

Country Cooperation Strategy for WHO and Lebanon 2010–2015

Lebanon



**World Health
Organization**

Regional Office for the Eastern Mediterranean

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Document WHO-EM/ARD/035/E

Design and layout by Pulp Pictures

Printing by WHO Regional Office for the Eastern Mediterranean, Cairo

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Abbreviations

AGFUND	Arab Gulf Programme for United Nations Development Organizations
CCA	Common country assessment
CCS	Country cooperation strategy
DOTS	Directly observed treatment, short course
EPI	Expanded Programme on Immunization
EWARS	Early warning alert and response system
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross domestic product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GNP	Gross national product
HIV/AIDS	Human immunodeficiency virus/acquired immunodeficiency syndrome
IHR	International Health Regulations (2005)
IT	Information technology
LL	Lebanese pound
MDGs	Millennium Development Goals
MOPH	Ministry of Public Health
PAPCHILD	Pan Arab Survey for Child Health
PAPFAM	Pan Arab Survey for Family Health
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDAF	United Nations Development Assistance Framework
UNDCP	United Nations Drugs Control Programme
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIFIL	United Nations Interim Force in Lebanon
USAID	United States Agency for International Development
WHO	World Health Organization
WTO	World Trade Organization

Executive summary

The main challenge that Lebanon represents for any development effort is its slow progress towards rebuilding civil institutions and implementing economic reform, which have been further hindered by the turmoil and political instability experienced since the beginning of the last Country Cooperation Strategy cycle (2004–2009). Successive crises have shifted the cooperation between WHO and the Ministry of Public Health (MOPH) towards risk mitigation, emergency preparedness, reestablishment and reinforcement of health care services, expansion of new projects such as the early warning and response system (EWARS), decentralization and empowerment of the health district offices.

Despite its gloomy economic picture and limited environmental policies, Lebanon still scores relatively well on its health indicators. In comparison with other countries in the Eastern Mediterranean Region, Lebanon's indicators are average. Life expectancy at birth is 69 years for men and 72 years for women, and the infant mortality rate, estimated to be 18 per 1000 live births in 2004, appears to have continued to improve over the past 5 years. However, these indicators come at the high price of US\$ 460 annual expenditure on health per citizen in 2005.

Equity and fairness of the health system, despite major improvements, are still far from being reached. Unhealthy and risky lifestyle behaviours are the target of many joint programmes. WHO has been a partner in most of these interventions, providing technical expertise in health system

management and helping to establish key programmes, such as AIDS, tobacco control, noncommunicable diseases, epidemiological surveillance, injury and accident prevention and tuberculosis control.

The CCS mission reviewed most of these programme activities, often carried out by less than a handful of dedicated individuals, and found a strong need to streamline and focus cooperation more effectively. Collaboration should be more strategic and focused on fewer priority areas with more emphasis given to WHO's role as a policy adviser and broker rather than support and management of routine programmatic activities. In order to increase the effectiveness of WHO support, innovative approaches and opportunities will be sought for increasing and strengthening partnerships with other international and national agencies, including nongovernmental organizations working in the field of health.

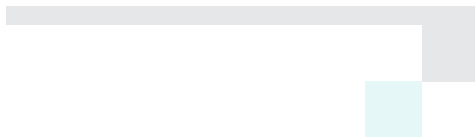
The strategic directions for WHO cooperation with Lebanon for the next 6 years take into account the good level of health coverage in Lebanon, the epidemiology of prevailing and projected disease patterns, the national health strategies and the goal of the Government of Lebanon to provide high quality health coverage to all people at an affordable cost. The strategic directions also take into consideration the large share of health care delivery dominated by the private sector and nongovernmental organizations and the intricacies of the country's prevailing political, administrative and economic status.

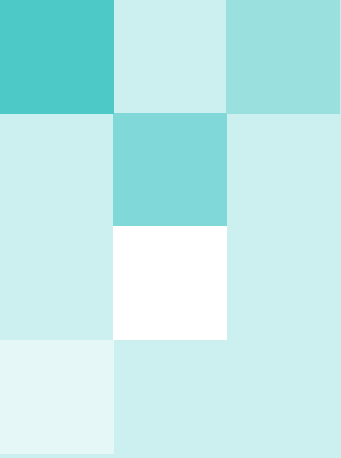
These strategic directions are:

- ❖ Strengthening health security through the implementation of the International Health Regulations
- ❖ Strengthening health system governance
- ❖ Reinforcing health system delivery

(revitalizing primary health care and strengthening hospitals)

- ❖ Improving equity in health financing
- ❖ Increasing evidence to support policy analysis and formulation
- ❖ Improving the development of human resources for health.





Section

1



Introduction



Section 1. Introduction

The Country Cooperation Strategy (CCS) reflects a medium-term vision of WHO for technical cooperation with a given country and defines a strategic agenda for working in and with the country. The CCS is a key instrument for WHO in the context of improving aid effectiveness at country level through alignment and harmonization of the health and development agenda. The CCS clarifies the proposed roles of WHO and how its core functions are applied in supporting the national health and development plans and strategies. The CCS takes into account regional as well as Organization-wide strategic orientations, priorities and the broader international legal and policy framework of the United Nations system such as the Millennium Development Goals, gender equity and the human rights-based approach to development.

The CCS examines the health situation in the country within a holistic approach that encompasses the health sector, socioeconomic determinants of health and national policies and strategies that have a major bearing on health. The exercise aims to identify the health priorities in the country and place WHO support within a framework of six years in order to strengthen the impact on health policy and health system development, as well as the linkages between health and cross-cutting issues at the country level. The CCS is the reference for WHO's work in the country, and guides planning, budgeting and resource allocation. It is the basis for reviewing WHO country presence and for mobilizing human

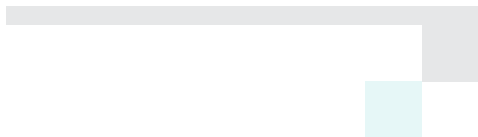
and financial resources for strengthening WHO's support to health development in the country.

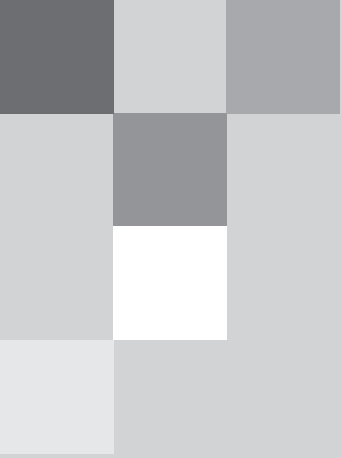
The CCS process takes into consideration the work of all partners and stakeholders in health and health related areas. The process is a strategic dialogue in the country and within the entire WHO secretariat: the country office, Regional Office and headquarters. It draws from, and contributes to, aid coordination and partnership platforms, in particular the Common Country Assessment/United Nations Development Assistance Framework (CCA/UNDAF). It seeks to complement the cooperation strategies of other major external actors in the country.

The CCS for Lebanon is the product of extensive review of documents and reports, and discussions between the CCS team, Ministry of Public Health (MOPH) and other public authorities, academia, nongovernmental organizations, scientific societies, syndicates, orders as well as United Nations development agencies. The document structure was set by the CCS mission, whose main goal was to identify Lebanon's health priorities in such a manner as to allow optimization of WHO support to the country and assertion of clear strategic directions for cooperation over the next six years. The CCS comprises a situation analysis based on review of publications, research articles, and national and international reports. The health situation includes a general overview, followed by a

concise health profile and a health system snapshot. The next section delineates the recent and past funding contributions by donors and United Nations agencies,

followed by recent WHO cooperation, the strategic directions and the implications for the WHO country office in terms of staffing and resources.





Section

2



**Country Health and
Development Challenges**



Section 2. Country Health and Development Challenges

2.1 Geographic and administrative profile

2.1.1 Geography and climate

Lebanon is a small country of 10 452 km²; it extends 217 km from north to south and spans 80 km at its widest point. The country is bounded by the Syrian Arab Republic in both the north and east and by the occupied Palestinian territory in the south. Lebanon has a Mediterranean climate that varies somewhat across the landform belts. The coastal plain is subtropical, with 900 mm of annual rainfall and a mean temperature in Beirut of 27 °C in summer and 14 °C in winter.

The natural resources of the country include limestone, iron ore and salt, but, perhaps the most valuable resource of Lebanon is water. In a water-deficient region, Lebanon has 170 km² of water and 860 km² of irrigated land. This important resource is lost in substantial quantities due to suboptimal management. Environmental concerns include deforestation (forest covers 13.3% of Lebanon),¹ soil erosion and desertification. Over the past few years, major fires have further reduced the forest areas.

2.1.2 Political structure

Lebanon is a democratic parliamentary state, a founding member of the United Nations and the League of Arab States and a member of the Non Aligned States. Its

constitution, written in 1926, amended after the country's independence in 1943 and revisited in 1990 through the Ta'if Accord, declares the country a secular Arab state, parliamentary democracy and free economy. It recognizes the rights of each religious community, but calls for the ultimate abolition of political confessionalism. The president is elected by the National Assembly (Parliament) for only one six-year term. The president appoints the Prime Minister after conducting obligatory consultations with the members of parliament.

The National Assembly has 128 members, elected every four years, with all men and women over 25 years eligible to run. All men and women over 21 years with good civil status are allowed to vote. Parliamentary seats are distributed to ensure balanced sectarian and regional representation.

2.1.3 Key political events

Lebanon has made progress toward rebuilding its political institutions since the Ta'if Accord in 1989, which put an end to the devastating civil war. Most of the militias were weakened or disbanded and the Lebanese Armed Forces extended central government authority to most of the country. The Israeli occupation withdrew from the south of Lebanon in May 2000 under pressure from the Lebanese Resistance.

The assassination of former Prime Minister Rafic Hariri in February 2005 reintroduced Lebanon to turmoil. With the issuing of UN

¹ Food and Agriculture Organization of the United Nations. Global Forest Resources Assessment, 2005

resolution 1559, Syrian troops that had been present in Lebanon since 1976 withdrew from the Lebanese territories in April 2005. Internal clashes and assassinations of other key political and media figures took place. In July 2006, Israel launched a sudden and large-scale attack on Lebanon that had catastrophic consequences on the infrastructure of the country. The aggression ended with the UN resolution 1701, without a definite ceasefire.

The years 2007 and 2008 witnessed a series of popular uprisings ending with a civil military escalation in May 2007 that led to the Doha Reconciliation. A presidential election occurred in June 2008, after a long and difficult process of national and international negotiations, and was followed by the formation of a national union government in September 2008 and the reactivation of the parliamentary functions.

2.1.4 Administrative situation

Lebanon has six provinces (*mohafaza*): Beirut, Mount Lebanon, North, Bekaa, South and Nabatieh. The provinces are further divided into 25 districts or *qada*, not including Beirut. The districts follow geographic, political, social and historic considerations, and each district is made up of several cadastral zones. The Bekaa is the largest *mohafaza* (4161 km²), followed by the North (2025 km²) and Mount Lebanon (1968 km²). In 2004, the provinces of the Bekaa and North were further subdivided into a total of four *mohafaza* pending operational decrees. In total, there are 1492 cadastral zones

The administrative and judicial systems are based on the fifth French Republic

² Ministry of Finance report, 2008

model, with centralization of authority in Beirut. There is a system of municipal administrations with limited policy-making autonomy and dual financial resources.

The judicial system is headed by a five-person Court of Justice dealing with matters of state, working alongside with four courts of cassation (3 courts for civil and commercial cases, and one for criminal cases), 11 courts of appeal and 56 lower courts. The judiciary is considered to be an independent body, as per the separation of state powers. However, this independence has been questioned over the past three decades, with accusation that the Judiciary Corps has often acquiesced to pressures of the security services. Laws related to health care can be issued at any of three levels, ministerial decree, Council of Minister resolutions or legislation through the Parliament according to the issue concerned.

The endorsement of the law 159 in 1983 adopted the devolution and decentralization of the health care system as one of the main axes of reform. The *qada* health authority is headed by a health officer.

2.2 Economic profile

Since the end of the civil war in 1990, Lebanon's economy has made impressive gains, and much of physical and financial infrastructure has been rebuilt. The government nonetheless faces serious challenges in the economic arena. It has funded reconstruction by borrowing heavily – mostly from domestic banks. By mid-2008, the national debt had reached the level of \$45 billion, of which 51.7% was of domestic origin.² 50% of the fiscal budget serves the debt. Despite the enormous amount of

Box 1. National debt in Lebanon²

By the end of June 2008:

- ❖ the gross public debt reached LL 67 060 billion (US\$ 44.5 billion), a 5.83% increase over the end of December 2007 level
- ❖ net public debt stood at LL 60 909 billion (US\$ 40.4 billion), registering an increase of LL 2072 billion over the end of December 2007 level
- ❖ domestic currency debt registered LL 34 672 billion, higher than the end of December 2007 level by 10.52%
- ❖ foreign currency debt totaled LL 32 388 billion, 1.24% higher than the end of December 2007 level.

public debt (see Box 1), Lebanon's rating has remained acceptable, with a stable outlook on both the short term and long term.

To contain the ballooning national debt, the government has planned an economic austerity programme to rein in government expenditures, increase revenue collection, privatize state enterprises and implement financial reform. The Lebanese government met with international donors at the Paris II Conference in November 2002 and again at the Paris III Conference in January 2007 to seek bilateral assistance in restructuring the debt at lower rates of interest.

Economic developments since 2005 have been shaped by major changes in the political landscape. The assassination of former Prime Minister Hariri in February 2005 plunged the country into a period of political turbulence, exerting strains on the financial system. The cost of reconstruction due to the Israeli aggression has added an additional burden to the already-strained economy. Since then, adoption of the

economic programme has been delayed by renewed political tensions.³

GDP growth has slowed considerably in the past few years. Rising oil prices, the economic slowdown, and payments of arrears have all weakened public finances. Consequently the government debt has risen to 175% of GDP. The trade balance showed a deficit of US\$ 8999 million in 2007.⁴

Moderate progress has been made on the structural financial reform agenda. Most public sector reforms have been of an administrative nature, with a number of legislative proposals pending in parliament, including those on revenue administration and debt management, laws to regulate capital markets and bank mergers, as well as competition and domestic market reform.

2.3 Demographic profile

The total estimated population of Lebanon is around 3.4 million, with a population growth rate estimated at 1.5%, and a total fertility rate of 1.9 per woman. Around 27% of the population is under 15 years of age, and 7.7% is older than 65 years.⁵ The crude birth rate is estimated at 20.8 per 1000 population and the life expectancy of women and men is 72 and 69 years, respectively. Vital registries are not complete, with less than optimal registration of deaths, while birth registration coverage is more than 90%. The quality of the vital registry information is questionable.

Over 85% of the population lives in urban areas concentrated mainly in Beirut and Mount Lebanon. The only population census

³ Consultation of the Executive Board of the International Monetary Fund, May 2006

⁴ Central Bank annual report, 2007

⁵ Ministry of Public Health. Statistical bulletin, 2008

dates back to 1932, when Lebanon was under the French mandate. All demographic information is based on several surveys conducted by the Central Administration of Statistics as well as by several ministries (notably the Ministry of Social Affairs) and United Nations agencies.

In addition to the Lebanese citizens, more than 220 000 Palestinians are living in refugee camps.⁵ In the mid 1990s, estimates described around one million seasonal Syrian workers (mostly in construction and farming). It is estimated that this number declined significantly after the Syrian troops withdrew from Lebanon in April 2005. It is also estimated that some additional 100 000 workers (domestic and semi-skilled workers, mainly from Egypt and Africa and countries in South-East Asia) reside in the country. UNHCR estimates that some 40 000 Iraqi refugees have been hosted in Lebanon since the invasion of Iraq.

The school enrollment rate is very high (>99% primary enrollment), slightly favouring females. The nation is widely covered by more than 4500 schools, with around 2799 private schools hosting around two-thirds of the student population, and around 1712 public schools hosting around one third of the student population.⁶

2.4 Health profile

2.4.1 Overview

Lebanon remains in a state of epidemiological transition in which infectious and communicable diseases are still endemic with an increase in the prevalence of noncommunicable and

degenerative diseases. Important health challenges related to this transition include: health related environmental problems, new unhealthy lifestyles, challenges facing children's and women's health, and the reforms required in the health sector in general. Despite improvements towards reaching the Millennium Development Goals (MDGs), available data suggest geographical discrepancies and well as gender discrepancies in terms of population health status. Injuries due to wars, internal armed conflicts and road accidents still bear heavily on the health system.

2.4.2 Health status indicators

Communicable diseases

Lebanon has achieved remarkable improvement in the control of communicable diseases. The high internal population mobility, extensive trade and commerce with the rest of the world and tourism create a continuous risk of importation of many infectious diseases. Although mortality from diarrhoeal and upper respiratory diseases is very low, these diseases continue to cause significant morbidity in children and adults. Certain zoonotic diseases such as brucellosis, rabies and echinococcosis remain a major public health concern. Respiratory diseases and diarrhoeal diseases also remain quite prevalent, with some seasonal variations. Data on adult vaccine-preventable diseases such as hepatitis B and human papillomavirus, as well as some selected sexually transmitted infections remains insufficient, although there are some indications that these might be on the rise.

⁶ Ministry of Education, 2004

HIV/AIDS

Lebanon remains a low prevalence country for HIV, despite the potential risks associated with the high population mobility and relative sexual permissiveness. The total cumulative number of cases reported to the national AIDS programme by mid 2008 was 1056 cases, with an average of 60 new cases reported yearly. However, due to various factors, and despite the introduction of antiretroviral therapy free of charge by the Ministry of Public Health, it is estimated that HIV is still underreported. Although local transmission of the infection is well documented, a clear correlation with travel and migration is currently accounting for 39.2% of the accumulated cases. HIV transmission in Lebanon is essentially a behavioural issue, with around 70% of the transmissions occurring via sexual contacts, and recently a net increase of new cases reported among men who have sex with men. Routine screening for pregnant women is not performed. However, data show that prevalence of mother-to-child transmission of HIV remains very limited. Since 1993, no cases due to blood transmission have been reported. The male to female ratio is 4.6 and most reported cases (59.5%) are in the 31–50 year age range.⁷ Deaths due to HIV/AIDS remain low, estimated at less than 10 per 100 000 population per year.

Tuberculosis

The prevalence rate of tuberculosis in Lebanon was 12 per 100 000 population in 2006. The previously joint MOPH–WHO

national tuberculosis control programme adopted the DOTS strategy in 1998 with encouraging results describing 92% coverage. The average detection rate during the past five years was 74%, compared to the WHO standard detection rate of 70%. The treatment success rate, as an average over the five years up to 2005, was 92% as compared to the WHO standard treatment success rate of 85%. Deaths due to tuberculosis among HIV-negative people are estimated at only 1 per 100 000 population per year; no deaths due to tuberculosis among HIV-positive people were reported in 2006.⁸

Hepatitis

There is some evidence of an epidemiological shift of hepatitis A towards the adult age. This could be attributed to better sanitation and hygiene and the introduction of hepatitis A vaccine in the private sector, leading to a decrease in incidence of hepatitis A among children and predisposing adults to more severe disease.

Hepatitis B has an incidence rate estimated at 6 per 100 000 and a prevalence ranging between 1.6% and 2.2% in Lebanon. Hepatitis B is more prevalent in the south of Lebanon, possibly due to emergency conditions leading to incomplete testing of blood products. Hepatitis C has relatively low incidence and prevalence rates not exceeding 1.7 cases per 100 000 people and 0.7%, respectively. However, high prevalence rates, reaching almost 30%, were found in haemodialysis patients and injecting drug users.⁹

⁷ National AIDS programme data, 2007

⁸ National tuberculosis report, 2007

⁹ Hepatitis situation assessment report, 2006

Sexually transmitted infections

Recent evidence based on Pap smear data analysis shows an overall prevalence increase of 2.1% in Pap smears associated with sexually transmitted infections (from a low of 4.8% in 2002 to a high of 6.9% in 2006) with an increase in prevalence of human papillomavirus-associated changes from 1.4% in 2002 to 3% in 2006, and a subsequent increase in atypical squamous cells of undetermined significance from 0.3% in 2002 to 2% in 2006 (a 6.7-fold increase over 5 years), changes being observed among women of younger age groups (from an average 42.4 years in 2002 to an average of 31.6 years in 2006).¹⁰

Noncommunicable diseases and risk factors

Chronic and degenerative diseases seem to be on the rise, although available data indicate that around 72.6% of those aged 15–59 years who reported the presence of a chronic disease were not necessarily confirmed.¹¹ There is evidence that lifestyle related diseases such as cardiovascular disease, gastrointestinal ulcer, chronic obstructive lung disease, musculoskeletal disease, depression and cancer are increasing. Various studies and registry data provide the estimates described in Box 2.

It has been observed that the prevalence of certain health risk behaviours particularly favours the increase in prevalence of the noncommunicable diseases in the country. One such health risk behaviour is

smoking, usually closely correlated with cardiovascular diseases, cancer, lung disease and dislipidaemia. It is estimated that 45% to 53.6% of adults are smokers, with the proportion of smokers among males at 60% and that among females at 47%.¹² Prevalence data on obesity, sedentary lifestyle, injury and violence, and substance abuse, correlating with cardiovascular diseases, musculoskeletal diseases, acquired disability and mental health diseases, respectively, remain insufficient although some increasing trends are observed.

Although data on morbidity and causes of death are not readily available, estimates on the main causes of adult deaths due to noncommunicable diseases are described in Table 1.

Mental health

Findings of the World Mental Health Survey for Lebanon showed that mental disorders are common in Lebanon, with a prevalence equivalent to that in western Europe. However, the number of individuals with mental disorders who are not receiving treatment is considerably higher in Lebanon than in western countries.

A prospective wartime study in four Lebanese communities had identified a lifetime prevalence of 27.8% for major depression. There is also evidence of relatively higher prevalence of post-traumatic stress disorders particularly in the areas that experienced protracted and repetitive conflicts.

¹⁰ Karam et al, 2008

¹¹ National household expenditure and utilization survey, 1997

¹² Baddoura et al, 1997

Box 2. Estimates of prevalence of noncommunicable diseases

Around 13% prevalence of hypertension is reported among the general population, and up to 25% of the elderly population.

Around 7000 new cases of cancer are reported every year. Breast and lung cancers are the most frequently reported types of cancer overall, while lymphomas, leukaemias, bone and cartilage tumours and brain tumours are the most frequent cancers reported among youth.¹³

The prevalence of non-insulin-dependent diabetes mellitus is believed to be around 13% in the adult population.

Around 25 000 invasive coronary interventions occur every year, that is nearly 72 procedures per 10 000 population, suggesting a significant prevalence of coronary and ischaemic heart diseases.¹⁴

The prevalence of anaemia is close to 25% among women of childbearing age.¹⁵ The prevalence of thalassaemia trait is not known, but the number of new cases of thalassaemia major is around 15 every year.¹⁶

Table 1. Mortality indicators

Indicators	Value (Year)
Adult mortality rate (probability of dying between 15 to 60 years per 1000 population), both sexes	162 (2006)
Adult mortality rate (probability of dying between 15 to 60 years per 1000 population), female	133 (2006)
Adult mortality rate (probability of dying between 15 to 60 years per 1000 population), male	193 (2006)
Age-standardized mortality rate for cancer (per 100 000 population)	90 (2002)
Age-standardized mortality rate for cardiovascular diseases (per 100 000 population)	453 (2002)
Age-standardized mortality rate for injuries (per 100 000 population)	98 (2002)
Age-standardized mortality rate for noncommunicable diseases (per 100 000 population)	742 (2002)

Source: ¹⁷

Nutrition

Malnutrition has not been identified as a critical issue in Lebanon. While under-nutrition is rarely observed, obesity in general and among children in particular is of increasing concern, with around 15%

of students estimated as being at risk for becoming overweight.¹⁸ Although there are few data related to micronutrients, there is evidence that the prevalence of anaemia among women of childbearing age can be as high as 25%, and that vitamin D deficiency

¹³ Noncommunicable disease control programme. Cancer registry, 2007

¹⁴ Lebanese Interventional Coronary Registry Working Group (LICOR), 2004

¹⁵ UNICEF, 1996

¹⁶ Chronic Care Centre report, 2004

¹⁷ Ministry of Public Health. Statistical report, 2007

¹⁸ Global School Health Survey, 2005

may be quite prevalent, particularly among women. A programme for fortification of flour with iron was prepared but not implemented due to lack of interagency and interministerial agreement and reluctance among private flour-producing mills. Since 1996, all locally produced salt is iodized, as an attempt to reduce the prevalence of goitre.

Environmental health

Lebanon is facing a variety of environmental health problems resulting from the years of war, including water pollution, air pollution, inadequate solid waste management and uncontrolled use of pesticides for agriculture and public health. Pesticides and fertilizers are overused, and the system of educating farmers on appropriate use of pesticides needs to be strengthened. Problems related to fresh water include deteriorating services and networks and mismanagement and uncontrolled exploitation of groundwater resources. Environmental concerns also include deforestation, soil erosion and desertification which will be compounded by climate change. Lebanon's coastal waters are also polluted with raw sewage and oil spills. Health care waste management is

a major issue, with no national consensus reached regarding the proper methodology for its disposal. Selected environmental health indicators are shown in Table 2.

Maternal health (including reproductive health)

Lebanon has witnessed significant improvement in reproductive health outcomes and indicators, as clearly shown in the results and findings of the Pan Arab Survey for Family Health (PAPFAM) conducted in 2004. Significant improvement is seen towards reaching MDG5, namely improving maternal health, particularly reducing maternal mortality ratio, as shown in Table 3.

Indeed, the maternal mortality ratio dropped from 104 deaths to 86.3 deaths per 100 000 live births over the past 10–15 years. The PAPFAM survey also indicated that 95.5% of pregnant women received prenatal care. Antenatal care was found to be proportional to education level and inversely proportional to the number of children. PAPFAM data indicate that 92% of all births take place in hospitals (private and

Table 2. Selected environmental health indicators

Indicator	Value (Year)
Population with sustainable access to improved drinking water sources (%) rural	100 (2006)
Population with sustainable access to improved drinking water sources (%) total	100 (2006)
Population with sustainable access to improved sanitation (%) rural	87 (2000)
Population with sustainable access to improved sanitation (%) total	98 (2000)

Source: ¹⁹

¹⁹ Central Administration of Statistics. Statistical bulletin, 2007

Table 3. Progress towards Millennium Development Goal 5: reducing maternal mortality

Indicator	1990	1996	2000	2004
Maternal mortality ratio (per 100 000 live births)	140 (1993)	107	NA	86
Proportion of births attended by skilled health personnel (%)	NA	NA	96	98
Contraceptive prevalence rate – modern and traditional (%)	53 (1987–1994)	61	63	74
Antenatal care coverage (at least one visit) (%)	87.1	87	94	96

Source: ²⁰

public) and only 2.4% of births are still taking place at home. The survey showed that postpartum care was not seen as routine care, as 83.7% of women who did not seek postnatal care claimed that this was not a felt need as they did not suffer from any complications and/or side effects as a result of giving birth.

Child health

Lebanon has made significant efforts towards reaching MDG4, namely reducing child mortality. Despite the progress shown in Table 4, the infant and child mortality rates

are average when compared to the Region. The infant mortality rate declined from 28 per 1000 in 1996 to 26 per 1000 in 2000 to 19 per 1000 in 2004, despite the existing regional disparities.

Great efforts were made to improve vaccination coverage, particularly over the past two decades; the current vaccine preventable disease patterns and trends in Lebanon still denotes, however, sub optimal immunization coverage. In fact, the immunization coverage might be on the decline, compared to one decade ago. In

Table 4. Progress towards Millennium Development Goal 4: reducing child mortality

Indicators	1996	2000	2007	2015 Target
Under-five mortality rate (per 1000 live births)	32	33	19 (2004)	12
Infant mortality rate (per 1000 live births)	28	26	19 (2004)	10
Proportion of children under one year immunized against diphtheria-pertussis-tetanus (%)	94	94	57*	95
Proportion of children under two years immunized against measles-mumps-rubella (%)	88	79	56*	90

Source: ²⁰

* Based on administrative coverage reported by the public sector alone

²⁰ Millennium Development Goals report Lebanon, 2007

addition, the immunization market may be driven by motivations that are not conforming to the idea that vaccination is a social good and a public health safety net against diseases. The Ministry of Public Health has an official vaccination calendar, but the immunization sector is flooded with different vaccination schedules, and the private sector introduces antigens freely outside those officially recommended. Nevertheless, Lebanon has made remarkable achievements towards polio eradication and has been certified as polio-free since 2002. Measles remains a major public health concern, with one of the highest reported incidence among the countries of the Region.

Among the main causes of under-five child deaths, neonatal causes are the most prevalent (64.9%), followed by undetermined causes (22%), injuries (11.1%), pneumonia (1.1%) and diarrhoea (1%).

Youth health

In Lebanon, young people (adolescents and young adults) constitute around 20% of the population, but have received the least attention in terms of health care and health services in the country. Most of the health services are tailored to serve best either children or the elderly in general, neglecting the particular needs of young people, especially in terms of counselling, health risk reduction and health education.

Most of the data available on youth health describe health problems related to behaviour, namely: violence, unprotected sex, unhealthy diet, inactivity and smoking. Some problems

relate to mental health, namely anxiety and addiction. According to the Global School Health Survey implemented in Lebanon in 2005, mental health and violence present significant concerns, with almost 40% of students feeling sad or hopeless and around 16% having seriously considered suicide. Almost 50% had been in a physical fight one or more times in the past year and over 30% stated that they had been bullied. Alcohol use among youth seems also widespread, with around 19.5% of students having had at least one drink containing alcohol in the month preceding the survey. The prevalence of lifetime drug use (using substances such as marijuana, cocaine, heroin, ecstasy and medical tranquilizers, one or more times during their life) was 3.5%. Around 27% of Lebanese students aged 13–15 had ever smoked cigarettes.²¹ Data available indicate that youth are engaging in sexual activity at an earlier age, with around 15% of school students reporting being sexually active²² and around 52% of adult males reporting being sexually active before the age of 20.²³ This combined, with delayed age of marriage for both sexes (27 and 31 years for females and males, respectively), and insufficient use of protective measures such as condoms show that the risk of sexual health problems becomes significant among this age group.

Health of the disabled

The prevalence of disability among the general population is estimated at 4.3%, with around 1.8% severe disabilities and 2.5% moderate to mild disabilities.²⁴

²¹ Global Youth Tobacco Survey, 2004

²² Sibai et al, 1999

²³ National AIDS programme. Knowledge, attitudes and practices survey, 2004

²⁴ Pan Arab Survey for Family Health, 2004

Old age is the most important cause of disability, at 26%, followed by medical conditions (chronic or communicable diseases) in 20.6% of the cases, accidents in 18% of the cases, congenital factors in 17.4% of the cases, and delivery and birth-related complications in 3.2% of the cases. Among all disabled, 49.2% reported having not received health care during the past year, while 44.1% reported having used health care services.

Data from the injuries and resulting disabilities incurred by the July 2006 war show that a total of 2548 injury cases were admitted to hospital, with more than 50% being between the age of 21 and 64 years. 62% reported lower extremity injuries, 54% upper extremity injuries, 43% head injuries and 41% back injuries. While 27% reported permanent wound deformity, around 33% of all injuries resulted in partial impairment and 2.5% resulted in total impairment.²⁵

Health of the elderly

Data on elderly health is scarce, although the elderly constitute around 9% of the total population. Available studies indicate that almost one third of the elderly are dependent in their daily life, that around 50% do not benefit from any type of health insurance and that 12% to 17% of males and 22% to 26% of female elderly suffer from poor hearing and poor vision, respectively.²⁶ Studies also suggest that depression is frequent among elderly, whether in nursing homes²⁷ or in the community.²⁸ Despite attempts at

developing an elderly health policy, the issue is still subject to national political debate.

2.4.3 Health system: structure and organization

Overview

The past decade has witnessed significant efforts of the Lebanese government to address the detrimental effect on the health system structure caused by the long lasting civil war that ravaged the country in the 1970s and 1980s, and that was characterized by rapid growth in an unregulated manner of the private for-profit high technology health sector and a weakened public sector. Although the health sector reform was halted by the volatile political and security situation, progress was made towards improving the health system performance in general, and regaining the stewardship function of the Ministry of Public Health. Nevertheless, and despite a moderate to high level of spending on health, the health outcomes do not compare favourably to other countries with similar health spending, which points to relative inefficiency of the system. When compared to indicators such as disability-adjusted life-years, the health of the Lebanese population also does not match favourably with developed countries. The Ministry of Public Health remains the insurer of last resort for around 50% of the population, which reflects the government efforts to address the inequities in access to health care.

²⁵ Sibai AM, Kronfol N. Needs assessment of impairments and disabilities among July 2006 war casualties, Lebanon. 2007

²⁶ Sibai AM et al. *Gerontology*, 2003, 49, 215–24

²⁷ Doumit L, Nasser R, 2007

²⁸ Habib LA, 2007

Governance

The Ministry of Public Health has embarked on health sector reform with the following main pillars.

- Health financing reform, which included: revised contractual agreements with private hospitals introducing flat rates, the issuance of “visas” for the treatment of patients on account of the Ministry of Public Health in both public and private hospitals, regulatory legislation in the pharmaceutical sector that led to a 20% cost containment.
- Regulating and expanding the primary health care system as a point of entry for this reform, which included contractual agreements with nongovernmental organizations enrolled in the MOPH-supported primary health care network, devolution of some programmes and specific interventions such as the epidemiological surveillance, an early warning system, the immunization and the distribution of drugs for chronic diseases.
- Institutional reinforcement of the public sector, including information system development, promotion of transparency through the use of the Ministry’s website to provide information and track citizens’ administrative formalities, updated and computerized registration of the health human resources and the distribution of medication for chronic diseases (through networking and the newly introduction of a pharmaceutical magnetic card). Utilization reviews show a marked increase in the utilization of the public sector and the primary health care network.

- Regulating the hospital sector, including development of the hospital accreditation system, formulating performance indicators, reinforcement and expansion of the public hospital network.

Health care financing

Overall expenditure on health is adequate but the balance of spending across segments of the health system may be ameliorated to deliver the expected outcomes. The excessive use of resources and new technologies seems to be the result of perverse incentives that arise out of the way hospitals and health care providers are paid, as well as through the incentives inherent in third party coverage and provider payments. The current financing structure, with the fragmentation of public funds, tends to focus more on curative care and gives relatively less focus to areas such as disease prevention and public health management in primary care. It also takes account of the rise in demand from an ageing population and the epidemiological transition towards more complex noncommunicable diseases.

The total health expenditure share from GDP is estimated at 8.3% (US\$ 460 per capita in 2005) with downward trend⁵ while government spending on health constitutes 6% of its fiscal budget. Nevertheless, the responsibility for health services does not lie solely with the Ministry of Public Health. Lebanon aims to provide universal access to health services to all Lebanese nationals through a fragmented system made of six public funds: mandatory social insurance for employees in the formal sector, medical services of the Army and the other uniform

staff (total of 4), the cooperative of civil servants, a few social mutual funds and a private voluntary insurance provider.

Through the Ministry of Public Health, the health system covers the uncovered citizens (53%). Actual figures show that the Ministry of Public Health consumes 36% of the treasury budget on health care.²⁹ The presence of multiple funds, along with the Ministry of Public Health as a last resort insurer, limits the government's ability to use its purchasing power in an effective way (Table 5).

The out-of-pocket contribution is estimated at 44%³¹, down from 69% in 1998, and is still considered high. On average, households spent a little over 9% of their household expenditures on health services in 2004, as compared to 14% in 1998. However, the burden of out-of-pocket expenditures as a proportion of household expenditures is not equitably distributed; nearly a fifth of expenditures in households in the lowest income category went to health. The proportion spent on health decreases as income increases, and households in the highest income group spend only 8% on health care. Even though there might not

be inequities in access, as measured by per capita use rates, the burden of out-of-pocket expenditures is inequitably distributed.

The predominance of the private sector in Lebanon makes it clear that meaningful changes to health system expenditure will not occur without better management of the private sector.

Service delivery

Private hospitals

There are 168 hospitals in Lebanon, with close to 13 000 beds. Of those, close to 4000 are for long term patients (elderly and mentally ill). The majority of private hospitals have less than 100 beds, and are owned and managed by charitable organizations, often religious or private physician's families. There are 3 private/charitable university teaching hospitals. The location of the private hospitals favours large cities.

Despite high utilization rates (12% of the population) varying with the third party payers, the occupancy rate is close to 55% and the average length of stay is 4.5 days. Private hospitals compete in the acquisition of "heavy" medical equipment. It is believed

Table 5. Public spending on health services (1998-2005)

Budgetary resource indicator	1998	2004	2005
% GDP spent on health (%)	12.3	8.8	8.3
National health expenditure per capita (US\$)	499.0	456.0	460.0
MOPH-allocated budget from total government budget (%)	3.8	3.7	3.6

Source: 5, 30

²⁹ Ministry of Finance, 2007

³⁰ National health accounts, 1998

³¹ Household survey, 2005

that this induces demand and even over-usage of unnecessary examinations. Efforts to introduce “certificate of need” (carte sanitaire) legislation have met strong resistance and claims that this would interfere with the free market philosophy prevalent in the country.

Public hospitals

The substantial investment of the government in constructing, equipping and staffing the government hospitals, enhanced by the availability of donors funds and felt needs after the July 2006 war, has started to yield a return. Around 10 public hospitals of about 80–100 beds are now almost fully operational, and more are partially operational.

The Rafic Hariri University Hospital in Beirut is the only government university hospital and is intended to serve as the lead referral hospital for the public hospital sector. The utilization of the public hospital sector has increased tremendously in recent years, and the sector has attracted more than 40% of the hospitalized patients covered by the Ministry of Public Health. Empowerment of public hospitals through the updating of their information systems, introduction of the accreditation process to assure quality, building the capacity of their staff and the recruitment of competent health personnel has played a major role in advocating for the system.

Medical laboratories

The total number of laboratories in Lebanon is estimated to be around 322. These laboratories are classified as either hospital-based or free-standing. According

to the Syndicate, in 2005 there were 92 hospital-based laboratories in Lebanon and 230 free-standing laboratories (not including dispensaries). When laboratories in dispensaries are counted, the total number of laboratories could reach 550. Out of the total 230 laboratories, only 114 are licensed by the Ministry of Public Health and are registered in the Syndicate. The remaining 116 medical laboratories operate under questionable legal status. Free-standing laboratories are concentrated mainly in urban areas, with very few operating in rural areas. An attempt has been made to introduce the Lebanese external quality assessment scheme to monitor the quality of the laboratories.

Central Public Health Laboratory

The Central Public Health Laboratory (CPHL), established in 1958, is mandated by law to undertake the following tasks.

- quality control of medications introduced in the Lebanese market
- monitoring of food products particularly those meant for exportation
- monitoring of water quality particularly microbiological aspects
- performing screening tests for selected diseases

The CPHL severely suffered during the civil war, and the repercussions of political tension and outdated legislation have greatly affected its capacities in terms of staff, equipment and role as a public health control laboratory.

The CPHL premises were closed in early 2006. A review mission was conducted in 2008 upon the request of the MOPH, and the

following actions were proposed.

- ❖ Revise the functions of the CPHL with emphasis on its role in:
 - ❖ quality control of medicines
 - ❖ monitoring of epidemics
 - ❖ quality monitoring of medical laboratories
- ❖ Reinforce the staffing
- ❖ Relocate it temporarily pending the establishment of premises and equipment better adapted to the new functions and needs

The Ministry of Public Health has embarked in the re-establishment of the CPHL, particularly in view of the booming pharmaceutical market and industry in the country and the introduction of generic medications. Commitment of the Ministry of Public Health and the government to this important regulatory public health functions is essential.

Radiology centres

Radiology centres in Lebanon are mainly hospital based but there are also some free-standing radiology centres and dispensaries that offer the same services. Radiology centres must be registered at the Ministry of Public Health to obtain a license to practice.

Physiotherapy clinics

Physiotherapists are allowed according to the law to practice undependably in clinics under condition of registry at the Ministry of Public Health and enrollment at the Order of Physiotherapists. It is estimated that 500 clinics are present in Lebanon, mainly in Beirut and Mount Lebanon.

Primary health care facilities

The country counts around 800 primary health centres that range from simple dispensing centres that operate sometimes only once every month, to well developed comprehensive primary health care centres. Around 70 primary health centres are operated by the Ministry of Social Affairs, 47 centres are operated by the Ministry of Public Health, a few are operated by municipalities, and the rest are operated by nongovernmental organizations that are often religiously or politically affiliated.

The Ministry of Public Health has strengthened access to primary care through a large network of primary care centres (currently around 120) established in collaboration with nongovernmental organizations and with the municipalities, providing since 1996 a package of health services by contractual agreement. Selected manuals for health workers were developed in an attempt to standardize and improve the quality of services. However, additional efforts are required to enhance the image of public health centres and improve consumer satisfaction.

In 2004, the national strategy for primary health care was revised and renewed without a consensus, and a five-year plan (2006–2010) was developed to expand the coverage still further, by increasing the number of primary health care centres enrolled in the MOPH-supported network and ensuring better quality of services, at an affordable cost, that are accessible to the public.

The basic package of services theoretically includes both preventive and primary curative care in the following departments: general medical care, paediatrics, dental and oral health, reproductive health, and cardiovascular medical care. In addition, the basic package includes the dispensing of essential medicines following a defined list that is revised every 3 to 4 years.

Over the past two years, the Ministry of Public Health, in collaboration with nongovernmental organizations, has been piloting different modalities of primary health care referral, be it based on capitation of a well defined package (such as the Wadi Khakled mother and child health primary health care project) or based on a catchment population referred from primary health care centres to public hospitals (such as the Nabatieh pilot referral project).

The total number of beneficiaries in the primary health care/dispensary network was close to 750 000 for 2006 with a total number of visits of 817 000, an increase of four-fold compared to 2001. It is worth mentioning that the utilization of primary health care services by pregnant women has also increased by 50% as compared to 2001, which may be attributed in part to the reproductive health programme activities. The network of primary health care centres remains the primary hub for provision of chronic disease medications to beneficiaries. This programme is managed by a nongovernmental organization, the Young Men's Christian Association, and covers all parts of the country.

Private ambulatory services/clinics

Private practice is dominant in the health service delivery system. Almost all physicians

have private consultation cabinets, most of them outside a health centre (hospital or other health facility). It is estimated that there are around 8000 private medical consultation cabinets all over the country, with a concentration favouring large cities. Recently, some attempts have been made to initiate group practice. This is particularly observed in certain medical disciplines such as plastic surgery. The recent medical demography in 2008 showed that there are 1.7 clinics per active physician in Lebanon.

In 2008, with the support of WHO the EWARS was extended to the around 75 private practitioners' clinics, with the objective of strengthening private sector coordination with the Ministry of Public Health and improving the alert system, knowing that most consultations take place in private clinics.

Dental care

Dental care is not covered under most insurance policies. Contrary to the trend for other services, the elderly use far less dental care than other age groups. Similarly, lower income groups use less dental care than higher income groups. While some of this might be a function of greater awareness, the findings for income and age likely indicate a lack of access (due to the inability to pay). Dental care is almost exclusively the domain of the private sector.

Utilization of health services

On average, the Lebanese population averages 3.6 outpatient visits per year, with males averaging 3.1 visits per year and females 4.1 visits per capita per year.⁵ While regional disparities exist in usage rates,

these do not appear to be significant. An interesting finding is that, unlike many other countries, lower income individuals have higher utilization rates than those in higher income groups.³² This indicates that there does not appear to be inequities in access to health services if these are measured by utilization rates. The age groups of over 60 years and under the age of 5 years have the highest utilization rates. Except among children under the age of 5, utilization rates for females tends to be higher than males. Those who have insurance have higher utilization rates than the uninsured.

In 2003, 78% of outpatient visits took place in the private sector, followed by the nongovernmental organization sector at 12%, with the public sector accounting for only 9% of all visits.

Quality assurance and accreditation

Quality of care has been a major concern for policy-makers. The Ministry of Public Health initiated an accreditation process in 2000. An accreditation manual tailored to the state of hospitals in Lebanon was developed and tested. This manual became the foundation for the National Hospital Accreditation Survey. It aimed at developing an external quality control system, assessing the quality and safety of services provided, and establishing a new foundation for the private–public partnership through the development of quality improvement plans. It also assists the Ministry of Public Health in controlling health expenditures, improving the efficiency of services, strengthening the confidence in the quality of hospital services,

controlling the supply and use of medicines, encouraging the generation of health related data, strengthening infection control practices, and finally establishing a system for patient advocacy.

The Ministry of Public Health remains the sole accrediting body for hospitals in Lebanon. It has been proposed that accreditation should be extended to cover all providers of care in the country (primary care, long term care, mental health, private clinics, diagnostic facilities and laboratories) in the public as well as the private sectors.

The Ministry of Public Health has recently embarked on the development of hospital performance indicators. Those indicators are being tested in both public and private hospitals.

The continuous nursing education programme and its linkage to hospital accreditation is reported as a success in building the capacity of nurses and assuring patient safety and quality of care. Assessment of such initiatives might be of added value.

Human resources for health

The supply of health professionals in the working market is unregulated and is subject to the principles of Lebanon's free market. In particular, Lebanon has a high number of specialist physicians per capita, a high number of pharmacists and a low number of nurses. This situation is not easily changed in the short term, as it is difficult to rebalance staff mix within the current educational and health care delivery systems. In the case of

³² Central Administration of Statistics. National household expenditure and utilization survey

nurses, an important issue will be how to encourage nurses to enter the profession in the first place, but the challenge is also how to retain them after training.

There are around 11 450 registered physicians (a rate of 2.8 per 1000 population) with more than 8000 being specialists. Many of the registered physicians may be practising abroad. The active workforce in Lebanon is around 8500 physicians with more than 21% of the registered physicians working outside Lebanon.

Human resources for health must be licensed by the Ministry of Public Health and must register with their respective professional order to practice. However, as yet the Ministry of Public Health has no mechanism for follow-up after registration. This creates ambiguity as to the number of human resources in the country, as well as further details about their practice. It is reported that there are currently 4200 dentists registered in Lebanon (about 1.1 dentists per 1000 population). There has been a major increase in the number of dentists in the past decade primarily due to the return of dentists educated outside Lebanon. At the same time, the order of pharmacists reports that 4667 pharmacists were registered in Lebanon in 2007 (1.2 pharmacists per 1000 population), with 58% women. About two-thirds of pharmacists work in pharmacies and 10.3% in drug companies. All others work in hospital pharmacies, health centres and a few laboratories.

In 2007, the Ministry of Public Health reported a rate of registered nurses in Lebanon of 1.8 nurses per 1000 population. The ratio of hospital beds to nurses has

improved to 1.3 beds per nurse compared to a 1994 survey. In order to retain nurses in the Lebanese health market, the nursing levels must be categorized with clear scope of practices and respective competencies.

Paramedical human resources include several categories of allied health personnel that are available in Lebanon such as physiotherapists, laboratory technicians, radiographers and opticians. Except for physiotherapists, information on this group is very scarce. The Order reports 1242 physiotherapists (55% women) practising in 2007. However, there are many unregistered practitioners in the country, many of whom are without formal training. In 2007, the Syndicate of Laboratories reported 871 registered laboratory technicians.

Many other postgraduate diplomas, executive and master degrees were instituted in different universities, such as in the fields of health management, public health and coding. However, data are not available regarding the number practising in the Lebanese market.

Pharmaceuticals

Pharmaceuticals have been a source of continuous debate in Lebanon. This sector is mostly based on imported medicines and on patented brand names, constituting more than 80% of the total market. The private sector plays a prominent role in procurement and financing. A factor that limits the impact of interventions to contain cost is the relatively low use of generics. Besides the standard practice of physicians of prescribing by brand rather than generic name, it is suspected that the relationship between manufacturers, importers and

physicians encourages the prescribing of branded medicines rather than generic equivalents. Recently, legislation has been put in place that has updated the registration process and reduced prices by more than 20% through a readjustment of the pricing components of medicines and the creation of incentive schemes that favour the selling of low price medicines.

The central drug distribution system at the Ministry of Public Health has also been improved through the decentralization of the distribution process, the development of a network and software application to regulate drug distribution and the launch of drug magnetic card. The drug distribution system supported 31 000 patients in 2007 up from 11 660 patients in 2005. A medicine registration programme is in place to capture all imported medicines and provide analytical reports.

Pharmaceuticals account for more than 25% of Lebanon's health expenditure.³³ The expenditures on medicines by the Ministry of Public Health in 2007 amounted to about US\$ 34 million. Essential medicines accounted for 4%, vaccines for 5%, and medications for "catastrophic" illnesses for 90% of the expenditures. These illnesses include cancer (53%), multiple sclerosis (13%), central nervous system conditions (10.1%), kidney disease (9%), HIV/AIDS (0.5%).

The Ministry of Public Health has embarked on a good governance in medicine project, which aims at improving transparency in terms of medications management and procurement. The Order of Pharmacists and the Ministry of Public Health have launched

awareness campaigns against counterfeit medicines, and the Ministry of Public Health is publishing periodically on its website those counterfeit medicines that are retrieved from the market.

Health information system

Significant efforts were made to improve on the health information system over the past few years, such as issuing a periodical births bulletin, introduction of geographic information systems technology in health, computerization of the several departments at the Ministry of Public Health allowing for easy access to various health data and the recent introduction of a private-based EWARS system. However, information about morbidity and mortality at national level remain suboptimal, and most of the data in Lebanon are usually obtained from studies done through certain projects. For example the Pan Arab Survey on Mother and Child (PAPCHILD) and the second generation Pan Arab Survey for Family Health (PAPFAM) undertaken in 1996 and 2004 were part of the regional projects supported by the Arab League and United Nations agencies. Similarly, the national health accounts, the national household health expenditures and utilization surveys conducted in 1997–1998 were part of the preparations for the health system reform project funded by the World Bank.

Most of the behavioural surveys (knowledge, attitudes and practices studies) on HIV are funded by UNAIDS or WHO under specific projects. The Multiple Indicators Cluster Survey (MICS II) study done in 2000 was

³³ National health accounts, 2001

supported by UNICEF as part of reporting on child conventions. More so, the cross-sectional study on outcomes of deliveries conducted in 2001 was undertaken under a reproductive health project. Data on mortality, causes of death and morbidity are not available, which was a major limitation in completing the burden of disease study initiated in 1999 as part of the health system reform project. Small-scale studies, usually limited to certain population groups and most of the time to certain geographic areas, are abundant. It is frequently difficult to use these studies and generalize the results to the population at large because of their poor representativeness, often poor reproducibility, and sometimes suboptimal quality of data.

There are efforts towards developing a national health information system at the Ministry of Public Health. In that respect, the Ministry of Public Health has computerized its archived data regarding the licenses given by the Ministry to health professionals, as well as its pharmaceuticals distribution systems. The finance auditing system is also computerized.

A collaborative effort led to a unified database between the CNSS and the Ministry of Public Health as public funders. The epidemiological surveillance hospital-based network generates substantial information regarding communicable diseases. Main issues challenging the further development of the health information system include the following.

- ❖ Computer literacy of concerned MOPH staff, both centrally and peripherally
- ❖ Equipment across the MOPH offices
- ❖ Cooperation of stakeholders in sharing their data
- ❖ Collaboration with the private sector
- ❖ Feedback of information

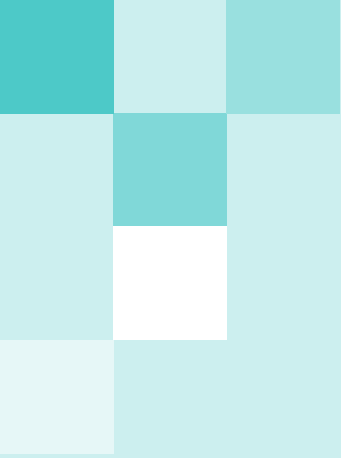
Legislation

Many legislative changes were introduced during the past few years. The main achievements were related to the pharmaceutical sector in term of pricing, quality control and that of the public hospital accreditation mechanism. In terms of human resources management, a new nursing law adopting the WHO nursing standards and criteria is expected to come in the next year.

Section

3

Development Cooperation
and Partnerships



Section 3. Development Cooperation and Partnerships

3.1 Overview

In 1998, donor assistance amounted to 1.96% of total health care financing. Previously, donor assistance doubled between 1995 and 1996, declined by nearly 30% between 1996 and 1997 and then 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. The Ministry of Public 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. The World Bank has been supporting health sector reform as well as capital investment activities in Lebanon.

It is estimated that around 2% of health expenditures is provided by donors. This percentage probably increased after the July 2006 war due to the humanitarian and recovery health interventions.

In addition to the UN agencies involved directly in health, namely WHO, UNICEF and UNFPA, other agencies and donors, such as the World Bank, Italian Cooperation and some embassies, have interventions in health.

The United Nations agencies provide support based on their respective mandates, as well as in line with the UNDAF. Most of the various activities by agencies were readjusted to meet the needs of national priorities in health as described in Paris III Conference.

The Government of Lebanon aims to alleviate poverty and improve the quality of health by expanding basic health services coverage and improving efficiency and quality.

3.2 Active agencies in the health sector

The main donors in health for the past three years, through WHO recovery activities, are described in Table 6.

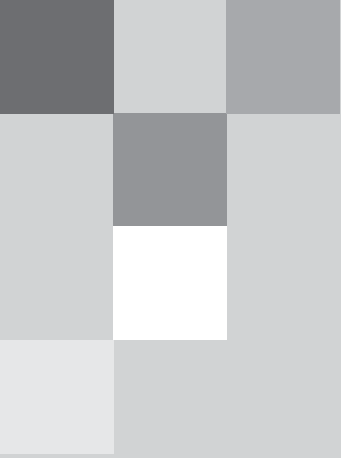
In addition, the Italian Cooperation has been one of the principal partners of the MOPH since the 1980s. It has supported continuing nursing education (US\$ 3 million), the Central Public Health Laboratory (US\$ 1 million), the development of a health system research unit at the MOPH (US\$ 1.7 million) and support to the primary health care network (US\$ 3.5 million). The current health interventions (2006–2008 extended to 2009) consist of “supporting basic health services reform” in selected districts of the country, with focus on quality improvement in line with the accreditation process.

Other bilateral donors who contributed to health interventions over the past few years include the following.

- ❖ Spain has a protocol for a value of US\$ 30 million to strengthen health facilities through the purchase of equipment (83%), rehabilitation of the infrastructure (15%) and technical assistance (2%).
 - ❖ Sweden has provided US\$ 1.7 million to strengthen the nursing profession and US\$ 0.5 million to establish the Drug Quality Control Centre.
 - ❖ The GCC countries notably Saudi Arabia, Kuwait and the United Arab Emirates have supported the construction and refurbishment of hospitals and health centres, notably the Rafik Hariri University Hospital.
 - ❖ France has supported several institutions most notably the Université Saint Joseph (including the establishment of Berytech and Technopole Santé), the Lebanese University, Makassed and the University of Kaslik. In addition, France has supported the “Mutuelles”, the “Ecole Supérieure des Affaires ESA”, and the “Institut de Gestion de la Santé et de la Protection Sociale” at the Université Saint Joseph.
 - ❖ Belgium provided support for primary health care in rural areas (356 432 Euros) over the period 1998–2002.
 - ❖ Greece has provided assistance to the Saint Georges University Medical Centre (59 000 Euros) as well as to the Marjeyoun maternal and child health clinic (366 000 Euros), the Dar Al Ajazza Al Islamia hospital in Beirut (73 000 Euros) and to the Kfarsoun-Koura medical centre (15 000 Euros).
 - ❖ Turkey is in the process of supporting a reference hospital for traffic injury treatment in the north of Saida
- The main challenge facing donors is consistently given as the lack of a clearly stated vision for health.

Table 6. Main donors in the health sector, 2006–2009

Donor	Area of intervention	Amount (US\$)
Government of Australia	Capacity building of the MOPH in health emergency preparedness	385 000
Governments of Australia, Finland, Kuwait, Qatar	Supporting the school health programme	1 400 000
Government of Finland	Strengthening the mental health programme	115 000
Government of Australia	Support to EPI	300 000
Governments of Kuwait, Qatar	Support to the pharmaceutical sector	250 000
Government of Australia	Support to community-based health interventions	300 000
Government of Finland	Improving maternal mortality rates in selected regions	1 000 000



Section

4



Current WHO Cooperation



Section 4. Current WHO Cooperation

4.1 Previous CCS cycle

Since the beginning of the CCS cycle 2004–2009, Lebanon has witnessed turmoil with an unstable political, economic and security situation impeding the implementation of planned activities. As a result of the crisis situation that prevailed after 2005, a change in priorities shifted the joint WHO–MOPH cooperation towards other interventions. These interventions, which took advantage of the flow of donor funds and the commitment of the Government to alleviate the impact of the July 2006 war on certain historically deprived areas, were linked to improving certain determinants of health. Along the same line, efforts focused on the school health programme, which was expanded and modified to include a component on school health environment and initiation of health promoting schools initiatives, in addition to formulation of a school health strategy.

Efforts were made towards strengthening and rebuilding the health system in all its components. Most of the interventions implemented during the recovery and reconstruction phases were in fact seed interventions for more sustainable ones. As a result, new systems were introduced such as the logistics supply chain system and management, and a primary health care-based early warning and response system. The decentralization of certain health-related programmes, such as the regional drug dispensing system, allowed the strengthening of qada doctors units and some functions at the periphery level.

Efforts to empower the public health sector gained a significant boost. Many achievements were noted in the governmental hospital sector, the drug regulation system, the upgrading of many health facilities (primary health care and hospitals) in terms of modern technology, package of services, and reinforcement of the capacity of the human resources particularly in terms of emergency preparedness and response during the past two years.

The past five years witnessed also more focus on the strategic direction of supporting disease control, with special emphasis on immunization and reinforcing the Expanded Programme on Immunization (EPI), and the establishment of disease prevention and control programmes such as for hepatitis, diabetes and cardiovascular diseases and injuries, and oral health programmes.

Partnership for health was improved mainly in terms of private–public sector collaboration, and the elaboration of systems whereby the private sector and other stakeholders are essential partners. The enhanced collaboration between the MOPH, WHO, academia and nongovernmental organizations was the direct fruit of the national response to the 2006 crisis and the implementation of the health cluster approach. This cooperation showed itself in many examples such as the EWARS network in the private sector, the contributions of army surveillance and EWARS into the MOPH health information system, and the active participation of nongovernmental organizations in strategy

development and service delivery, such as in the primary health care programme and community-based interventions. However, few efforts were made towards supporting the government to adapt to the challenges of globalization.

4.2 WHO country office

The Government of Lebanon and WHO signed the first agreement for collaboration in 1960. WHO considers itself a partner with the Lebanese Government in all activities that promote the health status of the population. The office is located in Museum Square where it occupies half of the fourth floor, and part of the first floor for the National Health Information Centre. WHO provides direct technical, administrative and financial support to various programmes as agreed during the joint programme review and planning mission.

4.3 Key areas of work

4.3.1 Joint WHO–MOPH programmes

In order to facilitate administrative procedures and foster implementation and technical support of selected programmes, in the mid 1990s the MOPH signed with WHO two agreements whereby the MOPH entrusts to WHO on yearly basis an amount of money to execute two joint programmes, namely the national AIDS control programme and the primary health care programme.

Although the transfer of funds is significantly delayed every year, an important part of the trust fund is spent on salaries of

qualified staff that the restricted recruitment policy of the MOPH does not otherwise allow, and total financial allocation is suboptimal. WHO has succeeded in developing and supporting the following programmes.

National AIDS control programme

Initially established by WHO in 1989, the national AIDS programme is currently a joint programme executed by the WHO with a trust fund made available by the MOPH to WHO on yearly basis. The national AIDS programme is also the secretary of the UN theme group on HIV/AIDS, established in 2006 and currently chaired by WHO. A national strategic plan for HIV was developed in 2004, and revised in 2008. The main interventions in the past five years were focused on vulnerable groups including youth and prisoners, and on high risk groups namely men who have sex with men, drug users and sex workers.

The main strategies adopted by the national AIDS programme include: capacity building on the prevention and harm reduction; community awareness and periodic campaigns; outreach through a large and active network of nongovernmental organizations; epidemiology and data collection including research; and improving patient care and support. The national AIDS programme has introduced free antiretroviral therapy treatment according to a national protocol in 2000, and has also established 20 voluntary counselling and testing centres in collaboration with the nongovernmental organizations.

Primary health care programme

The primary health care programme includes a number of sub-programmes.

Noncommunicable diseases programme

Established in 1996, the noncommunicable diseases programme initially focused on prevention and control, and covered the following diseases and conditions under one manager: diabetes, cardiovascular disease, injury and cancer. The programme witnessed fluctuations in its performance, which led to its restructuring in 2007 to include the following.

- ❖ The national diabetes control programme, focusing on quality of care and database improvement. The programme has adopted the following strategies: capacity building of health professionals, awareness and patient education, media campaigns and data collection.
- ❖ The national cardiovascular programme, focusing on prevention and data collection. The programme aims also to liaise with the Lebanese Interventional Cardiology registry, established within the National Cardiology Society in 2001.
- ❖ The national injury prevention programme, focusing on prevention and data collection particularly as related to fractures and osteoporosis. Based on the national data available showing that death and injury from road accidents have been rising and are now among the highest in the world, affecting mainly young people, it is expected that the programme will expand its activities to cover prevention of road accidents, with support from national nongovernmental organizations.

- ❖ The national oral health programme, focusing on prevention, in line with the national strategy of school oral health has been very active over the past years. Several national studies were carried on, indicating the need for more intense interventions and for a wider scope of action. The fluoridation of salt is being considered.
- ❖ The national cancer registry, which was established in cooperation with the scientific cancer societies in the country, was transferred the epidemiology and surveillance unit at the Ministry of Public Health, supported by the national cancer registry committee. Data are collected using the capture and the recapture methods.

National viral hepatitis programme

The national viral hepatitis programme was established in 2007, and is focusing on prevention and care of viral hepatitis. The main strategies include the following.

- ❖ Awareness dissemination to general public using media channels
- ❖ Capacity-building of health professionals with focus on dialysis centres and primary health care
- ❖ Data collection and epidemiological surveillance

Drug dispensing centre

The drug dispensing centre was established in 1998 with the Central Drug Warehouse and has been continuously updated and reinforced with equipment and staff. In 2007, the logistics supply system was established at the dispensing centre, which allows better tracking and stocks control. In addition, a temperature-controlled

room was established, which secured a well-controlled cold chain at the central level. The drug dispensing centre was decentralized in 2008. There is need to develop software for registering all pharmacies.

4.3.2 National programmes

Expanded Programme on Immunization

The Expanded Programme on Immunization (EPI), initially established jointly between WHO and UNICEF, was delegated to the MOPH in 1996. The programme has been actively involved in developing and implementing national vaccination campaigns (polio, measles). The national vaccination schedule was revisited in recent years to revise some of the antigens already introduced in terms of timing or concomitant use in a polyvalent form.

Decentralization of the EPI towards the periphery and the empowerment of the district EPI teams have progressed significantly. A trial of the “reach every child” approach through the local community was piloted successfully in 2008–2009 in four districts.

The process of development of an EPI policy with clear strategic axes and a multiyear plan endorsed jointly by the MOPH and by the private sector was started in 2008. WHO team provides technical support to the EPI, and vaccines are still purchased through UNICEF using funds made available by the MOPH.

The main challenges facing the programme include understaffing, sub-optimal utilization of routine vaccination at the level of primary health care, and unclear data on vaccination in the private sector.

National school health programme

The school health programme established more than a decade ago, was operating essentially through nongovernmental organizations in selected public schools. A national school health survey was conducted 2005, as part of the global school health survey showed the need for improving the school health programme, particularly as it relates to behaviour modification. WHO supported actively the upgrading of the school health programme to include, in addition to the medical screening component, provision of necessary medical equipment to all 1400 public schools, a new medical prevention component (including oral health screening and fluoride gargle) with a referral system to the primary health care network, a component on health education that targets students, parents and teachers (under which the health promoting schools and e-learning projects were implemented), and a component on assessment of school healthy environment. The school health programme was implemented under a Memorandum of Understanding signed between WHO, MOPH and the Ministry of Education in 2006. Efforts are geared towards sustaining the commitment of both ministries, reinforcing the national ownership of the programme, improving utilization of youth health data collected through the programme and fostering the participation of the private sector.

Health security and response

In line with the requirements of the International Health Regulations (IHR), WHO supports the reinforcement of surveillance in general with particular emphasis on disease early warning and response. In that respect, an early warning and response system (EWARS) was established at the level of primary health care, including equipping the MOPH district offices, and building capacity of MOPH staff, both centrally and at peripheral level, for routine surveillance and for water quality monitoring. In addition, the EWARS was expanded to include around 100 sentinel clinics in the private sector across the country.

Along the same line, efforts were made towards improving national preparedness for health emergencies. Accordingly, a national contingency plan was formulated for avian influenza, with stockpiling of oseltamivir and intensive capacity-building in the public and private health sectors, reaching more than 2000 health professionals from various disciplines and institutions. Similarly, an important effort is being made to build national capacity in terms of emergency planning and response, covering the primary health care and the hospital sector, and a multidisciplinary core team reaching around 1700 health professionals across the country.

In parallel, a case definition of reportable diseases based on IHR recommendations was developed. The Central Epidemiology and Surveillance unit at the MOPH was reinforced in terms of IT capacity, staff and technical information. Further efforts are needed with regard to the following.

- Assessment of needs towards full implementation of IHR
- Advocacy among parliamentarians and decision-makers to allocate resources and review related legislation
- Capacity-building of staff at ports of entry, as well as among MOPH staff
- Further reinforcing the national surveillance and EWARS capacity
- Re-establishing the CPHL with revised and upgraded functions to be commensurate with IHR requirements

National tuberculosis programme

The national tuberculosis programme was established around 15 years ago, and has been able to build a very good cooperation with the private sector. The private sector has a substantial role in national detection of cases, reporting and referring around 80% of cases to the programme, and the public sector has a major role in the success rate of treatment (100%) particularly after the introduction of the DOTS strategy around 10 years ago. There are eight anti-tuberculosis centres in Lebanon. WHO provides continuous technical and logistical support to the programme, and has facilitated access to the global anti-tuberculosis drugs initiative. The national tuberculosis programme provides free treatment even for non-national tuberculosis patients, which constitute 13% to 18% of total tuberculosis cases registered in Lebanon. Efforts will be made to improve information on multidrug-resistant tuberculosis.

Zoonotic diseases programme

The zoonotic diseases programme is part of the prevention department at the MOPH. However, it has not been very active,

except for providing selected interventions namely those related to treatment for snakebite and dog bites, and development of related education material that is not well disseminated. The emergence of new diseases, such as avian influenza, has incited the MOPH team, with the support of WHO, to initiate training and develop a contingency plan. However, much more needs to be done, particularly in terms of brucellosis prevention and treatment, and general awareness and prevention from zoonotic diseases.

Environmental health projects and activities

There is scarcity of studies on the magnitude of environmental health problems in Lebanon. WHO has been intensifying its technical and logistical support in three main areas.

- ❖ Management of hospital waste. The private sector is producing the bulk of hospital waste. Difficulties related to who should bear the high cost of waste disposal have hampered development of a strategy for hospital waste management. WHO has conducted several trainings sessions targeting health inspectors, hospital staff and army hospital staff on proper management of hospital waste. Nevertheless, the need for a national strategy remains pressing, in addition to the need to assess the impact of the uncontrolled health care waste management.
- ❖ Water quality monitoring system. In view of the need to address the urgent need to monitor water quality after the massive destruction of infrastructure during the July 2006 war, as part of controlling waterborne diseases, WHO

supported the establishment of a water quality monitoring system that included, besides provision of the necessary portable laboratories and reagents, the provision of vehicles at the peripheral levels, and capacity-building of health inspectors and field and laboratory technicians. The main focus will be on reinforcing the response capacity and on linking the water quality monitoring system to the epidemiological surveillance unit and EWARS.

- ❖ Reinforcement of the sanitary engineering department at the Ministry of Public Health. In an attempt to improve coordination and performance of the sanitary engineering department at the MOPH, WHO has supported the computerization of the department, in addition to building the capacity of the staff, particularly at the level of field response and monitoring. There is a need to maintain the efforts initiated in that direction, and support the department to develop a more proactive role, and link with existing initiatives.

Occupational health

Little has been done in respect to occupational health at national level, and related data are very scarce. WHO supported a situation analysis exercise which mainly highlighted the need for legislation reinforcement, a lot of advocacy among employers and decision-makers, as well as solid and useful data compilation. Initiatives will be developed in that direction.

Nutrition and food safety

Food safety seems to be of rising concern. WHO has developed guidelines

on food inspection, and safety norms were disseminated to health inspector through workshops. However, more efforts should be oriented in that direction, particularly in terms of community awareness and the role of the municipalities.

Mental health

The efforts to establish a national maternal health programme have not yet succeed despite recognition by the officials at the MOPH for such a programme, and the growing evidence of increasing mental health issues, in terms of post-traumatic stress disorder prevalence, increasing prevalence of addiction and drug abuse, increasing suicidal ideations among youth, and increasing violence at school. A psychiatrist and a psychologist were nominated as focal points for mental health at the MOPH. The MOPH has offered premises for centres that would offer mental health related services to children free of charge. The requirements for mental health in primary health care have been determined. WHO has implemented capacity building in terms of emergency mental health, reaching around 1500 medical and non-medical staff at the level of primary health care. The assessment of mental health institutions and services is in process. Efforts will concentrate on building the national mental health programme and updating and disseminating mental health-related data.

Maternal and child health

The national child perinatal and neonatal network was established a decade ago and is being maintained with the support of WHO. It has progressively expanded to include currently 25 hospitals across the country covering around 25 % of all deliveries. Data

available from the network indicate the need for improving neonatal care. Efforts will focus on exploring possibilities for expanding network capacity to obtain data on maternal mortality and morbidity.

Neonatal resuscitation training was initiated with the support of WHO, in collaboration with a local and an international specialized nongovernmental organization. The project aims at improving the skills of health staff working in emergency paediatrics units and delivery rooms in emergency resuscitation of neonates, with the ultimate goal of reducing child mortality and morbidity attributed to the neonatal promptness and appropriateness of care.

Training on reproductive health in emergencies was initiated and implemented by WHO in collaboration with UNFPA and the MOPH. It provided training to around 1000 staff working in hospital emergency rooms and at the level of primary health care on principles and guidelines for management of reproductive health in emergencies. Efforts will focus on integrating this training as part of university curricula as well as part of primary health care capacity-building.

Improving data on maternal mortality and morbidity. Data on maternal morbidity are practically inexistent, while data on maternal mortality are not very clear. WHO has initiated discussions with the MOPH and concerned stakeholders (the professional association, orders, syndicates and scientific societies, certain nongovernmental organizations, the Ministry of Interior, UNICEF and UNFPA) to develop options that will allow improved data and information regarding maternal mortality and morbidity. Efforts will continue in that direction.

Efforts will focus on improving maternal and child data, as well as further developing the piloted interventions and enhancing private sector cooperation in these two areas.

Health system development

The health system reform initiative was started in 1997 by the MOPH in collaboration with WHO and the World Bank. Initial efforts generated, for the first time, a national household expenditure and utilization survey and a national health account report that pointed towards significant inequities in health affordability resulting in regional health outcomes discrepancies, as well as very high out-of-pocket expenditures on health. Accordingly, WHO support was directed towards the development of scenarios and possible solutions for fair financing in health. WHO also supported the implementation of a burden of disease study that could not be completed due to lack of data on morbidity, as well as to a national study on health system responsiveness.

WHO provided technical and administrative support to re-establish programmes related to noncommunicable diseases, namely the diabetes, cardiovascular disease, injury, and oral health programmes.

Significant and continuous support was provided to improve epidemiological surveillance at both central and peripheral level, an issue that became even more important in view of the requirements of the IHR. With the establishment of the EWARS and the reinforcement of the qada doctors units, epidemiological data that were previously only hospital based, are now also primary health care and private sector

based, reflecting better the trends and epidemiological situation.

In addition, WHO supported the development of hospital performance indicators, both in the public and private sector, an initiative that needs to be reinforced and institutionalized as part of the revised accreditation system.

Discussions about defining performance indicators as part of primary health care accreditation have been initiated with the MOPH, as part of the World Bank funded reform project. More efforts need to be elaborated in this direction. A study on patient safety culture was supported by WHO, a seed intervention aiming at developing further the hospital safety programme in the country.

WHO has been instrumental in providing IT support to various departments and projects and programmes, including installing and training on the logistical supply system and the central drug warehouse, decentralizing the drug distribution system, computerizing the audit department and the health education department, and archiving the human resources database.

Along the same line, WHO supported the updating of the hospital database in collaboration with the Syndicate of Hospitals, and the updating and upgrading of medical demographic information in collaboration with the Order of Physicians. In addition, WHO is technically participating in the main health reform projects, with particular input to reinforcing and upgrading primary health care and the public-private sector mix. Advocacy is needed to increase the government share on health expenditures as

well as technical support in all areas of the health reform project.

Health of special groups

Health of adolescents

WHO is actively participating in the joint UN agencies project aiming at developing a national youth policy. The policy document is expected to be in effect starting in 2010.

At the same time, WHO has been advocating and providing technical support for the integration of youth health, including sexual and reproductive health, at the level of primary health care, and through the national school health programme. Efforts will be geared towards improving data on youth health, and improving access to and utilization of quality and adapted health services to youth needs.

Health of the elderly

A National Committee for the Elderly was established several years ago, focusing mainly on elderly in nursing and chronic care homes. The government has just proposed a pension and retirement plan that is still subject to debate. Recently, a centre for studies on ageing was been established as a registered nongovernmental organization.

WHO efforts will focus on providing assistance in translating research into policies and practice aiming at improving response to health needs of the elderly.

WHO collaborating centres in Lebanon

The Nutrition Department at the American University of Beirut was designated a WHO collaborating centre in 2008. The osteoporosis centre at the American University of Beirut, jointly with the Université Saint Joseph, Endocrine Division, is also applying to become a WHO collaborating centre.

WHO partnerships

WHO considers as partners all international and national organizations that are working in health and health-related areas in Lebanon, whether there is actual current direct collaboration or future potential. Most of the support is directed to the MOPH. Other activities are coordinated and implemented with other stakeholders.



Section

5

Strategic Agenda
for WHO Cooperation



Section 5. Strategic Agenda for WHO Cooperation

5.1 Operating framework

The following strategic directions were discussed with the Ministry of Public Health team and the main stakeholders. The identified strategic priorities are meant to support national efforts to achieve the Millennium Development Goals, particularly Goals 4, 5 and 6 (maternal mortality, infant mortality, tuberculosis and HIV/AIDS control programmes). The strategic directions also aim at strengthening the equity focus of public health interventions. They are constructed to be aligned with WHO mandate and technical domain, but also take into account the following issues:

- ❖ Characteristics of the population health status, namely the epidemiological transition and projected disease patterns
- ❖ National health strategies and goals formulated by the government
- ❖ Unique characteristics of the health system design, namely the public–private mix
- ❖ Longstanding partnership with civil society and the active role of the nongovernmental organizations in health delivery
- ❖ Forecasted impact of the recovery interventions, and the momentum and experience gained by selected initiatives and interventions.

5.2 Strategic directions

5.2.1 Strengthening health security

Health security has become an increasing concern, especially with the mobility of the large Lebanese diaspora, potential crisis situations and environmental risks. WHO collaboration will continue to support the development of new interventions as well as build on already-initiated action aimed at improving the essential public health functions, with emphasis on three main axes of intervention.

- ❖ Control of emerging and re-emerging diseases with special focus on building capacities with respect to the International Health Regulations, strengthening the national surveillance system to cover communicable and noncommunicable diseases, expanding the early warning system, reinforcing the programmes related to vaccine-preventable infections, especially routine immunization, and re-establishing the national control laboratory with upgraded functions more adapted to public health requirements.
- ❖ Emergency preparedness and response, with focus on national contingency planning, and institutional capacity building in management of emergencies.
- ❖ Improvement of chemical, water and food safety, with special focus on standards development and capacity building and reinforcement of the water quality monitoring system.

5.2.2 Strengthening health system governance

The last 3–4 years have witnessed significant efforts by the MOPH to regain its stewardship among the myriad stakeholders in health in the country. The MOPH has also made important efforts towards decentralizing health care, as well as towards regulating the pharmaceutical sector. WHO collaboration will support the reinforcement of health system governance with special emphasis on the following axes of intervention.

- ❖ Improving governance of the pharmaceutical sector through supporting the development of a national autonomous regulatory authority to manage health and biomedical technology including medicines and vaccines, strengthening national medicines control laboratory to support quality assurance and improvement activities, and promoting the use of generics, as well as continue the initiatives regarding enhancing the transparency of the pharmaceutical sector and the reinforcement of laws against frauds.
- ❖ Institutional strengthening of MOPH through supporting needs assessment for capacity development of MOPH staff in terms of health system strengthening, decision-making regarding major policy directions and communicating with media and major stakeholders.
- ❖ Enhancing the regulatory function of MOPH through building the capacity of central staff and district managers in planning and management. Particular effort will be directed towards improving the capacity of the MOPH in terms of promotion of a culture of

quality assurance and improvement in service delivery, including patient safety and security in health facilities.

- ❖ Strengthening decentralization through supporting interventions aimed at defining relationships with local government and civil society organizations, development of a referral system and task shifting to improve the performance of health professionals. WHO collaboration will also support advocacy for the promotion of the use of *carte sanitaire* in developing long term scenarios and a master plan for hospital/primary health care development.

5.2.3 Reinforcing health system delivery (revitalizing primary health care and strengthening hospitals)

Lebanon has gained experience in moving forward towards building a more effective primary health care strategy and succeeded in developing a strong partnership with nongovernmental organizations. The past few years have also witnessed a progressive expansion of public hospitals both in terms of physical premises as well as in terms of services and utilization. WHO will focus on the following main areas.

- ❖ Revitalizing primary health care. Upgrading the primary health care strategy through assessing the lessons learned in order to elaborate a clear policy for funding primary health care, reinforce coordination between primary and secondary levels of care such as referral system, promote high quality primary health care services as an entry point to understand the complexities of morbidity and health behaviour along

with other determinants of health, and introduce the voluntary registration of families within a catchment area. WHO will also support defining the role and coordination mechanisms between the municipalities, nongovernmental organizations and the private sector in primary health care delivery and definition of health status indicators of populations served will be further strengthened. Focus will be put on strengthening the existing primary health care network through supporting the review and upgrade of the primary health care package, building the capacity of primary health care staff in micro-planning and management and in information system, encouraging community-based initiatives, integration of prevention and disease control programmes at primary health care network, particularly the noncommunicable disease control programmes, with special focus on health promotion and healthy lifestyle and environment.

- Strengthening the hospital sector. Supporting the assessment of the initiative aimed at strengthening public hospitals through measurement of their input to: service delivery, strengthening primary health care and controlling health care costs. Also included are review and assessment of existing public hospitals in relation to their staffing, biomedical equipment and overall efficiency and performance. Activities will include strengthening the capabilities of hospital managers, in both the public and private sectors, particularly in costing and cost analysis, in using ICD and in improving the

quality of health and medical records, as well as supporting initiatives and training aiming at increasing capabilities of hospital managers through use of modern techniques, improvement of management information systems and accountability

- Strengthening health system governance. It is also crucial to reinforce the capacity of the MOPH in coordinating and harmonizing interventions and programmes between various departments and divisions within the Ministry and among concerned ministries in major public health issues such as noncommunicable diseases, environmental health, HIV and sexually transmitted infection prevention, EWARS and routine surveillance, and emergency preparedness.

5.2.4 Improving equity in health care financing

The government has made significant efforts towards health reform, especially in terms of financial health reform. WHO will continue supporting national efforts and initiatives aimed at improving equity in health with special focus on improving social health protection through advocating increased public spending in order to reduce out-of-pocket expenditures. Interventions include reviewing the financing modalities of the primary health care and supporting the development of scenarios to support the measurement of fairness in financial contribution and catastrophic health spending using household data for advocacy to improve equity in health care financing.

5.2.5 Increasing evidence to support policy analysis and development

Efforts towards introducing the use of evidence for policy and strategy decisions have been significant over the past decade, but issues such as representativeness, periodicity and pertinence of data need further improvement, especially in terms of mortality and morbidity. In that respect, WHO will focus on the following axes of intervention.

- ❖ Strengthening national health information systems through supporting national efforts aiming at improvement of health and medical records, the use of ICD coding at various hospital facilities, improvement of civil registration in coordination with the Ministry of Interior, as well as expansion of the use of cancer and noncommunicable diseases registries through partnership with academia, the private sector and professional associations.
- ❖ Developing a multi-annual plan for research and analysis using data generated through the health information system or through periodic studies such as national health accounts and health and demographic surveys, with special emphasis on assessment of the core list of national health indicators to be used for monitoring and evaluation of health status, and segregation of data by age, sex and qada.

5.2.6 Improving human resources for health development

Efforts are needed to enhance the MOPH regulatory, supervisory and planning role through the development of a MOPH

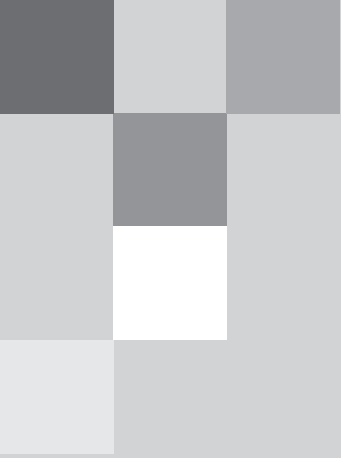
comprehensive human resources profile with specific terms of reference and competencies for each position.

Significant efforts have been made by the MOPH towards mapping of health professionals as well for training of human resources in health through workshops on selected health and health management topics, with successful experience in developing a continuing education programme and postgraduate specialization programme nurses.

5.3 WHO's role

WHO will support the formulation of a policy on human resources for health to direct the development of relevant strategies with special focus on the following axes of intervention.

- ❖ Reinforcing the update information and related professional attributes on human resources for health, through supporting the establishment of an observatory for national human resources for health.
- ❖ Development of a national strategy for human resources for health that will address the shortages, distribution and retention of human resources for health, as well as the role of Lebanon in production of human resources for health for the Region, especially the anticipated WTO agreement and its potential impact on the flow of human resources for health. It will also define standards of accreditation of educational institutions and health establishments, and explore the possibilities of continued education and training on health management.



Section

6



**Implementing the Strategic Agenda:
Implications for WHO**



Section 6. Implementing the Strategic Agenda: Implications for WHO

In addition to the institutionalized collaboration of the country office with the Ministry of Public Health and other concerned ministries, contacts with the private sector and a number of nongovernmental organizations and community based organizations that are playing an important role in delivering health services. There is also a need for more frequent contact with WHO collaborating centres and the health research and scientific community to facilitate development of linkages between these institutions and their counterparts abroad.

In view of the growing importance and potential impact of the “UN delivering as one” approach on WHO work at country level, substantive and regular contacts with the United Nations agencies represented in Lebanon will be crucial, within the scope of the CCA and UNDAF, particularly to facilitate achievement of health-related MDGs.

The joint WHO–MOPH health programmes funded through trust funds are enabling the government to keep alive essential public health functions related to HIV/AIDS and some chronic diseases (diabetes, hepatitis, cardiovascular diseases, cancer and injuries). However, due to the complex process of approval and actual transfer of funds to WHO country office, this funding is quite unpredictable and requires special flexibility to ensure continuity of services rendered by the joint programmes.

All these factors will have obvious implications for human resources in the

country office for successful implementation of the CCS.

6.1 Implications for the country office

The premises, information technology and other equipment in place in the country office are quite adequate. The association of the National Health Information Centre with the country office is a very good asset. The only serious limitations at present are low internet connectivity and persistent concerns about the safety and security of the country office premises. The low speed of the internet connection has serious consequences not only for the work of the WHO office but also for the activity of the National Health Information Centre. In terms of security, the issue of whether WHO should join the contemplated new United Nations complex or otherwise find new premises fully compliant with Minimum Operating Security Standards and as close as possible to the MOPH needs to be further examined.

The staff members are competent and dedicated. However, there are a number of issues that need to be addressed with regard to staffing. There is only one national professional officer as fixed-term technical staff, while the WHO country office staff ensures in addition to the normal WHO country office duties the technical supervision of the joint WHO–MOPH programmes; other technical staff are appointed on a temporary basis at present. The continuity of service and volume of work require another national fixed-term staff within the WHO country office.

After the end of the recovery phase following the 2006 war, further reduction in force is unavoidable and will inevitably affect the efficacy of the WHO work at country level.

It may be said that WHO collaboration has had a significant role in maintaining the drive towards more public health interventions within the health care delivery centered national health system and more recently on giving prominence to emergency preparedness and the health stakeholders in the country. Areas where WHO can bring significant input relate to reorienting the health system towards primary health care, taking account of the demographic and epidemiological transition, particularly the increasing burden of noncommunicable diseases and lifestyle-related diseases, existing up-to-date curative services and wide use of modern technology and ensuring more equitable health financing.

Implementation of the strategic agenda for WHO cooperation will require the following.

- Ensuring emphasis on improving the evidence base with systemized data collection and analysis for policy and action.
- Stronger technical and advocacy capacity in health.
- A large scope of competencies and skills, especially in the area of health sector reform.

It is possible to rely on deploying national expertise, provided the WHO country office staff includes the aforementioned specialists that can work with national experts and orient their input to the best benefit of the health development in the country, make optimal use of the expertise of the Organization at different levels, and collaborate effectively with the large number of able stakeholders.

Particular skills are required to deal with the very active private sector in health; the same applies to tapping the possible financial resources that the private sector may offer to enhance the collaborative work with the country.

The WHO country office should ensure the following activities are taken into account.

- Ensuring effective utilization of new technologies and tools for office management and communication and new tools provided for improved data collection from the private sector and stakeholders outside ministry of public health.
- Sustaining partnerships established with civil society and professional organizations to promote healthy lifestyles through integrated programmes and interventions.
- Addressing the unfinished and emerging agenda for communicable disease.
- Monitoring and evaluating impact of CCS on the collaborative programme with the country, with adequate support from the regional office and headquarters.

Staff development is essential to implement the strategic agenda for country cooperation. Not only does this imply a fair share for the country office of the resources allocated for staff development and learning, but also the proactive association of country office staff with essential regional and global initiatives and activities. At the same time, the country office should ensure sustainability of qualified technical staff for the implementation of the programmes under the trust funds, especially the HIV/AIDS, noncommunicable diseases and primary health care programmes.

6.2 Implications for the Regional Office and headquarters

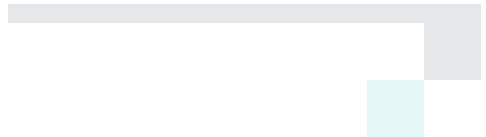
The strategic agenda describes the areas where WHO contribution is needed. It is important that the Regional Office and headquarters are able to mobilize high-level expertise, including from other WHO Regional Offices, to satisfy the needs of a sophisticated and well developed national health care delivery system. Enhanced sharing of regional experiences and other resources is required, especially in the priority areas in the CCS.

The Regional Office and headquarters should stand ready to support the country office in advocating for the leading role of the Ministry of Public Health in directing and piloting the health system in the country and in using the primary health care as the main vehicle to deliver quality and equitable health services.

The Regional Office and headquarters should be particularly supportive to the resource mobilization process because even though the needs for WHO support are obvious, as evidenced throughout this Country Cooperation Strategy, there have been difficulties convincing donors to make essential contributions for a country ranked as middle–high income.

The Regional Office and headquarters should support the country office in trying to use the existing expertise within the country to initiate and strengthen centres of excellence and collaborating centres, as the need of the Regional Office and headquarters may dictate, as well as for training and orienting health professionals from other countries in Lebanon.

Finally, Lebanon has good potential to be a full-fledged partner in regional and global health initiatives. The support of the Regional Office and headquarters is requested to promote the Lebanese experience in that regard.



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