# Chapter One

# THE CONTINUING CHALLENGES

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

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

<sup>&</sup>lt;sup>1</sup> World Health Organization.2000.The World Health Report 2000. Health Systems: Improving Performance. WHO 2000, Geneva.

<sup>&</sup>lt;sup>2</sup> World Health Organization. 2001. Macroeconomics and Health: Investing in Health for Economic Development. Report of the Commission on Macroeconomics and Health. WHO 2001, Geneva.

<sup>&</sup>lt;sup>3</sup> World Health Organization.2008. Closing the Gap in a Generation. Commission on Social Determinants of Health. WHO. 2008, Geneva.

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

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

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

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

## **1- OVERVIEW**

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

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

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

The Lebanese civil society is very active with powerful professional Orders, Syndicates and NGOs. Trade unions however, fell victim of the political discord, became divided and lost their influence. Traditionally, Lebanon maintains a good educational system. Gross school enrollment ratio is 98.6% for the first level and 95.2% for the second level. The literacy rate 10 years and above is 91.2% (94.4% for males and 88.2% for females)<sup>4</sup>. The high unemployment rate estimated at 26.4% of the active labor force<sup>5</sup> contributes to emigration and "brain-drain".

## 2- THE POLITICAL DEADLOCK

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

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

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

<sup>&</sup>lt;sup>4</sup> Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004.

<sup>&</sup>lt;sup>5</sup> UNDP. 2002. Country profiles: Lebanon [online], available at www.undp.org

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

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

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

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

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

Eight months after the constitutional deadline, a new president was not yet elected. The disagreement went beyond a consensus on the president's name and extended to an explicit dispute over the division of shares in the new government and the new electoral law. Political statements however, disguised a deeper discord related to the constitution. "When parties do not agree about the system they constitute, the conflicts are particularly contentious to settle"<sup>6</sup>. Lebanon's political system, is built on a balanced division of powers between Muslims and Christians within the cabinet and Parliament, where majority and opposition alliances are balancing each other out. This leads to a political deadlock.

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

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

## **3- MILITARY CONFLICTS**

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

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<sup>&</sup>lt;sup>6</sup> Kriesberg, L. Constructive Conflicts: From Escalation to Resolution, p.16, Rowman & Littlefield, 1998.

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

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

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

Throughout the period of hostilities, relief work was severely hampered by continuous shelling of the coastal highway. The cease fire came into effect on April 27. The overwhelming majority of the displaced were able to relocate over the next two days. Notwithstanding this situation, the Government has continued its pursuit of national reconstruction focusing on rehabilitating the country's infrastructure, facilitating the return of internally displaced persons, building its human resources and achieving balanced regional development. Between July 12 and August 14, 2006, Lebanon was the victim of intense military aggressions, causing severe destruction to public infrastructure, including health facilities, a heavy human toll and large scale environmental damage. A total of 1,190 people were killed and around 4,400 injured, while more than 1.2 million people were displaced as a direct result of indiscriminate attacks on civilians, civilian property and infrastructure, and the prevailing climate of fear and panic. Up to one half of the displaced were children. About 150,000 were accommodated in schools while others sought shelter with families, friends, or in open spaces such as parks. Forced to live in crowded and often insecure conditions with limited access to safe drinking water, food, sanitation and electricity, displaced children suffered from respiratory diseases, diarrhea and skin infections.

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

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

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

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

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

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

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

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

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

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

conflict was deliberate to turn large areas of fertile agricultural land into "no go" areas for the civilian population<sup>8</sup>.

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

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

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

#### 4- THE ECONOMIC CRISIS

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

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

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

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

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

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

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

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

<sup>&</sup>lt;sup>9</sup> Banque du Liban -Quarterly Bulletin, Fourth Quarter 1998. www.bdl.gov.lb

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

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

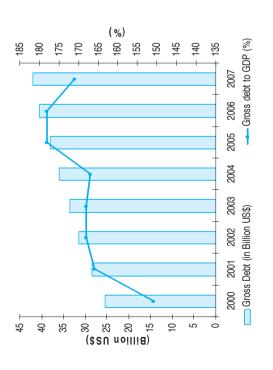
The minimum wage of 200 USD<sup>11</sup> lying far below monthly minimum expenses, has remained unchanged since 1996 despite a registered inflation of 70% ever since. Almost 30 percent of the population has been living below the poverty line since 1995<sup>12</sup>. The widespread poverty situation has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

<sup>&</sup>lt;sup>10</sup> Debt and Debt Markets, Quarterly Bulletin of the Ministry of Finance, issue No. 3, quarter IV 2007.

<sup>&</sup>lt;sup>11</sup> A new minimum wage of 500,000 LBP was decreed by the government starting May 2008.

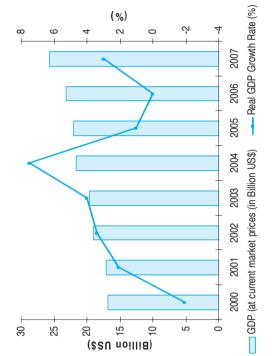
<sup>&</sup>lt;sup>12</sup> Haddad, A. 1996. Poverty in Lebanon. Report prepared in 1995 for the United Nation Economic and Social Commission for Western Asia (ESCWA). Beirut.





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





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

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

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

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

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

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

<sup>&</sup>lt;sup>13</sup>Erin Fitz P. The Globalization of Democracy Building: A polyarchic Dilemma. December 10, 2003.

|  | Value  |
|--|--------|
| OPH allocated Budget (% of total government budget)            | 3.60   |
| OPH allocated Budget (% of government budget without debt)     | 6.67   |
| OPH Expenditure as % GDP                                       | 1.01   |
| iblic Expenditure on Health as % of GDP                        | 2.35   |
| iblic Expenditure on Health as % of total Health Expenditure   | 28.4   |
| nnual MOPH budget (USD per capita)                             | 63.97  |
| otal Public Expenditure on Health (USD per capita)             | 124.32 |
| purce: Ministry of Public Health. National Health Account 2005 |        |

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Note: Treasury figures from the Ministry of Finance. www.finance.gov.lb

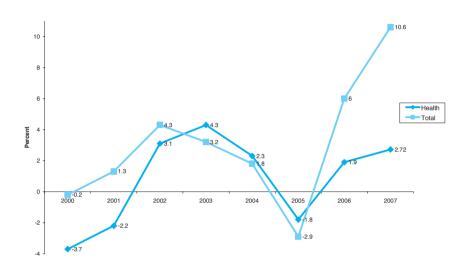
One of the most important regulation mechanisms of the MOPH is related to tarification of hospital services and periodic issuing of drugs price index. These revealed to be relatively effective when comparing health related goods and services to other sectors commodities as denoted by the evolution of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

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

<sup>&</sup>lt;sup>14</sup> Ministry of Social Affairs, October 2007. Poverty, Growth & Inequality in Lebanon. Beirut: UNDP.

<sup>&</sup>lt;sup>15</sup> Gini Coefficient (GC) is a measure of statistical dispersion, most prominently used as a measure of inequality of income distribution. It is defined as a ratio

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



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

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

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

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

<sup>&</sup>lt;sup>16</sup>Report of the Commission on Macroeconomics and Health. 2001. Macroeconomics and Health: Investing in Health for Economic Development. Geneva: WHO.

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

#### **5- GLOBALIZATION CHALLENGES**

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

<sup>&</sup>lt;sup>17</sup>IBRD known as the World Bank (WB).

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

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

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

<sup>&</sup>lt;sup>18</sup> Doha Declaration, Nov. 2001, paragraphs 1 and 4, with reference to Article 8 of the TRIPS agreement.

<sup>&</sup>lt;sup>19</sup> Dr. Heinz Klug, the Doha Declaration and Public Health: global view. WHO report on consultative meeting on TRIPS and Public Health, Amman, Jordan. December, 2003.

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

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

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

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

<sup>&</sup>lt;sup>21</sup> WTO, General Council Decision of 30 August 2003: Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health. (pre-Cancun Agreement) (paragraph 6.i)

facilitating trade in services without reference to any specific mechanisms.

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

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

<sup>&</sup>lt;sup>22</sup> The EFTA Agreement, Annex V; referred to in Article 24: Protection of Intellectual Property. Lebanese Official Gazette May 25, 2006.

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

#### 6- THE INCREASING BURDEN OF DISEASE

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

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

<sup>&</sup>lt;sup>23</sup> Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004.

<sup>&</sup>lt;sup>24</sup>MOPH Vital Statistics Department. 2007. Statistical Bulletin 2006. Beirut: Ministry of Public Health.

<sup>&</sup>lt;sup>25</sup>MOPH, League of Arab Stage. 1996. The Pan Arab Project for Child Health (PAPCHILD) 1996.

<sup>&</sup>lt;sup>26</sup>CAS, MOSA, League of Arab States. 2006. The Pan Arab Project for Family Health (PAPFAM) 2004.

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

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

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

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

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

<sup>&</sup>lt;sup>27</sup>CAS, MOPH, WHO, WB. 2001. National Household Health Expenditures and Utilization Survey 1998-1999.

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

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

# 7- HEALTH SYSTEM ADJUSTMENTS

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

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

<sup>&</sup>lt;sup>28</sup>Salti, I et al. Epidemiology of Cardiovascular Risk Factors Among Adult Lebanese Population. Lebanese Technical Reports. Lebanese National Council for Scientific Research, 1998.

<sup>&</sup>lt;sup>29</sup>Sibai AM, Hwalla N, Adra N, Rahal B. prevalence and Covariates of Obesity in Lebanon: Findings from the First Epidemiological Study. Obesity Research vol. 11 No. 11 November 2003.

facility within 10 minutes walk, and a hospital within 20 minutes drive<sup>30</sup>.

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

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

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

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

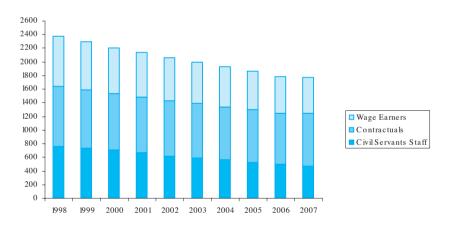


Fig I-4: MOPH employees by employment categories 1998-2007

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

<sup>&</sup>lt;sup>30</sup>Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004/5.

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

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

<sup>&</sup>lt;sup>31</sup>Report of the Scientific Peer Review Group on Health Systems Performance Assessment. WHO, Geneva 2002.

<sup>&</sup>lt;sup>32</sup>Health Systems: Improving Performance. The World Health Report 2000. WHO, Geneva 2000.