financial burden related to health. This is how, for example, the primary health care component aims primarily to improve the health status of the population and to reduce regional inequity in terms of accessibility to essential services, while at the same time offering affordable alternative ambulatory care for households that are used to, or prevented of,

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[1] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO. pp-95-101
[2] Idem. pp 102-126
[3] Idem. pp 131-150

seeking expensive out-patient services. The same applies to public hospitals that are conceived primarily to address equity concerns, and to reinforce the MOPH bargaining position in its relation with private hospitals, for these are contributing, at the same time, to decreasing households out-of-pocket (OOP) costs through a reduced copayment.

On the other hand, improving the quality of health services is not only a valuable aim by itself, but leads also to a better return on investments for both public financers and households.

Unfortunately, the health system's assessment from efficiency, equity and quality perspectives, as elaborated in 2003, could not be reproduced for lack of updated pertinent information. As a matter of fact, the CAS 2004/5 survey targeted broad household living conditions and did not use detailed questionnaires on health expenditures and utilization as the 1998 CAS & MOPH survey. It lacked essential information on utilization of health services and their distribution by region, sex and age group, as well as other pertinent data on financing and consumers' opinions. To that end, we believe that the analysis exposed in the "Health System and Reform in Lebanon" is still valid to a large extent.

Containing Households Direct Spending On Health For Equity, Sustainability And Poverty Alleviation

Out-of-pocket (OOP) payment is considered as the most regressive and unfair financing modality. It reflects the importance of the financial barrier to health care, and exposes households to impoverishment.

Findings of the 1998 survey[4] had a decisive influence on the setting of a long term national strategy for the health sector. The survey revealed that the role of the MOPH in financing health services was determinant for achieving equitable accessibility to hospital care and expensive treatment. It also indicated that up to

[4] Kasparian C; Ammar, W.; Mechbal, A.; Nandakumar, A.K.; National Household Health Expenditures and Utilization Survey 1999. MOPH in collaboration with: CAS, WHO, WB. October 2001.

that stage, accessibility, almost free of constraints with an open benefit package and no waiting list, was achieved at a high cost incurred by the households. OOP payment directly disbursed at the point of service was very high and represented 60% of total health expenditures. Most of the households paid goods and services were related to out-patient care mainly pharmaceuticals.

A health financing system that relies so heavily on OOP payment has to face poverty and sustainability issues. Unfair financing is a threat to equitable accessibility and seriously jeopardizes the achievement of health goals. A new strategy revolving around decreasing the household health financial burden was deemed extremely needed and at the same time, most controversial! Critical questions had to be answered, although answers never came without some ambiguity.

One of the options considered to address these issues was to expand the MOPH coverage over ambulatory care including medical and dental services, diagnostic tests and pharmaceuticals. This would have decreased households OOP payments and avoided unnecessary hospitalizations for procedures not usually covered on an ambulatory basis. The financial burden of such an expansion on the government's budget however, would have been unbearable. Financial analysis based on the NSSF experience showed that this type of coverage would have cost at least the double of the MOPH current budget, without reducing significantly hospitalization rates. NSSF expenditures on ambulatory care are currently exceeding those on hospital care, while NSSF hospitalization rates are higher than those of the MOPH. In addition, the impact of such a scenario on health and total expenditures was rather uncertain, as no evidence proved that the MOPH was capable to manage its budget more cost-effectively than the households.

Because covering ambulatory care was not feasible neither financially nor administratively, the MOPH considered providing at least an alternative to the poor who are lacking financial resources to seek private for-profit out-patient services, by ensuring universal accessibility to quality controlled primary health care.

Table VI-1: PHC and public health programs: MOPH incurred expenses and NGOs contribution estimates 2007 (1000 LBP)

	MOPH incurred expenses[1]	NGOs contribution[2]	International organizations' contribution[3]	# Beneficiaries[4]
EPI[5]	3,493,400	18,492,600	850,000	74,015
PHC network	8,049,600	12,074,400		750,967
Reproductive Health	1,418,880	5,594,400	75,000	104,480
Essential drugs[6]	3,000,000			404,248
Chronic Disease Drugs	4,875,000	43,128,595[7]		152,531
AIDS program	100,000		1,175,100	1,788
TB program	120,000		15,000	476
Pregnant & Infant	195,000	184,364		17,450
Project				
Epidemiological	54,300		600,000[8]	
Surveillance				
Total	21,306,180	79,474,359	2,715,100	Over one million

(1)Including salaries, pharmaceuticals and consumables

(2)Social Health Department: estimates include human resources involved in each program and consumables.

(3)WHO, UNICEF, UNFPA, World Bank

(4)Beneficiaries' numbers overlap: Some of those benefiting from drugs distribution maybe at the same time beneficiaries of the PHC network

(5)Expanded Program for Immunization, including 2.3 Billion LBP vaccine procurement

(6) Excluding medication for chronic disease and drugs with exorbitant prices that are dispensed by the MOPH directly to patients

(7) YMCA estimates: including YMCA and NGOs contributions as well as beneficiaries fees.

(8) Including procurement of vehicles

Capitalizing On Existing Resources

Providing PHC services through a national network of health centers where the NGOs play the most important role was considered to be feasible and highly cost-effective. This strategic choice only needed small investments in basic equipment, training, and essential drugs purchased yearly through UNICEF and YMCA, while maximizing return on the huge human and physical capital already existing in the public and private non-profit sectors.

Table VI-1 summarizes the contributions of major stakeholders in the primary health care and preventive programs in 2007. The MOPH incurred expenses are those related to all the Departments of the Directorate of Preventive Medicine as well as all government health centers and dispensaries. They amounted to 21.3 billion LBP. In addition to this sum which corresponds to less than 6% of its budget, the MOPH was able to mobilize 2.7 billion LBP in donations from international organizations, and NGOs resources estimated at 79.5 billion LBP. It is worth mentioning that most of the MOPH calculated contribution is incurred anyway, as it is related to salaries of civil servants who are involved directly or indirectly in the program's activities, but have at the same time administrative tasks with no relation to PHC.

Almost one third of the population is currently benefiting directly from one or more of these programs. However, the number of indirect beneficiaries is much higher as most of these programs generate important externalities. This is how for example, the epidemiological surveillance and control program has a public health impact that is of benefit to all citizens.

Towards A More Credible And Attractive Alternative For Outpatient Care

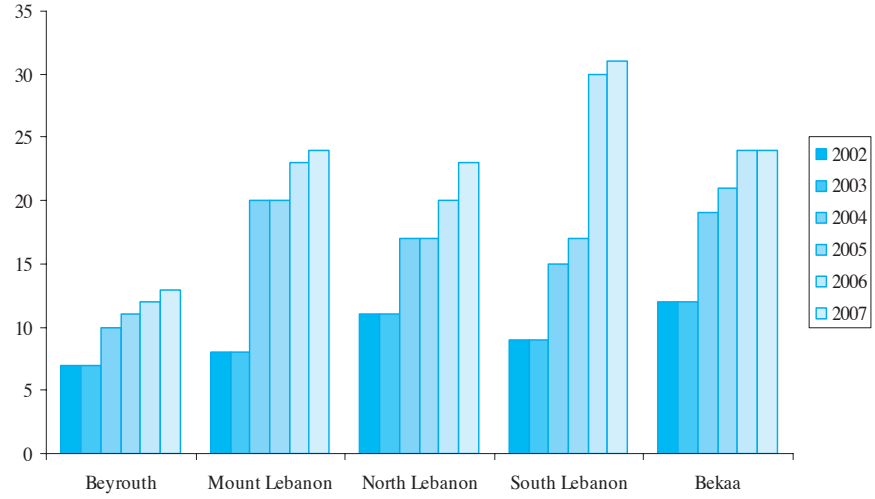
NGOs have developed their PHC facilities during the civil strife (1975-1989) to respond to the population health needs, especially those of the poor, in parallel to the weakening of government institutions. Factors that were behind their blossoming in war time were also responsible for their relative decline in peace time in the early 1990s. One factor was the direct generous

international aid that stopped promptly after the end of the war. Another was the drastic reduction of foreign support to most of the confessional political parties which used health services provision to increase their popularity during the war years, without building sustainable self financing mechanisms, and whose opportunism shifted with the end of the war to other non-health concerns. Accordingly, the image of the NGO run PHC facilities were fainting, and the situation even worsened due to severe criticism from numerous competitors such as private clinics, pharmacies, laboratories and others.

The NGO sector had to shift from voluntary, sometimes amateur relief interventions, to professional sustainable activities. The post-war period was rich in human resources development, and some NGOs were able to gain a relative financial, and sometimes decisional, autonomy vis-à-vis their founding confessional party. The MOPH introduced the concept of contractual arrangements in PHC, and started in 1996 assessing and selecting NGOs facilities in a network for that purpose (see chapter II). Developing managerial and clinical guidelines and conducting trainings to all human resources categories, as well as establishing systems of regular reporting and close monitoring, have led to upgrading and improving the quality of PHC services delivered by the network centers. It took almost a decade to enhance professionalism, and to upgrade PHC services in the NGOs sector. However, it took much more time and efforts to improve the image of PHC centers to the public and to regain the population's confidence.

The MOPH worked on increasing the number of health centers in the PHC Network, while respecting at the same time selection criteria related to space, basic equipment, qualified personnel and package of services provided. The number of qualified centers, less than 50 before 2003 became 115 by 2007 (fig VI-1).

Fig VI-1: Distribution of PHC Network health centers by mohafazat 2002-2007



The number of beneficiaries and the volume of services provided both increased, as a result of enhancing existing centers productivity as well as the inclusion of new ones. It is worth mentioning that statistics published from the "PHC National Network" are related to the 115 formally contracted centers. However, the MOPH is also supporting more than 400 dispensaries operating in the country, through PHC related programs, such as immunization, reproductive health, essential drugs and others. These programs produce their own statistics that overlap naturally with those of the PHC network.

In addition to the centers' commitment to provide the comprehensive package of primary health care, a particular emphasis is put periodically on a specific program or a set of activities that respond to a particular situation or health conditions. As an example, following the publication of oral health studies' results, that showed the magnitude of dental cavities particularly among poor children[5], the MOPH started emphasizing the

[5] Doumit, M., Doughan, B. and Baez, R. 2002. Oral Health Programme in Lebanon. Final Report on data collection: WHO.

importance of dental care services in PHC. Fig VI-2 shows that dental care has tripled in 2005 compared to 2001. It shows also that the total number of beneficiaries from the network has increased from 186,600 in 2001 to reach 671,826 in 2005.

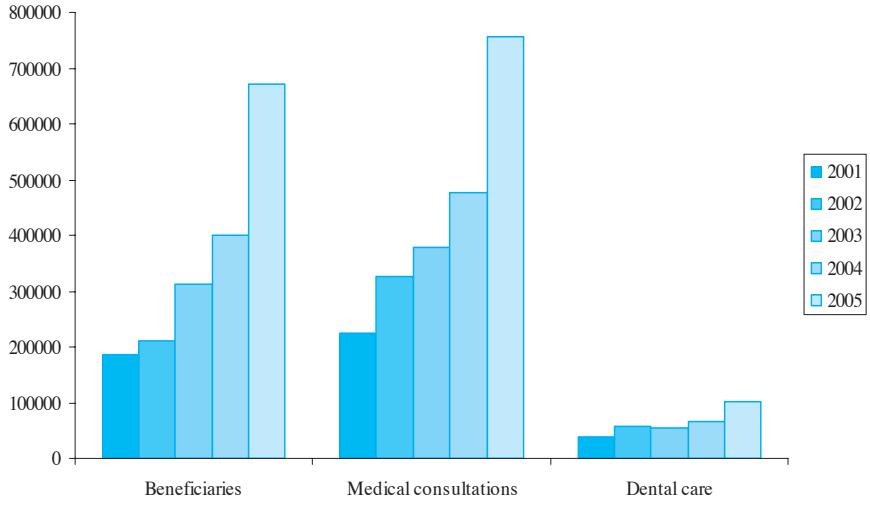
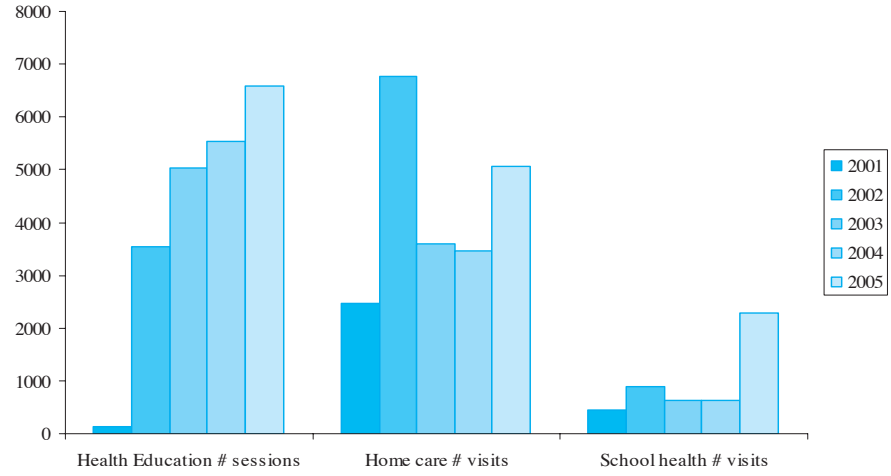


Fig VI-2: Number of beneficiaries of PHC services (National Network 2001-2005)

A clear progress has been observed in the reproductive health program both in quality and volume of services. In 2005, 11,372 pregnant women were followed up by the program representing 13.6% of total pregnancies, whereas in 2007 the number increased to 23,510 representing 28.8% of the total.

On the other hand, the program of medication for chronic disease continues to develop and to enroll more and more beneficiaries. The number of chronically ill patients benefiting from the program increased from less than 100,000 in 1998, to more than 153,000 in 2007, with 68,807 patients receiving long term treatment with at least 3 drugs. This program plays an important role in secondary prevention, and has as well a significant impact on OOP households' payments.

Fig VI-3: Health promotion activities (National Network 2001-2005)



One of the most important criteria for inclusion in the PHC network is the center's capabilities in health promotion and disease prevention. Health education, school health as well as home care are included in the package. Despite the significant progress noticed in this area, there is still room for more improvement.

Towards Achieving The Millennium Development Goals

In September 2000, the largest-ever gathering of Heads of State ushered in the new millennium, by adopting a historic declaration to eradicate extreme poverty and to improve the health and welfare of the world's poorest people. The UN Millennium Declaration, endorsed by 189 countries, was then translated into a roadmap, setting out eight goals to be reached by 2015. These Millennium Development Goals (MDGs) reflect an unprecedented commitment by the international community to address the most basic forms of human injustice and inequalities. Three of the eight goals are health related: to reduce child mortality, to improve maternal health and to combat HIV/AIDS, malaria and other diseases. Whereas health depends on, and makes an acknowledged contribution to, the achievement of the other five goals: to eradicate extreme poverty and hunger, to achieve universal primary education, to promote gender equality and empower

women, to ensure environmental sustainability, and to develop a global partnership for development.

Upgrading Primary Health Care and strengthening promotional and preventive health programs represented the corner stone of the MOPH strategy aiming at improving the overall health status of the population and achieving the Millennium Development Goals, while at the same time reducing households direct spending on health.

Over the past decades, Lebanon has witnessed a marked improvement in population health indicators. The national maternal mortality rate was estimated to have dropped from 300 per 100,000 live births in 1990 to 86 in 2004, and infant mortality from 35 per thousand in 1990 to 16 in 2004, in parallel with a significant increase in births attended by skilled health personnel.

Table VI-2: MDGs related health indicators[6]

	1990	**1995**	**2000**	**2004**
IMR (per 1000 live births)	35	33	27	16.1
<5 MR (per 1000 live births)	43	40	35	18.3
Births attended by skilled health personnel (%)	45		89	98.2
Maternal Mortality Ratio (per 100,000)	300	130	104	86.3

Table VI-3: Tuberculosis related indicators[7] (per 100,000 inhabitants)

Indicator	**1998**	**2000**	**2002**	**2004**
Prevalence of tuberculosis	30	17	15	11.9
Tuberculosis detection rate under DOTS	73	92	70	81.6
Tuberculosis treatment success rate under DOTS	73	92	91	

It is worth mentioning that, within the framework of the Safe Motherhood initiative, a hospital and maternity based reporting system was created in 2005. This system has been upgraded progressively to include 145 facilities in 2007 whereby 55,782 deliveries were reported. A total of 81,552 births were registered in Lebanon in 2007, among which about 15,000 were born outside the country. The reporting system covered thus more

[6] National_MDG-reports_2008
[7] National_MDG-reports_2008

than 80% of deliveries occurring in 2007 inside the country. In that year reported maternal mortality rate was less than 8 per 100,000; whereas caesarian sections rate was as high as 39% of total deliveries. Reported data should be considered with caution. The reporting rate as well as the number of affiliated facilities that reached 150 by 2008 are however encouraging.

Table VI-4: Safe Motherhood reported data for 2007 and first 6 months of 2008

	2007		2008 first 6 months	
	Number	**Rate***	**Number**	**Rate***
Deliveries	55782		30836	
Abortions	7581	12.00%	4087	13.20
Live births	55138	98.80%	31078	100.78**
Still births	654	11.80‰	354	11.50‰
Neonatal deaths	198	3.60‰	128	4.10‰
Maternal deaths	4	7.30‰‰	1	3.20‰‰
Low birth weight (< 2500 g)	5761	10.44%	2574	8.19%
Overweight (> 4200 g)	1145	2.07%	848	2.72%

* All rates are calculated in proportion of live births except for abortions that are in % of total deliveries.
** Over 100% result from twins births.

The improvement of health indicators could not be achieved without the universally accessible and effective primary health care system, as well as successful public health programs such as the Epidemiological Surveillance, Expanded Immunization, AIDS, Tuberculosis and Primary Health Care (Chap. II section 3).

Despite the overall improvement of national health indicators, regional disparities persist in terms of quality of mother and child care and related outcomes, which affects progress in achieving the MDGs.

Data reported by the National Collaborative Perinatal Neonatal Network (NCPNN)[8], which includes hospitals having a

[8] The National Collaborative Perinatal Neonatal Network (NCPNN). (Unpublished data, provided upon personal request). 2008.
The NCPNN is a private independent initiative fully supported by the MOPH as a nationwide perinatal and neonatal surveillance system that provides evidence for policy making and allows monitoring the impact of applied strategies.

Neonatal Intensive Care Unit (NICU), reveal that neonatal mortality, occurring in hospitals with high case-mix risk, averaged to 7.9‰ of a cumulative number of 58,315 live births between 2001 and 2006. Significant variations are noticed depending on hospitals' location, with those of Akkar reaching the highest rate of 17.6‰. In addition to factors related to the hospital's setting, parents' place of residence revealed to be an important determinant of neonatal mortality, as it is also related to the household's socioeconomic status and the education level of the mother. In-hospital neonatal mortality for the same sample has reached 17‰ for mothers originating from Akkar irrespective of the accommodating hospital. Akkar has witnessed, during the last decade, important investments in health structures. One public and 3 private hospitals are currently operating in this district with high standards of care in addition to the relatively well developed network of health centers and dispensary. Evidence generated by the NCPNN shows clearly that the impact of the health delivery system on mother and child health remains modest in comparison with economic and social determinants.

Considering regional disparities and specific programs' challenges, three interventions were particularly designed to foster achieving on time the Millennium Goals related to maternal and child health.

Intervention I: The Capitation Based Pregnant And Infant Package

A pregnant and infant package of care based on capitation payment was introduced in Wadi Khaled, a remote poverty pocket in the northern district of Akkar, the most deprived rural area in Lebanon, with considerable family sizes and particularly difficult socio-economic characteristics[9]. This intervention financed by the MOPH and implemented by an NGO, proved to be highly cost-effective in improving the outcomes of pregnancy and early childhood. All pregnant women are identified in the catchment area and provided with a continuum of prenatal, obstetrical, and well-baby care up till 2 years of age.

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[9] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO.

Table VI-5: Wadi Khaled output indicators (2004-Nov. 2008) in comparison with PAPFAM 2004 national indicators

	Wadi Khaled PHC deliveries 2004-Nov. 2008 n=1429	PAPFAM Lebanon 2004
Caesarian Sections (%)	15.2%	23.0
Complications during pregnancy (%)	0.42%	22.5
Complications during delivery (%)	33%	11.8
Neonatal mortality rate (28 days or younger) (per 1000 live births)	2.1	10.8
Maternal mortality rate (per 100000 live births)	0 (<1/ 1429)	86.3

Source: - CAS, MOSA, League of Arab Stage. 2006. The Pan Arab Project for Family Health (PAPFAM) 2004
- Makassed Association, the Wadi Khaled Project, Nov. 2008

The pregnant and infant package sets the example of a targeted and cost effective intervention designed to contribute directly to reach the MDGs. It is also a good example of combining financial incentives to outcome quality indicators, in order to achieve a substantial impact that can be assessed by a simple monitoring system. On one hand, the capitation payment is an incentive to avoid unnecessary hospitalization and expensive caesarian sections, and on the other, contract evaluation based on outcome indicators such as maternal and neonatal mortality, discourage taking the risk of delaying medically justified intervention in a hospital setting. Results are spectacular in comparing the program output indicators that are related to the most deprived area in the country, to national figures as shown in table VI-5. Caesarian sections, complications during pregnancy, and neonatal mortality rate are lower in the served population of Wadi Khaled project than the 2004 national average. This is undoubtedly a good achievement, considering wide historical discrepancies. Maternal mortality with less than one death among 1429 deliveries i.e less than 70 per 100,000 became lower than the 2004 national average. In addition, a survey[10] was conducted in 2007 to assess the impact of the pregnant and infant intervention, targeting 2450 households. The study revealed that under-five mortality was estimated at 14.26 per thousand in Wadi Khaled and

[10] Zyadeh, F. and Rabah, R. Mother and Child Health house-to-house survey: Wadi Khaled, November 2007. Unpublished study.

neighboring villages. This is a very promising result compared to the 2004 national average of 19.2‰.

This initiative is currently in the process of being generalized to all peripheral districts of the country. It is designed to reduce regional discrepancies in mother and child health outcomes, and hence to help accomplishing related goals on time.

Intervention II: Reach Every Child In Immunization

The Reaching Every District (RED) initiative involves giving the priority to low-performing districts by strengthening five important immunization-related functions. These functions are: planning and management of resources; capacity-building through training and supportive supervision; sustainable outreach; links between communities and health facilities; and active monitoring and use of data for decision-making. This initiative was adapted to the Lebanese context by seeking the approach of Reach Every Child based on nominative checklists of under 2 children in each village. This intervention is currently carried out successfully in five districts (Jbeil, Rashaya, Tyr, Baabda, and Shouf). Applied strategies include implementing an ambitious capacity-building programme to improve the vaccination logistics, and streamlining communication and social mobilization activities through the mayor and/or a municipality focal person designated by quarter, respecting the village administrative divisions. Nominative lists of children under 2 specifying their vaccination status are set and regularly checked up by the mayor. The final aim is to overcome the lack of information on the private sector immunization activities, and to vaccinate or complete the vaccination of every child.

Intervention III: Neonatal Resuscitation Training

There is evidence from national studies[11] that neonatal (first 28 days) and early neonatal (first week) mortality constitute

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[11] WHO. Child Health Research Project Special report, October 2004.
UNICEF, MOPH. National Perinatal Survey. 1999-2000. Beirut.
UNICEF, CAS. National Survey on Situation of Children in Lebanon 2000.

respectively 77% and 52% of mortalities occurring in the first year of life, with almost half of the first week's deaths occurring in the immediate 24 hours following births. Birth asphyxia is thought to be responsible for as much as 15% of the under-five child mortality. Therefore, it would be unlikely to achieve MDGs without upgrading the overall obstetrical and neonatal care in the country, with a particular emphasis on the quality and promptness of neonatal resuscitation. Accordingly, the MOPH, in cooperation with UNICEF and WHO, has designed a neonatal resuscitation capacity building project, aiming at creating a critical mass of medical and paramedical personnel, trained on standardized neonatal resuscitation techniques. The project started in November 2008 by training national trainers, and should, within 2 years, ensure that all obstetric wards and neonatal units dispose of necessary equipment, and adequately trained personnel for proper neonatal resuscitation and care. In addition, standard guidelines on neonatal resuscitation techniques would be developed, and eventually, integrated in the curricula of medical, nursing and midwifery schools operating in the country. A national committee at the MOPH with stakeholders' representation oversees the project.

Sustaining The MOPH Role As An Insurer Of Last Resort And Developing Performance Contracting Capabilities

The role of the MOPH, in covering the uninsured for hospital care, remains of prime importance for the poor to overcome financial barriers, and for the less poor to minimize the risk of getting impoverished by settling hospitals bills. This very role of the MOPH resulted in pushing back hospital cost, in terms of households financial burden, to lag behind ambulatory care and medicines, as confirmed in various studies. This is why the financing function of the MOPH ought to be sustained and improved, as long as the National Social Security Fund is not ensuring a universal coverage. The number of hospitalization on the Ministry's account has increased from 163,000 in 1998 to 183,000 in 2005 (+12.27%), while for the same period the cost has increased from 187 billion LBP to only 195 billion (+4.28%). Thus, the MOPH has not only been able to increase its services as

an insurer of last resort, but also to manage more efficiently available resources.

The successful hospital accreditation program implemented during that same period has probably improved the quality of hospital care, concomitantly with the increase in the volume of financed services, which confirms further the technical efficiency. It is remarkable that some international consultants keep emphasizing in their reports the "inefficiency" of the MOPH contracting with hospitals. Reference is often made to outdated studies and old statements made by MOPH officers long time ago, as if nothing had happened since. Unless there is a definition for efficiency other than providing more and better services in relation to human and financial resources, such reports should be revisited, as should be reconsidered the bad habit of "copy-pasting" from previous experts' reports. This is really deplorable, especially that some texts are reproduced by the media and used for political propaganda.

Nevertheless, the improvement of the MOPH financial management has been sustained over the past decade to cover 202,800 hospitalization cases in 2007 at a cost of 191.5 billion LBP.

Table VI-6: MOPH covered hospitalizations and incurred cost 2001-2007

	2002	**2003**	**2004**	**2005**	**2006**	**2007**
# admissions	158,048	161,184	177,326	183,365	186,624	202,803
Incurred cost (1000 LBP)	180,431,825	182,591,837	198,349,826	194,952,511	189,846,719	191,514,846
% increase compared to 2001	2.24	3.47	12.40	10.47	7.58	8.52

In addition to inpatient surgical and medical care shown in table VI-6, the MOPH covers the dialysis of about 1400 patients for a cost of almost 20 Bill. LBP, and subsidizes long-stay geriatric services of some 2,000 elderly for an annual budget of 27 billion LBP. Some additional thousand patients are benefitting yearly from a variety of sophisticated services such as LDL aphaeresis and radiotherapy.

In addition to its impact on lowering the national average of household spending on health, the MOPH financing role has an acknowledged contribution in readdressing inequity issues in both accessibility and financial terms. Table VI-7 shows the regional distribution of the MOPH financing. Natives from Nabatieh have the highest hospitalization rates on the Ministry's account. Whereas the highest billed admissions in LBP per thousand population are from hospitals in North Lebanon.

The MOPH assistance has to be provided according to the needs that are difficult to evaluate, as these do not only depend on the health status and ability to pay, but are also related to the regional distribution of other funds coverage. This is how for example the number of visas per thousand people originating from Akkar (67‰) is lower than the averages of Bekaa (92‰) and Nabatieh (128‰). Although Akkar is the district with the poorest population, it is also known to have the highest rates of uniformed, and thus the highest military schemes coverage.

Table VI-7: MOPH coverage: Distribution of hospitals admissions and bills per mouhafazat (2007)

	Population 2007[(1)]	Number of visas[(2)]	Visa (per 1,000 population)	2007 bills[(3)] (LBP)	LBP Billed (per 1,000 population)
North Lebanon	806,823	48209	**60**	42,485,952,000	52,658,305
Bekaa	496,972	45739	**92**	43,441,366,000	87,412,090
Nabatieh	238,364	30500	**128**	12,490,146,000	52,399,366
South Lebanon	424,453	28077	**66**	29,695,764,000	69,962,408
Mount Lebanon	1,554,044	33370	**21**	56,769,128,000	36,529,933
Beirut	407,362	14741	**36**	41,059,924,000	100,794,721
TOTAL	**3,928,019**	**200636**	**51**	**225,942,280,000**	**57,520,669**

Sources: (1): Statistical Bulletin of the MOPH, 2007
(2): Visa = Prior authorization for hospital admission.
The distribution per mouhafazat is based on beneficiaries ID cards.
(3): Bills amounts as issued by hospitals before auditing.

Since the role of the MOPH as insurer of last resort is not expected to change in the foreseen future, it has been decided to enhance further its contracting capabilities. Selecting hospitals according to quality standards has been considered a historic achievement, despite political and confessional thwarts. Nevertheless, accreditation does not guarantee a good performance from the Ministry's perspective as a financer. Over-doctoring is

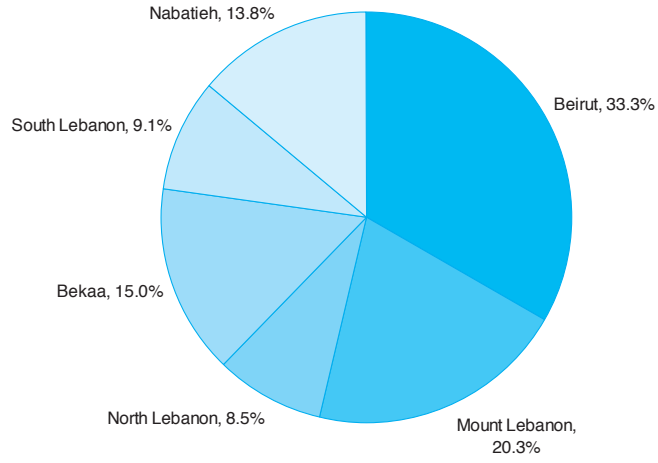
one example of inefficient use of resources, that is rather stimulated by the accreditation. Accreditation is also incriminated for increasing the cost of services, although this is true in some hospitals more than others. How well the patient is dealt with in terms of prompt attention and respect, is also quite variable among hospitals irrespective of their accreditation status. This is considered by the MOPH as a highly important contractual issue, especially when it comes to illegally selecting patients or imposing extra fees. Therefore, it becomes imperative to select among the accredited hospitals the better performers for further contracting. The MOPH sought the World Bank assistance to set a utilization review unit to serve the purpose of performance contracting. The project was approved by the government and will be implemented starting January 2009.

Public Hospitals Contribution To Equitable Accessibility And Lightening The Households' Financial Burdens

Empowered by the autonomy law, public hospitals are becoming serious competitors to the private sector. Inspite of all the pressures to favor governmental hospitals, the MOPH has remained attached to the principle of fair competition by avoiding all measures of favoritism. No preferential treatment in terms of admission or payment has been adopted. Quite the opposite, public hospitals prices are set at 90% of the private tarification, divided into 5% paid by the patient and 85% reimbursed by the MOPH. The patient has the freedom to choose between private and public hospitals. Therefore public hospitals had to improve their services' quality and to work on patient satisfaction in order to attract clientele. Most proved to be up to the challenge. In addition, public hospitals, as part of their public mission, are playing an important role in prevention, awareness, epidemiological surveillance and response to emergencies. These services of public interest are usually under- or not at all reimbursed.

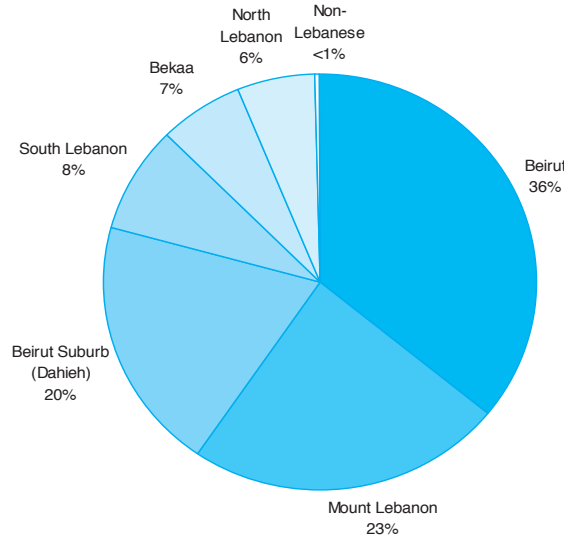
Public hospitals already have a significant impact on at least two levels. First, denying for any reason a medically justified hospitalization, is unlikely to happen any more. Private hospitals are known for selecting patients according to their medical conditions and their third-party payer indications, which

Fig VI-4a: Distribution of MOPH admissions to Hariri University Hospital by mouhafazat of origin as indicated on the ID card (2007) (N=12,816 admissions)



Source: *MOPH visa system*

Fig VI-14b: Distribution of RHUH admission by place of residence (N= 16,916 admissions)



Source: *RHUH*

represented for many years a serious source of discrimination and unsatisfaction. In recent years, and in parallel to the development of public hospitals, such complaints have been fading gradually. The role of Rafic Hariri University Hospital (RHUH)[12] has been particularly remarkable in accommodating controversial or complicated cases rejected by private hospitals. This hospital has been playing fully its role as the biggest governmental referral hospital, by admitting MOPH patients from all regions in Lebanon as shown in fig VI-4a. This is further confirmed when considering the distribution of total admissions (MOPH covered and others) by place of residence (fig VI-4b). Second, patient copayment set at only 5% of the public hospital's bill, instead of 15% in the private, had an impact on the patient financial burden that had been growing over years, in parallel with the increasing public hospitals activities. Social cases are partially or totally exempt from copayment that in any way never exceeds the set 5% for public hospitals, whereas private hospitals frequently impose extra-fees on top of the set 15% of the bill. Copayment to public hospitals represents therefore a decrease by at least two third of concerned households out-of-pocket payment for hospital care.

As of July 2008, only half of the 28 public hospitals are fully operational, four are not yet opened, and the others have been receiving patients for less than a year. The impact on private hospitalization is already meaningful and would very likely continue to grow gradually with the progressive functioning of all public hospitals. However, the decrease in private admissions, at the national level, is not expected to happen at the same rate as the increase in public admissions, because of the growing needs related to the demographic and epidemiological profiles on one hand, and because public hospitals are also satisfying some demands that used to be rejected by the private sector (fig VI-5).

Fig VI-6 shows clearly the increasing impact of public hospitals, as is the case of Nabatieh Government Hospital that is

[12] Rafic Hariri University Hospital previously named Beirut Government University Hospital is considered in all MOPH statistical distributions as part of Beirut City despite the fact that it belongs administratively to Baabda district.

Fig VI-5: Admissions in private and public hospitals all districts 2005, 2006 and 2007

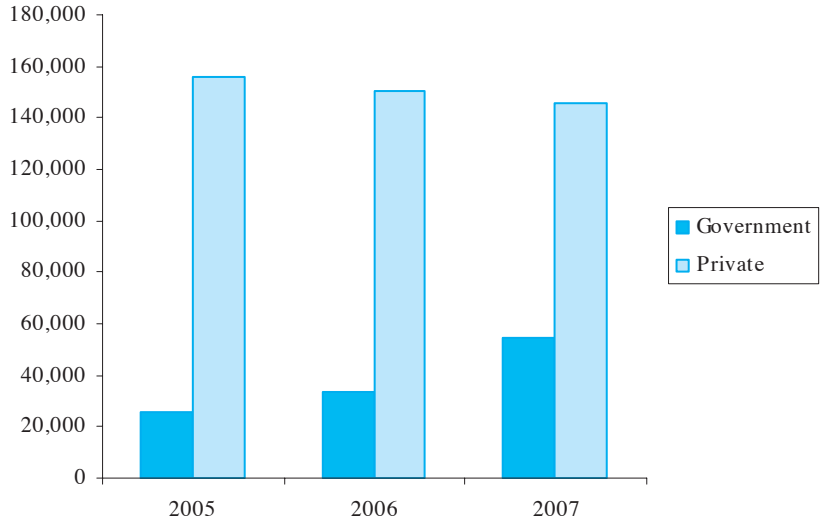
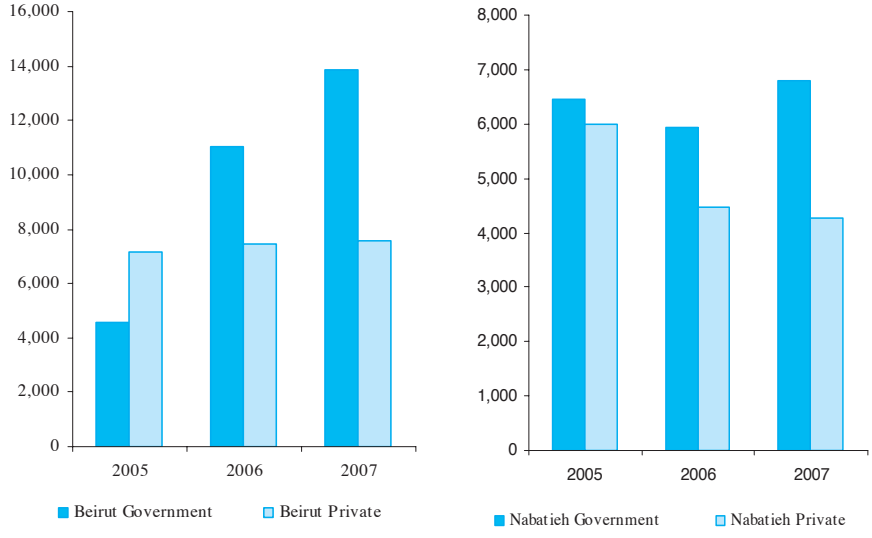


Fig VI-6: Admissions in private and public hospitals in Beirut and Nabatieh district 2005, 2006 and 2007



behind the steady decrease of number of admissions in the district's private hospitals. In contrast, the rapid development of RHUH did not have the same obvious impact on neighboring private admissions considering on one hand, referrals from other regions (fig VI-4b) and on the other, the fact that private university hospitals in Beirut are also attracting clienteles from outside the capital.

In 2007, 72,743 patients were admitted to public hospitals of which 77% are on the account of the MOPH. Most of the remaining 23% were covered by other public funds or private insurance and very few are self-financed. RHUH alone accommodated 24% of total public hospitals admissions. Average costs per admission ranged from 2.3 million LBP in RHUH to 750,000 LBP in other public hospitals, with a total public hospitals budget amounting to 82 billion LBP in 2007. The total paid by patients for hospital care in public hospitals amounted to 2.8 billion LBP resulting from copayment, deductions and exemptions. This corresponds to at least 10 billion LBP savings for households compared to being hospitalized in private hospitals, not taking into account the much larger amounts of extra payments frequently and secretly imposed by these hospitals.

If we consider the movement of patients between regions by subtracting, for each mouhafazat, the number of admissions of native patients from the total number of admissions, we conclude that most of the referrals are done from the North, the Bekaa and Nabatieh towards Mount Lebanon particularly Baabda and towards Beirut and Saida.

The comparison of 2005 to 2007 figures reveals that referrals to Mount Lebanon and the South have decreased in favor of Beirut, which reflects the RHUH role as the referral public hospital of choice.

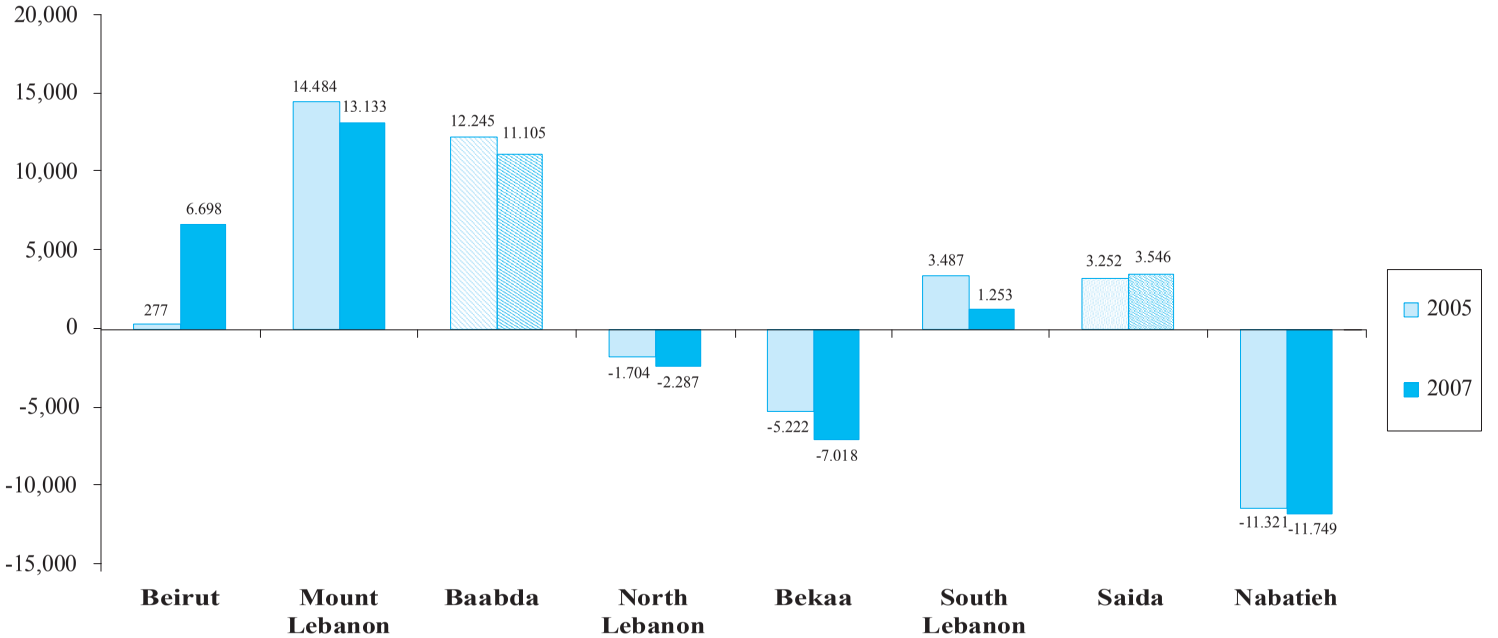


Fig VI-7: Movement of patients for hospital admission between mouhafazats and the cadas of Baabda and Saida, 2005 and 2007

The Contribution Of The MOPH Drugs Dispensing Center, In Alleviating The Financial Burden Of Disease

While chronic diseases represent a growing burden on the government budget, the patient incurred catastrophic costs represent a serious risk of driving households below the poverty line. The MOPH spent 44.8 and 50 billion LBP in 2005 and 2007 respectively, on drugs handed out directly to patients with medical conditions necessitating prohibitive cost treatment. The MOPH benefits from its purchasing power to get important discounts and bonuses through a highly competitive procurement procedure. Should the concerned patients have purchased the needed medicines on their own, they would have paid at least double the cost borne by the MOPH. Without the Ministry's assistance, those who could have paid the price would have been exposed to impoverishment, while others would have been deprived from a critically needed treatment. The current number of beneficiaries exceeds 12,000 patients. In 2007, 3,095 new cases joined the program of whom 1,837 (59%) were cancer patients and 462 (15%) mentally ill. Cancer patients account for almost 60% of new cases but represent less than third of regular beneficiaries, while the number of mentally ill is cumulating progressively. The beneficiaries' epidemiological profile in the MOPH DDC database, provides interesting information on the distribution by disease with heavy financial burden as shown in table VI-8.

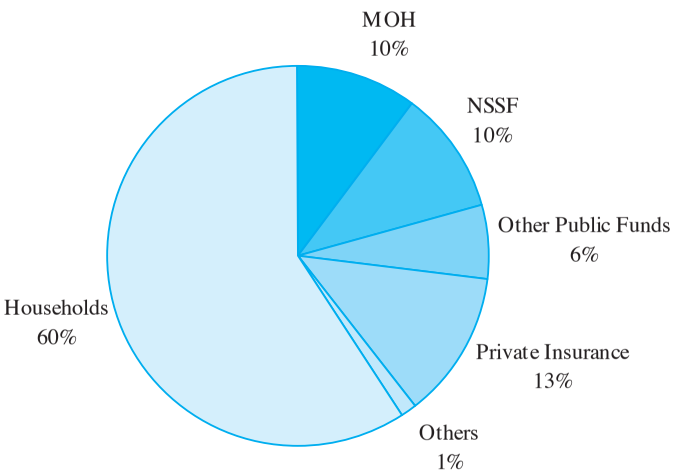
Table VI-8: Distribution of disease with heavy financial burden according to the MOPH drugs dispensing center

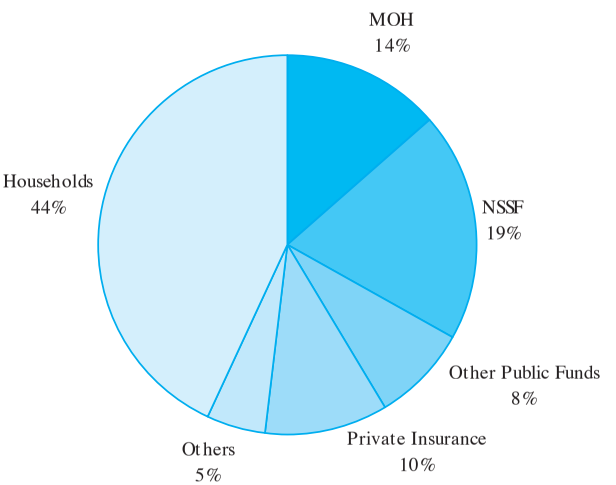
Diagnosis	Incident Cases 2007	(%)	Prevalent cases 2007	(%)
Cancer	1,837	59.35	3,727	32.35
Growth Hormone deficiency	143	4.62	400	3.47
Renal failure	130	4.20	507	4.40
Dialysis	20	0.65	155	1.35
AIDS	54	1.74	262	2.27
Epilepsy	168	5.43	1,275	11.07
Mental diseases	462	14.93	3,643	31.62
Kidney transplant	46	1.49	497	4.31
Hemophilia	1	0.03	72	0.62
Hepatitis B	56	1.81	113	0.98
Hepatitis C	77	2.49	161	1.40
Multiple Sclerosis	101	3.26	710	6.16
Total	3,095	100	11,522	100

The MOPH provision of drugs of exorbitant prices for the uninsured has an undeniable positive impact on the patient's health and quality of life, as well as on the household's budget. This task was initiated in the early 1990s as a social assistance for needy patients on individual basis, and was not provided for in the organizational structure of the MOPH. Over years it has been evolving more rapidly than the institutional capacity can cope with, while the yearly increase in allocated budget could not catch up with a faster growing demand. As a result, patients endure long waiting lines queuing daily at the dispensing center. They are also exposed to episodic treatment discontinuation, as the warehouse runs out of stock for many drugs by the last few months of the year. Despite all benefits, the situation is no longer acceptable for its repercussions on the treatment effectiveness as well as on the patient's dignity. There is no other option for the MOPH than that of becoming more selective in accepting to cover additional innovative drugs and more conservative about their indications. The lack of cooperation from the Order of Physicians scientific societies, and their resistance to developing evidence based therapeutic guidelines is deplorable. Nevertheless the recent decentralization and computerization of the regional dispensing centers would improve, at least to some extent, the delivery conditions.

The Overall Impact On Households Out-Of-Pocket

Enlarging the PHC network, strengthening preventive programs and upgrading public hospital services, together with enhanced MOPH institutional capabilities and control mechanisms, have contributed to a large extent to decreasing total health expenditures, by targeting specifically the major spending item which is households out-of-pocket. Per capita health expenditures have decreased from 496 USD in 1998 to 460 USD in 2005. Considering the GDP increase by 32.7% in the same period, this resulted in a significantly lower GDP share of health spending in 2005 (8.27%) compared to 1998 (12.4%). This was achieved by both, a decrease of the households share from 70.65% to 59.82%, and an increase of public sources financing from 18.22% to 28.98% occurring concomitantly within the same period. The out-of – pocket share, which excludes prepaid contributions and





1998 **2005**

Fig VI-8: Shares of out-of-pocket and financing agencies in health expenditures 1998-2005

premiums, decreased from 60% of total health expenditures in 1998 to 44% in 2005.

The reduction in households' share of total health expenditures was accompanied by a lower spending in absolute terms at the household level. According to households living conditions surveys, a household out-of-pocket spent on health at the point of service delivery averaged 870 USD per year in 2005 compared to 975 USD in 1997. OOP payment represented 74% of total household health spending in 2005 compared to 84% in 1998. Therefore the decrease in household's health spending was achieved at the expense of OOP and not prepayment (PP).

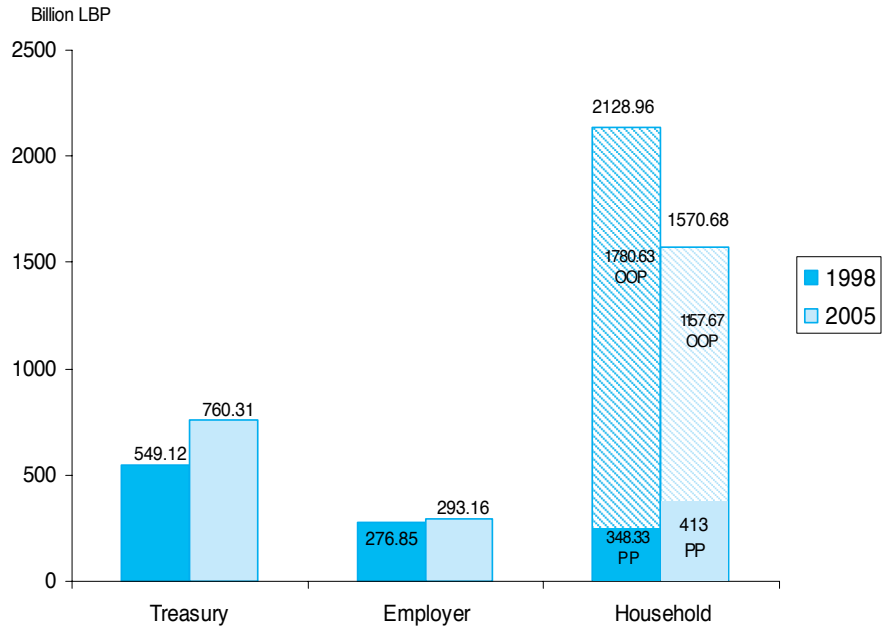


Fig VI-9: Distribution of health expenditures from treasury and private sources 1998-2005

Medicines Remain Beyond Remedy

The mere fact of quashing the Ministerial Decision 208/1 concerning drugs pricing after being in force for 22 years, bears in

itself an important symbolic value. Introducing new concepts in the pricing structure, such as degressive profit margins and re-pricing mechanisms, were expected to have a lasting effect on prices. Nevertheless, all these efforts remained with minimal lasting impact on the total cost of pharmaceuticals for many reasons:

First, because many factors of great influence on drugs prices lie beyond the local market forces and the control of the MOPH. Such factors include expensive new medicines with sometimes excessively high ex-factory prices, and dramatic variations in international currency rates.

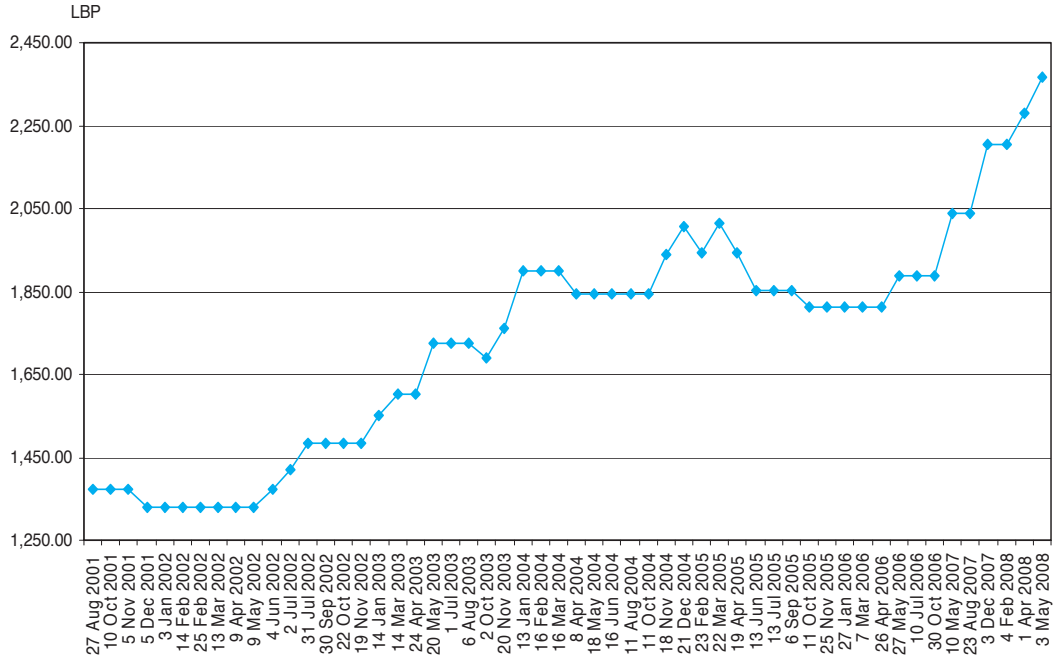


Fig VI-10: EURO exchange rates corresponding to price indexes issued by MOPH from August 2001 to February 2008

Continuous increase in the European currencies exchange rates has been the major factor behind price increases from the beginning of this decade. Particularly, the steep exchange rate

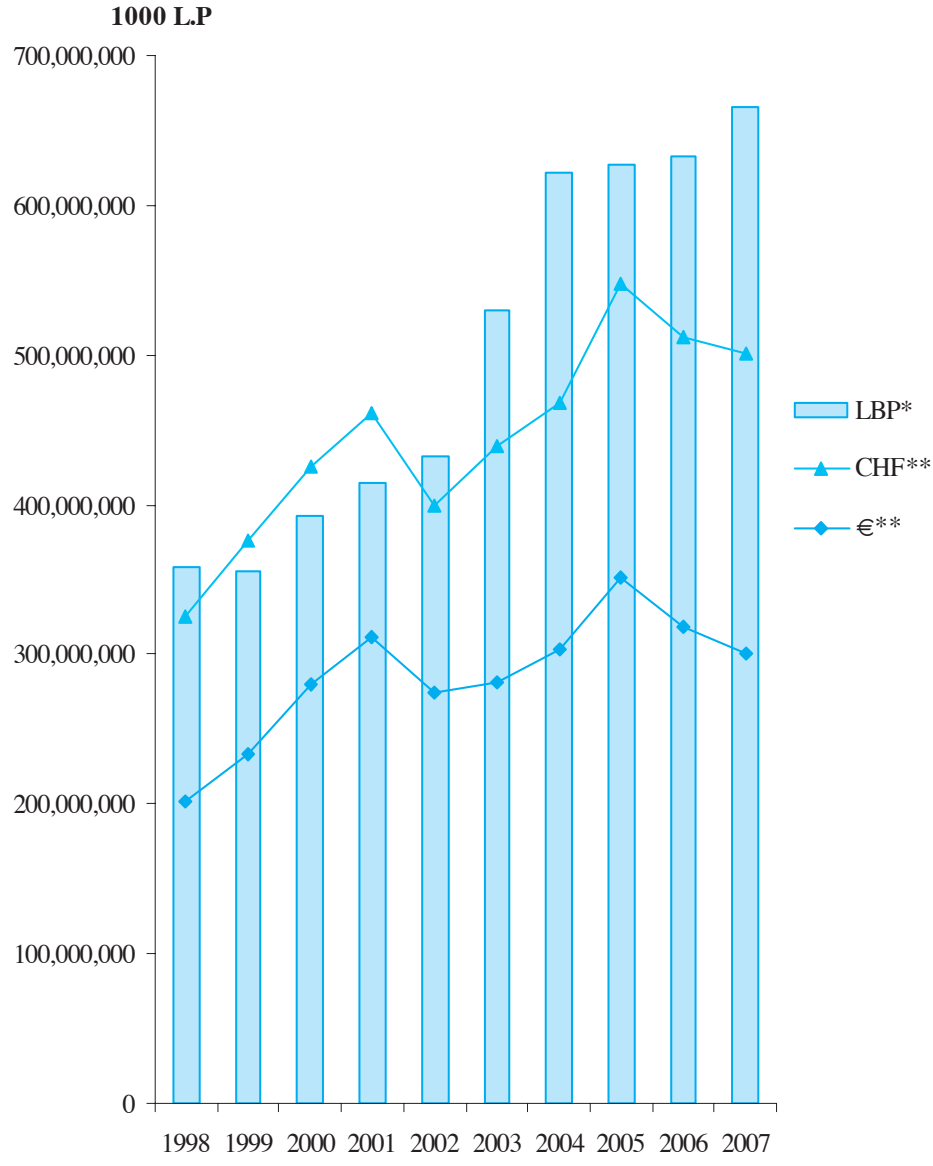
increase of most currencies vis-à-vis the US Dollar that started in 2006, has negated all the price reduction measures taken by the end of 2005, knowing that the Lebanese Pound is solidly tied to the American currency. According to IMS[13], the total amount of purchased drugs from wholesalers at net price to pharmacies was 627.1 billion LBP in 2005 and 666.3 billion LBP in 2007, with an increase of 6.25%. If calculated in Euro[14], these amounted to 351.5 million € in 2005 and 301.1 million € in 2007with a decrease of 14.3%.

Fig VI-11 shows the impact of cost containment measures taken by the MOPH on pharmacy drugs sold in nominal LBP (the bars) compared to prices in Swiss francs (CHF) and €(the curves). This is revealed by a slowing down of the upward slope of price increases in LBP in 2005 and 2006. However, the CHF and € curves show a clear downward slope starting 2005, which reflects what would have been the effect of the MOPH measures taken that year, if devaluations of USD, and hence LBP, had not occurred i.e. if currencies had remained stable.

Second, as a result of the failure of market forces to adapt and outbalance, on the long term, constant and lasting variations in exchange rates. Drug importers failed, or were disinterested, in seeking cheaper sources for their products including the off-patent ones. At the same time, parallel import as regulated and practiced could not nor is expected to play any constructive role in competition, as it becomes a domain restricted to some political forces. In addition, the quality of drugs imported through parallel channels, may be compromised with impunity, as a result of political and confessional intimidation and in the absence of a national drug analysis laboratory.

[13] International Medical Statistics (IMS) Health-Lebanon. 2004-2007.
[14] Euro conversion rate is based on Banque Du Liban end of period exchange rate for 2005 and 2007.

Fig VI-11: Drugs purchasing from wholesalers at net price to pharmacies (1998-2007)



*Hospital drugs and public biddings are not included.
**Calculated based on the end of period exchange rate for the corresponding year as issued by Banque Du Liban.

Generic Drugs Are The Cure

The current price structure still does not encourage enough the importation of inexpensive generics. More incentives need to be integrated to encourage the importation of these cheaper drugs by making, for example, importers and pharmacists profits more degressive. Therefore, mark-ups and the incremental calculation method, as well as the list of countries for price comparison should be revisited again. Knowing that such measures, especially when it comes to compressing profit margins, are usually severely contested and politically uncertain. Most importantly, reforming the pricing structure may not have a lasting effect, as it may easily be offset by exchange rates variations.

Therefore changing prescribing habits should inevitably be sought in order to have a consistent and long lasting impact on prices. This implies reconsidering medical curricula and conducting training through an unbiased continuing education program, in collaboration with universities and Physicians Orders. Medical prescriptions could also be rationalized by adopting a common MOPH and NSSF list of reimbursed drugs that is biased towards generics including licensed and labeled ones. A framework of accountability to assess prescribing patterns, and to publish the information by physician and by institution may be informative for patients and third-party payers, and persuasive for providers.

Making generic drugs available in the market as soon as the patent of the original molecule expires remains of great importance to drive down the price of expensive drugs, especially those with exorbitant prices. Affirming governments' right to use TRIPS flexibilities remains words on paper without the development of knowledge in international agreements and the improvement of negotiation skills. The "early working exception"[15] allows the completion of all procedures necessary to register a generic product before the original patent expires, which allows consumers to obtain medicines at lower prices immediately thereafter. Such

[15] TRIPS Agreement, Article 30; "Bolar exception"

flexibility in order to be enforced should be first incorporated in the country's legislation.

Nevertheless, technical, commercial and most of all, diplomatic pressures to impose by law "patent-like" barriers such as data exclusivity remain a big challenge for Lebanon. The slipping of negotiations from "TRIPS versus TRIPS-Plus", towards arguing on the extent of the "PLUS" part, has to be faced by innovative, simple, non resource-intensive solutions. An article was introduced in the application decree[16] to Law 530, stating that: "The applicant should not include in the registration file any information he or she considers undisclosed. The technical committee, in light of provided documents, would decide if any additional information is needed for registration, and would discuss with the applicant if the needed information should be considered as undisclosed. In the case of such an agreement, then the required additional documents would be provided in a separate file, and the MOPH would be committed to protect the concerned data". Needless to mention that this procedure is unfortunately very lengthy, and the pharmaceutical firm would better include all necessary, however disclosed, information to speed the registration process. And we assume that, most often, real undisclosed information would not really be needed to technically approve a drug registration. The applicant is also required to certify that all technical documents included in its application file are based on studies conducted specifically on the product submitted for registration in addition to published scientific information[17].

Article 39.3 of the TRIPS Agreement[18] states that "Test data must be protected (only)[19] if national authorities require its

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[16] Article 8 of the decree no 571 September 23, 2008; Application of articles 3 and 5 of the law no 530 of 16/7/2003 and articles 52,53, 54 and 60 of the law no 376 of 1/8/1994.

[17] This statement is meant for generic applications.

[18] TRIPS Agreement, Article 39.3: "Members, when requiring as a condition of approving the marketing of pharmaceutical…, the submission of undisclosed test…, shall protect such data…"

[19] Author's emphasis

submission"[20]. This was, intentionally or unintentionally, alluded to in the EFTA Agreement under which Lebanon granted for the first time, data exclusivity for at least six year. Taking a closer look at Annex V of this Agreement, Article 4 says: "The Parties shall protect undisclosed information in accordance with Article 39 of TRIPS. The Parties shall prevent applicants… from relying on or referring to undisclosed test or other undisclosed data submitted (as such)[21] by prior applicants to the competent approval authorities…"

Hence, technically speaking there is often a way out, and politicians may choose to rely on the expert opinion of professionals in public health and international laws. They may also choose to get power from the voice of an informed public even when heard through protests.

Conclusion

The health system in Lebanon has been built up incrementally, mostly as a result of implicit and even unintended health policies interacting with different stakeholders' conflicting interests. However, unintended policies do not have necessarily bad implications, especially when they come as a culmination of interrelated decisions dictated by the society democratic forces actions and reactions. As an example, health financing was designed as prepayment (and copayment) based. Financing from treasury source was introduced and gradually expanded as a result of political decisions taken episodically in response to social pressures. This started by covering the uninsured for basic hospital care then for more and more sophisticated services and expensive treatment, leading to make the MOPH a major player in financing health care. One important characteristic that explains the usual inexistence of a master plan and therefore the unlikelihood of

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[20] Correa, C.M., 2002. Protection of Data Submitted for the Registration of Pharmaceuticals: Implementing the Standards of the TRIPS Agreement. Geneva. South Center. pp ix-xii.

[21] The EFTA Agreement between Lebanon and "Switzerland, Norway, Iceland and Lichtenstein", has been promulgated on 15/5/2006 and published in the official gazette on 25/5/2006. Annex V; referred to in Article 24: Protection of Intellectual Property.

achieving comprehensive structural reform, in the health sector as in any other sector in Lebanon, is the lack of authority of the government institutions. Two reasons lie behind the authorities "fainting authority": first, confessional forces that preserve through a "religious arm" judicial prerogatives defined by the Code of Personal Status, while the "political arm" gets power from the political regime on the expense of the State's credit and prestige, and gains popularity through public service clientelism. Second, the strong belief that prevailed after the end of the civil war, at the very time of rebuilding national capacities, that the government should do as little as possible and the public sector should be shrinked as much as possible. This reflected the international leitmotiv of that time "that government is best which governs least"[22].

The government policy for the past two decades following the civil war has led to weak regulation and control of a flourishing private sector. For example a wide range of goods and services that affect health directly are not submitted to any kind of regulation or serious control including medical devices. In this regard the World Health Report 2008, considered as a worrisome trend of health systems where a hands-off or laisser faire approach to governance has allowed unregulated commercialization of health to flourish.

On the other hand, with regard to health service delivery in the 1990s, front line public hospitals were operating below standards with less than 20% occupancy rate. Their situation changed dramatically however, with the law of autonomy issued in 1996, and public hospitals became since 2000 increasingly competitive with the private sector. At the level of PHC, more than 30 PHC centers were built by the government all over the country during the last decade. These health centers were designed with modern standardized architecture and very well equipped. The MOPH was incapable to run these centers primarily for the lack of human resources and the government decision to halt the recruitment of civil servants. The management of most of these

[22] The World Bank.2008. The Growth Report, strategies for sustained growth and inclusive development. Commission on Growth and Development. WB.2008, Washington, DC.

centers ended up being delegated to NGOs. Municipalities were reluctant to get on board and only a few accepted the Ministry's delegation for running health centers. It is worth mentioning that most of the public health centers and dispensaries that were and are still managed directly by the MOPH are encountering administrative bottlenecks and are operating below standard. Despite the sustained gradual improvement of PHC as a primary level of essential services, the weakness of public institutions and their lack of authority remain the major hindrance for promoting PHC as an equitable and cost effective system for universal accessibility to health care.

The role of government is currently witnessing a paradigm shift world wide. In its recent Report, the Commission on Growth and Development argued that successful cases of sustained growth and inclusive development share the characteristic of increasingly capable, credible and committed government. It states that "no country has sustained rapid growth without also keeping up impressive rates of public investment in infrastructure, education, and health" and that "governments should also establish social safety and ensure uninterrupted access to basic services". In another recent report, the Commission on Social Determinants of Health emphasizes the reinforcement of the primary role of the state in the provision of basic services essential to health and the regulation of goods and services with a major impact on health. It also advocates primary health care as a model for a system that acts on the underlying social, economic, and political causes of ill health[23].

This paradigm shift regarding the role of government would undoubtedly influence policy makers in Lebanon, as such international shifts usually do. Consequently, responsibilities that are proper to health authorities should be redefined in the near future. These are duties that no other party can fulfill and where delegation has been experienced and failed. There is an undisputable need to strengthen the MOPH capacity to assume its responsibilities for Essential Public Health Functions, and to

[23] World Health Organization.2008. Closing the Gap in a Generation. Commission on Social Determinants of Health. WHO. 2008, Geneva.

enhance as well its leadership and steering capabilities to reorient the health system towards promoting health and reducing inequities. This would necessarily lead to revisiting the MOPH organizational structure, to recruiting qualified staff and to managing human resources on merit basis. Should PHC be considered as a set of reforms that goes beyond "basic" service delivery, as advocated by the World Health Report 2008, ambitious human resources policies are required that involve civil service reform[24].

Meritocracy however, requires a certain degree of discretion in judging the merit of a civil servant by his superiors, which leaves room to favoritism. This explains the resistance of the Civil Service Board to applying merit systems. Nevertheless the rigid seniority system in place, praised by bureaucrats does not prevent favoritism, especially on a confessional basis in the Public Administration. It would be unfortunate for government institutions to remain stuck between opportunistic politicians who exploit the public service for their interests, and protectionist bureaucrats who oppose the opening out of the public administration without being capable of preventing favoritism and clientelism. It is advised to "develop more objective measures of a civil servant's performance, which can be used to confirm or question a superior's judgment"[25].

Experience teaches us that confessional forces possess great capacity and skills to mobilize masses at the larger national scale, and yet are unexpectedly less powerful at a local community level! One plausible explanation for this phenomenon would be that in a national debate, implicit hatred and fear of the "other" are underlying the political positioning of people; whereas at a local community level the "other" is not a stranger but is rather a neighbor, which leaves little room for irrational manipulations. This provides additional arguments to the importance of

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[24] World Health Organization. 2008. The World Health Report 2008. Primary Health Care: Now More Than Ever. WHO 2008, Geneva.

[25] The World Bank.2008. The Growth Report, strategies for sustained growth and inclusive development. Commission on Growth and Development. WB.2008, Washington, DC.

decentralization and join the MOPH efforts in promoting close collaboration with locally elected mayors and municipalities. This meets also the call for social participation in health action in the World Health Report 2008. That Report emphasized the role of local authorities in organizing health care around people's needs and in mobilizing communities as a "necessary complement to the more technocratic and top-down approach to assessing social inequalities and determining priorities for action"[26].

Finally, no matter how critical one can be, the health system in Lebanon has many indisputable advantages that should not be jeopardized in whatever envisaged reform. A relatively high percentage of the Lebanese living abroad have double nationalities and are eligible to advanced social security systems in their countries residence such as Canada, Australia, and many European States. Yet many chose to come to Lebanon each year to seek health services such as diagnostic investigations, surgeries and radio and chemotherapies. They are satisfied with the quality of care, the cost and most of all the absence of waiting lists. Some of them even benefit from the coverage of the MOPH, whether for hospitalization or for getting expensive drugs free of charge. On the other hand no matter how one can praise some achievements, these are probably the highest possible attainable ones in the existing situation as most has been made out of the current system. This book like its previous "Health Sector and Reform in Lebanon" intends to bring forth a rethinking of the health system in light of a new definition to the role of government in the health sector in Lebanon.

[26] World Health Organization. 2008. The World Health Report 2008. Primary Health Care: Now More Than Ever. WHO 2008, Geneva.

ACRONYMS

ACAL	Association of Private Insurance
AF	Armed Forces
AFP	Acute Flaccid Paralysis
AMF	Association of Mutual Funds
AUB	American University of Beirut
BP	Brevet Pratique
BS	Bachelor of Science
BT	Baccalaureate Technique
CHF	Swiss Francs
CEOs	Chief Executive Officers
CIF	Cost Insurance and Freight
COE	Centers of Excellence
COPD	Chronic Obstructive Pulmonary Disease
CPI	Consumption Price Index
CSC	Civil Servants Cooperative
CT	Computerized Tomography
DDC	Drugs Dispensing Center
DEA	Diplôme d'Etude Approfondie
DESS	Diplôme d'Etude Supérieure Specialisé
DOTS	Directly Observed Treatment Strategy
DR	Dependency Ratio
DTP	Diphtheria Tetanus Pertussis
EFTA	European Free Trade Association
EKG	Electro Cardio Gram
EMEA	European Medicines Agency
EPI	Expanded Program for Immunization
EMRO	Eastern Mediterranean Regional Office
EU	European Union
ESU/P	Epidemiological Surveillance Unit/ Program
FCTC	Framework Convention on Tobacco Control
FDA	Food and Drug Administration
FFC	Fairness of Financial Contribution
FOB	Free On Board
FPH	Faculty of Public Health
GAFTA	Greater Arab Free Trade Area
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tarifs and Trade
GC	Gini Coefficient
GCC	Gulf Cooperation Countries

GMP	Good Manufacturing Practice
GDP	Gross Domestic Product
GIS	Geographic Information System
GOL	Government of Lebanon
GSF	General Security Forces
HAS	Haute Autorité de Santé
HFC	Health Financing Contribution
HHOOP	Households Health Out-of-Pocket
HHUES	Household Health Utilization and Expenditure Survey
Hib	Hemophylus influenza b
HIV	Human Immune Deficiency Virus
HSRP	Health Sector Rehabilitation Project
IBRD	International Bank for Reconstruction and Development (the World Bank)
ICD10	International Classification Disease, tenth version
ID	Identification Data
IHR	International Health Regulations
IMF	International Monetary Fund
IMS	International Medical Statistics
INSEE	Institut National des Statistiques et des Etudes Economiques
IP	Intellectual Property
IRB	Interface and Resource Bodies
ISF	Internal Security Forces
ISO	International Organization for Standardization
IT	Information Technology
KSA	Kingdom of Saudi Arabia
LDCs	Least Developed Countries
LOP	Lebanese Order of Physicians
LBP	Lebanese Pounds
LRC	Lebanese Red Cross
LU	Lebanese University
MCOs	Managed Care Organizations
MCV	Measles Containing Vaccine
MENA	Middle East and North Africa
ML	Mount Lebanon
MOD	Ministry of Defense
MOE	Ministry of Education
MOET	Ministry of Economy and Trade
MOPH	Ministry of Public Health
MOSA	Ministry of Social Affairs

MMR	Measles Mumps Rubella
MRI	Magnetic Resonance Imaging
MS	Military Schemes
NAP	National Aids Control Program
NCD	Non Communicable Disease
NCPNN	National Collaborative Perinatal Neonatal Network
NGOs	Non Governmental Organizations
NHA	National Health Accounts
NHHEUS	National Households Health Expenditure and Utilization Survey
NICU	Neonatal Intensive Care Unit
NID	National Immunization Days
NL	North Lebanon
NSSF	National Social Security Fund
OECD	Organization for Economic Cooperation and Development
OOP	Out-Of-Pocket
OP	Orders of Physicians
OPV	Oral Polio Vaccine
PAPCHILD	Pan Arab Project for Child Health
PAPFAM	Pan Arab Project for Family Health
PHC	Primary Health Care
PP	Prepayment
PPP	Purchasing Power Parity
QRP	Quality Related Payment System
RED	Reaching Every District
RH	Reproductive Health Program
RHUH	Rafic Hariri University Hospital
SDS	Standardized Discharge Summary
SHIP	Social Health Insurance Program
SL	South Lebanon
SPH	Syndicate of Private Hospitals
SPS	Sanitary and Phyto Sanitary agreement
SSF	State Security Forces
TB	Tuberculosis
TBT	Technical Barriers to Trade
TPA	Third Party Administrator
TRIPS	Trade-Related Aspect of Intellectual Property Rights
THE	Total Health Expenditures
TS	Technique Supérieur
TOR	Terms of Reference

UK	United Kingdom
UN	United Nations
UNFPA	United Nations Fund for Population Assistance
UNICEF	United Nations Children's Fund
UNSCR	United Nations Security Council Resolution
UNRWA	United Nations for Refugees Welfare Agency
USA	United States of America
USD	US Dollars
USJ	Université Saint Joseph
WB	World Bank
WHO	World Health Organization
WHR2000	World Health Report 2000
WIPO	World Intellectual Property Organization
WTO	World Trade Organization
WWII	World War Two
YMCA	Young Men Christians Association

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