

**CASE-STUDY
LEBANON**

Nabil M. Kronfol

Lebanon

5

CASE-STUDY: LEBANON
*Nabil M. Kronfol***1 General background data****1.1 Preamble**

Lebanon is a middle-income country with a population estimated at 3.5 million, 90% of whom live in urban areas. Before the civil war, which began in 1975, the Lebanese economy was robust, enterprise flourished, and it was the banking centre of the Middle East. The civil war led to the relocation of many service sectors out of the country, much of the industrial and agricultural infrastructure was destroyed, and the economy went into decline. Increased spending on security forces and the reduction in Government revenues from taxes and other duties led to a steep increase in public debt. The country is still recovering from the long-term effects of the civil strife.

Drained by the protracted civil disturbances that spanned the years from 1975 through 1990, the Treasury faced the extraordinary burdens of reconstruction of the infrastructure, rehabilitation of facilities, subsidies to populations displaced by the civil strife and building of its armed and security forces. The Lebanese economy is now debt-ridden, and faced with considerable and onerous burdens. It is under this scenario of economic difficulty that the reforms of the health care system are to be viewed.

The Treasury is already pressured by the existing cost of medical care from several public agencies. Therefore, one of the prime considerations to be addressed is the need to undertake reforms with a view to keeping costs under control, and perhaps within the current level of expenditures on health care.

In terms of the existing health system, the civil disturbances had a major negative impact on the current makeup of the public health care system. State facilities were often at dangerous sites in the country, and were in the majority destroyed, looted, or deserted. The staff found difficulty in reaching their workstations. The centralization of the Ministry of Health prevented the smooth flow of supplies, pharmaceuticals, systems, and manpower, and the dissemination of regulations. The Government relied on the private sector to provide care for the traumatized population.

LONG-TERM CARE

Before the war, in 1970, only 10% of the Ministry's budget was spent on the care of patients in private facilities, principally for advanced care unavailable in public hospitals. During the war, this budget line provided a ready opportunity for the treatment of patients. Of all sectors in the economy during the past two decades, none flourished as much as the private health sector. However, no one denies the extent to which the private hospital sector assisted in the provision of care, under duress, during that long period of strife. It is to be noted that these incentives expanded the private sector to areas of the country that were until then under-served. After the war ended in 1990, the Government began to refurbish its hospitals and to build new ones. In 1992, the Ministry decided to cover the treatment of patients undergoing complex surgeries and medical care such as cardiac surgery, cancer treatment and renal dialysis.

This chapter describes the health and social service systems in Lebanon. It analyses the components of these systems within the context of the epidemiological, demographic and economic realities that exist in the country. The chapter devotes special attention to the health and social services existing for the care of the disabled and elderly, and in particular the long-term care services available for these population groups. This chapter has drawn from many studies that have been published or produced in the past few years. Annotation and recognition of the authors have been indicated throughout.

Presented on the following pages are background data concerning Lebanon, derived from international data bases.¹ These data include demography, vital statistics and epidemiology, economic data, and health expenditure. About 30% of the population in Lebanon is under age 15, and 9% over age 60. The population is growing at 2% per year, and the total fertility rate is 2.2.

Over the past 20 years, there have been steady increases in life expectancy and a steady decline in mortality rates. The life expectancy at birth increased considerably during the past two decades and reached approximately 73 years in 2000, while the infant mortality rate per 1000 live births declined significantly. The demographic transition has been accompanied by an epidemiological transition. While important health problems are still related to infectious diseases, chronic and degenerative diseases are becoming more prevalent. The causes for this are the ageing of the population, changing dietary habits, and changes in lifestyles concomitant with urbanization. Prevalence rates for hypertension and diabetes are on the rise in Lebanon. In addition there are 4000–5000 new cases of cancer each year. Concerning AIDS, there were 3.1 cases per 100 000 people in 1997.

¹ For consistency reasons data used in this section are taken from international data sources: UN, World Population Prospect, the 2000 revision (median variant); UNDP, Human Development Report 2001; US Government. The World Factbook 2002; WHO, World Health Report 2002; World Bank, World Development Indicators Data Base; ILO, Yearbook of Labour Statistics, 2000; UNAIDS/WHO Working Group on HIV/AIDS, 2002

1.2 Background data from international data bases

<i>Demography (year 2000)</i>	
Population (thousands)	3496
Land area (sq km)	10 400
Population density (per sq km)	336
Population growth rate (% 2000–2005)	2
Urban population (%)	90
Ethnic groups (%)	
Arab	95
Armenian	4
Other	1
Religions (%)	
Muslim (Sh'a, Sunni, Druze, Isma'elite, Alawite, or Nusayri)	70
Christian (including Orthodox Christian, Catholic and Protestant)	30
Jewish	NEGL
Total adult literacy rate (% in 1997)	86%
Age Structure (%)	
0–14	31.2
15–24	18.7
60+	8.5
65+	6.1
80+	0.7
Projections 65+ (%)	
2025	8.7
2050	18.9
Sex ratio (males per female)	
Total population	0.94
15–64	0.91
65+	0.84
Dependency Ratio	
Elderly dependency ratio in 2000 ²	11.5
Elderly dependency ratio in 2025	13.8
Parent support ratio in 2000 ³	8.8
Parent support ratio in 2005	7.3

² Elderly dependency ratio: the ratio of those aged 65 and over per 100 persons aged 20–64.

³ Parent support ratio: the ratio of those aged 80 and over per 100 persons aged 50–64.

<i>Vital statistics and epidemiology</i>	
Crude birth rate (per 1 000 population) (2000)	19
Crude death rate (per 1 000 population) (2000)	5.4
Mortality under age 5 (per 1 000 births) (2001)	
males	34
females	28
Probability of dying between 15–59 (per 1,000) (2001)	
males	204
females	140
Maternal mortality rate (per 100 000 live births) (1995)	130
Total fertility rate (children born/woman) (2001)	2.2
Life expectancy at birth (years) (2001)	
Total Population	69.8
Male	67.6
Female	72
Life expectancy at 60 (years) (2000)	
Total Population	18.5
Male	18.0
Female	19.0
Healthy life expectancy (HALE) at birth (years) (2001)	
Total Population	59.3
Male	56.5
Female	62.2
Healthy life expectancy (HALE) at 60 (years) (2001)	
Total Population	11.5
Male	10.0
Female	12.9

Economic data (year 2000)

<i>GDP – composition by sector</i> (%)	
Agriculture	12
Industry	27
Services	61
<i>Gross national income (GNI)</i> (\$PPP) ¹	20 billion
<i>GNI – per capita</i> (\$PPP)	4550
<i>GNI – per capita</i> (US\$)	4010
<i>GDP growth</i> (annual %)	0

Health expenditure (year 2000)

<i>% of GDP</i>	11.8
<i>Health expenditure per capita</i> (\$PPP)	696
<i>Health expenditure per capita</i> (US\$)	590

⁴ PPP=Purchasing power parity: the rates of currency conversion that equalize the purchasing power of different currencies by eliminating the differences in price levels between countries

2 General health and social system

2.1 Basic income maintenance programmes for the disabled and elderly

The income maintenance programmes for the disabled and elderly in Lebanon are not different from those provided for the rest of the population. Personal savings are the major source of maintenance. The salaried population also continues to receive monthly payments as retirement benefits.

When the salaried head of household passes away, his widow continues to receive a proportion of this pension (the proportion varies according to the adopted scheme). In most cases, the children will also receive a pension if they are disabled or unable to be employed. In general, pensions are supplemented by income from family members (sons, daughters).

2.2 Organizational structure of decision-making

The Ministry of Health is the Government ministry with the most important responsibilities with regards to the provision of health care in Lebanon. However, the Ministry's major role is in financing and not in the direct provision of services, and most of its budget is spent on financing the hospitalization of patients in private hospitals. The Ministry of Health has not been prepared for this role in its legislation. The existing legislation, promulgated in 1961, stills defines the role of the Ministry, as a 'public health' entity (i.e. the provider of non-personal health services) to communities and the country in addition to its regulatory responsibilities (licensure, inspection and control). Moreover, from its original role to provide care for the poor, the Ministry has evolved to be the safety net, to cover, in principle, the medical care of all the non-insured, and to promote access and equity.

Initially, the Ministry of Health provided hospital care to the medically indigent. Hospital care was seen as a matter of 'financial duress' for the medically indigent, and progressively to other segments of the population. In 1992, coverage was extended to complex procedures and treatments, basically the 'catastrophic illnesses' that would tax any household financially. This approach has oriented care towards the hospitals, to ensure coverage and facilitate access to the satisfaction of all users and providers – and to the detriment of primary health care and its role as the gatekeeper of care.

However, the building of new public facilities leaves the private sector uneasy about its role as a partner. Will the Ministry continue its financing of the private sector to the same extent? Will these facilities remain operational? What standards of care will be mandated?

CASE-STUDY: LEBANON

The very first component of reform will need to define the role(s) of the Ministry of Health. This is essential for the stability of the entire health care system, private and public, and to its long-term development. The delivery system must have strong and sustainable foundations on which reforms can be built and options developed.

The Ministry of Social Affairs (MOSA) also plays an important role in the provision of health and social services in Lebanon. For example, MOSA provides health assistance at public social centres. This assistance involves curative and preventive health care services, vaccinations, primary health care, reproductive health services for mothers and children, advice on reproductive health, and a set of services aimed at the disabled population.

MOSA also assists a number of centres belonging to not-for-profit and nongovernmental organizations (NFPs/ NGOs) that include health services among their activities. Geriatric homes for the elderly population are also supported by MOSA.

The Ministry of the Economy also has a role in health care in Lebanon. It is responsible for awarding licenses for private insurance.

The organization of Lebanon's health care system can be described as highly fragmented. The war considerably weakened the institutional and financial capacity of the Government and other elements of the public sector, and its role in the provision of health care services steadily declined. Nongovernmental agencies and elements of the private sector that had undergone a rapid increase both in their numbers and their capacity filled the vacuum. Health care services have become increasingly oriented towards curative care with a rapid growth in the number of hospitals and centres for high technology services.

Today, ninety percent of hospital beds are in the private sector. The primary health care system has remained weak. The nongovernmental sector, especially NGOs, dominates this sector with governmental involvement being minimal. Nongovernmental providers include private practitioners, dentists, pharmacists, and medical laboratories.

2.3 Financing of health services:

There is considerable disagreement concerning the proportion of the population covered by various financing agencies. As part of the National Health Accounts (NHA) activity, an attempt has been made to estimate this coverage by obtaining information directly from the financing agencies as well as analysing data collected from the National Household Health Expenditures and Utilization Survey (NHHEUS).

LONG-TERM CARE

According to the NHHEUS, 46.8% of the population reported having some form of insurance (either social or private). If one excludes the non-Lebanese population (estimated at 7.6% of the total population), 45.6% of the Lebanese population does not have health insurance. There is considerable geographic variation in the profile of those insured by the Mohafazat⁵ or governorate. The highest proportion of the population covered is in Beirut and the Mount of Lebanon, with the lowest coverage in Bekaa and Nabatyeh.

Expenditures on hospital care by public financing agents are very high. Overall, 66.4% of public health expenditures is spent on hospital-based care, 14% is spent on ambulatory care, 7.8% is spent on pharmaceuticals, 6.8% is spent on administration, and 5% is spent on 'other goods' (e.g. subsidies for imaging tests, treatment abroad). In the case of the Ministry of Health, 71% of its budget is used to pay for hospital-based care. Expenditures on primary health care services are a sub-set of those on non-institutional health care providers and account for less than 5% of public expenditures. The Ministry of Health has not been able to disburse all amounts allotted to primary health care and in some cases these resources have been diverted to curative specialized care services.

There are three sources of governmental health insurance in Lebanon. This is in addition to the payments made by the Ministry of Public Health to private hospitals for the hospitalization of uninsured applicants.

2.3.1 The National Social Security Fund (NSSF)

The NSSF was established in 1964, within the programme of reforms that had been legislated after the 1958 civil disturbances. The Public Law mandated the creation of independent funds to cover workmen's compensation, end-of-service indemnities, and maternity and sickness. The latter was implemented in 1971.

The NSSF is quite similar to the French model of Social Security. It is financed by employers, employees, and the Government. The high social costs of the NSSF have led employers to underestimate the salaries of their employees and to employ non-Lebanese.

The NSSF is managed by an independent 26-member Board of Directors: ten representing the employers, ten representing the employees, and six representing the government. A Director-General executes the decisions of the Board. Having been essentially a gain for workers, the NSSF falls under the responsibility of the Ministry of Labour and Social Affairs. The Ministry of Health has little, if any, input into its operations or decisions.

⁵ Lebanon has six Mohafazats (sometimes the South is divided into two Mohafazats) and 24 Qadas or districts (all within the Mohafazats).

CASE-STUDY: LEBANON

The NSSF is the most important source of public health insurance in Lebanon. In principle, it covers Lebanese citizens who work in the private, non-agricultural sector, permanent employees in agriculture, employees of public institutions and independent offices who are not subject to civil service, teachers in public schools, taxi drivers, newspaper sellers and university students. Health coverage includes sickness and maternity allowances amounting to 90% of hospitalization costs and 80% of medical consultations and medication excluding dental care. To a large extent, the Fund is financed from private sources – yet, it is a public institution.

On 12 April 2000, a “project law” was approved by the Cabinet, instituting the provision of health care to the entire population above the age of 64 under the auspices of the NSSF. The “project law” has not been implemented as yet and may be revised. On 1 May, 2000, the Board of Directors announced that the following new population segments will be admitted into the NSSF Maternity and Sickness Fund: tobacco growers, fishermen, writers, poets, artists, and physicians.

Beneficiaries include the individual him/herself, the spouse, male children under the age of 16 years (up to 25 years if in formal education), and female children up to the age of 25 years. There is no age limit for coverage if the child suffers from a disability. Parents are also covered if they are over the age of 60 years, are living in the same household and cannot support themselves (there is evidence that this restriction is not strictly applied).

Hospital admission is secured through one’s physician and reviewed by the NSSF medical inspector at the hospital. Patients enter Class II, but may enter into a higher class if they pay the class difference out-of-pocket. Taxi drivers, university students and newspaper reporters do not pay any co-payment; all others pay 10% of hospital costs and 20% of outpatient care (based on the tariff).

Hospitals submit the patients’ bills to the NSSF. There is usually a delay and often bills are discounted after review. Outpatient care is paid by the patient and later reimbursed by the NSSF. Dental care is not covered as yet. There is evidence that the reimbursement procedures are tedious, time-consuming, and bureaucratic. This leads many to forego their claims. Hence, although the financial barrier is removed, the bureaucratic/administrative barrier limits the reimbursement of claims.

The household survey of 1997 revealed that only 15.2 % of the sample interviewed was covered by the NSSF. In the most recent survey (March 2000), 17.8% responded that they carry the NSSF coverage. The NSSF maintains that it provides coverage for 33% of the Lebanese population, i.e. double the numbers suggested by the surveys. This information also impacts on the costs of operation and coverage, since the number of beneficiaries claimed may be double the number who receive the service (hence the cost would be halved).

LONG-TERM CARE

2.3.2 The Cooperative of Civil Servants (Coop)

An important source of public health insurance is the Cooperative of Civil Servants. The Law instituting the Coop was issued in 1964, four months after the Law of the NSSF was implemented by the same Cabinet. An article in the Law stipulates that the Coop is to be merged with the NSSF once the latter has been developed.

The Coop insures all employees of the public sector who are subject to the laws of the Civil Service. Health insurance here covers 90% of hospitalization costs and 75% of consultations, medication and dental treatment for the employee (up to a ceiling, beyond which the Coop covers all). In addition, it covers 75% of hospitalization costs for family members of the employee and 50% of their medical consultations and pharmaceuticals.

The Coop is operated by the Office of the Prime Minister. It covers permanent civil servants. The NSSF covers staff on contracts. The Coop also covers educational costs and other family benefits. After twenty years of service, the civil servant and his dependents are covered after retirement. Coverage includes hospital care, ambulatory services, dental care and optometric services as well. Coverage is in First, Second or Third class – depending on the employment grade of the enrollee. Dental care is covered, as well as 90% of treatment abroad (up to US\$10 000).

The Coop is financed by a 1% deduction from the payroll, with the balance covered by the Government. The Coop enters into a tariff agreement with providers, independent of other public funds. The Coop tariff is usually more advantageous than the other funds.

2.3.3 The Security Forces

Security forces receive coverage from multiple sources: the military is covered by the Ministry of Defense through the Military Medical Services; the Internal Security forces (ISF) have their own plan, under the Ministry of Interior; the staff of the Public Security, Customs' employees, and those of the State Security are covered through two different funds, under the Office of the Prime Minister. All uniformed staff members are covered, as well as their dependents and parents. The dependency ratio is 3.5 persons per enrollee.

Coverage here is the most generous: 100% of hospitalization and medical expenses for the member, 75% for spouses and children, and 50% for dependent parents. Treatment abroad, cardiac surgery and renal transplantation are also covered.

2.3.4 The Ministry of Health (MOH)

CASE-STUDY: LEBANON

In Lebanon, the Ministry of Health is the insurer of last resort, funding hospitalization costs for any citizen who is not covered under an insurance plan. This coverage is independent of the income and asset status of the individual. The Ministry of Health covers the cost of some narrow specialties such as chemotherapy, open-heart surgery, dialysis, and renal transplant, and drugs for chronic diseases.

Even as the responsibility of the Ministry of Health has grown, its share of the Government of Lebanon's budget has declined from over 5% in the early 1990s to around 3% in 1998. The Ministry has the largest share of the total cost of public expenditures, including insurance, on health services in the country (MOH Budget).

The amount the Ministry of Health spends on hospital care in the private sector has ranged from 84% in 1993 to 72% in 1995. Many of the interventions – such as open heart surgery, kidney dialysis, kidney transplantation, and treatment of burns – affect very few people and yet consume approximately 20% of the budget of the Ministry of Health.

The Ministry of Health has been incurring deficits due to its increasing commitments to special programmes, a growing awareness among the population that the Ministry pays for hospitalization costs, and its inability to curb hospital costs. The deficit was worst in 1997 when it was equal to nearly 60% of the budget. The Ministry of Health has responded to these deficits by delaying reimbursement to hospitals for their services and by making deductions in these reimbursements.

The MOH contracts with private hospitals to provide medical services for the non-insured population. Each hospital is graded and a corresponding room rate and tariffs for tests, drugs, the use of operating theatres and other covered items are agreed with hospitals. Private hospitals are supposed to admit any person with a referral note from the Ministry issued after determining that the patient had no other insurance.

At the Ministry, there is an audit committee that reviews bills presented by hospitals and that has, in addition, medical inspectors in the field to check on the identity and eligibility of patients under this plan. A number of practical problems exist, however, making the functioning of the system problematic and open to misuse. The MOH covers 90% of hospital care: the individual is expected to pay 10% of the hospital bill. Even this co-payment is frequently waived altogether, in cases of need.

There are a number of reasons to believe that control of the MOH over-billing is inadequate. Recently, the Ministry has taken steps to introduce 'flat rate' payments in its contracts with private hospitals. This requires studies of current practices and current costs.

LONG-TERM CARE

Table 1. MOH budget by category

Category	1993 (%)	1995 (%)	1997 (%)	1997 (billions LL)
Personnel	7.5	7.2	5.7	14
Pharmaceuticals	4.3	6.9	8.1	20.4
Subscriptions, assistance, Contribution	1.1	2.9	4.6	11.5
Hospitalization	83.9	72.2	77.8	196.6
Others	3.3	10.8	3.7	9.3
Totals	100	100	100	251.8

Source: MOH-As Safir Jan 04 2000

2.3.5 Private insurance companies

The private insurance market is growing rapidly in Lebanon. According to Ministry of Economy sources, approximately 70 private insurance companies provide health insurance. They provide both complementary and comprehensive health insurance policies.

The former is to complement and fill gaps in the benefits provided by the NSSF, Coop, and health insurance arrangements for the army and police. The latter refer to stand alone health insurance policies that can cover a range of benefits including inpatient and outpatient care, and coverage for pharmaceutical expenses. It is estimated that 8% of the population has comprehensive coverage and 4.6% gap insurance.

Compared to other countries in the region, Lebanon has a fairly well developed private insurance sector. The Ministry of Economy licenses private insurance.

Nearly 85% of the private policies in Lebanon are purchased by employers as an employee benefit or to fill gaps in NSSF coverage. Insurance policies in Lebanon typically cover inpatient care. Outpatient services are covered for an additional premiums with co-payments of around 20%.

There is anecdotal evidence that private insurance companies transfer the burden of high cost cases to the Ministry of Health as the latter does not have the ability to verify whether applicants have insurance or not. Estimates of the breakdown of expenditures by private insurance companies by type of service show that physicians' fees account for 30% of expenses, pharmaceuticals for 31%, hospitalization costs for 15%, and administrative expenses for 24%.

2.3.6 The Mutual Funds

A growing number of mutual funds are also being established, covering health expenses in the context of syndicates, associations, and other groups.

Mutual funds began in 1991. This movement is under the jurisdiction of the Ministry of Housing and Cooperatives. The Law governing this sector permits any group of 50 persons (or above) to form a mutual fund. The linkage can be professional, religious, community-based, etc.

Tax laws that provide tax-breaks to non-profit groups have led to a proliferation of mutual funds that offer health insurance coverage to their enrollees. Recent estimates would indicate that about 65 000 individuals are covered for health benefits by mutual funds. However, the number of enrollees ranges from as low as 66 to 12 000.

Mutual funds collected 17 380 230 000 LL (US\$11 586 820) in premiums and paid out 13 871 047 500 LL (US\$9 247 365) in benefits. This amounts to a loss ratio of 80%.

Some mutual funds have been established exclusively to provide gap-insurance coverage, thereby negating the impact of demand side interventions aimed at controlling over consumption of high cost health services. Private insurance companies feel that the differential tax treatment distorts the playing field, and that the growth of mutual funds hampers the competitiveness of the insurance market.

Mutual funds are supported technically by the French Association of Mutual Funds. They are intended to provide for a co-insurance or a complementary insurance. Mutual funds do not pay taxes on the premium, unlike private insurance companies.

LONG-TERM CARE

2.2.7 Nongovernmental Organizations (NGOs)

There is a relatively small proportion of the total health bill that represents coverage of beneficiaries of health assistance from local and foreign not-for-profit and nongovernmental organizations (NFP/NGOs). They operate generally at the local level in poorer urban districts and underprivileged rural areas. The importance of this coverage lies in the fact that it relates to needy individuals who would have great difficulty obtaining health services from other sources.

Medical care offered through NGOs witnessed major growth during the war years. It became evident that health care was a magnet to attract the sympathies and allegiance of the population under duress. This has waned somewhat since 1990. However, it should be noted that the involvement of the community in the provision of medical care did offer some innovative models for the financing, governance and management of health services.

2.3.8 Donor assistance

In 1998, donor assistance amounted to 1.96% of total health care financing. While this is a small percentage of total health expenditures, the trends in donor assistance need attention. Donor assistance doubled between 1995 and 1996, actually declined by nearly 30% between 1996 and 1997, and rose by less than 5% between 1997 and 1998. The sharpest decline in donor assistance has been to immunization and control of diseases and there has been a significant increase in support for family planning activities.

Outlays for capital investment account for the majority of donor assistance. These rose by 174% between 1995 and 1996, declined by 23% between 1996 and 1997, and rose by 13% between 1997 and 1998. The Ministry of Health and other Government agencies are the primary beneficiaries of donor assistance. The American University in Beirut and nongovernmental providers received less than 5% of donor disbursements. With donor assistance it was difficult to reconcile the amount disbursed with the amount actually spent.

The World Bank has been supporting health sector reform as well as capital investment activities in Lebanon. The World Bank's loan portfolio has been \$38 million. Disbursements in 1998 amounted to \$2.34 million and cumulative disbursements until the end of 31 March, 1999 totalled \$3.91 million.

2.3.9 Out-of-pocket expenditures

Last, but certainly not least, the most important item in the total health bill is the out-of-pocket payments that consist of health expenditures borne directly by individuals, covering supplementary payments by those who are covered by insurance or the MOH, as well as full payments by those who are not covered by any insurance or are not beneficiaries of MOH assistance.

These payments are greatly affected by the economic situation and decline with recession, resulting in an increase in unmet health needs. Since this is a major item in the total health bill, this bill is bound to vary significantly with significant changes in the economic situation.

Household out-of-pocket expenditures amounted to 70% of total health expenditures. This is significantly higher than previous estimates that had placed out-of-pocket expenditures at around 53% of total health expenditures. This steep increase in household expenditures has important policy implications.

According to the National Household Health Expenditure and Utilization Survey (NHHEUS), households spent a total of 2 088 000 000 000 LL for health services in 1998. Of this, 97% was spent in the private sector, 2% in the NGO sector, and just 1% in the public sector. Per capita expenditures amounted to 522 000 LL per year. 15% of this was spent on insurance, 10% on hospitalization, 2% on one day surgery, 22% for dental care, 25% for outpatient care (excluding drugs), and 27% on drugs.

On average, households spent a little over 14% of their household expenditures on health services. However, the burden of out-of-pocket expenditures as measured as a proportion of household expenditures is not equitably distributed.

It is seen that nearly a fifth of expenditures in households in the lowest income category was allocated to health. The proportion spent on health goes down as income increases and households in the highest income group spend only 8% on health care.

Therefore, even though there might not be inequities in access, as measured by per capita use rates (as will be discussed below), certainly the burden of out-of-pocket expenditures is inequitably distributed. While the Ministry of Health pays for hospitalization costs of the uninsured, there is probably a need to develop a targeted financing scheme that assures financial access to health services for low-income families.

LONG-TERM CARE

2.3.10 Summary

In summary, Lebanon has several different Government, not-for-profit, and private for-profit financing schemes. These include:

- two employment based social insurance schemes;
- four different schemes to cover the security forces;
- the Ministry of Health financing that covers any citizen who is not covered under any other scheme;
- a growing private insurance market that is largely employment-based;
- mutual funds; and
- out-of-pocket expenditures.

It is noteworthy that the Treasury has effectively spent only US\$333 million (17%) out of a total of close to US\$2 billion that was spent on health in 1998. The lion's share has been funnelled through the Ministry of Health (US\$207 million or 62%).

Put differently, the Treasury has expended less than US\$100 per capita for medical care only. The balance has been paid out of private sources. Hence, the basic issue in reforms is to contain the cost of medical care, as it impacts the overall economy, and specifically as it affects the private purse (of individuals, households, and private companies).

Table 2, on the following page, shows the amount spent by both private and public sources of funding for health care in 1998.

Table 2: Expenditures on Health Care by Source (1998) (LL)

	<i>Total Billions LL</i>	<i>Hospitals</i>	<i>Non-institutional</i>	<i>Pharmaceuticals</i>	<i>Other</i>	<i>Administration</i>
<i>OOP</i>	1 785	246	978	525	35	0
<i>MOH</i>	311	227	28	21	22	13
<i>NSSF</i>	297	108	42	48	60	40
<i>Other public</i>	189	105	42	18	3	21
<i>Private</i>	412	50	160	103	7	92
<i>Total</i>	2 994	735	1 250	715	128	166

Key: OOP: Out-of-pocket expenditures; MOH: Ministry of Health; NSSF: National Social Security Fund; Other public: includes the uniformed medical services, the other ministries and the cooperative.

Data also show that 12% of the country's GDP was spent on health in 1998. This compares with 4 to 6% in most developing countries (Tabbara, 2000). It should also be mentioned that, although many European countries spend approximately 10% of GDP on health care, the value-for-money, quality of care, and coverage are all far superior to the situation in Lebanon.

With universal coverage and full payment of medical bills by the public sector, the total health bill in Lebanon, under the present system of payments and costs, would probably exceed 15% of GDP. In fact, given the determinants of the health care system in Lebanon, i.e. fee-for-service, oversupply of manpower and facilities, low occupancy of hospital beds, hospital-driven care, poor control, etc., there is no reason that would prevent costs from rising to 14 or 16% or more as is the case in the USA, where control is more effective and managed care is available.

LONG-TERM CARE

2.4 Services delivery system:

2.4.1 Health care utilization

Among those surveyed by the National Household Health Expenditure and Utilization Survey (NHHEUS), individuals on average had 3.6 outpatient visits per year, with males averaging 3.1 visits per year and females 4.1 visits per year. While regional disparities exist in use rates, these do not appear to be significant. This situation probably reflects the presence of a well-developed market for health services (in the private, NGO and public sectors).

An interesting finding is that unlike many other countries lower income individuals have higher use rates than those in higher income groups. Jordan is the other country in the region where similar results have been observed. This indicates that there does not appear to be inequities in access to health services if these are measured by use rates. Looking at use rates by age group it is seen that those over the age of sixty and those under the age of five have the highest use rates. Those who have insurance have higher use rates than the uninsured.

When examining hospitalization rates, once again one does not see income-related inequities in use rates, although those with insurance do tend to have a higher use of hospital services than those who are uninsured. The age differences persist, as in the case of outpatient care.

The fact that lower income households have higher use rates than those with higher incomes quite likely reflects the fact that the Government – as the insurer of the last resort – pays for hospital care for all uninsured in Lebanon. Thus, those needing hospital care can either use insurance (social or private) or approach the Ministry of Health for financing.

The household survey reinforces the fact that the private sector dominates the health services market in Lebanon. Seventy-eight percent of outpatient visits took place in the private sector, followed by the NGO sector at 12%, with the public sector accounting for only 9% of all visits.

With regard to hospitalizations, the private sector once again accounts for nearly 86% of all admissions with the public sector accounting for 9%. The public sector fares a little better when it comes to one-day surgery, probably because it both pays for and provides these services in its facilities.

Dental care is almost exclusively the domain of the private sector. This predominance of the private sector in Lebanon makes it clear that any attempt to contain costs and improve efficiency will require the participation and commitment of the private sector. At the same time, meaningful changes in the health system cannot be achieved unless this sector is better managed.

2.4.2 *The hospital sector*

There are in Lebanon a total of 167 hospitals with 11 533 beds. Twelve per cent of the hospitals and ten per cent of the beds are in the public sector. The predominance of the private sector reflects the results of a financing arrangement where the public sector purchases services from the private sector; the lack of coordination on provider payment and rates among public sector payers, and the significant investments made by the private sector in the hospital sector. The private hospital association is a powerful lobby and controlling hospital expenditures has been a policy concern for some years.

Lebanon has 2.88 beds per 1000 population – one of the highest ratios in the Middle East. However, the beds are not uniformly distributed. For example, Mount Lebanon has 6.55 beds per 1000 population and Nabatieh has only 0.86 beds per 1000 population (NHA matrices).

Sixty-seven per cent of hospitals in Lebanon have 70 beds or fewer, 30% have between 71 and 200 beds, and only 3% have more than 200 beds. All of the hospitals with over two hundred beds are in the private sector.

The high percentage of hospitals with fewer than 70 beds – and the fact that they tend to be multispecialty facilities – make it difficult to achieve economies of scale. This leads to inefficiencies. Quality of care and financial viability in these facilities also remains a concern.

According to the Syndicate of Private Hospitals, there were 139 private hospitals in 1999 with 8297 medium stay active beds. All 14 of the private hospitals in the country with 100 to 200 beds and all 4 with 200 beds or more are concentrated in Beirut and its suburbs. A low occupancy rate adds to size inefficiency. Occupancy rates are low (59% in 1998, according to Ministry of Health sources), much below OECD norms of 80–85% needed to maximize economies of scale (girgis, 1994).

In this respect, it should be noted that the size of the hospital correlates not only with efficiency but also with the quality and cost of medical care, since larger hospitals can attract larger volumes of patients, hence improving the capabilities of the medical team and reducing the cost.

The growth of private hospitals was phenomenal during the civil war. It has been reported that close to 60% of the private hospitals were established during the war years. This expansion has been fuelled through the financing of medical care by the public funding agencies, mainly the MOH.

LONG-TERM CARE

In terms of active beds in the public sector, there are a total of 810 beds in the 15 public hospitals that exist in various parts of the country. The average number of beds per hospital is 54, close to the average in private hospitals. There is only one hospital with 150 active beds and the numbers of beds in the remaining ones vary between 15 and 81.

The emphasis here is somewhat reversed and concentrated on the areas where the private sector has been deficient. The concentration of hospital beds in relation to population is in the needy areas of the Bekaa and the South. The North, however, remains highly neglected by the private sector and relatively neglected by the public sector.

In addition to the above, there are some 19 hospitals with 3478 long-stay beds (1998) catering basically to old-age and disabled persons (Syndicate of Private Hospitals). These hospitals receive an annual contribution from the Ministry of Public Health depending on the number of beds and the type of sickness of the patients (old age disability, mental disability, etc.). Payment is predominantly on a per diem basis.

After the end of the civil disturbances, the Government proceeded to rehabilitate the existing public hospitals and build new ones. From 15 public hospitals with 810 beds, the number will increase to 28 hospitals with nearly 2900 beds. It should be noted that an additional 2100 beds will be added very soon to the public hospital system and that another 1000 beds are currently being commissioned in the private sector. A total of approximately 3000 new hospital beds will strengthen the Lebanese hospital system, despite the fact that – as mentioned previously – existing hospitals are currently occupied at less than 60%.

An attempt in 1978 was made to make public hospitals autonomous. The law was revised in July 1996 (Law 544/96; Law 602/97) and is currently being applied in some of the newly built public hospitals such as Nabatieh, Dahr El Bachek, and Tannourine. The driving force behind autonomy lies in promoting the efficiency of the public hospital.

It is anticipated that the Ministry of Health will contract with public hospitals in much the same manner as it does with private hospitals. In this manner, public hospitals could retrieve their operating costs through contracts with the MOH, the public agencies and private insurance, much as the private hospitals do at this time (the co-payment by the patient will be reduced to 5% instead of 15%).

It appears that public hospitals are also favouring inpatient care that is reimbursed by the Ministry of Health, thus behaving much like a private hospital. Patients, physicians, and hospitals seem to opt for hospitalization since it is covered by the MOH.

CASE-STUDY: LEBANON

For the first time, as part of the National Health Accounts activity, a sample of hospital bills paid by Government agencies was analysed to achieve a better understanding of their breakdown. Seventy-three per cent of the reimbursements for hospital care by the Ministry of Health was spent on surgical care and the remaining 23% was for non-surgical care. The Coop spent 59% of its hospital reimbursements for surgical care, the ISF 53%, the army 51%, and the NSSF 60% (NHA Spreadsheets). This distribution probably reflects the fact that the Ministry of Health is the insurer of last resort and hence tends to pay more for inpatient admissions. With regard to the other agencies, hospitalization costs are part of the benefits available to their beneficiaries.

Hospitalization rates hovered around 7% among the population in 1984 (Beirut 1984-AUB). The household survey completed in March 2000 documented that the overall hospitalization rate was then 12% per year (1.5% of the population had more than one hospitalization per year). As expected, in the age group above 60 years it was 28%, with 4.5% having more than one episode per year.

Hospitalization episodes did not vary significantly among the regions. Hospitalization (once per year and more than once per year) was more frequent among lower income groups: 10.5% and 3.1% for households earning less than 300 000 LL per month, versus 7.8% and 2.2% for households earning more than 5 million LL per month. Evidently, hospitalization rates varied between the insured and the non-insured, 10% versus 8 % for one admission per year and 1.6 % versus 1.2% for those admitted more than once per year. Hospitalization for one day (day surgery, etc.) had similar frequencies across regions, income groups, age, and insurance status.

2.4.3 The health centres and ambulatory services

The primary health care system has remained weak. The nongovernmental sector, especially NGOs, dominates this sector; public involvement is minimal. Private providers include private practitioners, dentists, pharmacists, and medical laboratories. NGOs own over 80% of the 110 primary health care centres and 734 dispensaries spread across the country. NGOs have contributed successfully to joint preventive programmes carried out by the MOH and United Nations Agencies.

As an example, many centres owned and operated by NGOs are affiliated with the reproductive health programme, undertake family planning activities, and provide antenatal care. NGOs also support the health system by conducting surveys and training programmes and provide logistical support by purchasing and distributing essential drugs through a vast network of PHC centres (UNDP, 1997). Ambulatory services tend to respond to consumer demand. Follow-up and continuum of care remain weak, quality of care varies significantly across providers, and community involvement is limited.

LONG-TERM CARE

The Ministry of Public Health provides some health services in public hospitals and in a number of public health centres. The Ministry of Social Affairs (MOSA) also provides the health assistance at public social centres mentioned earlier, including curative and preventive health care services, vaccinations, primary health care, reproductive health services for mothers and children, advice on reproductive health, and a set of services aimed at the disabled population.

MOSA also assists a number of centres belonging to not-for-profit and nongovernmental organizations (NFP/ NGO) that include health services among their activities. Operating in various parts of the country, some of these centres function properly and others poorly (Van Lerberghe et al., 1997).

No thorough survey of these centres has been made, so little is known about their effectiveness. Nevertheless, the decline in international donations has forced many of these centres to operate in a way not very dissimilar from the operation of private clinics – charging the patients for the services of the doctor and those of the centre itself (Van Lerberghe et al., 1997) (Tabbara, 2000).

Table 3. Distribution of outpatient facilities by region and ownership of facilities

Mohafazat	MOH	MOSA	Red Cross	Municipalities	NGO	Closed	Total open
<i>Beirut</i>	2	1			10	1	12
<i>Mount Lebanon</i>	5	4	1	5	17	2	30
<i>South Lebanon</i>	4		0	0	20	0	24
<i>North Lebanon</i>	4		0	0	11	1	14
<i>Bekaa</i>	7	2	1		10	2	18
Total	22*	7	2	1	68	6	98

**According to MOPH, in 1999 these total 28, including 4-6 that are expected to open during 2000.*

Source: The World bank (1999b)

CASE-STUDY: LEBANON

All in all, there are some 700 health centres and clinics in the country (Khoury G., 1999), but the number of persons covered by their services remains limited in relation to the national health system. However, the concentration of the centres in disadvantaged areas makes their importance in the health system greater than their number or their coverage.

In this context, it should be mentioned that health care, primarily outpatient services, witnessed a major boost during the difficult years of the war. Political, religious and community groups established clinics, dispensaries and health centres to cater to the needs of their respective populations. Health care became an effective tool to promote the image of these various groups.

Before the war, during the period 1958-75, the Office of Social Development (later to become the Ministry of Social Affairs) also encouraged the development of comprehensive health centres, based on community organization, participation and partial funding. The concept and programmes of primary health care were promoted well in advance of the Alma Ata declaration and the worldwide movement for PHC and Health for All.

The Ministry of Health has embarked since the war on a programme to refurbish its network of health centres and build additional ones. The health sector rehabilitation programme (World Bank-MOH, 2000) has also established several task forces and programmes to promote ambulatory care, empower communities, train PHC professionals and Qada (district) physicians, introduce technology and rehabilitate health centres in both the public and NGO sectors.

Utilization of the health centres has been low. Private clinics have been the main outlet for ambulatory care for 85% of patients in Beirut (Beirut 1984) and for 79% of patients in all of Lebanon. Hospital outpatient departments were the venue for 8% of this care, NGO clinics for 10%, and other facilities for 3%. Only 20% of households had a family physician to care for their health concerns on an ongoing basis.

Reimbursement of the cost of ambulatory services in effect lies with the various public agencies, except for the Ministry of Health (MOH offers care at no or minimal cost within its own network). However, because the patient must pay first and be reimbursed afterwards, there is evidence that many prefer not to go through the process of reimbursement – which is considered tedious and time-consuming.

LONG-TERM CARE

2.4.4 The pharmaceutical sector

In 1998, pharmaceuticals expenditure accounted for over 25% of total health expenditures. Considerable uncertainty exists about the size and composition of the pharmaceutical sector in Lebanon. Of pharmaceuticals sold in Lebanon, 98% are trade names and generics account for only 2%. Imported drugs account for 94% of consumption with locally manufactured drugs making up only 6% of consumption (some studies and estimates put this as high as 14%).

Thus, Lebanon has not only high per capita expenditures on pharmaceuticals (US\$120) but almost all of the drugs are trade name products that are imported into the country. Expenditures on pharmaceuticals have been increasing at 7% per annum – a figure that is higher than the rate of inflation. Household out-of-pocket expenditures account for 94% of spending on pharmaceuticals.

The growth in expenditures on pharmaceuticals has been accompanied by a rapid increase in the number of pharmacies in Lebanon. Between 1995 and 1999 that number rose by 59% and the number of registered pharmacists grew by 34%. In North Lebanon the number of pharmacies nearly doubled, in Bekaa the increase was 73%, in Mount Lebanon 55%, and even in Beirut there was an increase of 28% (NHA matrices).

2.5 Human resources and training

Table 4. Manpower and physical resources indicators (year 2000)

Indicator	Per 10 000 population
Physician	29.2
Dentist	10.4
Pharmacist	6.5
Nursing & midwifery personnel	11.9
Hospital beds	30.7
PHC units & centres	6.9

2.5.1 Physicians

The plethora of physicians in Lebanon has been an important issue for the medical profession for the past two decades. It has been exacerbated only in the past few years.

Lebanon had 14 new registered physicians in the ten-year period from 1931–40. There were a total of 800 physicians in 1946. With the rest of the world, the number of physicians continued to increase at a very rapid rate. Yet even in the decade 1961–70, there was an average yearly increase of physicians of only about 100.

In the last three decades, the annual rate of entry of new physicians into the market has been in the range of 500–700. The increase in the number of registered physicians in the past eight years alone (4918) has been close to the total pool of registered physicians in 1980 (5141).

Until the late 1970s, most physicians practising in Lebanon were graduates of the two medical schools that existed then in Lebanon, namely the American University of Beirut and the Saint Joseph University. A relatively small percentage of physicians had completed their medical education in Western Europe, mainly France.

In 1999, the graduates of Lebanese universities made up only 39% of the total pool and of the new yearly inflow. Graduates from countries in the former Soviet Bloc constituted in 1999 some 28% of the total pool and 36% of the new inflow. These graduates had received fellowships and grants to study abroad during the past three decades. Lebanese physicians who had graduated from Arab countries made up 12% of the existing pool; yet their annual increase seems to have declined (unpublished data from Beirut Order of Physicians).

The quality of doctors varies greatly from very competent to poorly trained. Generally speaking, physicians trained in Eastern European countries, including Russia, are less qualified than those trained in Lebanon, Western Europe, or the United States, as is evidenced by the degree of success in passing the colloquium examination. Lebanese 'Foreign Medical Graduates' are likely in the near future to outnumber physicians educated in Lebanon; it is believed that this will impact (adversely) on the character of the profession.

In mid-1999, it was estimated that the number of physicians registered in Lebanon was 8934. To this number should be added those who are (illegally) practising but not registered with either one of the two Orders of Physicians (Beirut and Tripoli). However, there are also a number of doctors who are registered but not practicing, mostly because they are working outside the country.

LONG-TERM CARE

The estimated ratio of physicians to population would thus be approximately one physician per 450 persons. In 1997, 22.1% of the pool of registered physicians were women (as compared to only 6.9% in 1946). There are two orders of physicians in Lebanon: The Order of Lebanon based in Beirut for all the country except the Mohafazat of North Lebanon (7900 registered physicians), and the Order of Physicians of the North (1069 MDs).

In the National Provider survey, released in March 2000, and financed by the MOH/World Bank/WHO, 46% of the physicians in the sample could not be contacted; of the 54% with whom contacts were established by the survey, 12% were not practicing in Lebanon. The degree of correspondence between the information available in the registries and that obtained in the survey varied to a degree between 80-85%.

Although this does not render meaningless the high number of registered physicians in Lebanon, this information indicates that the number of physicians actually practising in Lebanon may not be that high and highlights the importance of an updated database for decision-making. It is an established fact that large numbers of physicians register with the Ministry of Health (to obtain their licence) and with the Order of Physicians (to complete the practice requirements), but then elect to emigrate.

In two studies by Kronfol in 1979, only 34% of medical graduates of the American University of Beirut between 1935–1974 (40 years) were practising in Lebanon. In a follow up of that study, in 1987, only 16% of the 1960–69 medical graduates were practising in Lebanon. There is no established mechanism to update the records of physicians.

Importantly, what is clear is that there is a discrepancy in the distribution of physicians across regions, with a concentration in the Greater Beirut area. The distribution of doctors by Mohafazat is uneven, the main concentration being in the Beirut area. In November 1999, there was one registered doctor per 125 persons in Beirut as opposed to one per 417 persons in Mount Lebanon and one per 665 persons in the Bekaa.

Around 70% of physicians registered in the Beirut Order of Physicians (which includes 88% of total registered physicians) are specialists and only 30% are in the field of general or family medicine. The ratio of specialists to generalists has been increasing. In 1990, for example, the proportion of specialists was 61% of the total.

CASE-STUDY: LEBANON

Policies should be devised to control both the quantity and quality of physicians. The level of the Colloquium should be maintained at high standards. There have been calls, particularly from the Order of Physicians, to stop the licensing of new schools of medicine and impose quotas on entrants into the existing schools.

But direct Government intervention in determining the supply of doctors is said to run into conflict with private education and the prerogatives of the private educational sector. In May 2000, licences were granted to two additional medical schools in the country: The Lebanese-American University (affiliated with the Baylor College of Medicine in Houston, Texas) and the Balamand University.

The majority of physicians practise independently and are compensated on a fee-for-service modality. The overabundance of physicians may be a factor that assists the acceptance of prepayment, capitation or employment (salaried). Similarly, the grouping of physicians into group practice schemes such as Preferred Physician Providers Group (PPPG) is likely to be more acceptable.

2.5.2 Dentists

Dentists face almost the same situation as the physicians in Lebanon. It is reported that there are currently 3471 dentists registered in the Order of Dentists of Lebanon and another 400 registered in the Order of dentists of North Lebanon (The Order of Dentists was established in 1949 but split in 1966 (Al Mustaqbal, Jan 2000)

There is a concentration of dentists in Beirut and Mount Lebanon. This is believed to be due to the effective economic demand for dental care in the more affluent regions of the country. One must remember that dental care does not have as extensive a coverage by funding agencies as medical care.

2.5.3 Nurses and paramedical personnel

The ratio of nurses to population is very low. In 1997, there were 754 nurse graduates with an undergraduate degree, 437 nurses with a "Technique Supérieure (TS)" degree, 757 'Baccalaureat Technique (BT)' nurses, and 1505 nurse's aids – a total of 3453 nursing personnel (Awar, Choujaa, Papagallo, 1999).⁶

⁶ This unpublished report, prepared by these three professionals within the World Bank-MOH Health System Rehabilitation Project, concerns the data available on health manpower, primarily nursing.

LONG-TERM CARE

The ratio of population to qualified nurses is 1600 persons for each qualified nurse. This is one of the highest ratios in the world, and is more than ten times that typically found in industrialized countries and some two to three times that found in developing countries.

The ratio of hospital beds to nurses is 4.5 beds per nurse, which compares with a ratio of between less than 1 and 2.5 beds per nurse in most Western European countries (Tabbara, 2000). As a result of this shortage, use of nursing aids and on-the-job trained nurses aids in place of nurses has become quite common in most hospitals. The quality of service in hospitals is certainly affected by this situation.

The Lebanese University has been active in the field of nursing. The School of Public Health graduates about 80–100 BSc nurses every year in its five branches, throughout the country. In addition, schools of nursing have been in existence since the turn of the century at the American University of Beirut and the Saint Joseph University. The latter has also established a graduate degree programme (MSc).

Recently, the Balamand University has established an undergraduate nursing programme. Nursing institutes exist all over the country to prepare technical nurses at the BT and TS levels. Other nursing programmes are hospital-based. Recently, a total number of 59 institutes have been involved in the preparation of nursing personnel.

The heterogeneity of nursing education and practice has undermined efforts to 'professionalize' nursing. It has also impeded legislation concerning the formation of an Order for Nurses in Lebanon. A preparatory committee for the establishment of an order or an association has been in existence for the past fifteen years. It has lobbied Parliament and Government, so far without success.

It has only recently been announced that a Project Law has been submitted to Parliament to authorize an Order for professional nurses. Reform activities at the Ministry of Health include a major component for the development of the nursing profession, financed by the Italian, Swedish, and Spanish protocols of cooperation with Lebanon.

3 Summary of LTC provision

As an introduction to the issue of long-term care for the disabled and elderly, it is important to note that the informal support system plays the predominant caregiving role for disabled individuals in Lebanon, with family members being the primary caregivers. This has not changed, even though far more women participate in the labour force.

The family and extended support system remains strong. It should be noted, however, that hospital care for the elderly population and the disabled is primarily supported by governmental providers, unlike the ambulatory and outpatient services (including pharmaceuticals) that remain basically an out-of-pocket expenditure.

It is unlikely that these trends will change in the near future. Certainly, when a person in need of LTC becomes very disabled and family members can no longer provide needed care, the formal support system must intervene. However, the informal support system will remain the primary source of care, because of the continuing strength of the family and the community and its willingness to support its senior members.

3.1 History of care for the disabled in Lebanon

Long-term care and rehabilitation efforts were initiated in Lebanon at the turn of the twentieth century, as social concerns were raised about the plight of the blind, the deaf, and the disabled – developments that began to occur all over the world during this period. In the mid-sixties, these efforts were further accentuated due to the epidemics of poliomyelitis that left many of its victims disabled and in need of care and rehabilitation.

During the first half of the 20th century, efforts were initiated and concerns were raised by non-profit organizations in Lebanon. This was the general picture of medical care during this period. Far more technical and professional input was provided to these health care groups and to the Government by the international organizations, primarily the World Health Organization.

WHO provided training fellowships, courses, and seminars – as well as technical advice and support – for the treatment and care of these population groups. Physicians, nurses, technicians, equipment (prostheses) technicians were trained and workshops were established. Community support and public awareness rose after Lebanon's independence, particularly with the enactment of the labour laws in the early 'sixties, which paid special attention to the employment of people with special needs.

LONG-TERM CARE

The civil disturbances during the period 1975 through 1990 curtailed these developments as Lebanon entered a state of siege. Moreover, the plight of the injured and those disabled by the civil disturbances raised the concerns of the general public, individual local communities and the Government. 1980 was announced as the “Year of the Disabled” by the United Nations: this provided impetus to social and governmental efforts to develop the infrastructure to care for those in need of LTC.

In 1973, prior to the civil disturbances, the National Committee for the Support of the Handicapped was established in Lebanon. Its mandate was to study the causes of disabilities, the ways and means of prevention, and the availability of medical and social assistance. This Committee included most of the organizations and groups interested in the care of people with special needs. Among its responsibilities, the Commission legislated the definition of the status of the disabled (both mental and physical) and focused on insuring the livelihood of this population.

Efforts to support and further develop care for the disabled were expanded by the World Rehabilitation Fund in Lebanon, immediately after the end of the civil disturbances in 1990. Such efforts consisted of training, equipment donation and fellowships for trainers.

In 1992–93, efforts were accelerated by the Ministry of Social Affairs. In 1986, this Ministry had already conducted a national survey to identify the disabled and the causes of their impairments. This survey revealed that Lebanon’s disabled numbered close to 44 000 persons, i.e. a disability rate of 1.54% of the general population. In the same year, Caritas conducted its own survey that identified 106 355 disabled persons in the country: 39% had a physical disability, 15% were hearing and speech impaired, 14% were blind, 8% had amputations; and 24% had mental conditions.

These surveys and studies encouraged the establishment of institutions to care for persons with disabilities. It is believed that up to 60 such institutions and organizations exist in Lebanon, although they vary in their levels of sophistication.

In addition to these facilities, there are some 20 medical specialists in Lebanon for physical medicine and rehabilitation, in addition to the larger group of orthopaedic surgeons, neurologists and rheumatologists. This specialty is also recognized in Lebanon and a national association has been formed recently to promote the interests of the physicians specializing in this field.

Technicians are also educated at technical and university levels. In 1978, legislation was passed that defined educational programme requirements and their duration and content. A licensing examination is also required.

CASE-STUDY: LEBANON

Technicians in prosthetics and orthotics are also active, as are occupational therapists (ergo-therapists).

Community-based rehabilitation services (CBRS) have been successfully implemented in Lebanon in the 1990s, after a timid beginning in the early eighties. These concepts have been supported by the WRF and by WHO. A national registry for the disabled, currently being developed by the Ministry of Social Affairs, is at an advanced stage.

In general, it can be said that both the Ministry of Health and the Ministry of Social Affairs participate in the care of the older and disabled populations. The MOH is far more concerned with medical needs, while the MOSA focuses on support at home and by family members. However, both Ministries work through programmes they develop with nongovernmental, religious organizations. Home care is primarily extended from the primary health care centres and the comprehensive care centres of the MOH and MOSA. In a similar fashion, institutional services are dominated by NGOs and the voluntary private sector that manage the long-term care centres, whether they be medical or social-supportive.

Medical personnel providing LTC are trained and provided by the Ministries and the NGOs. Family members are self-trained or are coached by the health professionals who provide care.

3.2 Facilities for the long-term care of patients in Lebanon

In order to provide a clearer picture of LTC in Lebanon, this section attempts to provide more details on the two main types of facility that exist for the long-term care of patients in Lebanon.

- ***Long-term or chronic hospitals*** are medical facilities that specialize in geriatric care or that specialize in the treatment of patients in need of LTC, such as individuals who are physically or mentally disabled. There are 22 of these facilities, with nearly 5000 beds, located all over the country.
- ***Geriatric homes for the elderly population*** are facilities for individuals who may still be able to carry on with activities of daily living and for others who may need more assistance. There are also approximately 22 of these facilities.

LONG-TERM CARE

Both of these facilities have been traditionally established, managed, operated and financed by charitable, usually religious, organizations. The Government supports these types of facility. However, whereas the first type is supported by the Ministry of Health, the second type is supported by the Ministry of Social Affairs. Both receive donations, gifts, and financial assistance from individuals and communities. These facilities tend to be actively supported by philanthropists.

The medical facilities, i.e. the long-term chronic hospitals, are usually large facilities. Some have evolved from being facilities to treat tuberculosis (sanatoria) or mental illnesses. They resemble monasteries and religious buildings in their design (dormitories, refectories, etc.), although newer wings have been added and the older ones have been refurbished and upgraded. These facilities are usually located outside the capital, Beirut, or in its immediate suburbs. The Ministry of Health subsidizes these facilities by paying a daily rate for each of its patients. Hence, the income they receive from the Government corresponds to the number of patient-days for individuals in the facility.

Geriatric homes represent a new addition to the social structure. The religious socio-cultural environment used to favour to a greater degree care of the older population in their homes, within their families. The more junior members of extended families almost exclusively provided support. To a large extent, this remains the case. Geriatric homes are needed for older people who may not have progeny or direct relatives to care for them, particularly if they live in the major cities.

As mentioned previously, geriatric homes are established, managed, and operated by charitable, usually religious, organizations. They receive assistance from the Ministry of Social Affairs to continue operations. The community at large also provides financial support to these institutions.

3.3 Provision of medicines

In addition to residential support, the Ministry of Health financially supports patients in need of LTC through the free provision of medicines, particularly the more expensive drugs. These are distributed through the intermediary of the Young Men's Christian Association (YMCA), one of the larger nongovernmental organizations, to whom a contract has been awarded by the Ministry of Health to distribute medications to patients with chronic illnesses who are in need.

The value of these medications totalled US\$18 million in 1999. Such medications are distributed all over the country, through 378 distribution centres. The cost per beneficiary is approximately \$10 000 per year and the number of beneficiaries has been estimated at 3500.

4. General questions pertinent to LTC development

4.1 Present and future needs for long-term care

4.1.1 The older population

A major study, commissioned by the Ministry of Social Affairs, and undertaken by Dr Abla Sibai in September 1998, reviewed published and unpublished reports concerning the older population. Further analysis was also undertaken by the Population and Housing Survey conducted by the Ministry in 1996.

The sample survey of this study was a national probability sample covering all regions of Lebanon and consisted of some 70 000 households (10% of the estimated population). The study abstracted the records of all individuals above the age of 60 at the time of the survey.

The following summarizes the main findings concerning this important section of the Lebanese population. It is worth noting that the very old (80 years and above) comprise 10.6% of the old population among males and 12.1% among females. This is in accordance with the literature that asserts that women are expected to live longer than men.

■ *The subgroup 60–64 years of age*

Men in this age group were in the majority married (91.3%). More than two-thirds were still working (68.3%) and only 11.6% had retired. Almost half had completed only primary education, while 6% had finished university studies. Almost half were employed by others. More than four-fifths of this population group live in an apartment (70% of them actually own their apartments).

Unlike the men, fewer than two-thirds of women in this age group were still married, and 28% had become widows. Almost 60% were illiterate and slightly over 1% had completed university studies; 90% of the women were housewives. If employed, three quarters of women tended to be employees of others. Like men, most women lived in apartments that most of them owned.

LONG-TERM CARE

■ *The subgroup 65–74 years of age*

Men were still in their majority married. However, only 43% were still working, while 20% had retired. When working, two thirds were self-employed. Again most men lived in apartments that they owned in entirety.

Fewer than half of women were still married by the age of 75 years. 60% had become widows.

■ *The 'old-old': above 80 years of age*

Even above 80 years old, two-thirds of men were still married, as compared to only 17% of women. Only 20% were still working, mainly in their own business.

In the national household health survey, 10.5% of individuals in the representative sample were over age 60. This survey was conducted in 1998, and released in December 2000. The proportion of the population above 65 years of age was 7.2%.

Almost one third of those above 60 years of age perceived their health status as poor, as compared to 6.7% for the entire population. It should be cautioned, however, that the percentage of responses characterized as 'unknown' in that age group were higher than 40.8%.

This poor perception of wellness was confirmed when nearly 75% of men and 84.2% of women in this age bracket (above 60 years) reported at least one chronic illness.

Table 5. Chronic illnesses

Age group	Declared at least one disability			Sample size		
	<i>Males</i>	<i>Females</i>	<i>Both sexes</i>	<i>Males</i>	<i>Females</i>	<i>Both sexes</i>
< 5 years	10.4	8.0	9.2	1319	1316	2 635
5–14	14.8	12.8	13.8	3370	3165	6 535
15–59	29.1	38.3	33.8	9675	10 284	19 959
> 60	73.4	84.2	78.9	1735	1766	3501
Not determined		16.6	11.0	6	12	18
Overall	29.3	35.8	32.6	16 105	16 543	32 648

Source: Household survey 2000

Two-thirds of the elderly population in Lebanon underwent a physical examination during the year that the survey was completed; almost double the rate of the general population. Most had one because of a health complaint, although 20% were for the purposes of health promotion and illness prevention.

When asked if they experienced problems with activities of daily living, such as difficulties in motion, daily care, daily functions, and depression and pain, responses seem to indicate that the proportion of those reporting problems increases with their age.

However, it is only after the age of 70 years that problems are reported by a significant majority of the population with respect to motion (72%) and in daily functions (77%). There was no reported depression in 42% of the population above 70 years of age, and no difficulty in daily care in close to 60% of respondents.

LONG-TERM CARE

Table 6. Problems in daily life

Age group	No difficulty in motion	No difficulty in daily care	No difficulty in daily functions	No anxiety or pain	No depression
14-19	81.9	85.2	80.2	72.1	76.2
20-24	87	91.6	85.1	72.4	78.3
25-29	83.7	91	82.5	68.5	73.5
30-34	83.6	92.5	82.1	63.8	70.4
35-39	78.4	91.2	76.7	58.9	67.4
40-44	76.9	90.8	74.4	54.6	65.3
45-49	72.6	89.9	71.6	48.4	60.6
50-54	69.6	90.8	68.3	45.4	60
55-59	65.2	88.1	62.6	44.1	58.5
60-64	54.9	84.6	56.8	36.6	56.4
65-69	48.1	79.9	50.7	33	51.3
70 & above	28.1	59.2	32.3	23.1	42.1
Unknown	26.1	26.1	26.1	26.1	26.1
Total	74.5	87.3	73.5	58	67.3

Source: Household survey 2000

As shown in Table 7 on the following page, 50% of those aged 60 and over use eyeglasses and 55% use dental prostheses. It is remarkable that only 20% use support for walking, and only 7.5% use a walker.

Table 7. Problems in the elderly population

	<i>Does not use eye glasses</i>	<i>Does not use dental prostheses</i>	<i>Does not use support in walking</i>	<i>Does not use walker</i>	<i>Does not use hearing aids</i>
60-69	49.8	52.9	88.7	92.8	92.5
70-79	49.4	35.1	78.3	93.4	92.8
80 +	53.6	32.9	50.6	89.6	91
Total	50	45	81.4	92.6	92.4

Source: Household survey 2000

In Lebanon, 43% of those above 60 years of age are insured – the average for the general population. This should not be surprising, since most of the insurance coverage (public providers) cover individuals and dependents, including parents. Some may still be covered because of employment status, as noted earlier.

Close to 84% of men and 91% of women (above 60 years of age) indicated that they had a health problem. However, only 32.6% of men and 39% of women sought care for this health problem, i.e. only 30–40% of this age group had sought attention for a health problem at least once during the preceding month. A small proportion (5.7% of men and 8.9% of women) sought medical care more than once per month for these health problems.

However, it is important to remember that the population above the age of 60 years has a visit rate of 6.2 visits per person per year to an ambulatory health facility, almost double the national average.

The older population had a hospitalization rate of 28%, as compared to the national average of 12%. Men and women had similar rates, although men tended to be hospitalized more than once (4.9% versus 4.1%).

LONG-TERM CARE

The national health household survey attempted to seek information on lifestyles. Smoking was used as one indicator. It was found that 26% of the Lebanese population above the age of 15 years smoked. The population above the age of 60 years tended to have a higher rate of smoking: 30% between the ages of 60-70 years smoked and 16% above the age of 70 smoked (Household survey 2000).

As indicated earlier in the case study, the overall health care bill amounted in 1998 to 2994 billion LL or close to US\$2 billion. Of this amount, 1 785 billion LL was spent out-of-pocket, the Ministry of Health spent 311 billion LL, the National Social Security Fund spent 297 billion LL, and all other public funds spent 189 billion LL, while private insurance spent 412 billion LL.

The population over the age of 65 years had a health care bill of 426 billion LL (US\$284 million), of which 251 billion LL (US\$167 million) was spent out-of-pocket. This sum (426 billion LL), was spent as follows: 199 billion LL by the insured above the age of 65 years, and 228 billion LL by the uninsured in that same age group.

If the National Social Security Fund was to become universal and cover the entire Lebanese population, actuarial studies indicated that the overall health care bill would increase to 3317 billion LL or US\$2.211 billion, an increase of 10.6%. The population over the age of 65 years that would now become insured in its totality would be expected to consume 632 billion LL or US\$421 million, i.e. about US \$1460 per person above the age of 65 years per year, for all medical expenditures.

4.2 Developments in LTC

Services are now being developed to promote home-based care. One example includes private nursing care at home. (Two such agencies that provide nurses for home care have been established in the past two years).

Another example is physiotherapy services at home by trained and licensed physiotherapists who are normally employed in health care facilities and who 'moonlight' with additional work in the homes of needy clients. These contacts are developed while the patient is in the hospital, recovering from an orthopaedic condition. The 'at-home' physiotherapy service is usually temporary since the physiotherapist trains and teaches family members and the patient to continue exercises on their own.

Considerable interest is also developing in establishing 'senior citizens villages', compounds, or even new facilities. These are intended to bring together the elderly in order to combat depression and improve the quality of their lives.

Such facilities may be residential or clubs used by the individual during the day. The real issue in the development of LTC lies in the formulation of national policies for the provision and financing of LTC that is separate and well demarcated from the general health care and social services. Currently, LTC remains a component of care not targeted per se.

As noted earlier, LTC remains a component of the health care and social systems. A major breakthrough is likely to come when Parliament amends the terms of the National Social Security Fund that would provide for the care of the older population (i.e. after 65 years of age). To date, this coverage has been provided for former salaried persons. An amendment to that effect has been proposed and is currently being discussed in commissions in view of the increased financial provisions.

4.3 Major constraints to development of health care and LTC, and recommendations for future policy development

4.3.1 Sustainability

Lebanon spends approximately 12% of its GDP on health care services. The poor performance of the economy, high net public debt, and recently introduced higher pay scales for public sector employees are all bound to put increasing pressure on the Government budget.

While important health problems are still related to infectious diseases, chronic and degenerative diseases are becoming more prevalent. The causes for this are the ageing of the population, changing dietary habits, changes in lifestyle concomitant with urbanization, and issues such as diabetes and hypertension.

Unless there are significant gains in the country's economic performance, the current pattern of health care expenditures (as a percentage of GDP) will cause a significant strain on scarce health resources. In the long-term, this will likely adversely affect the current level and quality of services provided unless there are significant reforms in the system.

4.3.2 Cost containment

In the Lebanese health care system, financing and provision functions are separated but without effective supply side controls to contain costs. Public financing agencies purchase health services from the private sector. Private sector providers are reimbursed using a combination of capitation and fee-per-service based methods, which may provide them with an incentive to provide unnecessary services. The most expensive health services (cancer treatment, dialysis, kidney transplants, open heart surgery, chronic diseases treatment, and burn treatment) are provided either free or for a minimal co-payment by Government agencies.

LONG-TERM CARE

The Ministry of Health also pays for hospitalization costs of all uninsured persons, and it is possible that private insurance shifts the burden of high cost services to the Ministry. All of these factors contribute to cost escalation. Provider payment reforms are key to cost containment. In this regard, the Ministry of Health began implementing a flat rate system for same day surgical procedures in May 1998. An analysis conducted on the potential impact of extending this system to other surgical procedures indicated that this might lead to lower costs.

Each of the principal financing intermediaries has a separate supervising Ministry (Ammar et al., 1999). This makes inter-agency coordination difficult. At a minimum, consideration should be given to setting up an institution that can coordinate payments, monitor utilization, and oversee providers across the different public financing agencies.

Centralized budgeting and managerial controls extend little authority and discretion to managers of public facilities. Hence, managers are provided with few incentives to engage in cost containment efforts. The Ministry of Health has initiated efforts to make its hospitals autonomous. This effort needs to be strengthened and expanded.

4.3.3 Rationalizing capacity in the hospital sector

The Lebanon NHA findings draw attention to the fact that 62% of public expenditures are spent on hospital care. Indiscriminate capital investment in the private hospital sector and little regulation has resulted in a surge in the number of private hospitals. With 2.88 beds per 1000 population Lebanon has the highest ratio of bed to population among MENA countries participating in the regional NHA initiative. However, 67% of these beds are in hospitals with less than 70 beds. This coupled with the multi-specialty nature of these facilities leads to inefficiencies. Quality of care and financial viability of many of these facilities remains a concern.

4.3.4 Reallocating expenditures from curative to primary health care

Under the present breakdown of expenditures, less than 10% of resources are allocated to primary health care. Not only are few resources spent on primary and preventive health care services, it appears NGO and public systems do not have the capacity to fully utilize these resources. Investments in preventive measures (including changes in lifestyle) are likely to result in substantially limiting curative expenditures in the future.

In the wake of the rapid expansion of the curative sector, the primary health care sector has languished. There is a need to both strengthen the capacity of the system to deliver primary health care services, as well as increase funding for these services.

4.3.5 Controlling capital investment in medical technology

The Lebanon NHA study reiterates previous findings that Government reimbursements for high cost services have resulted in a rapid growth of high technology centres. This in turn has contributed to cost escalation. For example, as the number of centres capable of doing open-heart surgeries grew from three to eight, the number of surgeries performed increased from 600 to 1800 and expenditures rose from 8 billion LL to 25 billion LL.

The Ministry of Health spends about 75% of its budget for curative care in the private sector. For efforts at cost containment to be effective, policies need to be developed that will control investments in medical technology.

4.3.6 Rationalizing expenditures on pharmaceuticals

As mentioned before, pharmaceuticals accounted for over 25% of total health expenditures. Ninety-eight percent of the pharmaceuticals sold in Lebanon are trade names with generics accounting for only 2%. Imported drugs account for 94% of consumption with locally manufactured drugs making up only 6%.

Thus expenditures on pharmaceuticals have been increasing at 7% per annum – a figure that is higher than the rate of inflation. Between 1995 and 1998 the number of pharmacies grew by 59% and the number of registered pharmacists grew by 34%. Further, we saw that estimates of the total size of the market vary significantly.

While some of this might be explained by the fact that households might be over reporting expenditures on drugs, there exists the possibility that drugs are either making their way into the country bypassing official channels or there is some double billing that is occurring. The high level of expenditures is also likely due to the lack of a significant policy for using generic drugs as substitutes for equivalent higher-priced prescription drugs.

Hence, to effectively contain overall health care expenditures, the Government of Lebanon should initiate policies for improving the efficiency of the system by which pharmaceuticals are imported, distributed, and sold in the country and improve its management and oversight of this sector.

4.3.7 Expanding health insurance coverage to the uninsured and limiting multiple coverage

In Lebanon health insurance is linked with employment and those in low-income households are less likely to be employed in the formal sector. Further, the presence of multiple-insurance coverage also allows for inefficiencies, double dipping, overconsumption of health services and cost escalation.

LONG-TERM CARE

It is very difficult to obtain information from private insurance companies on premiums, claims, loss ratios, and profits. The Government needs to improve its management of the private insurance market and reduce multiple-insurance coverage if it wants to control health care costs.

4.3.8 Equity

Household out-of-pocket expenditures account for 69% of health expenditures in Lebanon (National Health Accounts Study). The household survey shows that there do not appear to be inequities in access to health care. Lower income households tend to use more health care per capita than higher income households. It is only with regard to dental care that we observe inequities in access.

However, when one analyzes the burden of out-of-pocket expenditures it is appears that the burden is inequitably distributed – with lower-income households spending a much greater proportion of their incomes on health than higher income households. Even though the Ministry of Health – as the insurer of last resort – pays for hospitalization costs for all insured and uninsured (including those with low incomes), there is no formal financing mechanism for primary and preventive health services.

As part of the reform in health financing, the Government might want to consider designing a targeted programme to provide quality basic health services for those with low incomes.

Bibliography

The Population-based Survey on Health Expenditures, Lebanon, December 2000, published by the Ministry of Health, the World Health Organization and the World Bank.

The National Health Accounts of Lebanon, December 2000, published by the Lebanese Ministry of Health, the World Health Organization and the World Bank.

Presentation on the Health Care System of Lebanon by Dr Riad Tabbarah (2000).

Ministry of Health reports.

Ministry of Social Affairs reports.

Dr Nabil Kronfol's database on Lebanon.

