Chapter Three

# FINANCING OF THE HEALTH SYSTEM

### 1- PUBLIC FUNDS COVERAGE AND EXPENDITURES

There are six employment based social insurance funds publicly managed in Lebanon, the largest one is the National Social Security Fund (NSSF) meant to cover all employees in the formal sector (private sector and government-owned corporations, in addition to contractuals and wage earners of the public administration). The Civil Servants Cooperative (CSC) covers the regular government staff. The remaining four funds cover the Military and Security Forces. CSC is under the tutelage of the presidency of the Council of Ministers and the others are overseen by three separate ministries other than MOH. It is worth noting that private insurances and privately-held Mutuality Funds are also under the tutelage of two separate ministries.

The Government allocates in the budget of the Ministry of Health special allotments for covering the uninsured population, with the aim of providing universal access to health services.

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Fund	Tutelage	Entitlement	Coverage	Financing
NSSF Maternity and sickness fund	Ministry of Labor	<ul> <li>Employees of the formal sector</li> <li>Contractual and wage earners of the public sector</li> <li>Employees of autonomous public establishments</li> <li>Teachers in public schools, taxi drivers, newspaper sellers, university students (physicians starting Feb. 2001)</li> </ul>	<ul> <li>Hospital care (90% direct payment to hospitals)</li> <li>Ambulatory care (85% reimbursement to user)</li> <li>Dental care (not implemented yet)</li> </ul>	<ul> <li>Employer: 12% of salary (7% starting April 2001)</li> <li>Employee: 3% of salary (2% starting April 2001)</li> <li>Government: 25% of total expenditures + the employer share for government contractuals and wage-earners</li> <li>+ Contributions for taxi drivers, students and newspaper sellers</li> </ul>
CSC Health fund	Presidency of the Council of Ministers	Regular staff of the public sector and dependents	<ul> <li>Ambulatory and dental care (75% reimbursement for employee 50% for family members)</li> <li>Hospital care (direct payment to hospitals 90% for the employee, 75% for family members)</li> </ul>	Government budget (of which 1% deduction of the payroll)
ARMY Medical brigade	Ministry of Defense	Uniformed staff members and their dependents	- Ambulatory and hospital care (100% for the member, 75% for the spouse and children, 50% for dependent parents)	Government budget

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

ISF, SSF, GSF Health departments	Ministry of Interior	Same	Same	Same
МОН	Ministry of Health	Uncovered Lebanese (Upon request)	<ul> <li>Hospital care (85% direct payment to hospitals, 15% copayment with some exemptions)</li> <li>Dispensing expensive drugs for catastrophic illnesses</li> <li>Providing vaccines and essential drugs to public and NGOs health centers</li> </ul>	Government budget
Private Insurance	Ministry of Economy and Trade	Voluntary enrollment	Variable	<ul> <li>Households (risk-based premiums)</li> <li>Employers and employees for complementary insurance</li> </ul>
Mutual Funds	Ministry of Agriculture	Voluntary enrollment	Variable	<ul> <li>Households</li> <li>Government subsidies; earmarked taxes for the judges mutual fund</li> </ul>

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The present system of multiple public funds is saddled with major defects. Of those, the overlapping of coverage and the shifting of eligible on the MOH burden represent serious problems. A meaningful number of adherents to the NSSF or the CSC have been submitting yearly "certificates of ineligibility" signed by both agencies, enabling them to benefit fraudulently from MOH's coverage. The MOH's coverage of 100% for some expensive interventions, like open-heart surgery was preferred over the 90% coverage of the NSSF. This problem was worsening with the extension of fully covered procedures. The extensions are decided at the discretion of the Minister of Health. Similarly, obtaining chemotherapy drugs for free from the Ministry's drugstore is a preferred option by an insured patient, instead of purchasing them from a private pharmacy, and getting 85% reimbursement by the NSSF and less by the CSC, several months later.

On the other hand, workplace injuries and occupational health are not included in the NSSF medical plan, and are covered instead by the MOH. Moreover, in case of health emergencies such as natural disasters, Israeli military attacks, or epidemics' outbreak, the MOH has to call upon private hospitals to treat hardshipped citizens, on the full charge of the Ministry, and can do so 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 more important and costly to satisfy. In addition, the citizens uncovered by the NSSF belong in general to the most deprived segments of the population, such as seasonal workers, farmers, retired and unemployed persons. Consequently the MOH welfare fund covers on average an older and poorer population. This means that higher hospitalization rates and average length of stay, and more complicated and expensive interventions are to be expected.

According to the 1999 National Household Health Expenditure and Utilization Survey<sup>1</sup> (NHHEUS), 45.9% of the

population was covered by one or more public or private insurance. The insured were distributed as follows: 38.8% covered by the NSSF, 9% by the CSC, 17.6% by military schemes altogether, 18% by private insurance (of whom 5.4 % for complementary insurance), 4.1% by Mutuality Funds, and 12.5% by various other funds including UNRWA's fund for Palestinian refugees. In that survey, 52.3% of residents declared being uncovered. Uncovered Lebanese are entitled to MOH coverage regardless of their ability to pay.

The NSSF main sources of financing are contributions proportional to salaries. In 1992, these contributions were set for different NSSF plans in the following manner: 15% of the salary paid by the employer for family allowances, 8.5% paid also by the employer for end of service indemnities, and 15% for medical insurance shared between the employer (12%) and the employee (3%). The medical plan benefits also from state's subsidies by 25% of its accrual expenditures<sup>2</sup>.

In March 2001<sup>3</sup>, the contribution was lowered to 6% for family allowances. Medical insurance was lowered to 9%, shared respectively between the employer and the employee by 7% and 2%. The maximum deductible sum for these contributions, was set at 1,500,000 L.P. The contribution for end-of-service indemnities was kept at 8.5% with no maximal ceiling.

As a result the NSSF revenues have been reduced significantly. At the same time dental care was added to the benefits basket, but the related decree (# 5104), which was supposed to become effective as of July first 2001, is still not implemented at the time of publication of this book.

Up till March 2002, the Ministry of Public Health had been contracting for general coverage with almost all private hospitals operating in the country<sup>4</sup>. According to the contract, a predetermined number of beds are reserved for patients referred by MOH, with prior authorization. The limited number of beds

assigned to each contracted hospital was supposed to contain costs under a certain ceiling.

Agency	% of residents	Number of adherents	Total number of beneficiaries (Adherents + dependents) or eligible	Remarks
NSSF	17.8	252 798	712 890	
CSC	4.5	55 283	180 225	
Military schemes	8.1	103 976	324 405	
Private insurance only	8.3	332 415	332 415	0.7% have more than one private insurance (n=28035). The number of private insurance policies alone = $360450$
(Private insurance complementary)	(2.5)	(100 125)	( 100 125)	Total number of private insurance policies=460 575
Mutual Funds and municipalities	2.3	92 115	92 115	
Other schemes	5.1	204 255	204 255	Including Lebanese and foreigners
МОН	48.3	-	1934 415	Eligible to MOH coverage not necessary benefiting all from its services
Others	5.6	-	-	Uncovered non Lebanese 224 280
Total	100	1 140 967(1)	3880 845(2)	4005 000(3)

Table III-2: Distribution of residents by covering fund according to their eligibility

(1) Lebanese and non Lebanese enrolled in one or more public or private insurance.

(2) Insured or eligible for MOH coverage

(3) Total number of residents in Lebanon

The MOH drugstore dispenses expensive drugs free-ofcharge directly to the uninsured citizens suffering from cancer, mental illness, multiple sclerosis, and other dread diseases. The MOH provides also vaccines and essential drugs to public and NGOs health centers. In return those centers are required to provide vaccines free of charge while they are allowed the collection of nominal user fees for consultations and essential drugs.

In addition to being largely inclusive about eligibility, the MOH has been consistently expanding its coverage over a growing basket of services. As a consequence, the MOH expenditures on hospitals have more than doubled in nominal dollars during the last decade.



From MOH's expenditures on curative care, 30 % go to cover only three specific health problems: kidney dialysis and transplant, cancer treatment and open-heart surgery. These services were added in 1992 to the coverage basket and were until recently, reimbursed at 100%.

Consequently, 78% of the MOH budget is spent on the hospitalization of 3.2% of the population, of whom 0.2% benefits from 23% of the budget for the three health problems mentioned above<sup>5</sup>.

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Budget items (1000 L.P.)	1994	1995	1996	1997	1998	1999	2000	2001
Salaries and indemnities	11,623,465	13,141,246	15,521,042	14,252,340	15,600,000	18,504,000	18,465,000	26,248,000
Drugs	7,493,945	12,559,985	14,658,936	20,300,000	21,150,000	22,042,000	23,042,000	29,326,000
Contributions and support to NGOs	4,252,000	5,240,000	4,723,000	11,519,548	9,654,000	7,491,000	7,641,000	9,117,000
Hospital care (short and long stay)	106,133,000	131,767,000	162,360,000	195,413,512	187,000,000	186,258,000	205,335,000	226,000,000
Others	10,567,039	19,716,750	13,817,736	9,287,835	17,184,000	10,582,000	21,369,000	20,238,000
Total	140,069,449	182,424,981	211,080,714	250,773,235	250,588,000	244,877,000	275,852,000	310,929,000
Total (USD)	83,374,672	112,538,540	134,360,730	162,945,570	165,295,000	162,439,000	179,669,000	206,254,000

 Table III-3: Ministry of Public Health recurrent expenses<sup>(1)</sup>. Accrual Accounting (1994-2001)

(1) Part 1 of the budget excluding the Central Laboratory budget

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At the end of 1997, the MOH introduced a flat rate reimbursement method for some surgical procedures, and a copayment of 15% for open-heart surgery and organ transplantation. The impact of these measures was remarkable on the 1998 and 1999 MOH expenditures as shown in figure III-1. Unfortunately, this effort was over-shadowed by the steep increase in the number of contracted beds in 2000, as will be explained later. It is worth mentioning that those unable to pay the 15% co-payment for any type of hospital care can apply for an exemption. Discretionary waivering is decided by the Minister.

All public agencies contract out with the private sector for hospital care. About 85 to 90% of the bill is charged to the concerned agency, and paid directly to the hospital. The billing is made according to a basic tarification, set by the MOH and the NSSF for 3rd class hospitalization. Officers and civil servants of the 2nd and 1st categories are entitled for special treatment at a higher fee. Outpatient services are paid by the patient who would be reimbursed after submission of required documents.

Financing agency <sup>(a)</sup>	Number of	Expenditures <sup>(d)</sup>	Expenses per be	neficiary <sup>(e)</sup>
	beneficiaries <sup>(c)</sup>	(1000 L.P.)	L.P.	USD
MOH <sup>(b)</sup>	1,934,415	208,150,000	108,000	71
NSSF	712,890	197,400,000	277,000	183
CSC	180,225	44,511,000	247,000	163
AF	260,000	58,467,000	225,000	148
ISF	53,000	37,000,000	698,000	460
GSF	9,000	5,600,000	622,000	410
SSF	2,405	2,288,000	951,000	627
TOTAL	3,151,935	553,416,000	175,580	116

Table III-4: Public expenditures on health services provided by the private sector (1998) (1 USD = 1516 L.P.)

Sources: Financing agencies for expenditures, NHHEUS for beneficiaries numbers.

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

b) For the MOH; uncovered Lebanese are considered beneficiaries, expenditures include drugs and hospital care.
c) NHHEUS: The number of beneficiaries includes adherents and their dependents.

*d) Covering hospital and ambulatory care except for MOH-paid coverage.* 

e) Administrative costs excluded.

The disbursement of MOH per uncovered citizen for hospital care was 71 USD in 1998. For all public funds, the average disbursement to private providers (including hospital and ambulatory care and excluding administrative costs) was 116 USD per beneficiary.

Mutuality Funds represent a small share of the market, covering 2.3% of the population in 1999. Some are complementary to other insurance schemes covering only the co-payment. Some others receive subsidies from the Government (table III-5). These amounted to 20.66 million USD in 1998, with more than 50% devoted to cover health services.

Table III-5: Government subsidies for Mutual Funds (in 1000 L.P.) (1998)

Source of Financing	Mutual Fund for Members of Parliament	Mutual Fund of the Parliament employees	Mutual Fund for judges	Mutual Fund for the Lebanese University professors
Regular Government Budget	9,100,000	1,820,000	6,550,000	13,000,000
Ear-marked taxes			848,392	

Source: Ministry of Finance

The separation between financing and provision of health care, the fragmentation and overlapping of sources of funding, in addition to weak institutional capacity, turn the control on cost and quality into a very complex task for financing agencies.

The average hospitalization rate of the population covered by public funds including the MOH welfare fund is 9.6%, and the average length of stay is 3.8 days. The cost per admission and per hospitalization day is highest for Civil Servants Cooperative and the General Security Fund. The average cost of hospitalization day is almost the same for MOH and the NSSF, and is around 170 USD per bed/day. The average cost per admission is less expensive for the latter because the length of stay is shorter. In comparison to other agencies, the MOH covers an older population, which explains partly the longer average length of stay.

Financing Agency	Hospitalization rate (% of eligible)	Average Length of Stay (days)	Average cost per admission (1000 L.P.)	Average cost of bed-day (1000 L.P.)	
MOH	8.44	4.25	1111	261	
NSSF	9.20	3.98	976	245	
CSC	7.3	4.09	1319	323	
AF	12.8	3.88	1132	292	
ISF	29.49	3.91	1043	267	
GSF	13.07	3.53	2059	583	
SSF	30.95	3.08	1208	392	
TOTAL	9.65	3.82	1264	338	

 Table III-6: Hospitalization rates and average costs by financing agency

 (1998)

#### Table III-7 : Accrual public expenditures breakdown (1998) (1 USD = 1516 L.P.)

	МОН	NSSF	CSC	Army	Security Forces
Private in-patient care (1000 L.P.)	187,000,000	107,700,000	24,200,000	50,094,000	28,950,000
Ambulatory services (1000 L.P.)	26,652,125(1)	89,700,000	19,800,000	18,747,000	15,938,000
Public hospitals total cost (1000 L.P.)	16,604,863	_	_	_ (2)	_
Administrative costs for medical coverage (as insurer) (1000 L.P.)	3,877,493	40,403,000	2,300,000	17,780,000 <sup>(3)</sup>	3,000,000
Total (1000 L.P.)	234,134,481	237,803,000	46,300,000	86,621,000	47,888,000
Total (US Dollars)	154,442,269	156,862,137	30,540,897	57,137,862	31,588,390
Cost per beneficiary (USD)	$80 + 6^{(4)}$	224	176.5	220	464.5
Administrative Costs (%)	1.7	16.9	4.96	20.5	6.3

(1) Including drugs for dread disease.

(2) The Military Hospital was closed in 1998 for rehabilitation.

(3) Salaries and other administrative costs of the Military Hospital amounted to 7 billion L.P.., and are not included even though they have been disbursed.

(4) MOH public health activities (14,447,700) and administrative costs of general services (19,162,000) go to the benefit of all citizens, and cost 6 USD per person.

Being the insurer of last resort for the most disadvantaged, the MOH contributes to some extent to solving accessibility and equity problems, as confirmed by both the Health Expenditure Survey conducted in 1995<sup>6</sup>, and more recently by the 1999 NHHEUS.

The MOH spent on private and public hospital care and ambulatory services, 234.13 billion L.P. (1998) including administrative costs. This went for ensuring medical coverage of 1.9 million eligible citizens, which represents an average of 80 USD per uncovered citizen. It is worth noting that although the uninsured are eligible for MOH coverage, many of them do not seek MOH services for different reasons. In addition, the MOH spent 33.6 billion on public health activities and general services, to the benefit of all the 3,720,645 Lebanese citizens'. This represents an additional 6 USD per citizen. Data collected showed great variations in administrative costs, a fact that requires more investigation. The lowest administrative cost was 1.7% for the MOH, followed by 4.96% for the CSC. This is due mainly to the meager salaries of civil servants. Apart from military schemes, the highest administrative cost was for the NSSF, (16.9%). The rather high administrative cost of the Army medical fund (20.5%) should be examined more thoroughly, as it may be due to over-staffing, of the entire Medical Brigade. The very high cost per beneficiary for the Security Forces Funds, 464.5 USD, should also be analyzed and may be largely attributed to inefficiency.

The mean cost per beneficiary for public funds is 220 USD, compared to 80 USD per eligible uninsured citizen for the MOH. The share of inpatient coverage (hospital bills) is 52.7% for the public funds, and 80% for MOH.

The NSSF's average cost for medical insurance is 224 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 much higher cost of private insurance, where the 1998 average gross premium per person-year was 474 USD<sup>8</sup>.

## **2-PRIVATE INSURANCE**

Private insurance companies are taking full advantage of the system for selecting younger and better off clientele ("cream skimming"). The chronically ill patients (diabetes, heart diseases, renal failure, cancer, ...) are discouraged by prohibitive premiums to join the private insurance. Most of the times expensive interventions (open-heart surgery, chemo and radiotherapy, transplantation, dialysis,...) are excluded and their burden ends up being shifted on the MOH.

Figuring the private insurance market's share in Lebanon needs complicated calculations and a triangulation of information from different available sources. The household survey provides data on proportions of people holding a private insurance alone "CO-NIL" or in combination with an NSSF coverage "CO-NSSF" and gives an estimate on premiums paid, out-of-pocket (OOP) totally or partially. On the other hand, estimation of premiums averages for "CO-NIL" and "CO-NSSF" policies can be derived from data provided by a Third Party Administrator (TPA) known to have a large share in the private insurance market. From the same source, information can be sorted out on proportions and average premiums for covering hospitalization alone or in combination with ambulatory care. Cross-tabulation of these different types of data allows a fair estimation of the number of different types of coverages and their incurred cost. For the sake of consistency, a comparison should be done between total amounts obtained and global budgets provided by the Private Insurance Association and the Ministry of Economy and Trade. Under declaration of private insurance revenues should also be taken into account through a comparison with totals derived from the household survey.

According to private insurance companies budgets published by the Ministry of Economy and Trade, subscriptions in 1996 amounted to a total of 244.3 million USD, representing a 10.26% increase compared to 1995. It is estimated that 25% of subscriptions are undeclared<sup>9</sup>.

Based on fiscal records, private insurance revenues in 1997, excluding life insurance premiums that are exempted from

taxation, amounted to 266,386,000 USD<sup>10</sup>. The total subscriptions estimate of the Private Insurance Association for 1997 amounted to 350 million USD.

The Household Living Conditions 1997 survey revealed that 14.8% of households were paying for private insurance. The average share by household amounted to 1,719,000 L.P. which adds up to a total of 228,155,994,000 L.P.<sup>11</sup>. This figure does not include the contribution of the employer to plans complementary to the NSSF coverage.

According to the 1999 NHHEUS, 8.3% of residents adhered only to private insurance; among them 0.7% held more than one policy, whereas 2.5% declared having a private insurance as complementary to the NSSF coverage. The calculation done for 1998 gives a number of private insurance policies of 360,450 for full coverage and 100,125 for complementary coverage.

In 1998, the NHHEUS revealed that households had paid 199,193,271 USD for private insurance. This amount includes contributions to Mutual Funds and excludes the employers share.

Considering the number of private insurance enrollees provided by the NHHEUS, and their distribution between complete and complementary coverage, the projection of total private insurance premiums for 1998, based on the average MedNet premium for these two categories, is 248,029,707 USD. This figure excludes contributions to Mutual Funds but includes the employer share's in premiums. MedNet is one of the largest TPA currently performing on the insurance market in Lebanon.

It is worth mentioning that this bottom-up method of calculation provides a different estimate of private insurance premiums than that of the published 1998 National Health Accounts where an estimation of 220,236,170 USD was obtained following a top-down approach.

#### Table III-8: 1998 Private Insurance Gross Premiums

	Private Insurance alone		Private Insurance complementary to NSSF		TOTAL	
	# Policies <sup>(1)</sup>	Gross Premium USD <sup>(3)</sup>	# Policies <sup>(2)</sup>	Gross Premium USD <sup>(3)</sup>	# Policies	Gross Premium USD
Covering hospitalization only	125,797	64,533,861	81,902	14,906,164	207,699	79,440,025
Covering hospital and ambulatory care	234,653	164,726,406	18,223	3,863,276	252,876	168,589,682
TOTAL	360,450	229,260,267	100,125	18,769,440	460,575	248,029,707

(1) Distribution of private insurance alone policies by type of coverage derive from the NHHEUS where 34.9% of private insurance policy holders declare covered for hospitalization only.

(2) Distribution of complementary private insurance by type of coverage is based on MedNet percentages.

(3) Based on the calculation of the average gross premium per "person-year" derived from 1998 MedNet statistics.

#### Table III-9: 1998 Private Insurance Expenditures (USD)

	Private Insurance alone		Private Insurance compl NSSF	TOTAL	
	Average burning cost per "person-year" <sup>(1)</sup>	Amount <sup>(2)</sup>	Average burning cost per "person-year" <sup>(1)</sup>	Amount <sup>(2)</sup>	
Hospital Care	272	34,216,784	97	7,944,494	42,161,278
Hospital and ambulatory care <b>TOTAL</b>	474	111,225,522 <b>145,442,306</b>	138	2,514,774 <b>10,459,268</b>	113,740,296 155,901,574

(1) MedNet Liban Health Insurance Portfolio, 1998.

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(2) The amount calculation is based on the number of policies as estimated in table III-8.

# Table III-10: Annual Household Expenditures (%) by spending item (last three months) and by mohafazat (1998-1999)

Items	Beirut	Beirut Suburbs	Mount Lebanon	North Lebanon	South Lebanon	Nabatieh	Bekaa	Total Lebanon	Annual (1000 LL)
Food	30.9	30.7	30.1	32.6	33.2	32.2	32.6	31.4	5825
Clothing	4.9	4.9	4.9	5.8	5.8	6.9	5.7	5.3	985
Personal care	5.3	4.8	4.5	5.6	5.8	6.2	6	5.2	969
Rent	3	2.8	1.1	1.2	1.5	0.6	1.2	1.8	340
Energy, Water, Telephone	9.6	8.7	10.1	9.3	8.4	7.1	9.5	9.2	1699
Maintenance/Repair	2.1	2.2	3.9	2.6	2.1	2.9	1.3	2.5	468
Assets	1.1	2.5	2.4	1.8	3.4	2.4	1.2	2.1	395
Transport	6.1	7.6	8.5	8.1	8.4	6.9	8.3	7.7	1435
Education	13.4	12.2	11.2	11.7	9.7	11.8	10.8	11.7	2163
Health care	12.7	14	15.4	13.7	12.3	13.9	15.7	14.1	2609
Leisure	5.6	5.6	4.6	4.4	6	5.1	4.2	5.1	942
Miscellaneous	5.4	4.1	3.4	3.2	3.5	3.9	3.5	3.9	721
Total	100.1	100.1	100.1	100	100.1	99.9	100	100	18551

#### **3-HOUSEHOLDS SPENDING**

The yearly total spending of households (1998-1999) amounted to an average of 18,550,000 L.P. by household, where 14.1% (2,609,000 L.P.) were spent on health. Spending on health is ranked second after food (31.4%). The average per capita out of pocket health expenditure amounted to 520,000 L.P. (343 USD) with the following distribution by age group: less than 5: 297,000 L.P., 5 to 14: 217,000 L.P., 15 to 59: 469,000 L.P. and for 60 years and above: 846,000 L.P.

15.2% of household spending on health goes for the direct purchasing of drugs. Considering that pharmaceuticals represent 20% of the hospital bill, and 11.6% of ambulatory expenses, their share would then be 21.5% of the household health expenditures.

Mohafazat	Insurance	Hosp. > 24h	One day hosp	Dental care	Ambulatory care	Pharma- ceuticals (direct purchasing)	Total
Beirut	22.9	6.9	1.5	16.6	35.3	16.8	100
Beirut Suburbs	18.5	10.6	1.1	22.5	32.6	14.7	100
Mount Lebanon	15.5	10	2	26	36	10.6	100
North Lebanon	11.6	7.7	1.4	19.8	43.1	16.3	100
South Lebanon	9.8	13.2	3.6	16.9	41.9	14.5	100
Nabatieh	4.5	10.4	2.2	22.5	39.2	21.2	100
Bekaa	6.7	13.6	1.4	23.8	35	19.5	100
Total	14.5	10.1	1.7	21.8	36.7	15.2	100

 Table III-11: Distribution of annual household spending on health by

 mohafazat and by health spending category (%)

In the 1999 NHHEUS, the average yearly household spending on health was 520,000 L.P. per capita, representing a 40% increase from that of the 1997 Households Living Conditions. It is most unlikely for such an increase to occur over a 2-year period. In all likelihood, household spending on health may

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have been under-estimated by the 1997 Living Conditions survey, and over-estimated by the 1999 survey that focused on health.

# 4-GLOBAL EXPENDITURES ON HEALTH AND SOURCES OF FINANCING

The 1998 national expenditures on health in Lebanon was estimated at 1,987,808,565 USD, representing 12.4% of the GDP. This GDP share exceeds that of countries with a comparable socioeconomic level. It is more likely similar to the OECD countries.

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Total Population	4,005,000
-	
Total Health Expenditure	3,013,517,785,000 L.P. (1,987,808,565 USD)
Per Capita Expenditure	752,438 L.P. (496 USD)
Total GDP	24,300,000,000,000 LL (16,200,000,000 USD)
Health Expenditure as Percent GDP	12.4%
Percent G.O.L. budget allocated to health	6.6%
Sources of Funds	
Public	18.22%
Private	
Households	70.65%
Employers	9.19%
Donations and Loans	1.94%
Distribution of Health Care Expenditures	
Public Hospitals	1.7%
Private Hospitals	22.8%
Private Non-Institutional Providers	41.0%
Pharmaceuticals	25.4%
Others	9.1%

Table III-12 summarizes the NHA main findings. Overall, public sources accounted for 18.22% and private sources for 81.78% of health care financing. International financing in loans and donations accounted for the remaining 1.94%.

The proportion of government budget allocated to the health sector was 6.6%. MOH spending on equipment and physical rehabilitation (part 2 of the MOH budget) is taken into account (table III-13), whereas public investment in building and

equipping new hospitals and health centers covered by loans and donations is not included. This extra budgetary financing does not constitute over years an important percentage of the total public spending. However, the public budget will certainly incur a tremendous operating cost, once they become functional.

In terms of total expenditures' distribution, public sector providers account for less than 2%, while private sector providers account for more than 60%. Spending on pharmaceuticals alone exceeds 25% of the total.

Out-of-pocket fee-for-service payment represents 59% of total health expenditures. Adding their contributions to public funds and premiums for private insurance, the total share of households reaches 70.65%. Employers contributions represent only 9.19% of the total.

Funding from tax sources are disbursed through various public agencies as follows: MOH 47.6%, NSSF 15.2%, Army 15.8%, CSC 9.7%, Security Forces 8.8% and Mutual Funds 2.9% (fig III-3).



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On the other hand, the breakdown of private financing (fig III-4) shows the relatively small contribution of employers (11.52%), compared to households contributions (88.48%).

If we compare the total health expenditures of 1997, calculated based on the "Households Living Conditions Survey" data that gives an estimate of 2,553,708,455,000 L.P.<sup>12</sup>, to those of 1998 based on the NHHEUS data of 3,013,517,785,000 L.P., the nominal increase would be of about 18%, which is 10.9 points higher than the GDP nominal growth  $(7.1\%)^{13}$  for the same period. However, this should be considered carefully, with the reservations made previously on the comparability of the two surveys estimates.

Finally, it is of relevance to make a reference to a recent note<sup>14</sup> of the "French National Institute for Statistics and Economic Studies" (INSEE), assigned by the G.O.L. for setting Lebanese National Accounts. In this note, INSEE considers that GDP figures set since 1997 have been underestimating the volume of the Lebanese economy by 20 to 25%. The INSEE considers that the service industries should be better represented, and that more pertinent aggregates, such as Gross National Income that integrates foreign transfers, should be calculated to reflect better the Lebanese economy. Accordingly, the 1998 GNP share of total health expenditures may become around 10%.

As shown in table III-14, in comparison with other Middle East and North Africa (MENA) countries where a National Health Accounts study was carried out, Lebanon lies in the higher end of the spectrum in terms of GDP and GDP per capita. Lebanon per capita health expenditures, are much higher than the MENA average. Moreover, the GDP share of health expenditures is even higher than the OECD average. In contrast, public expenditure as a percentage of total health spending in Lebanon is not high in comparison with other countries in the region.

# Table III-13: Distribution of financing sources and health expenditures by funding agency and households (1000 L.P.)

		ACCRUAL EXPENDITURES				
AGENCY	Households		Employer	Treasury	Extra budgetary	Disbursement (Adm.cost + surplus)
	Fees for Services	Contributions/ Premiums	Contributions/ Premiums		Donations / Loans	
МОН	_	_		261,279,802	49,639,500	287,880,419 (23,038,883)
MOSA+MOD	_		_	230,000	1,213,500	1,443,500
NSSF	_	46,358,000	185,432,000	83,734,000	_	237,740,000 (77,784,000)
CSC	_	_	_	53,091,642		50,791,642 ( 2,300,000)

TOTAL	1,780,623,000	348,335,000	276,848,265	549,118,520	58,593,000	3,013,517,785
Households	1,780,623,000	_	_	_		1,780,623,000
NGOs	_	—			7,740,000	7,740,000
Mutual Funds	_	17,380,230		15,659,196		33,039,426
Private Insurance		284,596,770	91,416,265	_		236,346,786 (139,666,249)
SF		—	—	48,502,970	—	45,502,970 ( 3,000,000)
Army		—		86,620,910	—	68,840,910 (17,780,000)
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01 GDP						
	GDP per capita	Health Expenditure	Health Expenditures as percentage of GDP			
Country or Region	(USD)	(per capita USD)	Total	Public Sources	Private Sources	
Yemen (1997)	449	19	5.0	1.5	3.5	
Egypt (1998)	1,016	38	3.7	1.6	2.1	
Morocco	1,241	49	4.0	1.3	2.7	
Jordan	1,475	136	9.1	5.2	3.8	
Iran	1,776	101	5.7	2.4	3.3	
Tunisia	2,001	105	5.9	3.0	2.9	
Lebanon (1998)	4,045	499	12.4	2.3	9.9	
Middle East & N. Africa (1994)	5,608	116	4.8	2.6	2.2	
E. Asia & Pacific	970	28	3.5	1.5	2.0	
OECD (1994)	24,930	1,827	8.3	6.5	1.8	

 Table III-14: International comparison of health expenditures per capita and as a percentage of GDP

*Source:* World Development Indicators, World Bank Shiber G, Maida A, Health Affairs Vol. 18#3

## **REFERENCES**

- Kasparian, G; Ammar, W; Mechbal, AH; Nandakumar, AK. National Household Health Expenditure and Utilization Survey, MOH, Beirut 2001.
- 2- Le Journal Officiel Libanais. Decree no. 2195, February 1992.
- 3- Le Journal Officiel Libanais. Decrees number 5101, 5102 and 5104, March 2001.
- 4- Le Journal Officiel Libanais. Decree no 11763, February 1998.
- 5- Ammar, W; Mechbal, AH; Awar, M. Le Financement de la Santé au Liban I. Organisation des services de soins, système de couverture et contribution du Ministère de la Santé Publique. Journal Médical Libanais, 46 (3): 149-155, 1998.

- Baddoura, R; Debiolley, D; Jurjus, A. Enquête sur les dépenses de 1200 ménages, Beirut 1995.
- Households Living Conditions, Central Administration of Statistics, Beirut 1997.
- 8- MedNet Liban, Health Insurance Portfolio, 1998.
- 9- AS SAFIR Sept.7, 1998 (Local newspaper)
- Zakhour, E. "Aksat Al Taamin Al Mouhakaka Al'am 1997. "Al Bayan" 316: 68-69, 1998.
- 11- Households Living Conditions, Central Administration of Statistics,1997.
- 12- Ammar, W; Mechbal, AH; Azzam, O. Le Financement de la Santé au Liban II. Sources de financement et dépense globale pour la santé. Journal Médical Libanais, 46 (4): 206-211, 1998.
- 13- Banque du Liban. Financial Market Handbook, June 1999.
- 14- "Paris II- Confirmation par L'INSEE dans une note au Ministre de l'Economie". L'Orient-le Jour, Monday, 25 November, 2002.