

Chapter Six

ASSESSMENT AND PROSPECTS OF HEALTH STRATEGIES

The Ministry of Public Health has been implementing an ambitious health reform plan¹ 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 report² in 2003. That report exposed, among others, two major achievements: the political mapping³ 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,

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 financiers 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 survey⁴ 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⁾				
PHC network	3,493,400	18,492,600	850,000	74,015
Reproductive Health	8,049,600	12,074,400		750,967
Essential drugs⁽⁶⁾	1,418,880	5,594,400	75,000	104,480
Chronic Disease Drugs	3,000,000			404,248
AIDS program	4,875,000	43,128,595 ⁽⁷⁾		152,531
TB program	100,000		1,175,100	1,788
Pregnant & Infant	120,000		15,000	476
Project	195,000	184,364		17,450
Epidemiological	54,300			
Surveillance			600,000 ⁽⁸⁾	
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

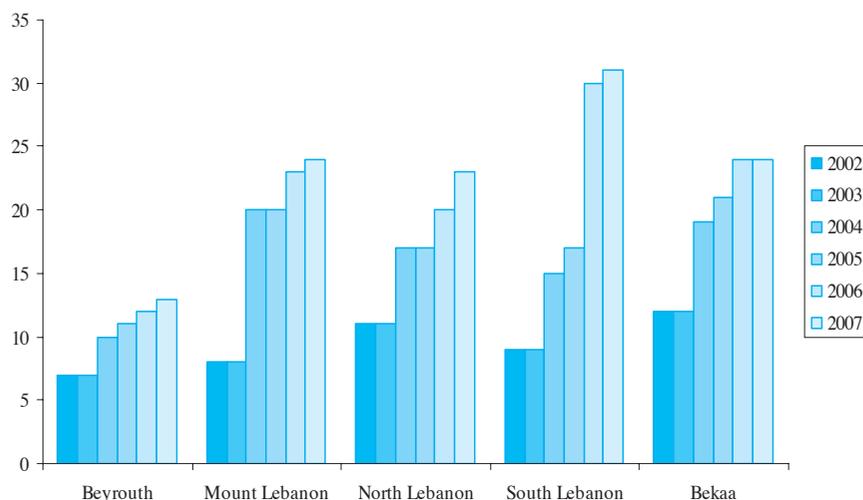
NGOs have developed their PHC facilities during the civil strife (1975-1989) to respond to the population health needs, especially those of the poor, in parallel to the weakening of government institutions. Factors that were behind their blossoming in war time were also responsible for their relative 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 children⁵, 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.

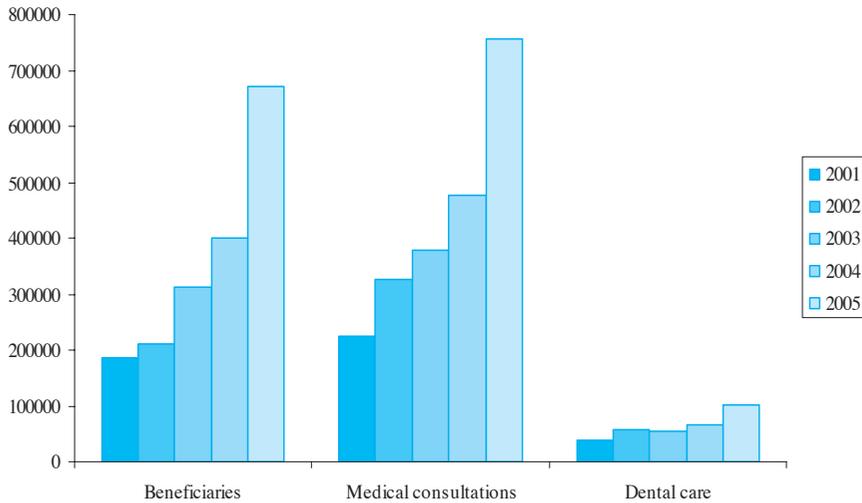
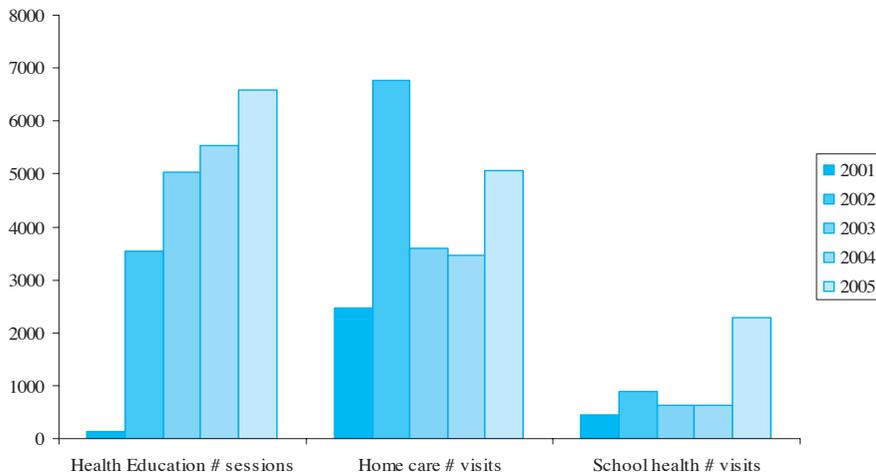


Fig VI-2: Number of beneficiaries of PHC services (National Network 2001-2005)

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 indicators⁶

	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 indicators⁷ (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‰ ⁰⁰⁰	1	3.20‰ ⁰⁰⁰
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 characteristics⁹. 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.

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 survey¹⁰ 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 studies¹¹ that neonatal (first 28 days) and early neonatal (first week) mortality constitute

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 financier. Over-doctoring is

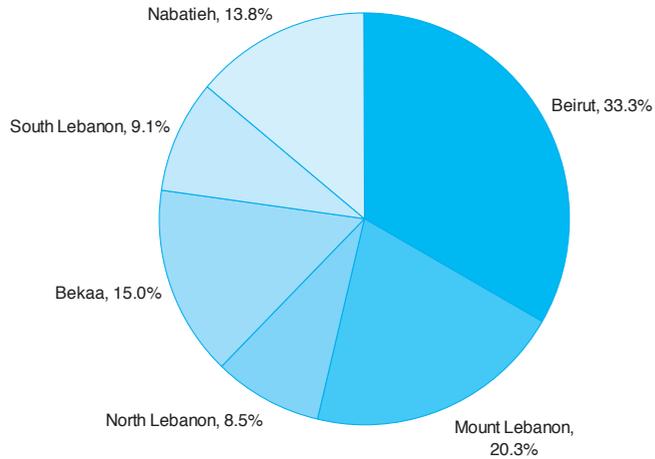
one example of inefficient use of resources, that is rather stimulated by the accreditation. Accreditation is also incriminated for increasing the cost of services, although this is true in some hospitals more than others. How well the patient is dealt with in terms of prompt attention and respect, is 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. In spite 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 tariffication, 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.

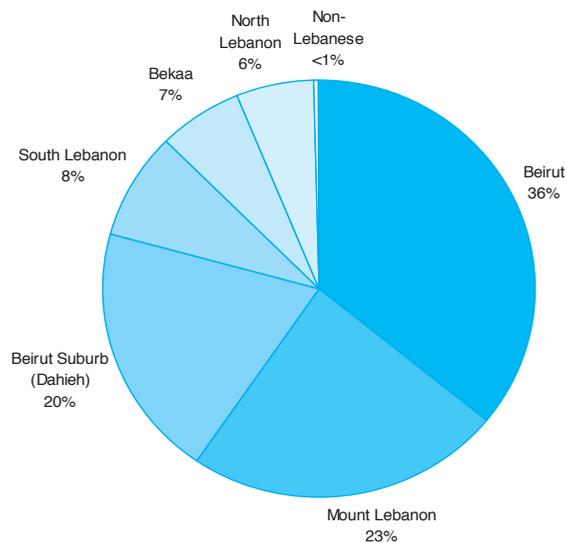
Public hospitals already have a significant impact on at least two levels. First, denying for any reason a medically justified hospitalization, is unlikely to happen any more. Private hospitals are known for selecting patients according to their medical conditions and their third-party payer indications,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

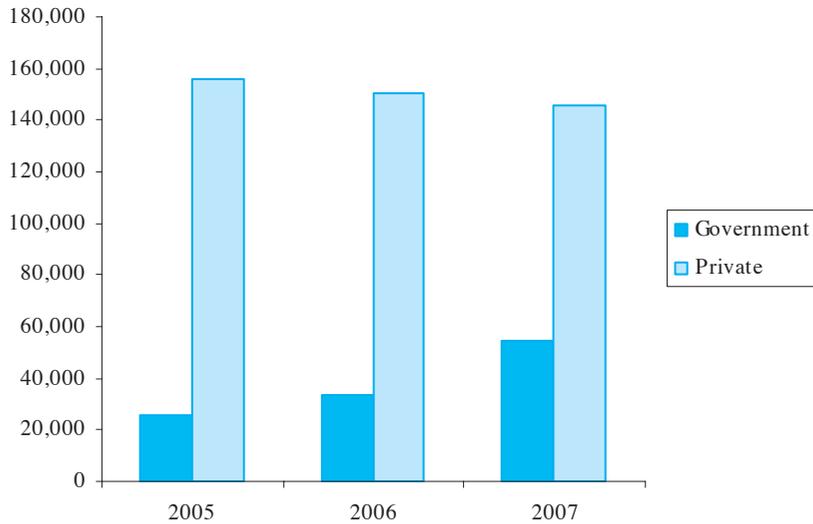
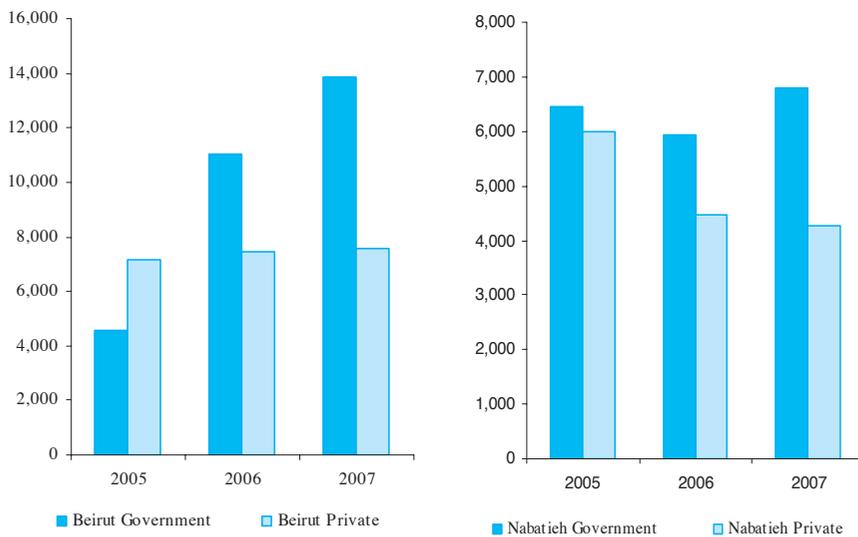


Fig VI-6: Admissions in private and public hospitals in Beirut and Nabatieh district 2005, 2006 and 2007



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 clientele 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.

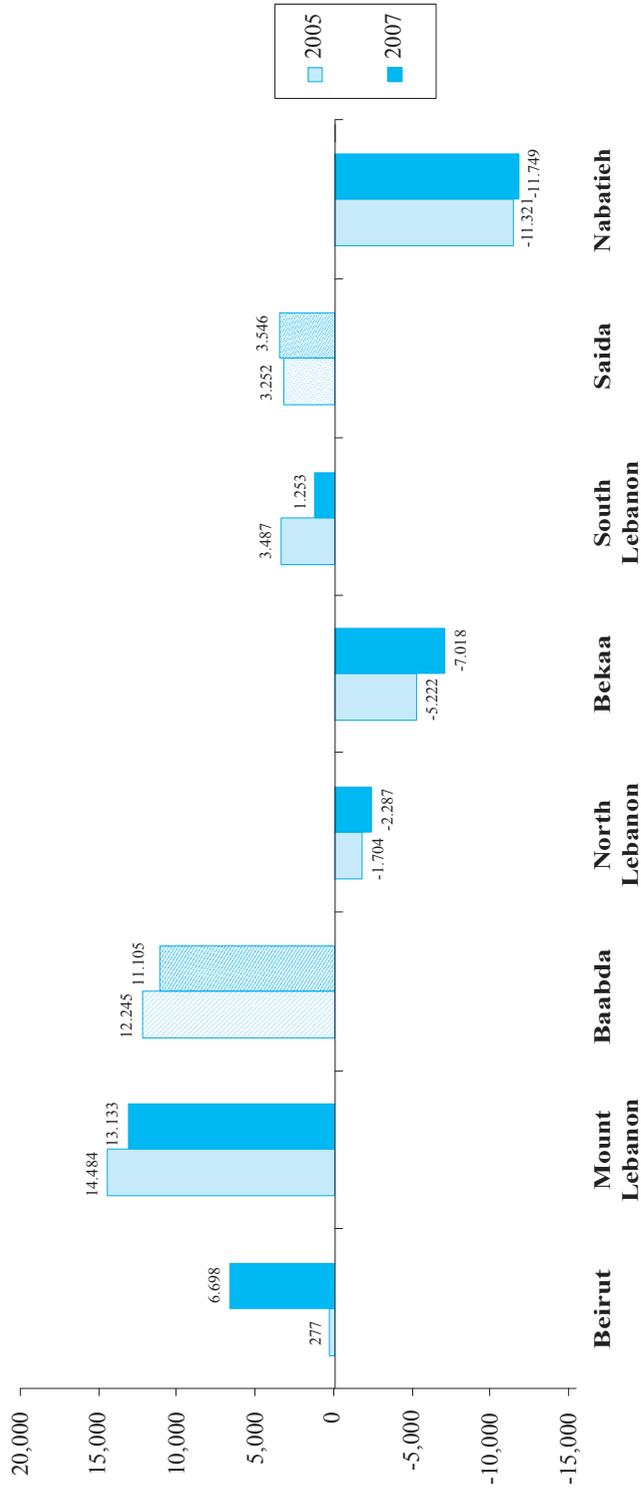


Fig VI-7: Movement of patients for hospital admission between mouhafazats and Saïda, 2005 and 2007

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

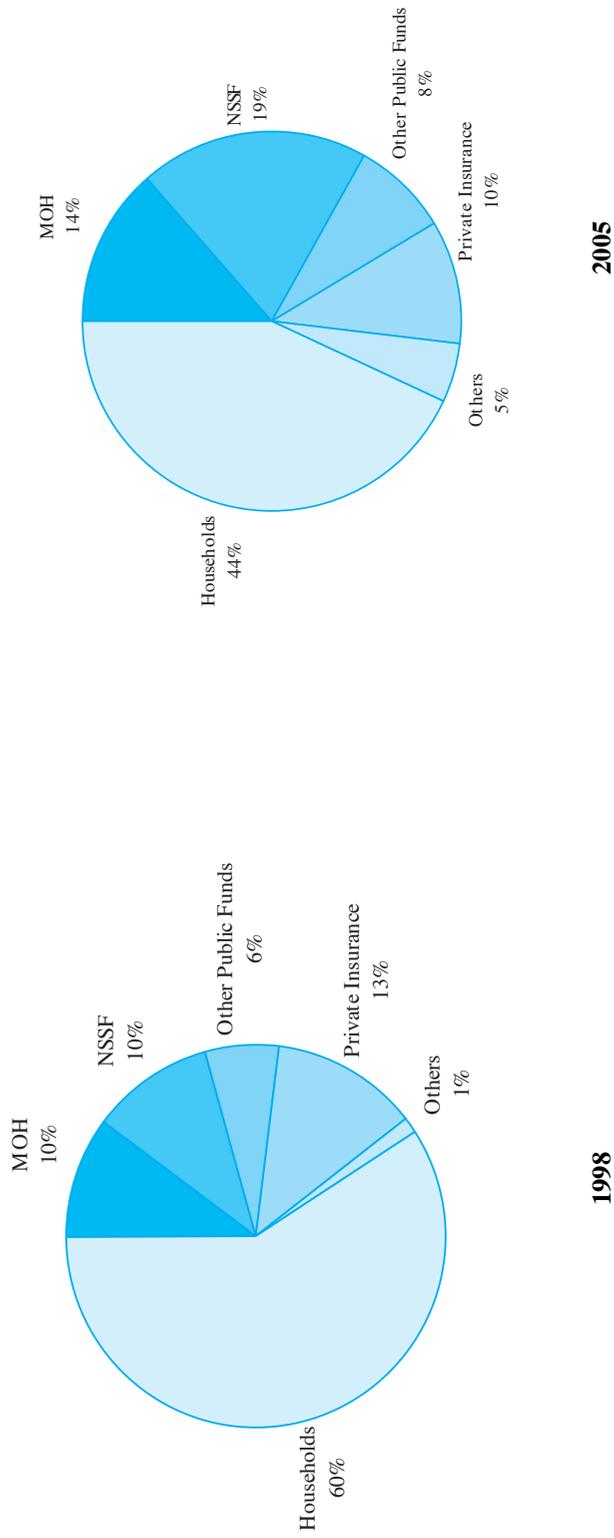


Fig VI-8: Shares of out-of-pocket and financing agencies in health expenditures 1998-2005

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).

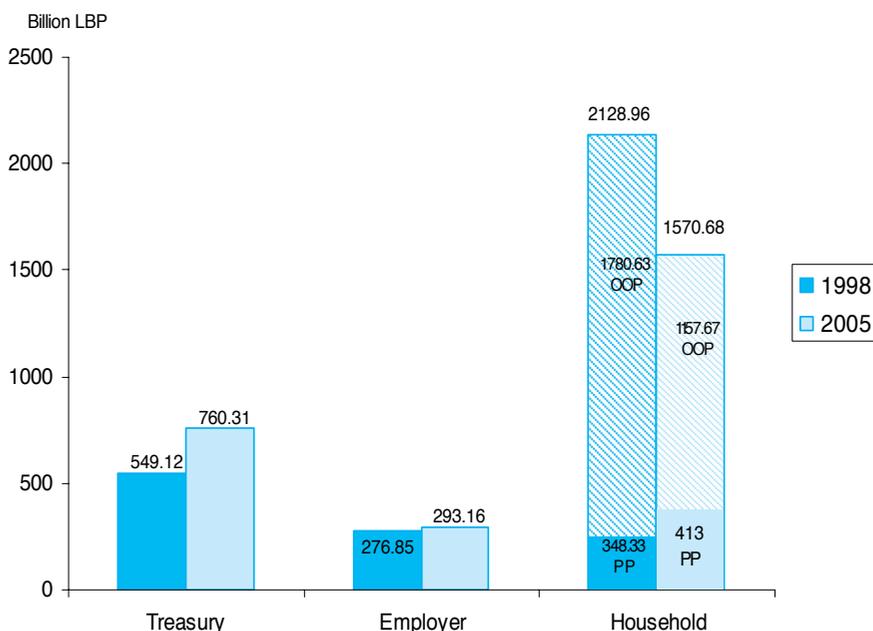


Fig VI-9: Distribution of health expenditures from treasury and private sources 1998-2005

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.

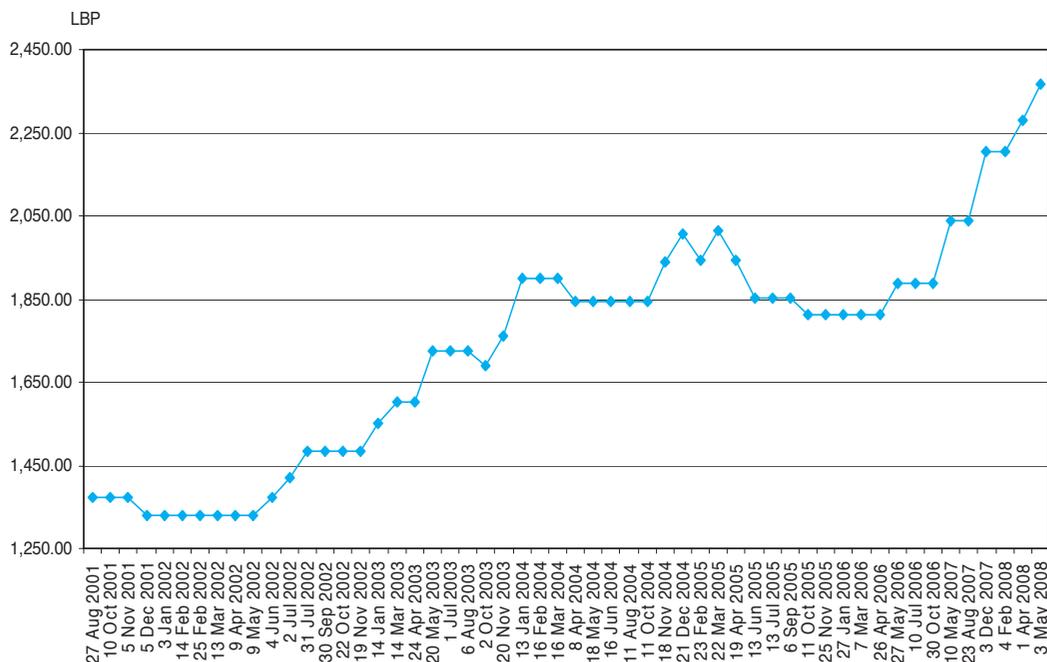


Fig VI-10: EURO exchange rates corresponding to price indexes issued by MOPH from August 2001 to February 2008

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 IMS¹³, 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 Euro¹⁴, these amounted to 351.5 million € in 2005 and 301.1 million € in 2007 with a decrease of 14.3%.

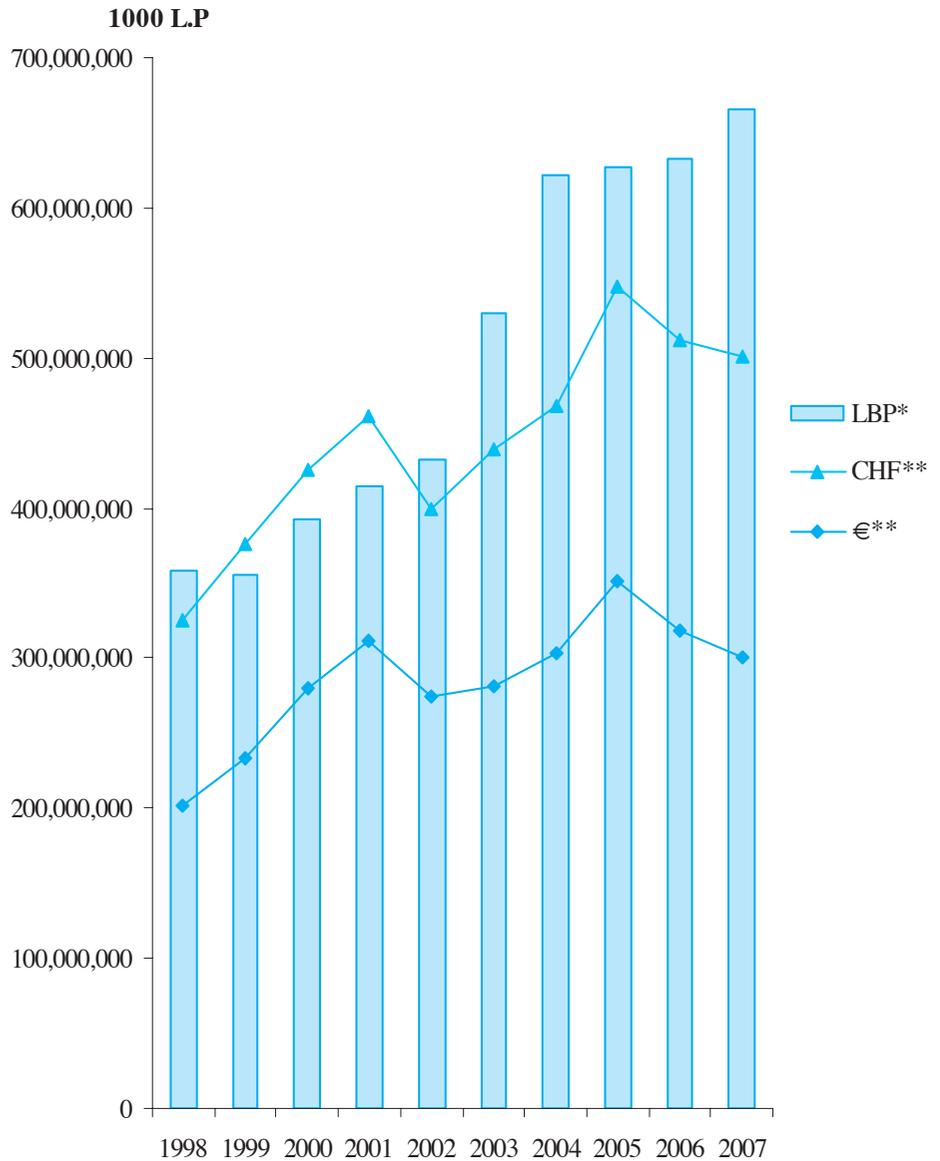
Fig VI-11 shows the impact of cost containment measures taken by the MOPH on pharmacy drugs sold in nominal LBP (the bars) compared to prices in Swiss francs (CHF) and € (the curves). This is revealed by a slowing down of the upward slope of price increases in LBP in 2005 and 2006. However, the CHF and € 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 decree¹⁶ 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 information¹⁷.

Article 39.3 of the TRIPS Agreement¹⁸ states that "Test data must be protected (only)¹⁹ if national authorities require its

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

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 shrunked 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 *laissez 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 health²³.

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 reform²⁴.

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

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.