EMRO

HEALTH SYSTEM PROFILE

LIBYA

Regional Health Systems Observatory
World Health Organization

2007

Contents libya

List of Tables

FOREWORD

Health systems are undergoing rapid change and the requirements for conforming to the new challenges of changing demographics, disease patterns, emerging and re emerging diseases coupled with rising costs of health care delivery have forced a comprehensive review of health systems and their functioning. As the countries examine their health systems in greater depth to adjust to new demands, the number and complexities of problems identified increases. Some health systems fail to provide the essential services and some are creaking under the strain of inefficient provision of services. A number of issues including governance in health, financing of health care, human resource imbalances, access and quality of health services, along with the impacts of reforms in other areas of the economies significantly affect the ability of health systems to deliver.

Decision-makers at all levels need to appraise the variation in health system performance, identify factors that influence it and articulate policies that will achieve better results in a variety of settings. Meaningful, comparable information on health system performance, and on key factors that explain performance variation, can strengthen the scientific foundations of health policy at national, regional and international levels. Comparison of performance across countries and over time can provide important insights into policies that improve performance and those that do not.

The WHO regional office for Eastern Mediterranean has taken an initiative to develop a Regional Health Systems Observatory, whose main purpose is to contribute to the improvement of health system performance and outcomes in the countries of the EM region, in terms of better health, fair financing and responsiveness of health systems. This will be achieved through the following closely inter-related functions: (i) Descriptive function that provides for an easily accessible database, that is constantly updated; (ii) Analytical function that draws lessons from success and failures and that can assist policy makers in the formulation of strategies; (iii) Prescriptive function that brings forward recommendations to policy makers; (iv) Monitoring function that focuses on aspects that can be improved; and (v) Capacity building function that aims to develop partnerships and share knowledge across the region.

One of the principal instruments for achieving the above objective is the development of health system profile of each of the member states. The EMRO Health Systems Profiles are country-based reports that provide a description and analysis of the health system and of reform initiatives in the respective countries. The profiles seek to provide comparative information to support policy-makers and analysts in the development of health systems in EMR. The profiles can be used to learn about various approaches to the organization, financing and delivery of health services; describe the process, content, and implementation of health care reform programs; highlight challenges and areas that require more in-depth analysis; and provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policymakers and analysts in different countries. These profiles have been produced by country public health experts in collaboration with the Division of Health Systems & Services Development, WHO, EMRO based on standardized templates, comprehensive guidelines and a glossary of terms developed to help compile the profiles.

A real challenge in the development of these health system profiles has been the wide variation in the availability of data on all aspects of health systems. The profiles are based on the most authentic sources of information available, which have been cited for ease of reference. For maintaining consistency and comparability in the sources of information, efforts have been made to use as a first source, the information published

and available from a national source such as Ministries of Health, Finance, Labor, Welfare; National Statistics Organizations or reports of national surveys. In case information is not available from these sources then unpublished information from official sources or information published in unofficial sources are used. As a last resort, country-specific information published by international agencies and research papers published in international and local journals are used. Since health systems are dynamic and ever changing, any additional information is welcome, which after proper verification, can be put up on the website of the Regional Observatory as this is an ongoing initiative and these profiles will be updated on regular intervals. The profiles along with summaries, template, guidelines and glossary of terms are available on the EMRO HSO website at www.who.int.healthobservatory

It is hoped the member states, international agencies, academia and other stakeholders would use the information available in these profiles and actively participate to make this initiative a success. I would like to acknowledge the efforts undertaken by the Division of Health Systems and Services Development to help countries of the region in better analyzing health system performance and in improving it.

Regional Director

Eastern Mediterranean Region
World Health Organization

1 EXECUTIVE SUMMARY

Socio Economic Geopolitical Mapping

The Libyan Arab Jamahiriya is located in north Africa on the southern coast of the Mediterranean sea, with total land area of 1 775 500 square kilometers, which makes it the third largest country in Africa.

Libyan Arab Jamahiriya is an oil-producing country, with its main income coming from oil revenue, as well as some petrochemical industry and agricultural activities. Country's oil resources account for approximately 95% of export earnings, 75% of government receipts, and over 50% of the gross domestic product. Oil revenues constitute the principal source of foreign exchange. The country has an estimated per capita income of over US$ 7000 per annum.

Libya's political system is based on the philosophy of Colonel Qadhafi's Green Book, which blends socialist and Islamic theories. According to the principles of the Green Book Charter, Libyan Jamahiriya is a grass-roots democracy, with local People's Congresses & Committees constituting the basic instrument of government.

The country boasts the highest literacy and educational enrolment in North Africa. The literacy rate for the population over 15 years is 86% (male 91%, female 81%). It has made substantial improvements in the past two decades, overtaking Tunisian adult literacy levels (of 71%), while cutting illiteracy among female youth from 39% in 1980 to less than 7% in 2000.

Official figures show Libya scoring extremely well on key measures, with 99% of the population having access to both improved drinking water and improved sanitation. However, urban sprawl, new developments and dispersed settlement patterns have reduced access to sanitation and water networks.

The conflict between the requirement of land for agriculture and for urban development presents the key challenge for urban planning and development in Libya. Successful planning and implementation requires an extensive coordination and data sharing between government and private entities on both national and local level. Plan formulation has suffered from poor definition of roles and a lack of data, and has not taken into account the requirements of economic development.

Health status and demographics

Libya has a small population in a large land area[1]. The total estimated population at mid year of 2006 was 5,323,991. With a geographic area of 1,775,500 square kilometers, it makes one of the lowest population density rates in the world, at 2.9 persons per km^2. About 85% of the population is urban, mostly concentrated in the two largest cities, Tripoli and Benghazi. 32 % of the population is estimated to be under age 15.

The average population growth rate is was 3.1% a year between 1975 and 1999. In 2006 it reduced to 1.8%. The Libyan Arab Jamahiriya is witnessing an increase in the adolescent age group with 25% of the population between 10 and 19 years old in 2000 according to the World Population Prospects database of the United Nations. As a result,

the country's population is fairly young, and the proportion of Libyans over the age of 65 is low even by regional standards, at about 3.4% in 2000 according to the Human Development Report 2002 of the UNDP.

Basic health status indicators for Libya are mixed. Life expectancy and health-adjusted life expectancy (HALE) are among the best among the MENA region at 73 and 64 years respectively. On the other hand, maternal, neonatal, and infant mortality rates- 51 per 100,000 live births, 11 per 1000 total births and 24 per 1000 live births respectively- are on par with MENA, but behind the averages in OECD member countries. The country has achieved high coverage in most basic health areas. Immunization records are also good: in 1999, 97% of one-year old children were vaccinated against tuberculosis and 92% against measles. However, concern has been raised that over the past three years the rate of coverage has slowed down. Births universally takes place in health facilities and are attended by skilled health personnel.

However, burden of disease has shifted towards non-communicable diseases and injuries. There is a steady increase in the incidence of coronary heart disease, accidents and injuries (mainly road traffic accidents).

Health System Organization

The public health sector is the main health services provider. Health care including preventive, curative and rehabilitation services are provided to all citizens free of charge by the public sector. Almost all levels of health services are decentralized.

In Libya, there is a mixed system of public and private health care, rather than a purely state-run model. Health care is delivered through a series of primary health care units, centres, polyclinics, rehabilitation centers, general hospitals in urban and rural areas and tertiary care specialized hospitals.

The health care delivery system operates on three levels:

1) The first level consists of the Primary health care units (which provide curative and preventive services for 5.000 to 10.000 citizens); Primary health care centers (serve from 10,000 to 26,000 citizens); and polyclinics, staffed by specialized physicians and containing laboratories as well as radiological services and a pharmacy. These polyclinics serve approximately 50,000 to 60,000 citizens.
2) At the second level, there are General hospitals in rural and urban areas where care is provided to those referred from the first level.
3) The third level comprises of tertiary care specialized hospitals.

A growing private health sector is emerging although currently it has a limited role. The government has decided to encourage the expansion of private clinics and hospitals. As well, serious attempts are being made to introduce the family physician practice along with the necessary rules and regulations. Health insurance is also being considered. All charges for the private sector are out-of-pocket due to the absence of health insurance.

The small but growing private health sector continues to be hampered by the lack of an overall policy approach to the sector from the health authorities.

Governance/Oversight

At the national level the General People's Committee for Health and Environment coordinates, supervises and evaluates the implementation of national health

programmes, medical services and community health activities. The secretary for the Committee is responsible for the initiation, coordination and consolidation of the health policy, national health strategies, programmes, activities and their evaluation process.

The national health policy declared by the General People's Committee for Health provides a framework for the health strategy. In accordance with this, the health programmes are designed and implemented to deliver comprehensive medical care services to all citizens. Other articles of the same law provide for the supervision of public health, preventive health and other related matters. The national health policy is currently geared towards achieving a comprehensive and uniform distribution of health services among the population. The process of planned development in the country started in 1972. The first Three-year National Transformation Plan (1973-75) emphasized that access to health services was the right of every citizen.

The national health strategy is an integral part of the comprehensive, socioeconomic development policy. It was first laid out in the Five-year Plan of 1981-85, which proposed to extend health services to all, to upgrade and maintain quality, to give priority to integration of health services and to achieve nationalization of health personnel. Furthermore, there has been continued emphasis on eight global elements of primary health care and the inclusion of four national elements (mental health, occupational health, school health and social and health care of the elderly).

In 1994, a national health strategy based on Primary Health Care (PHC) was adopted to attain the goal of “Health for All by the Year 2000”.

National health system in Libya is based on primary Health care. It aims at achieving the global goal of attainment by all the people of the country of a level of health that will permit them to lead a socially and economically productive life. The national health strategy aims to provide health for all and to achieve high quality and uniform distribution of health services among the people.

Health Care Finance and Expenditure

In comparison to its MENA peers, Libya spends much less on health care as a % of GDP- about 3.3%- but similar amount in absolute terms. When adjusted for purchasing power differences across countries, Libya spends only USD 222 per person per annum (see figure below).

The Government spends 60 million Libyan dinars (LD) annually for medical treatment of Libyan citizens abroad. More is spent out-of-pocket by Libyans traveling for treatment to Arab countries and Europe.

Despite guaranteed free medical care in the public sector, Libyans are opting to purchase private medical care, in order to receive a higher level of service. This money is spent in two main areas. There is a small but growing private health care sector in Libya. This mostly provides primary and basic secondary care through 431 outpatient clinics and 84 inpatient clinics, with the bed capacity of 1361. For more serious procedures, Libyans travel abroad for treatment in Tunisia, Jordan, and Egypt or further.

The state provides a national umbrella of social security by implementing a comprehensive social security system. Social security is guaranteed to all citizens and is extended to foreigners living in Libya. It also includes all schemes or procedures instituted to promote the welfare of Libyan and foreign workers in the event of old age, disability, sickness, employment, accident or occupational disease, disaster, death, pregnancy, and childbirth.

Currently, the Libyan Arab Jamahiriya receives no external funds as development aid from any source of any kind. However, after the re-activation of Libyan relationships with the west, it is expected that technical assistance will be offered in health sector development and especially health system reform.

Human Resources

Headline health system indicators show Libya's human resources and level of health service delivery to be in line with that of MENA peers. There are 13 physicians, 2.5 dentists, 2 pharmacists, 48 nurses and 23 paramedical staff per 10000 population. However the number of health professionals varies considerably across Shabiat, from 6.3 doctors per 10000 in Jdbaya to 28.5 per 10000 in Ben Ghazi and from 19.4 nurses per 10000 in Misrata to 275.8 per 10000 in Ghat. This variation stems from the absence of central guidelines on correct ratios or control over appointment.

Medical education in Libya has expanded massively, placing enormous pressure on scarce resources, with an ensuing decline in quality. At present Libya has 15000 students in medical faculties, compared to just 9000 practicing doctors, and a total population of around 6 million. It simply does not need to educate this many doctors. At the same time, there is a major lack of other health workers- pharmacists, medical technicians and trained paramedics. Furthermore, the expansive funding of Libyan doctors perusing post-graduate specializations abroad has also been inefficient, as Libya has not derived from their skill. Faced with low salaries, they have chosen to make their careers abroad and Libya has been forced to import expensive foreigners to replace them.

Finally, Libya still finds itself lacking in specialists in a number of key areas such as anesthesia, cardiology and radiology, despite enormous number of medical students, and the funds spent on scholarships for doctors to specialize abroad.

The standard of nursing care of Libya is also inadequate due to poor quality nursing education Nursing practice is dependent on expatriate staffing. Most qualified nursing staff is not Libyan. Libya remains dependent on expansive foreign nurses for almost all quality and specialized nursing care, and for midwifery.

Health Service Delivery

Owing to the large number of health facilities, access to primary health care is not an issue in Libya. According to official figures 100% of population has access to health services. Around 90% pregnant women are attended by trained health personnel and 99% of all deliveries are attended by trained personnel. Infants attended by trained personnel is also very high at around 98%. More than 98% of population has access to safe drinking water and adequate excreta disposal facilities.

The national EPI is successful, reaching high routine immunization coverage and convincing the population of the importance of childhood immunization. During the past 5 to 6 years, this programme has faced some administrative and managerial problems that have affected its continuity and performance. The reporting system as well as the vaccine-preventable diseases surveillance system has been affected consequently. In 2004, the Libyan Arab Jamahiriya reported high routine immunization coverage (97% for BCG, DPT3, OPV3, 85% for HBV3 and 93% of infants fully immunized.

There direct is access to specialist (ambulatory and hospital) services without any GP gate keeping role. The referral system is disorganized and needs improvement. Many centres operate on an open access basis. Patinets needing basic health care can go

directly to the secondary or teritary hospitals without referreal from lower levels leading to overburden on referrel level facilites

Secondary and tertiary care is provided through a network of general hospitals in rural and urban areas and specialized hospitals. There are total of 84 hospitals with total bed capacity of 19950 beds and 3.7 beds per 1000 population (See table 8.3). These facilities are besides the social and rehabilitation services supervised by the social solidarity fund.

Almost all levels of health services are decentralized. All hospitals are managed by secretariats of health at shabiat (district) level except Tripoli Medical Centre and Tajoura Cardiac Hospital and Shabrata cancer center, which are centrally run.

2 SOCIO ECONOMIC GEOPOLITICAL MAPPING

2.1 Socio-cultural Factors

Table 2-1 Socio-cultural indicators

Indicators	1990	1995	2000	2004	2006
Human Development Index (HDI):	-	0.756 (97)	0.773	0.798	
HDI rank	-	65	64	64	-
Literacy Total:	-	83	-	86	-
Female Literacy	53	73	-	81.3	-
Women % of Workforce	-	14.52	-	32.2	-
Primary School enrollment	-	106	-	106	100
% Female Primary school pupils	-	45.5	-	47.9	48.9
% Urban Population	-	85	-	85.3	85

Source:

- Population general census report 1995.
- Social and economic survey 2004 report {: N.C.I&D}

Commentary: key socio-cultural factors relevant to the health system

Education:

The country boasts the highest literacy and educational enrolment in North Africa. The literacy rate for the population over 15 years is 86% (male 91%, female 81%). It has made substantial improvements in the past two decades, overtaking Tunisian adult literacy levels (of 71%), while cutting illiteracy among female youth from 39% in 1980 to less than 7% in 2000. Meanwhile, the overall combined primary, secondary and tertiary enrolment rate was 92%, higher than in any of the neighbouring countries. Education is compulsory between the ages of 6 and 15 years. Secondary education starts at age 15 and lasts for three years. Unusually for an Arab state, female students tend to have more schooling than their male contemporaries. Significant numbers of Libyans attend university abroad, mainly in the United States of America and Europe.

Two important goals of the Libyan education system are to contribute to the economic, social and cultural development of the Libyan society, by improving the skills and abilities of Libyans, and to rapidly raise standards of human development in the society2 (34). Despite much progress over the last 30 years, and good basic outcomes, the Libyan education system does not yet fulfill the goals it has set itself, including providing the training and skills that are required to drive the economy forward. Poor quality input and a number of severe structural challenges are negatively affecting the education system.

[2] The Development of Education in Great Jamahirrya, Libyan National Commission for education, Culture and Science, presented to UNISECO Conference on Education, September 2004

Libya's public expenditure of education is approximately 4% of GDP, which is around the average for MENA countries. Public expenditure from the administrative budget has averaged LYD 1.2-1.6 Billion over the past 5 years, with a further LYD 280 Million spent on funding Libyan third level students studying abroad.

One of the key success stories of the Jamahiriya has been the improvement in basic education standards of Libyan people. Libya's education system does appear to be successful in achieving good basic education outcomes. Reported adult literacy levels are among the highest in the region at 82%; with youth literacy reaching 100% and female literacy considerably better than many MENA peers. Primary and secondary school gross enrollment ratios are also high at 114% and 105% respectively.

Water and sanitation:

The water supply and sanitation sector witnessed major institutional changes during the past few years. Critical review to identify strengths and weakness in this new institutional set-up is required to ensure safe water supply and adequate sanitation. There is also a need to draw up a national approach to the establishment of linkages between the water supply, sanitation and waste management activities and disease control programmes, such as diarrhoeal diseases and acute respiratory infections, as well as other programmes, including vector control, food safety and child health.

Official figures show Libya scoring extremely well on key measures, with 99% of the population having access to both improved drinking water and improved sanitation. However, urban sprawl, new developments and dispersed settlement patterns have reduced access to sanitation and water networks. According to the national physical perspective plan, even where sanitation networks do exist, not all houses are connected to the same system. As a result many houses are tapping the same ground water resources when extracting water and disposing of sanitation. A major nation-wide plan is now underway to upgrade water and sanitation infrastructure. Poor quality of drinking water may contribute to gastro-enteritis being the most common complaint of children being treated in primary care centers in Libya.

The Libyan Arab Jamahiriya is proud that it anticipated the world water shortage and planned a safe water supply for the population. The Great Man-made River (GMR) project, consisting of a massive pipeline project was launched in 1984. With the completion of the first two phases of the GMR, safe water supply is now secured for most northern cities. The World Bank has estimated that annual water usage is equivalent to over 7.5 times the annual renewable freshwater resources. However, as yet, water shortages are not a problem for Libyans, nor should they become one. Recognizing that the GMR is not a full solution to the country's water needs, the Government has started a programme to build 11 new desalination plants.

Urban planning:

The conflict between the requirement of land for agriculture and for urban development presents the key challenge for urban planning and development in Libya. Successful planning and implementation requires an extensive coordination and data sharing between government and private entities on both national and local level. Plan formulation has suffered from poor definition of roles and a lack of data, and has not taken into account the requirements of economic development. The 3rd Generation National Physical Development Plan (3GPP), now underway, offers an opportunity to regain control of planning in Libya and lay the foundations for the next stage in the country's development.

Only a very small percentage of the country's area- the land located along the Mediterranean coast- is habitable or agriculturally usable, for physical and climate reasons. As the major urban centers of Tripoli and Benghazi, which together accounts for around two-third of the country's population, expand, they are encroaching on the two main agriculturally-productive regions in the country, the coastal rain-fed plains of Jifarah and Jabal Al Akhdar.

2.2 Economy

Libyan Arab Jamahiriya is an oil-producing country, with its main income coming from oil revenue, as well as some petrochemical industry and agricultural activities. Country's oil resources account for approximately 95% of export earnings, 75% of government receipts, and over 50% of the gross domestic product. Oil revenues constitute the principal source of foreign exchange. The country has an estimated per capita income of over US$ 7000 per annum. The share of public health expenditure is 3.3% of the total GDP expenditure, which is relatively low. All payments in the private sector come directly as an out-of-pocket payment with the exception of some banks, private companies and the oil sector, which subsidize their employees' medical coverage in the private sector.

The female participation rate in economic activities (employed) is 32%. Due to repetitive reforms of the Libyan education system, coupled with provision of secure jobs by the government for most Libyans, there is poor labor competitiveness. The gradual reintegration of the Libyan Arab Jamahiriya into the international economy is leading to the setting up of private schools and training courses to meet demands in areas such as business, information technology (IT) and languages.

Policy issues: Since the late 1990s the Libyan Arab Jamaharia has been trying to strengthen the economy, principally by changing it into a liberalized market economy. In order to achieve this aim, it has sought to strengthen the private sector and draw in much-needed foreign investment. However, although foreign investment in the oil and gas sector has been strong, the progress has been slow in other sectors.

Taxation: Under the foreign investment law, Law 5 of 1997, foreign companies are exempt from corporate income tax for up to eight years and are eligible for exemptions from taxes on imports of equipment essential to the execution and operation of investment projects. However, a number of sectors are closed to foreign direct investment, either by law or de facto, including telecommunications and trade and distribution. Although tariffs have been eliminated, a consumption tax of 25% and a service fee of 4% are levied on non-exempted imported items.

Foreign trade: Libya has a large trade surplus, which was an estimated US$21.4bn in 2006. The surplus is largely a result of rising oil prices, which have boosted oil export revenue. Imports also rose from US$11.2bn in 2005 to an estimated US$12.3bn in 2006, driven by strong demand for consumer and capital goods.

Table 2-2 Economic Indicators

Indicators 1990	1990	1995	2000	2004	2006
GNI per Capita (Atlas method) current US$	-	-	3276*	4838*	-
GNI per capita (PPP) Current International	-	-	-	-	-
Real GDP Growth (%)	-	-	-	-	-

Real GDP per Capita ($)	-	7705	4769	5128	-
Unemployment % (estimates)	-	10.8	-	17.2	-
External debt as % of GDP	0	0	0	0	0

** Libyan dinar*

Source:

- General authority for information 2005
- Economic development in Libya - 1970 – 2003 {general secretariat of planning)
- Social and economic survey 2004 report {: N.C.I & D}

Table 2-3 Major Imports and Exports

Major Exports:	Crude oil, chemical materials
Major Imports	Plants & equipment, Foodstuffs & livestock, Miscellaneous products and chemical materials

Source: http://www.economist.com/countries/libya/profile.cfm?folder=Profile-FactSheet

Key economic trends, policies and reforms

Libya's economy depends primarily upon revenues from the petroleum sector, which contributes practically all export earnings and over half of GDP. These oil revenues and a small population give Libya one of the highest per capita GDPs in Africa. Since the year 2000, Libya has recorded favorable growth rates with an estimated 8.5% growth of GDP in 2005. The GDP per capita of Libya soared by 676% in the 1960s and a further 480% in the 1970s. However such fantastic growth rates proved unsustainable in the face of global oil recession and international sanctions. Consequently the GDP per capita shrank by 42% in the 1980s. Successful diversification and integration into the international community helped current GDP per capita to cut further deterioration to just 3.2% in the 1990s. Libya's gross domestic product grew in 2001 due to high oil prices and increased foreign investment.

The non-oil manufacturing and construction sectors, which account for about 20% of GDP, have expanded from processing mostly agricultural products to include the production of petrochemicals, iron, steel, and aluminum. Since 1999, Libya has been trying to increase its attractiveness to foreign investors, and several foreign companies have visited in search of contracts. Although agriculture is the second-largest sector in the economy, Libya depends on imports in most foods. Climatic conditions and poor soils severely limit farm output, and domestic food production meets only about 25% of demand. [3]

2.3 Geography and Climate

The Libyan Arab Jamahiriya is located in north Africa on the southern coast of the Mediterranean sea between 18º and 33º north latitude and 9º and 25º east longitude, with total land area of 1 775 500 square kilometers, which makes it the third largest country in Africa. It is surrounded by six African countries, namely Tunisia, Algeria, Niger, Chad, Sudan and Egypt, and has a coastline of around 1900 kilometers along the Mediterranean Sea. The climate is Mediterranean along the coast, which basically

[3] http://en.wikipedia.org/wiki/Economy_of_Libya

consists of four seasons. It is dry and hot in the extreme desert interior with the exception of Sebha in the south. The main cities are concentrated in the northern part of the country along the coastal area. The six largest cities are Tripoli, Benghazi, Alzawia, Musrata, Derna and Sirte.

Map of Libya

2.4 Political / Administrative Structure

Basic political /administrative structure and any recent reforms

Libya's political system is based on the philosophy of Colonel Qadhafi's Green Book, which blends socialist and Islamic theories. According to the principles of the Green Book Charter, Libyan Jamahiriya is a grass-roots democracy, with local People's Congresses & Committees constituting the basic instrument of government. The Libyan political system is, in fact, based on the direct representation of the people: all Libyan citizens participate in local government through the Basic People's Congresses and each assembly elects a secretary that represents it in the General People's Congress, the country's highest legislative body. The General People's Congress appoints secretaries who play a role, similar to that of ministers, in the People's Committee. The Secretariat for the General People's Congress (Parliament) is the top legislative body, and the Secretariat for the General People's Committee (Cabinet) is the top executive body. The General Secretary of the General People's Congress (GPC) is the chief executive.

The residents of each zone elect their own people's committee. Similarly, the residents of each branch municipality or municipality elect their own Basic People's Congress (BPC). The members of a BPC then elect a chairman and a five-member branch or Shabiat people's committee. The General People's Congress is made up of the chairmen of the BPC, the branch and municipal people's committees, and representatives of the people's committees for unions, professional associations and student unions.

The Declaration of the Establishment of the People's Authority declares that direct popular authority is the basis for the political system in the Socialist People's Libyan Arab Jamahiriya. The people exercise their authority through the people's committees, people's congresses, unions and professional associations, and the General People's Congress. Elections are direct, and all voting consists of a show of hands or a division

into yea-or-nay camps. Suffrage and committee/congress membership are open to all Libyan citizens eighteen years of age or older in good legal and political standing.

Libya is divided into 22 Shabiat, with each municipality divided into many small Basic People's Congresses (BPC). Currently there are 468 BPCs. Through these channels, the people's views are taken up to the top legislative body. Added to these, each Shabia has its own People's Committee which is the major executive body within the Shabia. Each Shabia also has its Secretariats.

The Libyan court system consists of four levels: summary courts, which try petty offenses, the courts of first instance, which try more serious crimes; the courts of appeals, and the Supreme Court, which is the final appellate level. The GPC appoints justices to the Supreme Court.

Key political events/reforms

Libya gained independence in 1951. Muammar Al-Qadhafi led the revolution in 1969 that deposed the king and made Libya a republic. In the 1970s, the economy was gradually nationalized and a new political system established, known as the jamahiriya (state of the masses).

By law, Libya has one of the most politically decentralized systems in the Arab region, as local governmental institutions extend over education, industry, and communities In fact, Libya was founded on the principles of profound political decentralization and the concept of administrative reform in Libya has always been associated with the decentralization process. Some changes initiated in the 1990s moved towards further decentralization through the introduction of a system of municipalities (Shabiat) and communes (Mahallat) to be governed through local representation.

In 1998, 26 municipalities (Shabiat) were established, each headed by the Secretary of a People's Committee who was given wide municipal and administrative powers. In 2000 the Libyan General People's Congress and the Government authorities strengthened the process of decentralization, abolishing most central government functions and making the devolution of responsibility to municipalities (Shabiat) a national priority.

Delegation of central authority to the local and regional authorities was a new trend in decentralized planning and allocation of funds. It also presented an opportunity to respond more accurately to some of the country's development needs, through increased needs-based targeting of resources.

From 2006, there has been a move towards centralization and synchronization at different levels. The country has been divided into 22 Shabiat and central authorities have been re-established including the Ministry of health.

3 HEALTH STATUS AND DEMOGRAPHICS

3.1 Health Status Indicators

Basic health status indicators for Libya are mixed. Life expectancy and health-adjusted life expectancy (HALE) are among the best among the MENA region at 73 and 64 years respectively. On the other hand, maternal, neonatal, and infant mortality rates- 51 per 100,000 live births, 11 per 1000 total births and 24 per 1000 live births respectively- are on par with MENA, but behind the averages in OECD member countries. The country has achieved high coverage in most basic health areas. According to the Human Development Report 2002, the mortality rate for children aged under 5 years fell from 160 per 1000 live births in 1970 to 20 in 2000. In Egypt, the equivalent figure is 43 and in Tunisia, 28. Immunization records are also good: in 1999, 97% of one-year old children were vaccinated against tuberculosis and 92% against measles. However, concern has been raised that over the past three years the rate of coverage has slowed down. Births universally takes place in health facilities and are attended by skilled health personnel.

The improvement in health status of population is evident from decrease in mortality and the increase in life expectancy, as well as decline in incidence of infectious diseases. However, burden of disease has shifted towards non-communicable diseases and injuries. There is a steady increase in the incidence of coronary heart disease, accidents and injuries (mainly road traffic accidents).

Data on Libyan mortality and morbidity are hard to obtain- vital registration and disease surveillance are not up to the international standards- but it is clear that new behavioral and environmental risk factors are having a serious impact on both these measures. These include: and increase in non-communicable diseases; poor road safety; questionable water and sanitation quality; and increase in the incidence of communicable diseases. The incidence of non-communicable diseases- cardio-vascular diseases, cancer, diabetes, and chronic reparatory diseases- has increased markedly in the lat 20 to 30 years. Cardiac diseases were estimated to be responsible for 37% of deaths in 2004, with cancer accounting for 13%4 (31). This increased incidence is associated with poor main risk factors- smoking, diet, physical inactivity and high blood pressure- which are interrelated. Libya needs both better surveillance, to understand the causes and enable early detection, and health promotion campaigns to increase risk awareness and promote health-seeking behavior.

Double burden of disease

Some communicable diseases still pose a problem such as AIDS, hepatitis, measles and tuberculosis. Non-communicable diseases show an increasing trend and cause the highest toll of morbidity and mortality. Contributing factors include ageing, injuries and lifestyle habits.

[4] This data from the Inspector General's Annual Report 2004 is based solely on deaths in hospitals as general vital registration statistics are not available

Communicable diseases:

The Centre for Control of Communicable Diseases has identified three priority areas: HIV/AIDS prevention and control, tuberculosis and surveillance of communicable diseases.

HIV/AIDS prevention and control:

Official data, which is very limited, does not show a high rate of HIV/AIDS infection, but is widely thought to understate the problem. A cumulative total of 5160[5] HIV/AIDS cases had been reported by the end of 2001. Among the reported cases, injecting drug use represents the most prevalent mode of transmission. Situation analysis in 2004 showed that 87% of the cases are among injecting drugs users. Practices involving sharing needles are believed to be prevalent among IDUs.

Both Libyan and international medical experts have expressed concerns about the potential for increase in infection, and AIDS is one of the three priority areas identified by the center for control of infectious diseases. With many immigrants arriving in Libya from neighboring countries like Chad, which has an HIV infection rate of over 5%, medical experts believe that Libya needs both a much better understanding of the problem and concerted policy action on prevention. Care and support to people living with HIV/AIDS consist of very limited advisory services.

A national strategic plan for AIDS is being developed. The plan is supported by a scientific committee which works through collaboration with governmental and nongovernmental organizations, the National Centre for Infectious and Endemic Disease Control and Prevention, as well as with the UN Theme Group on AIDS. The treatment protocol has been developed, and is currently being revised. Recently the national strategy was revised in line with the WHO goal to cover 3 million people with antiretroviral treatment by 2005[6].

The strategic plan for 2005–2009 for HIV/AIDS prevention and control aims to achieve a successful control programme in order to reduce the incidence rate. To gain an understanding of the national situation, national surveys on sero-prevalence, KAP and high-risk behaviour are planned to be conducted. The strategy also includes the introduction of a harm reduction programme and establishment of voluntary testing and counseling in major cities. Furthermore adaptation of the school curriculum to fight HIV/AIDS is also planned. The Government is also considering applying for inclusion in the “3 × 5” Initiative.

Tuberculosis: The incidence of major communicable diseases was successfully brought under control in the 1990s, but Tuberculosis is on the increase again, possibly as a result of increased immigration from Saharan and sub-Saharan Africa.

Although the Libyan Arab Jamahiriya has a low incidence of tuberculosis, 60% of cases occur in the productive age group of 15–56 years. The national strategy to fight tuberculosis is based on the three main goals: implementation of the DOTS strategy according to WHO guidelines, revision and updating of the medical faculties’ curricula according to the WHO meeting resolution in Beirut 2001 and improvement of tuberculosis laboratories by establishment of a multiple drug resistance laboratory and usage of PCR techniques in diagnosis.

[5] JPRM 2004-2005 situation analysis for HIV/AIDS programme in the Libyan Arab Jamahiriya.
[6] The indicator selected for the WHO JPRM is an anticipation of mother-to-child transmission among the infected mothers.

The National Tuberculosis programme (NTP) started implementing DOTS in 1998, and achieved the regional targets of DOTS ALL OVER in 2000. In 2002, 676 cases[7] of tuberculosis were notified in NTP/Ministry of Health health facilities working under DOTS, of which 436 were new smear positive cases. The DOTS case detection rate in 2002 was 97%. Treatment success rate was 76%.

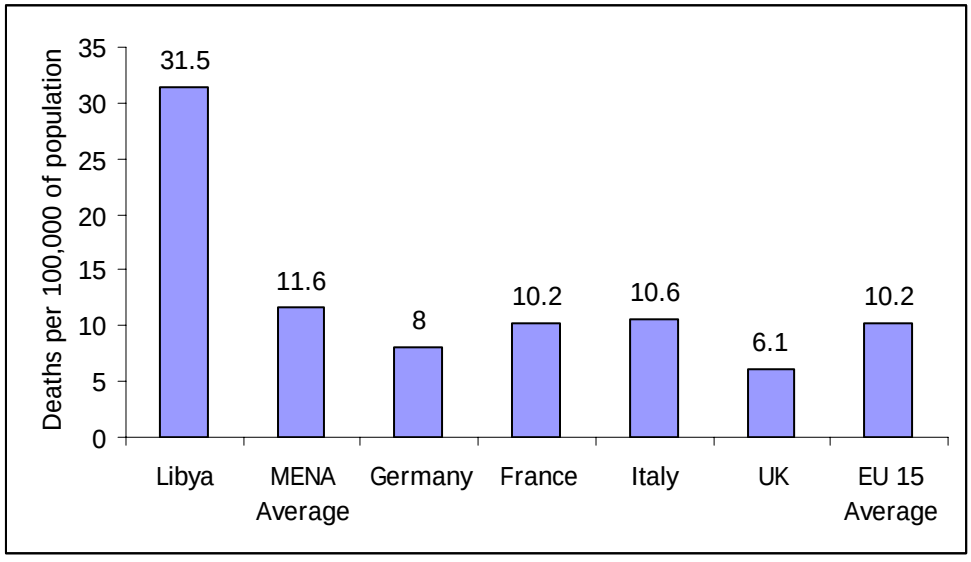
Surveillance and forecasting: A division of the centre responsible for disease surveillance is located in Zleiten. It has established a network and performs several training activities on data collection and handling guidelines. In addition, national guidelines for disease surveillance have been prepared and are being revised.

Non-communicable diseases

Non-communicable diseases have become a major cause of death. The prevalence and incidence of non-communicable diseases have increased dramatically over the past 20 years. Cardiovascular diseases, hypertension, diabetes and cancer account for significant mortality and morbidity and have put a lot of strain on health expenditure. Stepwise surveillance for non-communicable diseases has not started. The main causes of death (reported by national authorities) are cardiovascular diseases 37%, cancer 13%, road traffic injuries (RTI) 11% and diabetes 5%. Due to the changing lifestyles the determinants of non-communicable diseases and levels of risk factors have risen. More than 30% of the adult male population smoke regularly. Tobacco use among youth of school age (13–15 years) is alarming: 15% students currently use some form of tobacco products and 6% of students currently smoke cigarettes. Obesity is also emerging as a major health problem.

Road traffic accidents (RTA), which result in 4–5 deaths/day and even higher figures for disability, are a major burden of disease. The National Committee for Road Traffic Injuries (RTI) has a national strategy for RTA precautions and road safety with better emergency services for the injured. Road traffic accidents account for 11% of all hospital deaths with accidents the third highest cause of hospital morbidity. Despite far lower levels of vehicle ownership, Libya's road death rate is more than 3 times that of European union and almost the 3 times the MENA average.

Figure- Road fatalities per 100,000 population, International Comparison



[7] JPRM 2004-2005 situation analysis for tuberculosis programme in the Libyan Arab Jamahiriya.

Source: Inspector General of Health Annual Report 2004; European Health for All Database; Global Road Safety Program, quoted on www.trafficegypt.com
Note: Libya data is for 2004; Germany, France & Italy is for 2003; UK and EU 15 is for 2002; and MENA is for 2000

Around 1.2% of the population is blind, mainly due to cataract. Trachoma remains endemic in some pockets in the country. The Libyan Arab Jamahiriya signed the Vision 2020 declaration of support, but the national plan has not yet been developed. Disease control strategies, human resources development for eye care and strengthening of infrastructure and human resources as well as extra funds are needed.

The safety of food supplies is the responsibility of the National Food and Drug Control Centre with over 12 000 samples analysed annually. Some analyses have to be done outside the Centre's laboratory. Services for hypertension and diabetes are provided in the PHC setting but lack trained personnel and critical pathways.

The global youth tobacco survey known as GYTS was introduced by World Health Organization in collaboration with Centers for Diseases control in USA , the aim of this survey was to obtain baseline information about tobacco use among students in following aspects : -

- Prevalence of tobacco use
- Knowledge and attitude
- Access and availability
- Environment tobacco smoke
- Cessation
- Media and advertising of tobacco
- School curriculum

The GYTS was performed in Libyan Arab Jamahiriya, in April 2003 in 50 schools in which students of age from 13 to 15 are taught at school grades 7th, 8th, 9th. The total number of students surveyed was 1869. Male and female students in 150 classes in 18 different shabiat were included in the sample.

The results of the survey are summarized as follows:-

- 14.8 % of students currently use some form of tobacco.
- 5.9 % of students currently smoke cigarettes, {boys 9.4% - girls 1.7%}.
- 10.6 % use other form of tobacco {boys 12.5% - girls 8.1%}.
- 19.8 % of never smokers are likely to initiate smoking next year.
- Exposure to environment tobacco smoke is high – over 40.3% of students live in homes where others smoke in their presence, and 38.7 % are exposed to smoke in public places.
- 24% smoker students usually smoke at home.
- 27% buy cigarette from shops and were not refused purchase because of their age.
- Over 32.1% of students have parents who smoke.
- Almost 7 in 10 students think tobacco smoke from others harmful to them.
- 80 % of students think smoking in public places should be banned.
- 85.3 % smokers want to quit.
- 57.4 % saw pro-cigarette ads billboards in the past 30 days.
- 71.0 % saw anti-cigarette media messages in the past 30 days.
- 52.1 % of students had been taught in classes, during the past year, about the dangers of smoking.

Table 3-1 Indicators of Health status

Indicators	1990	1995	2000	2004	2006
Life Expectancy at Birth:	-	66	69(01)	-	69.5
HALE:	-	-	-	-	-
Infant Mortality Rate:	-	24.4	-	24.4	21.5
Probability of dying before 5th birthday/1000:	-	30.1	-	30.1	27.5
Maternal Mortality Ratio:	-	77	-	51	4
Percent Normal birth weight babies:	-	96	-	96	-
Prevalence of stunting/wasting:	-	0.2	-	4.1/0.8	-

Source:

- Libyan maternal and child health survey (pan-Arab ,project for childe development 1995)
- {MICS} report 2004 National center for infectious diseases.

Table 3-2 Indicators of Health status by Gender and by urban rural (2001)

Indicators	Urban	Rural	Male	Female
Life Expectancy at Birth:	-	-	68	71
HALE:	-	-	-	-
Infant Mortality Rate:	21.4	31.4	27.0	21.6
Probability of dying before 5th birthday/1000:	27.5	36.3	32.3	27.8
Maternal Mortality Ratio:	86	52	-	-
Percent Normal birth weight babies:	-	-	-	-
Prevalence of stunting/wasting:*	3.7/0.8	6.2/0.9	4.6/0.7	3.6/0.9

Source:

- MICS 2004
- Libyan maternal and child health survey (pan-Arab, project for child development 1995) .
- {MICS} report 2004 national center for infectious diseases

Table 3-3 Top 10 causes of Mortality/Morbidity

Rank	Mortality	Morbidity/Disability
1.	Cardiac diseases	(anti , post natal care)& Delivery
2.	Tumors	Cardiovascular diseases
3.	Road traffic accidents RTAs)	RTAs
4.	Respiratory tract infections and dehydration (pediatrics)	Tumors
5.	Diabetes & Chronic diseases	Gastro-enteritis (pediatric)
6.	Geriatrics (sepsis)	Diabetes Renal disease
7.	Hepato-biliary disease	Respiratory Diseases
8.	Respiratory Diseases	Hepato-biliary disease
9.	Prematurity	Infectious diseases
10.	Infectious diseases	Accidents

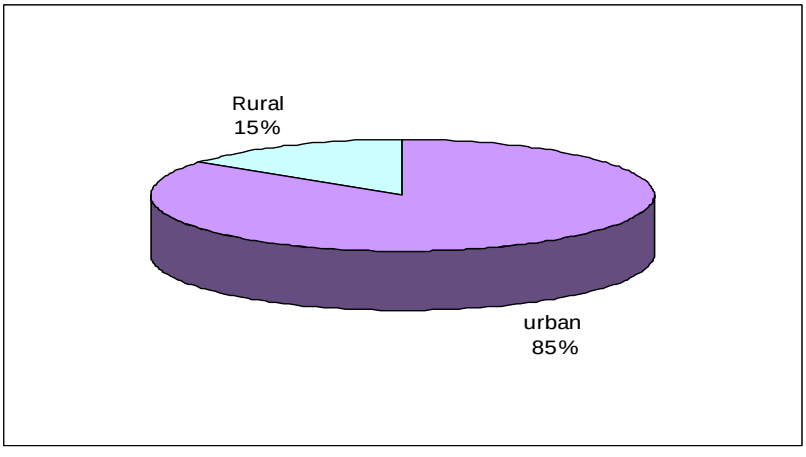
Source: WHO-Joint Program Review Mission 2006

3.2 Demography

Demographic patterns and trends

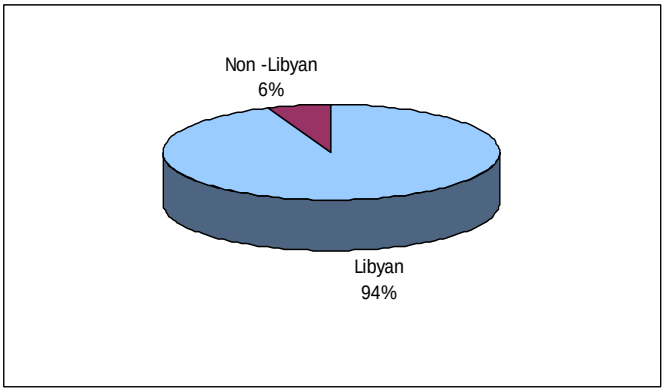
Libya has a small population in a large land area[8]. The total estimated population at mid year of 2006 was 5,323,991. With a geographic area of 1,775,500 square kilometers, it makes one of the lowest population density rates in the world, at 2.9 persons per km^2. Density is divided into two distinct areas: the northern part, which is relatively densely populated, with 85% of the population on 10% of the land area (primarily along the coast and include most of the main cities), and the southern part, which is much less populated and is mainly a desert that includes a number of oases and small towns. About 85% of the population is urban, mostly concentrated in the two largest cities, Tripoli and Benghazi. 32 % of the population is estimated to be under age 15.

Figure: Rural/urban distribution of population, 2006. Health information center, Libya



[8] http://en.wikipedia.org/wiki/Demographics_of_Libya

Figure: Distribution of Libyan / non-Libyan population, 2006.



Source: Health information center, Libya

The average population growth rate is was 3.1% a year between 1975 and 1999. In 2006 it reduced to 1.8%. The Libyan Arab Jamahiriya is witnessing an increase in the adolescent age group with 25% of the population between 10 and 19 years old in 2000 according to the World Population Prospects database of the United Nations. As a result, the country's population is fairly young, and the proportion of Libyans over the age of 65 is low even by regional standards, at about 3.4% in 2000 according to the Human Development Report 2002 of the UNDP. The Government has undertaken a census in 2005; the final report is still awaited.

There is an ongoing vital registration system in which every family has in its possession a record called a "Family Book", in which all family members are registered and vital events such as births, deaths and marriages are recorded.

The foremost demographic constraints that affect the health situation and services in the country include:

- the influx of a substantial number of immigrants, which strains existing health and social services and contributes to spread of diseases, such as tuberculosis, hepatitis, malaria and AIDS;
- a scattered population (15%) in a vast geographic area (90%) which adds a burden on the running of the health system.

Population Growth from 1973 - 2006

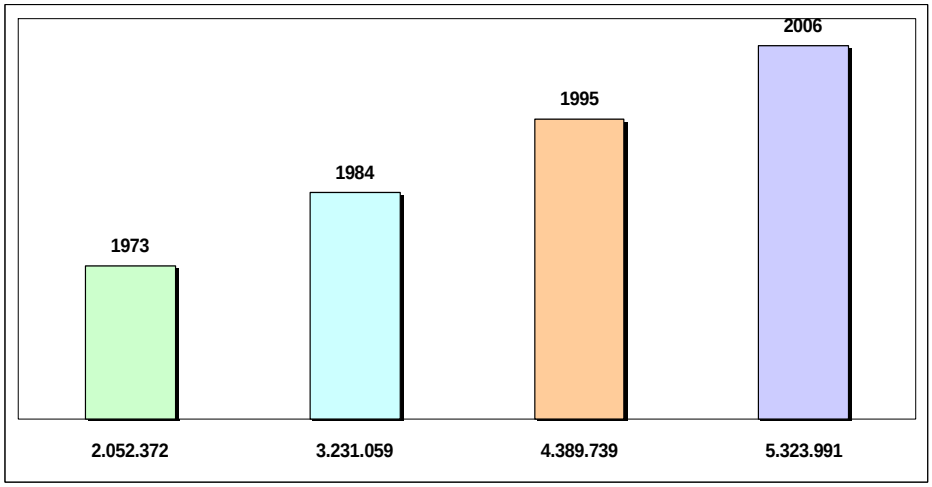


Figure: Demographics of Libya, Data of FAO, year 2006; Number of inhabitants in thousands

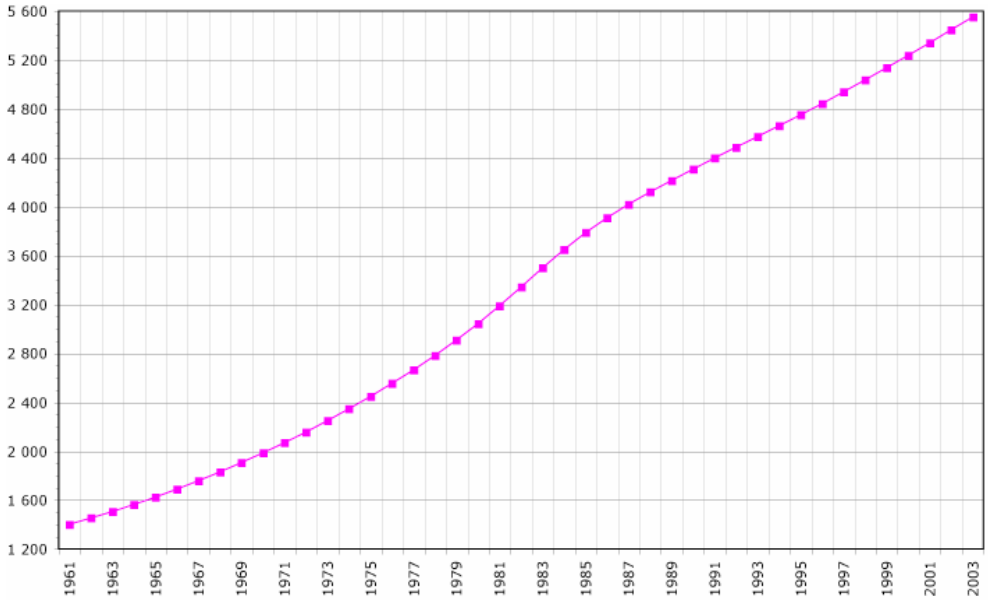


Table 3-4 Demographic indicators

Indicators	1990	1995	2000	2002	2004	2006
Crude Birth Rate	42 (84)	28.6	18.7	19.8	20.3	20
Crude Death Rate	-	7	3.4	3.4	2.4	2.6
Population Growth Rate:	4.2 (84)	2.9	-	-	1.8	1.8
Dependency Ratio %:	-	40	-	58	-	
% Population <15 years	-	39.5	-	-	-	32.4
Total Fertility Rate:	-	4.08	-	5.2	-	-

Source:

- Population general census report1984, 1995, 2006 {: N.C.I&D }
- Social and economic survey 2004 report {: N.C.I&D}
- Libyan development report 1999

Table 3-5 Demographic indicators by Gender and Urban rural

Indicators	Urban	Rural	Male	Female
Crude Birth Rate:	-	-	-	-
Crude Death Rate:	-	-	-	-
Population Growth Rate:	-	-	-	-
Dependency Ratio:	-	-	-	-
% Population <15 years	-	-	50.9	49.1
Total Fertility Rate:	3.8	4.9	-	-

Source:

- Population general census report 1995.
- Social and economic survey 2004 report {N.C.I&D}

4 HEALTH SYSTEM ORGANIZATION

4.1 Brief History of the Health Care System

Outline of the evolution of the Health Care System

The present day (modern) health care system started functioning in 1951 with meager resources — 14 hospitals (1600 bed capacity) and a few health centres. The process of planned development in the country started in 1972. The first Three-year National Transformation Plan (1973-75) emphasized that access to health services was the right of every citizen. The major emphasis in the country was on individual patient care until 1969, on community health facilities between 1970 and 1979 and has been on health for all since 1980.

4.2 Public Health Care System

The public health sector is the main health services provider. Health care including preventive, curative and rehabilitation services are provided to all citizens free of charge by the public sector. Almost all levels of health services are decentralized. All hospitals are managed by secretariats of health at Shabiat (district) level except Tripoli Medical Centre, Tajoura Cardiac Hospital and Shabrata cancer center, which are centrally run.

Organizational structure of public system

The General People's Committee for health and environment is responsible for planning, financing, resource allocation, regulation, monitoring and evaluation as well as provision of health services through Secretariat of health and environment and specialized centers at the central level and through secretariats of health in 22 Shabiat.

The Secretariat of health and environment (SOH&E) operates through an administrative and a technical workforce and has an extensive central organizational structure, headed by the Secretary of Health and Environment. The Secretary is assisted by the Undersecretary of health and environment. Central institutions under the direct supervision of the Undersecretary include;

- Central hospitals & Medical Centers
- Health Information Center
- National Center for Communicable Diseases
- National Council for Medical responsibilities
- National program for organ transplantation
- Libyan board for medical specialties
- General Authority of Environment
- National Company for Drugs & Supplies
- National company for maintenance of med equip
- General company for manufacturing of medical equipment & supplies

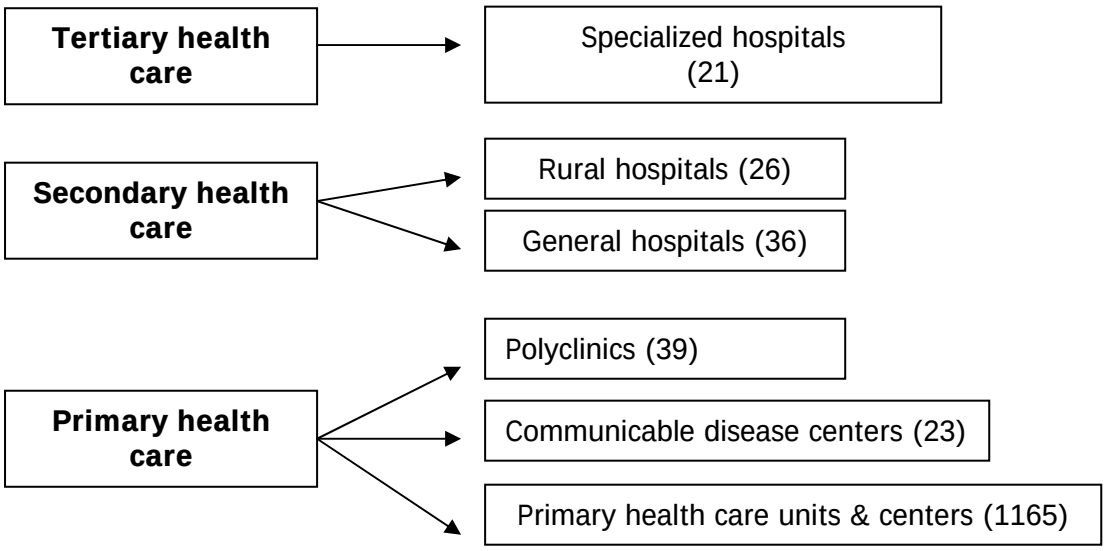
The Assistant Under-Secretary of health is administratively responsible for **directorates** of Primary health care; Emergency and ambulance services; Planning; Health education; Private sector and national services; Health construction projects; Administration & finance; Drugs and medical equipment; and Medical services. There are several departments under each directorate. In addition, **offices** of committee affairs, legal affairs, technical cooperation, internal auditing, human resources development, follow up and quality assurance also report to the Under Secretary of health. The overall structure of SOH&E therefore consists of nine directorates embracing 30 departments and seven offices at the central level. (SOH&E organizational chart is attached as annex 1).

At the Shabiat level, the People's committee for Health and environment is responsible for providing comprehensive health care including promotive, preventive, curative and rehabilitative services to all citizens free of charge through primary health care units, health centres and general hospitals (public health law No 106 of 1973). The Secretary of health in each Shabia is assisted by the directors of different departments including medical services, primary health care, health education, projects & construction, planning, administration and finance, private sector, drugs and medical equipment and ambulatory and emergency services.

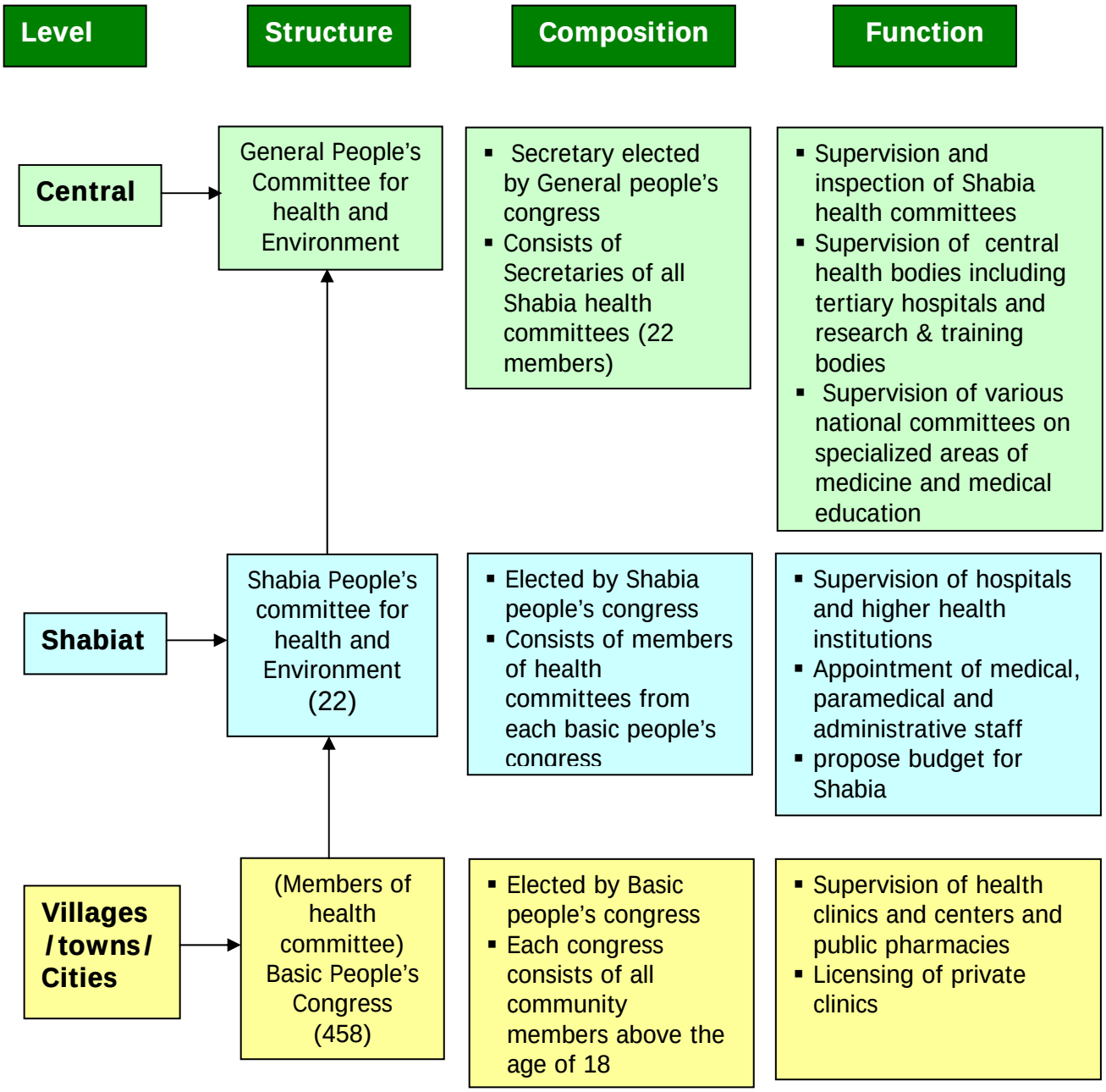
In Libya, there is a mixed system of public and private health care, rather than a purely state-run model. Health care is delivered through a series of primary health care units, centres, polyclinics, rehabilitation centers, general hospitals in urban and rural areas and tertiary care specialized hospitals.

The health care delivery system operates on three levels:

4) The first level consists of the Primary health care units (which provide curative and preventive services for 5.000 to 10.000 citizens); Primary health care centers (serve from 10,000 to 26,000 citizens); and polyclinics, staffed by specialized physicians and containing laboratories as well as radiological services and a pharmacy. These polyclinics serve approximately 50,000 to 60,000 citizens.
5) At the second level, there are General hospitals in rural and urban areas where care is provided to those referred from the first level.
6) The third level comprises of tertiary care specialized hospitals.



Administrative & Budgetary Structure of Health Care in Libya



Key organizational changes over last 5 years in the public system, and consequences

In 2000, the General people's congress (GPC) decided to dismantle the central body, the Secretariat of health, in order to allow decentralization of authority at Shabiat level. In 2003, the General health inspector was appointed at the central level by the General People's Committee to supervise the Shabiat secretariats of health with no executive authority. In 2006, GPC decided to re-establish the secretariat of health under the name of General peoples committee for health and environment and giving it the authority to supervise the central institutions and the secretariats of health at the Shabiat level.

4.3 Private Health Care System

Modern, for-profit

A growing private health sector is emerging although currently it has a limited role. The government has decided to encourage the expansion of private clinics and hospitals. As well, serious attempts are being made to introduce the family physician practice along with the necessary rules and regulations. Health insurance is also being considered. All charges for the private sector are out-of-pocket due to the absence of health insurance.

Table: Number of Private health Facilities and beds by Shabiat

NO	Names Of Shabiat	Private Sector				
		In Patient Clinics	No of Beds	Out Patient Clinics	Dental Clinics	Pharmacies
1.	Albetnan	1	20	7	2	38
2.	Derna	2	12	7	4	38
3.	Al - Gebal - Alakhdar	0	0	11	4	42
4.	Almarege	0	0	9	3	33
5.	Benghazi	16	272	78	41	250
6.	Al - Wahat	0	0	10	4	27
7.	Al -Kufra	0	0	3	1	5
8.	Sirte	2	26	6	5	45
9.	Al – Jufra	0	0	3	1	12
10.	Misurata	9	112	27	25	81
11.	Al -Merghip	11	120	33	5	39
12.	Tripoli	27	502	126	124	426
13.	Joufara	1	120	26	7	135
14.	Alzawea	3	82	32	6	79
15.	Al - Gebal -Lgharbi	0	0	16	7	55
16.	Naloot	0	0	2	2	20
17.	Sebha	4	25	7	12	57
18.	Ghat	0	0	0	0	2
19.	Morzig	0	0	2	1	9
20.	Wadi-Alhiat	0	0	2	2	16
21.	Wadi- Alshati	0	0	6	2	29
22.	Al -Nequt-Alghmis	8	70	18	1	64
	TOTAL	**84**	**1361**	**431**	**259**	**1502**

As shown in the table, total number of private hospitals including inpatient clinics in Libya are 84 having 1361 beds. Most of these facilities are located in tripoli, Ben ghazi and Al-maghrip. There are 431 otpatient clinics, 259 dental clinics and 1502 pharmacies in the private sector.

The small but growing private health sector continues to be hampered by the lack of an overall policy approach to the sector from the health authorities. In the absence of a clear and consistent government policy, private clinics face deep uncertainty and can not afford to invest in their expansion and development. There are several ways in which policy instability creates uncertainty. First, these clinics are granted licenses to operate by the basic people's congresses (BPCs), but without clear criteria or inspection policies. This leads clinics to fear that their license could be revoked arbitrarily by the BPCs. Second, clinics rely on health care professionals who work in the public sector and transfer to the private sector. Recent decree has barred this "dual practice" from January 2006, which obviously has serious implications for private clinics. This decree is seen as unworkable since most doctors rely on private work for most of their income, but its existence increases uncertainty for private clinics. Finally, the absence of health insurance means that private providers are restricted to basic activities such as simple operations.

Modern, not-for-profit

According to the Association Act of 1971, the establishment of non-governmental organizations (NGOs) is allowed. The act no 19 which was issued in 2004 has expanded the role of NGOs in health sector and organized their registration mechanisms, their role and scope of work. In addition there is Libyan Red crescent Society, currently, around eight national and sub-national NGOs are working in the areas of HIV/AIDS, infertility, Down's syndrome, Kidney diseases and caner.

Traditional

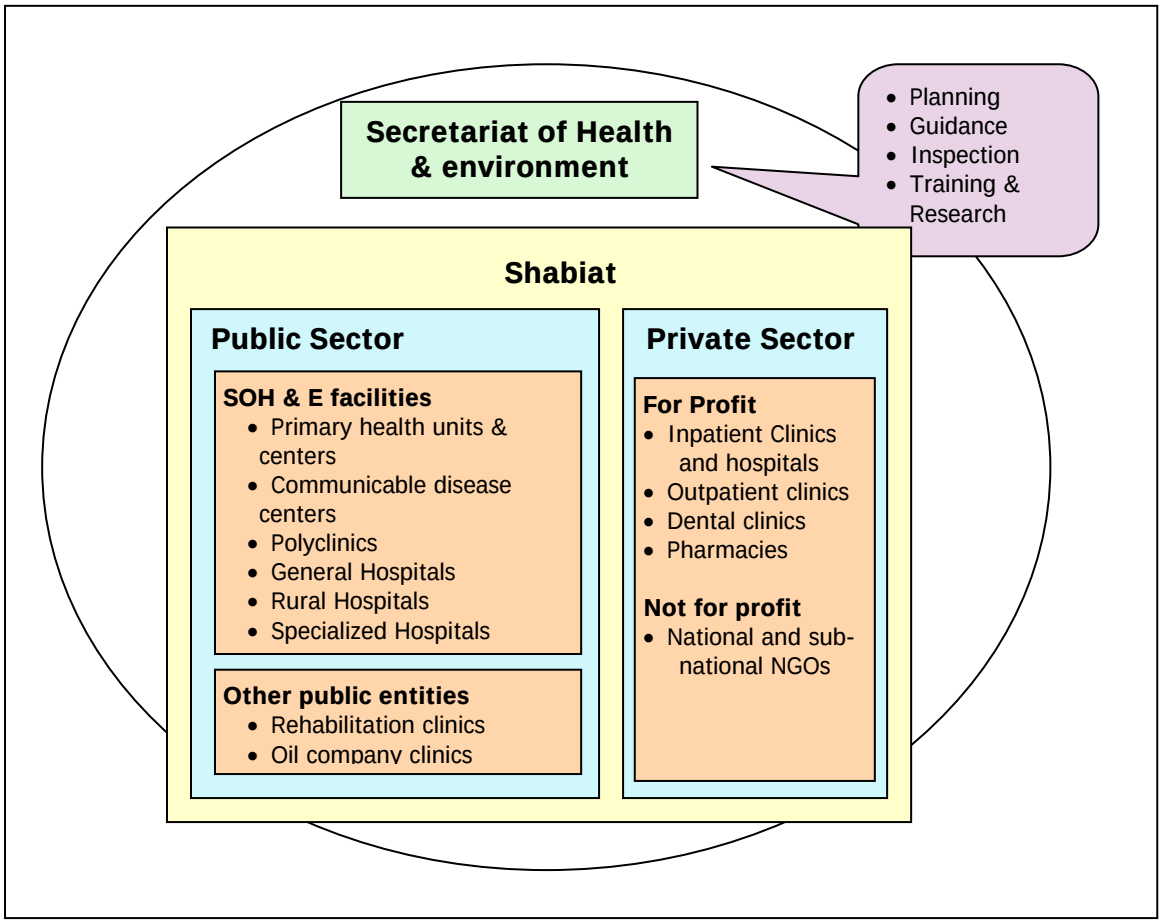
There are several outlets which sell herbal and traditional medicines and few traditional medicine clinics but this sector is not regularalized and data is not available on their number and activities.

Planned changes to private sector organization

According to 2008 -2012 proposed 5 years plan the private sector will play important role in health care delivery . The number of inpatient clinics, beds , outpatient clinics , dental clinics are growing .

4.4 Overall Health Care System

Organization of health care structures



5 GOVERNANCE/OVERSIGHT

5.1 Process of Policy, Planning and management

National health policy, and trends in stated priorities

At the national level the General People's Committee for Health and Environment coordinates, supervises and evaluates the implementation of national health programmes, medical services and community health activities. The secretary for the Committee is responsible for the initiation, coordination and consolidation of the health policy, national health strategies, programmes, activities and their evaluation process.

The national health policy declared by the General People's Committee for Health provides a framework for the health strategy. In accordance with this, the health programmes are designed and implemented to deliver comprehensive medical care services to all citizens. Other articles of the same law provide for the supervision of public health, preventive health and other related matters. The national health policy is currently geared towards achieving a comprehensive and uniform distribution of health services among the population. The process of planned development in the country started in 1972. The first Three-year National Transformation Plan (1973-75) emphasized that access to health services was the right of every citizen.

National health strategy

The national health strategy is an integral part of the comprehensive, socioeconomic development policy. It was first laid out in the Five-year Plan of 1981-85, which proposed to extend health services to all, to upgrade and maintain quality, to give priority to integration of health services and to achieve nationalization of health personnel. Furthermore, there has been continued emphasis on eight global elements of primary health care and the inclusion of four national elements (mental health, occupational health, school health and social and health care of the elderly).

In 1994, a national health strategy based on Primary Health Care (PHC) was adopted to attain the goal of “Health for All by the Year 2000”. According to this strategy, the Secretariat of People’s committee for health and environment is the principal provider of PHC services in Jamahiriya. Hospitals, medical centers and units and private doctor’s clinics are some of the channels through which health care services are provided in accordance with rules and regulations formulated by the People’s committee for health and environment.

Health Decree No. 24 in 1994 was formulated to restructure primary health care within the redesigned national health strategy that endorsed again the eight global elements of primary health care but also included mental health, school health, occupational health and social and health care of the elderly. Moreover, the decree promised to integrate health development with overall socioeconomic development and to streamline the entry to health care through family practice.

National health system in Libya is based on primary Health care. It aims at achieving the global goal of attainment by all the people of the country of a level of health that will permit them to lead a socially and economically productive life. The national health strategy aims to provide health for all and to achieve high quality and uniform distribution of health services among the people. Basic health care has been given a high

priority by creating the Department of Primary Health Care at the central level as well as at the provincial levels among 22 Shabiat.

Bases of the Strategy:

1. Comprehensive Primary health care is guaranteed for all the people of Jamahiriya.
2. Health resources are equally distributed and utilized.
3. Health development is an investment and part of the whole process of socioeconomic development
4. The secretariat of health and Environment cooperates with the other related sectors in the effort to promote health
5. The use of appropriate technology
6. Community participation and involvement in providing health services
7. Establishing links between people and PHC units using a family based registration system and a referral system to provide preventive, curative and rehabilitative health services.

Objectives of the National Health strategy

1. Strengthening health administration by training the managerial staff, and improving the health information and documentation systems
2. To develop the national health manpower resources, through the program of continuous education, with the aim of nationalizing all the workers in the health sector
3. Fostering the concepts of primary health care in medical schools, and involving local doctors from all specialties in the delivery of PHC services
4. Maintaining the existing health facilities and improving the quality of care they provide by improving their diagnostic and therapeutic capabilities. The services and distribution of these facilities should be continuously re-evaluated.
5. Improving the methods of medical supplies and updating is regulations, promoting rational use of drugs, and promoting the local pharmaceutical industry
6. Advocating cooperation with the international regional and Arab organizations to make maximum use of their capabilities in the implementation and evaluation of this strategy
7. Increasing financial resources by creating new sources of funding, and promoting rational use of the available resources by using quality control manuals for the different health activities and by introducing measures of auditing and continuous evaluation.

National health priorities

Consultations between the WHO team and different health managers and stakeholders reached consensus that technical assistance should cover the following areas:

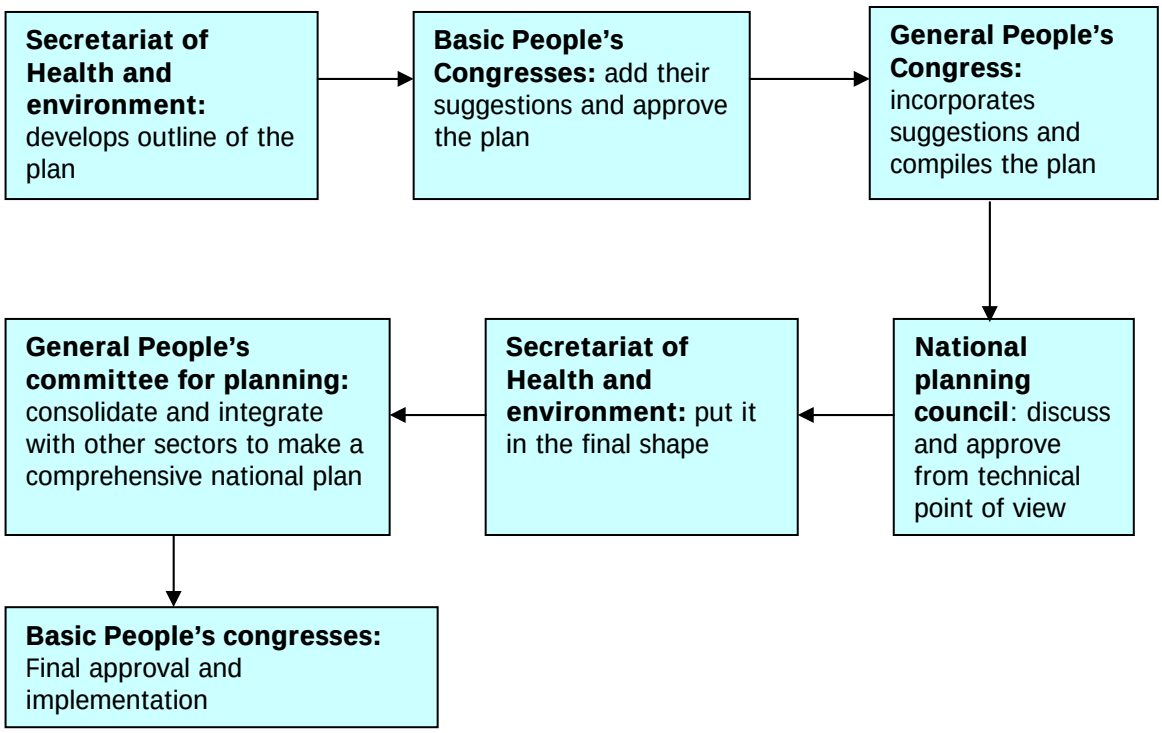
- support for appropriate policies and interventions aimed at improving environmental and other determinants of health;
- building national capacity on policy formulation and health strategic planning;
- strengthening of institutional capabilities of the public health sector through the empowerment of the four functions of the health system: governance, resource generation, health care financing and health service provision;

- optimal management of human resources for health;
- better definition of relationship between the three levels of the health system;
- strengthening disease surveillance and control;
- reducing deaths and disability related to road traffic injury;
- support for widespread e-health applications;
- establishment of disease-specific national registries;
- support for healthy lifestyle and safe community programmes;
- support for food safety and nutritional programmes through research and the establishment of a database.

Formal policy and planning structures, and scope of responsibilities

The planning process in Libya is decentralized and participatory in nature. The national health plan is formulated in steps. First, the Secretariat of Health and environment develops the outline of the health plan and sent it to Basic People's Congresses for their comments, suggestions and approval. From Basic people's congresses, the plan goes to General people's congresses, which after incorporating the suggestions of BPCs, compile the plan and send it to National planning council. National Planning Council reviews and discusses the plan from technical perspective and the feasibility and sees whether it is in line with government health priorities. It consults all relevant stakeholders including research centers and university, approves it technically and forwards it to Secretariat of Health and Environment, who put it in the final shape and sends it to General People's committee for planning for consolidation and integration with other sectors to make a comprehensive national plan. Finally the plan is sent to Basic people's Congresses for final approval and implementation.

Health planning process:



Analysis of plans

The People's Congress and its People's Committees guarantee the right of citizens to health care. However, policies and plans that provide a long-term vision for the health sector are not in place. The stewardship function at the central level still needs improvement. Absence of policy formulation and medium-term plans and poor governance are some of the key issues that face the health system. Although the health system is decentralized to the level of the *shabiat*, capacity at the local level is inadequate and there is a general lack of coordination.

5.2 Decentralization: Key characteristics of principal types

In 2000, the General people's congress (GPC) decided to dismantle the central body, the Secretariat of health, in order to allow decentralization of authority at Shabiat level. The decentralization process devolved considerable administrative and budgetary power to the Shabia level. With no authority over Shabia and lower level health committees, the central health authorities were powerless to enforce or monitor pending requirements through formal methods such as the use of certificates of need. While the decision was made to bring resource allocation decisions close to their point of impact, this lack of centrally-determined policy guidelines, or oversight and monitoring systems, or organized information systems, created the unusual situation that the overall allocation of resources within public health care in Libya were simply not known. In 2003, the General health inspector was appointed at the central level by the General People's Committee to supervise the Shabiat secretariats of health without any executive authority.

From 2006, there has been a move towards centralization and synchronization at various levels. The country has been divided into 22 Shabiat and GPC decided to re-establish the secretariat of health under the name of General peoples committee for health and environment and giving it the authority to inspect and supervise the central institutions and the secretariats of health at the Shabiat level.

The General People's Committee for health and Environment is currently responsible for;

- Supervision and inspection of Shabia health committees
- Supervision of central health bodies including tertiary hospitals and research & training bodies
- Supervision of various national committees on specialized areas of medicine and medical education

The current level of decentralization is shown in the table below.

Table. Level of Decentralization in Libya:

Health system functions	**Level of Government**	
Finance	**Central**	**Shabiat**
Revenue generation	+++	+
Budgeting, resource allocation	+++	-
Power of expenditure	-	+++
Line item flexibility	+++	-
Income from fee and contracts	+++	-
Information and Planning		
Prepare annual plans	+++	+
Health information systems design	+++	-

Data collection, processing, and analysis	+++	+++
Dissemination of information to stakeholders	+++	+
Service organization		
Hospital autonomy	-	+++
Defining service packages	+++	-
Setting norms, standards, regulations	+++	-
Monitoring, oversight of service providers	++	++
Contracts with private providers	++	+
Human resources		
Recruit staff	+++	-
Dismiss staff	+++	++
Reward staff	-	+++
Penalize staff	-	+++
Determine salaries & benefits	+++	
Transfer staff	+++	++
Performance evaluation	-	+++
Continuing education	+++	+++
Procurement and Logistics		
New equipment	+++	-
Drugs & supplies	++	++
Repair and maintenance contracts	++	++

Key: +++ Full authority; ++ Moderate; + Limited; - None

The decentralization of health services requires clear terms of reference of institutions at central and shabiat level. To attain that with effective implementation there is a need for institutional development through ensuring clarity of roles, functions and responsibilities of the national health body and shabiat.

Greater public hospital autonomy

All hospitals in Libya are considered as independent institutions based on the act no. 09 from General People's Congress, which was issued in 2004. The law gives the hospitals authority to have their own budgets and to have special accounts in the banks for income. The hospital director has the authority to recruit all cadres of health staff according to the rules and regulations.

Each hospital has a scientific committee that decides on technical issues. There is also a board of director that consists of heads of all the different departments in each hospital. The decree clearly states the roles and responsibilities of the hospital directors.

Private Service providers, through contracts

Contracting is mostly for non-clinical services. Now nearly all the hospitals have contracted out the cleaning, catering and maintenance work. Recently, contracting out is being extended to polyclinics and health centers. A few clinical services like medical imaging and laboratory services have also been contracted.

5.3 Health Information Systems

A General authority of information acts as a central data bank. It provides valuable information including the most important socio-economic demographic indicators, and vital statistics. The Health Information Center publishes an annual report containing updated health indicators and trends in collaboration with General Authority of Information and Documentation.

In Libyan Arab Jamahiriya, there is an ongoing vital registration system in which every family has in its possession a book "the family book" in which all the family members are registered and vital events such as birth/marriage/death are recorded. There are also regional vital registration offices all over the country.

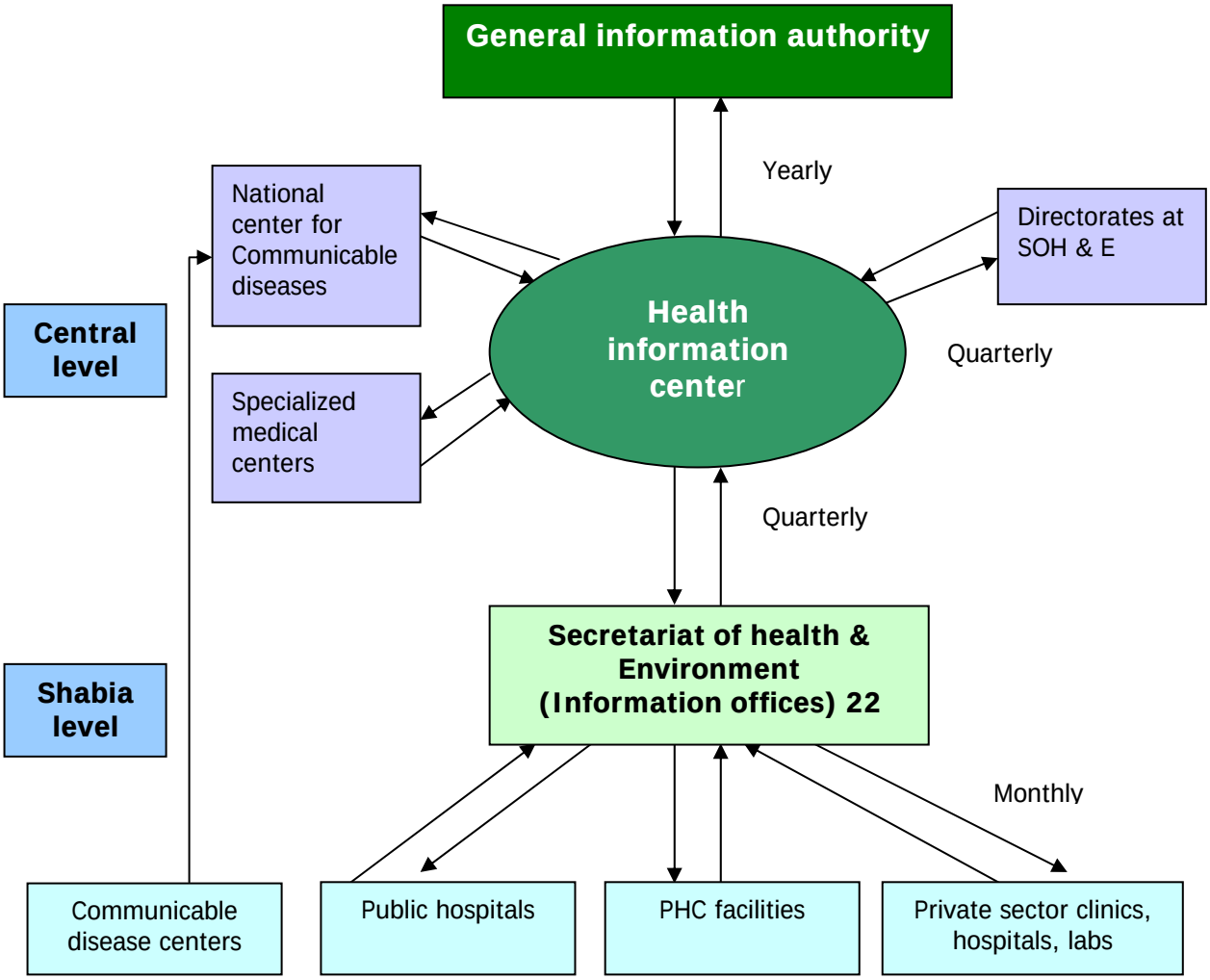
The establishment of the National Center of Infectious Disease Control (NCIDC) in 2002 has contributed to the provision of information on communicable diseases in Libya and strengthened the routine surveillance system besides the information collected through survies such as The (MICS) which was implemented in 2003. The (PAPFAM) survey project is being implemented which will provide valuable information on the health of child and mother[9].

The creation of Health Information Centre as a central information body to coordinate, collect and report on national health data sets is very positive step development of national health information system but the current status of information and data collection from healthcare facilities and regular reporting requires restructuring and mainstreaming.

The organization, reporting relationship and data flow of health information system in Libya is given in figure below.

[9] WHO-Joint Program Review Mission 2006

Figure: Health information system of Libya- Organization and data flow



Organization, reporting relationships, timeliness

- An ACT was issued in (1990) under no (4) that requires all providers to report data in both the public and private sector, with emphasise on communicable diseases which is listed by secretary of health.
- There is no duplication or fragmentation of information through different routine channels. The data is available for use at the national/ sub-national level
- The National Authorty of Information synthesize information from different sources and Issues an comprehensive annual report

Data availability and access

- The annual reoprt issued by national health information center is sent to all concerned secretariats and institutions & on the web site of secretariat of health and environment.

Health information system: Challenges

It is recognized that absence of a national health information system and the high cost of not finding information result in poor and uninformed decisions, poor planning and

evaluation and low quality impact assessment, duplicated efforts, and waste of time and resources.

The real challenges for developing a health information system are:

1. how to direct investment in the health information system a sustained, coordinated and integrated manner;
2. how to make sure that all aspects of health care delivery are serviced by the health information system including emergency services, medical education and primary health care;
3. how to sustain systematic provision of qualified staff to the health information system;
4. how to ensure that the health information system is integrated in the national health care system.

Plan for strengthening Health information system:

The 19 point program outlines specific initiatives to improve and strengthen the health information system.

1. Establish a **Central department** for health information
   - Hold workshop to introduce center
   - Create annual statistics report
2. Maintain a statistical database and statistical data flow for key indicators
3. Implement international classification of mortality
   - Standardize death certificates via central systems and hand book
   - Provide training to doctors
4. Implement international classification of sickness and injuries
   - standardize death certificates by utilizing ICD 10
   - Provide training to doctors
5. Train officials on use of information in planning and decision making
   - offer workshops for offices and department directors
6. Promote medical records and information system in hospitals
   - hold workshops for statistical data officials to introduce efforts
   - create annual statistical report with key indicators
7. Promote utilization of statistical systems
   - train officials on gathering data and correctly completing/filling forms
8. Build expertise in conducting health surveys at national and municipal levels
9. Build capacity within HIC in statistical documentation
10. Maintain a central database of medical information
    - maintain reference volumes at both the HIC and in hospitals
11. Build a strong library infrastructure

- train expert librarians at both central level and hospitals
- use electronic filing systems

12. provide internet for departments of the general people's Committee for health and environment
    - link Shabia committees for health and hospitals via wireless
13. Launch GIS and SAM (Service ability monitoring) systems
    - Train staff in using systems
14. define burden of disease
    - train researchers in defining overall disease burden
    - detailed study of disease prevalence in Libya
15. Perform studies in health economics
    - train researchers in methodologies
    - implement studies in multiple areas using methodology
16. coordinate epidemiological investigations with specialized centers
    - ensure research in disease areas is coordinated with specialized centers
17. Coordinate with National authority for information and communication
    - Hold periodic meetings to provide information on key indicators required for planning and decision making
18. Monitor and evaluate the performance of health information system
    - implement performance evaluation indicators

5.4 Health Systems Research

Health system research is an important area that needs attention and improvement in Libya. Currently there is no regular funding mechanism for health systems research or Public/ private funding for health research. Data on the number of articles published per year or the number of active researchers working in the field (private, public, academic institutions) is not available. There is no evidence that the the health systems research feed into national policy.

5.5 Accountability Mechanisms

With the ever increasing expectation of the community, technological development, and the present health financing system, resources may not be sufficient. In addition to the various efficiency measures which need to be introduced, there is a great need to make physicians and teams accountable, not only for their patients' health, but also for the wider resource implications of any treatments involved, including referrals from primary care to secondary and tertiary care. There is a need to adopt management protocols in order to curb the cost of services and to improve the quality and accessibility of care.

In Libya, there are operational mechanisms in place to ensure different health system actors can be held accountable for their actions. There is a special act called medical responsibility act no. 17, 1986, which provides the codes of behavior for medial and

paramedical staff and allows dealing with the misconduct of, health workers. These mechanisms mostly apply to public sector providers.

At the secretariat level, there is a department called follow up and inspection, which is responsible to makes sure that everyone is doing their job properly and there is no violation of rules and regulation.

There is also a special independent body for accountability, which directly appointed by the GPC and is responsible for accountability in administrative and financial matters. If any violation is found, they have the authority to stop someone from working and take him to the court.

Generally the procurement and recruitment processes seem transparent and there is no evidence that health system actors are less accountable in practice for their actions in relation to particular population groups – the poor, etc. Fee schedules, annual financial reports are also available from public sector.

6 HEALTH CARE FINANCE AND EXPENDITURE

6.1 Health Expenditure Data and Trends

Table 6-1 Health Expenditure

Indicators	1990	1995	2000	2004	2006
Total health expenditure/capita,	-	58*	68*	121*	-
Total health expenditure as % of GDP	-	-	-	3.1%	-
Investment Expenditure on Health (Million Libyan Dinars)	22.3	22.3	107	249.0	274.2
Public sector % of total health expenditure	-	-	60.1	71	-

Source:

- Annual health report 1995 {S.O.H}.
- Financial Report 2000 {Secretariat of finance}.

* Libyan dinar

Indicators	1990	1995	2000	2004	2006
Expenditure on health as % of total government expenditure	-	-	17.4	16	-
Per capita Government expenditure on health (USD)	-	-	78.5	86	-
Social insurance as % of Government expenditure on health	-	-	17.4	14.6	-
Out of pocket as % of total expenditure on health	-	-	-	23	23
OOP as % of private expenditure on health	100	100	100	100	100

Table 6-2 Sources of finance, by percent

Source	1990	1995	2000	2004	2006
General Government					
Central Ministry of Finance	89	89	89	89	-
State/Provincial Public Firms Funds	0	0	0	0	-
Local	0	0	0	0	-
Social Security	11	11	11	11	-

Private				
Private Social Insurance	0	0	0	0
Other Private Insurance	0	0	0	3
Out of Pocket	-	-	-	23
Non profit Institutions	0	0	0	0
Private firms and corporations	-	-	-	-
External sources (donors)	0	0	0	0

Source:

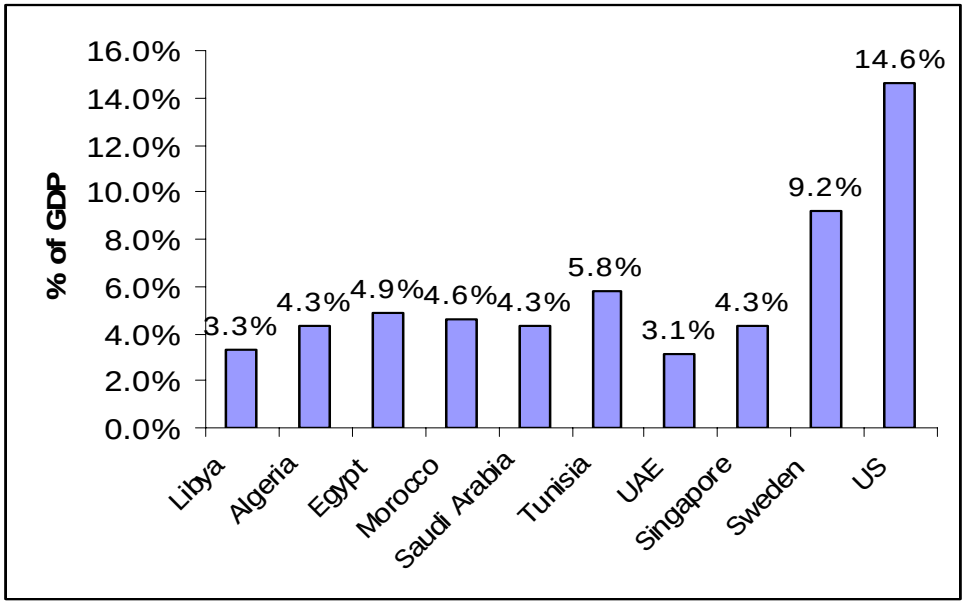
- Social and economic survey 2004 report: National Corporation for information and documentation.
- Economic development in Libya - 1970 – 2003 General secretariat of planning

In comparison to its MENA peers, Libya spends much less on health care as a % of GDP- about 3.3%- but similar amount in absolute terms. When adjusted for purchasing power differences across countries, Libya spends only USD 222 per person per annum (see figure below).

The Government spends 60 million Libyan dinars (LD) annually for medical treatment of Libyan citizens abroad. More is spent out-of-pocket by Libyans traveling for treatment to Arab countries and Europe.

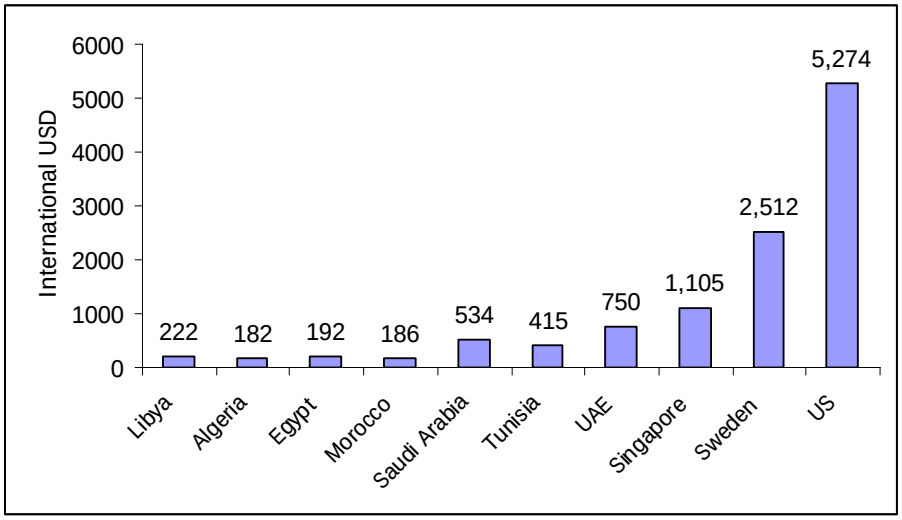
Historical data on government health expenditure and health budget is given in annex II & III

Figure: Health Expenditure, International Comparison, 2002
Total Expenditure on Health as % of GDP, 2002



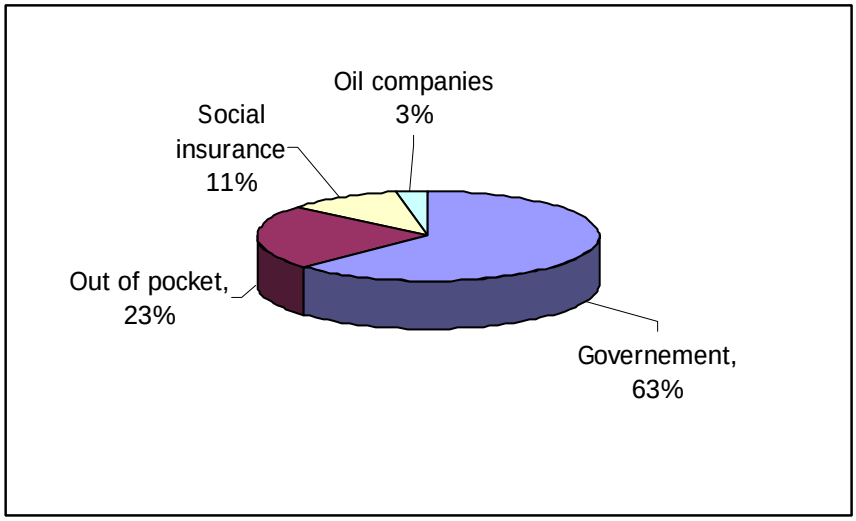
Source: WHO World Health Statistics 2005; Inspector General of Health Annual Report 2004

Note: WHO drives international dollars by dividing local currency units by an estimate of their Purchasing Power Parity (PPP) compared to U.S. dollar, i.e., a measure that minimizes the consequences of differences in price levels existing between countries.



Source: WHO World Health Statistics 2005; Inspector General of Health Annual Report 2004

Distribution of expenditure on health



Source: Social and economic study carried out by National information authority 2003

Rational use and management of financial resources have continued to be a major issue for decision-makers and planners. The efficiency of the health care financing system needs to be strengthened through:

- a health financing framework with rigorous examination of financing alternatives and transparent, effective and efficient budgeting, accounting and audit systems;
- a sound financial management system to optimize the use of resources;
- a cost and management accounting and information system to support the move towards an insurance based system;
- a long-term plan to align payment policies with quality improvement where payment methods should provide an opportunity for providers to share the benefits of quality improvement;
- a cost package of services at the different levels of health care;

- improvement of financial management through capacity-building in hospital management to increase efficiency and improve performance;
- increasing the awareness of staff and the wider population of the costs of providing health care and the opportunity cost of inappropriate use of health service resources.

Trends in financing sources

The Government provides free health care to all citizens. However, under-funding led to a decline in the quality of services during the last decade. In 2002 the Government announced that it was substantially increasing the development budget for health services, awaiting full implementation. 23% of total expenditure on health is out of pocket.

Health expenditures by category

Information on health expenditure is scarce since the budget for all sectors was transferred to Shabia without a clear allocation for health. Recently, the government has decided to allocate specified budget the health and other sectors.

Table 6-3 Health Expenditures by Category

Health Expenditure	1990	1995	2000	2004	2006
Total expenditure: (only public)	-	-	-	-	-
Per capital expenditure	-	-	-	-	-
% By type of service:					
Curative Care	-	-	-	-	-
Rehabilitative Care	-	-	-	-	-
Preventive Care	-	-	-	-	-
Primary/MCH	-	-	-	-	-
Family Planning	-	-	-	-	-
Administration	-	-	-	-	-
% By item					
Staff costs	-	47	48	32	30.5
Drugs and supplies	-	23	15	33	30
Investments	-	7	21	25	24
Grants Transfer	-	-	-	-	-
Other	-	-	-	-	-

Source

- The report of health and social services in Libya 1969 -1999.
- Health statistical report 2001 {Directorate of health}.

6.2 Tax-based Financing

No information available.

6.3 Insurance

Table 6-4 Population coverage by source

Source of Coverage	1990	1995	2000	2004	2006
Social Insurance	100	100	100	100	
Other Private Insurance	0	0	0	0	
Out of Pocket				23	
Private firms and corporations				3	
Government	100	-	-	77	
Uninsured/Uncovered	0	0	0	0	

Source

- National human development report {2000} {: N.C.I&D }.
- Social and economic survey 2004 report {: N.C.I&D }

Social insurance programs: trends, eligibility, benefits, contributions

Libyan Social Security System

The state provides a national umbrella of social security by implementing a comprehensive social security system. Social security is guaranteed to all citizens and is extended to foreigners living in Libya. It also includes all schemes or procedures instituted to promote the welfare of Libyan and foreign workers in the event of old age, disability, sickness, employment, accident or occupational disease, disaster, death, pregnancy, and childbirth.

The following persons are entitled to receive benefits under the Libyan social security system in return for payment of their contributions: 25

- Businesses where the partnership system is applied;
- Civil servants working in the various secretariats, public authorities and agencies, including the police and customs officials;
- Persons working under contracts of employment;
- Self-employed persons engaged in the liberal professions, arts and crafts, agriculture, - industry and similar activities; and
- Surviving dependents of persons covered in nos. 1 and 4 in the event of their deaths.
- When a foreign worker's contract is terminated for reasons other than total or partial disability and old-age, he is entitled to receive a lumpsum payment in respect of his period of work or service.

a) Social Security Benefits

- Old Age Pension

A contributor can claim an old-age pension upon reaching the retirement age of 65 years for a male and 60 years for a female. The pension is calculated on the basis of the average of his actual salary or of his presumed income for the past three years of work. The average is multiplied by 2.5% for each year of work or service during the first 20

years and by 2% for each subsequent year. A pensioner shall be entitled to a monthly family allowance of four dinars a month for the wife and two dinars a month for each child. The "family" covers the husband, wife, sons, up to 18 years old and unmarried daughters.

- Disability Pensions

When a worker retires because an accident at work has totally disabled him/her and made him/her unable to work again, he/she is entitled to a full pension. If the accident causes partial disability, the worker is entitled to a lump sum payment or partial pension. When the contributor suffers total disability, he/she is entitled to 50% of the rate of the full pension. An additional 0.5 % for each year of contribution is paid in the first 20 years of service, and is increased to 2% for each succeeding year.

- Basic Pension for Survivors

The basic pension for survivors is the minimum pension guaranteed by the social security system to the persons who are not granted any other pension.
Persons who may avail of this pension are those who reach the retirement age, those who are totally incapable of working, persons living in a state of indigence, widows, and orphans.

b) Other Benefits

Daily Cash Assistance

Daily assistance in cash is provided to self-employed persons in the event of temporary disability due to sickness, an employment accident or childbirth.

The following are lump sum grants which may be availed of by qualified persons:

- Pregnancy aid, payable from the fourth month of pregnancy until the woman's confinement;
- Childbirth grants;
- Burial grants;
- Relief grants in case of disaster or emergency.

Managed by a tripartite board and director general, the **Social Security Fund** administers the program through district and local offices General supervision is acted by a national social security and local supervision by municipal committees.

Private insurance programs: trends, eligibility, benefits, contributions

Private health insurance programs does not exist in the country

6.4 Out-of-Pocket Payments

Despite guaranteed free medical care in the public sector, Libyans are opting to purchase private medical care, in order to receive a higher level of service. A recent household survey estimated that this spending averages LYD 263 (USD 200) per year per household[10]. This money is spent in two main areas. There is a small but growing private health care sector in Libya. This mostly provides primary and basic secondary care through 431 outpatient clinics and 84 inpatient clinics, with the bed capacity of 1361. For more serious procedures, Libyans travel abroad for treatment in Tunisia, Jordan, and Egypt or further. The size of this market is unknown, but with the average

[10] Inspector General for Health Annual Report 2004

cost of state funded trips at LYD 15000 (USD 11500) in 2004, they represent a considerable expanse to the average Libyan[11].

(Direct Payments) Public sector formal user fees: scope, scale, issues and concerns

There is a formal user fee charged in the public health system. This is in the form of registration/prescription fee. One Libyan Dinar is charged from each patient visiting outpatient clinics. This fee is charged to prevent the misuse of health services. In addition, there is a fee of 50 Libyan Dinars for Medical imaging (MRI CT scan) only for the outpatients. These subsidized charges are only for the Libyans. Non-Libyans pay according to the actual cost.

Information is not available on the revenue generated by these fees as a proportion of expenditure. There is no evidence that implementation of the user fees lead to exclusion of certain groups.

(Direct Payments) Private sector user fees: scope, scale, type of provider involved, issues and concerns

Private sector is totally financed by out of pocket payments. There is no private insurance; fee for service is the main source. There are no mechniisms in place to provide services to the disadvantaged segments of society. The fee in the private sector is market driven with no no regulatory mechanism on setting the level of fees.

Public sector informal payments: scope, scale, issues and concerns

There is no evidence of informal fees being charged in the public sector facilities.

6.5 External Sources of Finance

Currently, the Libyan Arab Jamahiriya receives no external funds as development aid from any source of any kind. However, after the re-activation of Libyan relationships with the west, it is expected that technical assistance will be offered in health sector development and especially health system reform.

The contribution of UN agencies other than WHO to health development has been relatively scarce, but it is expected to be strengthened in the near future. UNDP is actively working in the health sector through two UN thematic groups. The HIV/AIDS group has been functional since 2003. The country contracted UNDP to conduct rapid assessment of drug abuse and the drug abuse thematic group has just been formed.

UNDP confirmed that the CCA process will start soon, and will be followed by the UNDAF exercise for the first time in this country. The results are expected to be finalized some time in 2005. In terms of technical assistance, UNDP has organized a seminar on privatization demonstrating the experience of others. It is also planning to organize seminars on project management for capacity-building for government officials. Technical cooperation existed with Italy. There are efforts to try to involve other countries as well. It expected that the continued cooperation with UNICEF will strengthen the UN team in the country.

[11] The State spent LYD 60MM (USD 46MM) funding treatment abroad for citizens until 2005

6.6 Provider Payment Mechanisms

No information available.

7 HUMAN RESOURCES

7.1 Human resources availability and creation

Table 7-1 Health care personnel

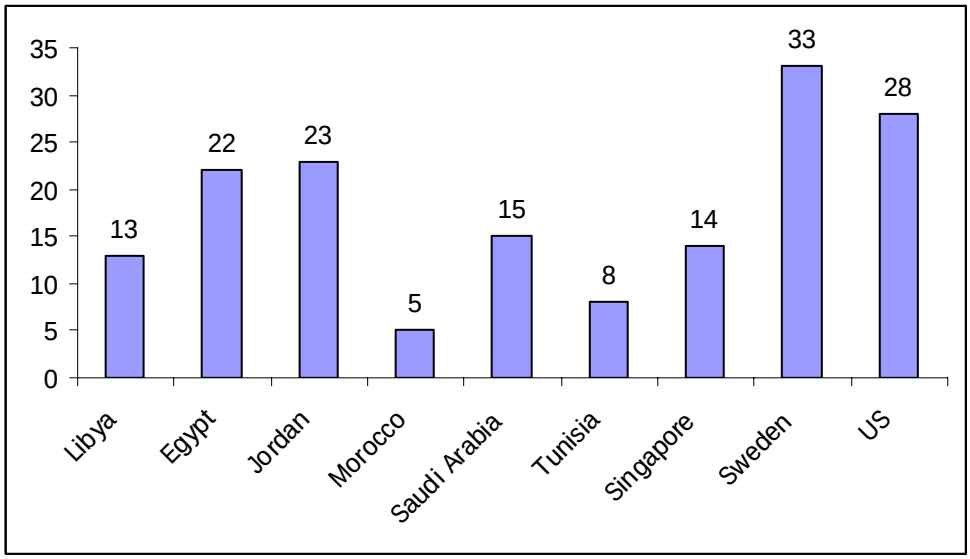
Personnel (per 100,000 pop)	1990	1995	2000	2004	2006
Physicians	-	137	134	125	125
Dentists	-	9	9	25	25
Pharmacists	-	12	14	20	25
Nurses and midwives	-	420	400	483	480
Paramedical staff	-	130	135	230	-
Community Health Workers	-	-	-	-	-
Others	-	-	-	-	-

Source:

- Annual statistical health reports 1995, 2001
- The report of health and social services in Libya 1969 -1999
- Annual Statistical Report, The Office of The Inspector General 2004.
- Health information center

Headline health system indicators show Libya's human resources and level of health service delivery to be in line with that of MENA peers. There are 13 physicians, 2.5 dentists, 2 pharmacists, 48 nurses and 23 paramedical staff per 10000 population. However the number of health professionals varies considerably across Shabiat, from 6.3 doctors per 10000 in Jdbaya to 28.5 per 10000 in Ben Ghazi and from 19.4 nurses per 10000 in Misrata to 275.8 per 10000 in Ghat. This variation stems from the absence of central guidelines on correct ratios or control over appointment.

Figure--: Physicians per 10,000 populations, international comparison



Source: WHO World Health Statistics 2005; Inspector General of Health Annual Report 2004

Note: Data for Libya is for 2004, Other data is latest available from WHO Egypt, 2003; Morocco, Sweden, Tunisia, UAE, 2002; Saudi Arabia, Singapore, 2001; U.S., 1999; Algeria, 1995

Table: Distribution of different categories of staff by Libyan/Non-Libyan

Personnel (Number)	Libyans	Non-Libyans	Total
Physicians	7429	1418	8847
Dentists	988	114	1102
Pharmacists	1000	50	1050
Nurses & midwives	30273	2076	32349
Technicians	15196	504	16700
Admin	37745	0	37745
Total	92631	4160	96791

Source:

- Health information center, Libya

Trends in skill mix, turnover and distribution and key current human resource issues and concerns

The phenomenon of public sector employment being used as the welfare distribution mechanism is common across the Libyan public sector, particularly in health and education. Local control of health budgets has enabled some Shabiat to increase administrative and nursing staff to extremely suspect levels, as noted by the general planning council health care committee report. According to figures from the Inspector general of health, in Ghat 65% of registered health workers are nurses versus a country average of 39%, while in Kufra 64% of health workers are administrators versus a country average of 31%, a figure which is considered high by the WHO. Experts estimate that around 30% of all registered nurses are inactive.

Medical education in Libya has expanded massively, placing enormous pressure on scarce resources, with an ensuing decline in quality. At present Libya has 15000 students in medical faculties, compared to just 9000 practicing doctors, and a total population of around 6 million. It simply does not need to educate this many doctors. At the same time, there is a major lack of other health workers- pharmacists, medical technicians and trained paramedics. Furthermore, the expansive funding of Libyan doctors perusing post-graduate specializations abroad has also been inefficient, as Libya has not derived from their skill. Faced with low salaries, they have chosen to make their careers abroad and Libya has been forced to import expensive foreigners to replace them.

The historically high quality of Libyan physicians, achieved through an excellent education system and testified to by the enormous numbers now working abroad, is under threat[12]. During the sanctions, Libyan doctors found it hard to obtain high quality continuous education, and although now efforts are now being made to redress the situation with the help from doctors of Libyan origin working abroad, a knowledge deficit still remains. Finally, Libya still finds itself lacking in specialists in a number of key areas

[12] There are estimated to be 800 Libyan doctors, who completed their undergraduate studies in Libya before moving to the UK to specialize, working in the NHS in the UK alone

such as anesthesia, cardiology and radiology, despite enormous number of medical students, and the funds spent on scholarships for doctors to specialize abroad.

The standard of nursing care of Libya is also inadequate due to poor quality nursing education Nursing practice is dependent on expatriate staffing. Most qualified nursing staff is not Libyan. Nursing is not taught to degree level, and curricula are out of date and lacking in clinical experience content. Leading Libyan health education professionals believe that nursing education standards have declined since control of nursing institutes was devolved to Shabia level. In the past few years, nursing education has been established to meet the increasing demand for nationals. A 3-year diploma course after secondary school has been established. Some small scale improvements are being achieved through the efforts of individual hospitals that provide training courses for nurses. New, degree-level course are also planned by the health care planning authority. However, Libya remains dependent on expansive foreign nurses for almost all quality and specialized nursing care, and for midwifery.

It is recognized that human resources are the main agent for change and improvement of the health system. Four approaches can be applied to develop human resources in this transitional stage in the Libyan Arab Jamahiriya.

- Long-term strategic planning for human resources development as part of the national policy and strategic planning functions;
- Redesigning the way health professionals are trained to emphasize evidence-based practice and providing more opportunities for interdisciplinary training;
- Modifying the ways in which health professionals are regulated and accredited to facilitate changes needed in care delivery;
- Using the reward system to support changes in care delivery while preserving its role in ensuring accountability among health professionals and organizations.

The Government and professional associations need to study these approaches and work together to better ascertain the optimum utilization, updating and management of human resources for health[13].

Table 7-2 Human Resource Training Institutions for Health (2006)

	Current		Planned		
Type of Institution*	**No. of Institutions**	***Capacity**	**No. of Institutions**	**Capacity**	**Target Year**
Medical Schools	9				
Schools of Dentistry	8				
Schools of Pharmacy	5				
Nursing & midwifery Schools	27				
Medical technology colleges (medical technicians)	3				
Schools of Public	2				

[13] Country Cooperation Strategy for WHO and the Libyan Arab Jamahiriya, 2005–2009

	Current		Planned		
Type of Institution*	No. of Institutions	*Capacity	No. of Institutions	Capacity	Target Year
Health					

*Capacity is the annual number of graduates from these institutions.

Source;

- Annual Statistical Report, The Office of The Inspector General 2004

Accreditation, Registration Mechanisms for HR Institutions

There are no independent professional accreditation bodies for doctors or nurses, with the power to grant or revoke licenses to practice based on objective, international standards. There is a critical need for establishing an independent regulatory body to oversee and regulate the medical profession. At the moment it is not clear who actually regulates doctors in Libya, and a clear and transparent licensing process does not exist. There is no robust mechanism to check the credibility and credentials of doctors practicing in Libya[14].

7.2 Human resources policy and reforms over last 10 years

Currently there is no explicit policy on human resource development.

Key challenges related to human resources are the following:

1. **Human resources planning**: There are no clear plans to match needs with number and categories of health personnel.
2. **Human resource production:** Lack of needs-based training, infrequent revisions of curriculum, lack of accreditation system, weak inter-sectoral collaboration, and lack of link between continuous medical education (CME) programmes and career development and inadequate training in management are some of the main challenges in this area.
3. **Human resources management:** there is imbalance of available personnel favoring urban areas and hospital practice and absence of systematic performance appraisal.

7.3 Planned reforms

No information available.

[14] Medical Tourism and the Libyan National Health Services; *Libyan J Med, AOP: 070530 (published 9 June 2007)*

8 HEALTH SERVICE DELIVERY

8.1 Service Delivery Data for Health services

Table 8-1 Service Delivery Data and Trends

TOTAL (percentages)	1990	1995	2000	2004	2006
Population with access to health services	100	100	100	100	100
Married women (15-49) using contraceptives	-	45.1	-	53.7	-
Pregnant women attended by trained personnel	-	95.0	-	96.3	-
Deliveries attended by trained personnel	-	94.4	-	99.9	-
Infants attended by trained personnel (doctor/nurse/midwife)	-	-	-	94	-
Infants immunized with BCG	-	99.8	-	99	100
Infants immunized with DPT3	-	96.5	-	96.5	98
Infants immunized with Hepatitis B3	-		-	79	98
Infants fully immunized (measles)	-	92.5	-	92.5	96
Population with access to safe drinking water	-	97.20	-	98.4	-
Population with adequate excreta disposal facilities	-	95	-	99	-

Source:

- Libyan maternal and child health survey (pan-Arab ,project for child development 1995) .
- { MICS } report 2004{ National center for infectious diseases} .
- Vital statistics report {: N.C.I& D }
- Joint report for immunization coverage in Libya, UNICEF, WHO and NCIDC Libya

URBAN (percentages)	1990	1995	2000	2004	2006
Population with access to health services	100	100	100	100	100
Married women (15-49) using contraceptives	-	48.4	-	54.3	-
Pregnant women attended by trained personnel	-	69	-	93.5	-
Deliveries attended by trained personnel	-	96.3	-	96.3	-
Infants attended by trained personnel	-	100	-	100	-
Infants immunized with BCG	-	99.7	-	99.7	-

Infants immunized with DPT3	-	96.3	-	96.3
Infants immunized with Hepatitis B3	-	-	-	73.3
Infants fully immunized (measles)	-	92.4	-	85
Population with access to safe drinking water	-	96.8	-	98.3
Population with adequate excreta disposal facilities	-	99.1	-	99.2

Source:

- Libyan maternal and child health survey (pan-Arab ,project for childe development 1995) .
- {MICS} report 2004 {National center for infectious diseases}.

RURAL (percentages)	1990	1995	2000	2004	2006
Population with access to health services	100	100	100	100	100
Married women (15-49) using contraceptives	-	36.2	-	46.0	-
Pregnant women attended by trained personnel	-	-	-	89.9	-
Deliveries attended by trained personnel	-	87.8	-	99	-
Infants attended by trained personnel	-	97.7	-	97.7	-
Infants immunized with BCG	-	97.7	-	97.7	100
Infants immunized with DPT3	-	97.0	-	97.0	98
Infants immunized with Hepatitis B3	-	-	-	85.0	98
Infants fully immunized (measles)	-	92.6	-	-	96
Population with access to safe drinking water	-	95.7	-	98.6	-
Population with adequate excreta disposal facilities	-	94.7	-	98.1	-

Source:

- Libyan maternal and child health survey (pan-Arab ,project for childe development 1995) .
- {MICS} report 2004 {National center for infectious diseases}

Access and coverage

Access to primary care:

Owing to the large number of health facilities, access to primary health care is not an issue in Libya. According to official figures 100% of population has access to health services. Around 90% pregnant women are attended by trained health personnel and 99% of all deliveries are attended by trained personnel. Infants attended by trained

personnel is also very hight at around 98%. More than 98% of population has access to safe drinking water and adequate excreta disposal facilities.

The national EPI is successful, reaching high routine immunization coverage and convincing the population of the importance of childhood immunization. During the past 5 to 6 years, this programme has faced some administrative and managerial problems that have affected its continuity and performance. The reporting system as well as the vaccine-preventable diseases surveillance system has been affected consequently. In 2004, the Libyan Arab Jamahiriya reported high routine immunization coverage (97% for BCG, DPT3, OPV3, 85% for HBV3 and 93% of infants fully immunized.

Access to secondary care:

There direct is access to specialist (ambulatory and hospital) services without any GP gate keeping role. The referral system is disorganized and needs improvement. Many centres operate on an open access basis. Patinets needing basic health care can go directly to the secondary or teritary hospitals without referreal from lower levels leading to overburden on referrel level facilites

8.2 Package of Services for Health Care

No well defined package exists. All basic and specialized services are provided according to different levels of care

8.3 Primary Health Care

A wide range of primary health care services are proovided in the PHC centers and units. The services include general medical care (including the adult population and elderly), care of children, minor surgery, rehabilitation, family planning, obstetric care, peri-natal care, first aid, dispensing of pharmaceutical prescriptions, preventive services (e.g. immunization, screening), health promotion services and school health services. There is a freedom of choice of primary health care physicians with no restrictions with respect to changing physician.

Infrastructure for Primary Health Care

Settings and models of provision:

The role chosen by the Government for the Secretariat of health and environment is to strengthen the delivery of sustainable and high quality of health services. This will be achieved through the planning for, and effective and efficient implementation of, the essential health services at all levels of care with an emphasis on community and outreach services. Previous investments in health services have resulted in a network of different health facilities as shown in Table 8.2.

Table 8.2 : Total Number of health facilities In Libya by Shabiat

No	Names of shabiat	Health facilities			
		Poly-clinics	PHC centers & units	Communicable Disease Center	Total
1.	Albetnan	1	65	1	67
2.	Derna	2	55	1	58
3.	Al - Gebal - Alakhdar	3	58	1	62
4.	Almarege	0	70	1	71
5.	Benghazi	6	69	1	76
6.	Al - Wahat	1	47	2	50
7.	Al -Kufra	0	16	1	17
8.	Sirte	1	42	1	44
9.	Al – Jufra	0	12	0	12
10.	Misurata	4	68	2	74
11.	Al -Merghip	2	134	3	139
12.	Tripoli	11	96	1	108
13.	Joufara	0	121	0	121
14.	Alzawea	2	58	1	61
15.	Al - Gebal -Elgharbi	1	157	2	160
16.	Naloot	0	43	2	45
17.	Sebha	1	25	1	27
18.	Ghat	0	13	1	14
19.	Morzig	1	52	1	54
20.	Wadi-Alhiat	0	36	0	36
21.	Wadi- Alshati	0	65	0	65
22.	Al -Nequt-Alghmis	1	80	0	81
TOTAL		**37**	**1382**	**23**	**1442**

Current issues/concerns with primary care services

Generally the quality of PHC services needs improvement. The focus have been more on increasing the quantity rather than quality. Despite availibity and high accessibility of services, there is a general lack of satisfaction by the general public, evident by increasing utilization of private setor health facilities and self-refferal to secondary and tertiary care facilites for minor ailments and basic services.

Some of the key issues are listed elow

- High expectations of patients not met by the services provided at primary health care facilites due to various reasons.
- One of the key issues is that there is no defined catchment areas for health facilities with to non-availibity of information on number of people served by a facility. This leads to difficulties in calculating indicators of utilization. Instead, there is more reliance of surveys for collecting information rather than on routine information system.
- There is a shortage of qualified physicians to work in rimary health care facilites. According to estimates, currently there are around 40% PHC facilities without doctors, which is one of the main reason for self-reffferal to the secondary and teritay health care hospitals.

- There is also a shortage of trained midwifery staff to take care of Antenatal and postnatal care.
- Outreach services are limited to school health services, which include examination, vaccination, health education, hygiene and health environment.
- Health education material is not available in primary health centers and units and sometimes there is shortage of medicines

Planned reforms to delivery of primary care services

- There is a plan to register the catchment population of each health facility, which would help improve the availibity and quality of information

8.4 Non personal Services: Preventive/Promotive Care

- **Availability and accessibility:**

Most of the preventive and promotive health services are available to the general population. More than 98% of population has access to safe drinking water and adequate excreta disposal facilities.

- **Affordability:**

Affordability of preventive services is not an issue as all services are provided free of charge

- **Acceptability:**

Services are socially and culturally acceptable; however, there is a general lack of satisfaction among clients about the quality of services.

Organization of preventive care services for individuals

Responsibility for environmental health

The secretariat of health and environment is responsible for environmental health and sanitation. The safety of food supplies is the responsibility of the National Food and Drug Control Centre with over 12 000 samples analysed annually. Some analyses have to be done outside the Centre's laboratory.

Health education/promotion, and key current themes

There is a separate directorate for health education. In the past year the country showed its commitment through engagement in several tobacco control-related activities, such as the Global Youth Tobacco Survey (GYTS) and the Health Professional Survey. There is a need to integrate smoking cessation and counselling in Ministry of Health facilities. Services for hypertension and diabetes are provided in the PHC setting but lack trained personnel and critical pathways.

Current key issues and concerns

The National Center for Infectious Diseases Control has identified AIDS and tuberculosis as the main areas for its work during the coming years, in addition to surveillance of other communicable diseases, such as hepatitis, malaria, measles, etc.

The national EPI is successful, reaching high routine immunization coverage and convincing the population of the importance of childhood immunization. During the past 5 to 6 years, this programme has faced some administrative and managerial problems that have affected its continuity and performance. The reporting system as well as the vaccine-preventable diseases surveillance system has been affected consequently. In 2004, the Libyan Arab Jamahiriya reported high routine immunization coverage (97% for BCG, DPT3, OPV3, 85% for HBV3 and 93% of infants fully immunized.

Around 90% pregnant women are attended by trained health personnel. The proportion of all deliveries attended by trained personnel has improved from 65.5% in 1976 to the current level of 99%. Proportion of infants attended by trained personnel is also very high at around 98%.

8.5 Secondary/Tertiary Care

Table 8-2 Inpatient use and performance

	1990	1995	2000	2004	2006
Hospital Beds/1,000	3.9	4.12	4.2	3.4	3.7
Admissions/1000	-	10	-	11	9
Average LOS (days)	-	6.5	-	9.5	10
Bed occupancy Rate (%)	-	-	49	56	-

Source:

- Annual statistical health reports 1995, 2001 {S.O.H}.
- The report of health and social services in Libya 1969 -1999.
- Annual Statistical Report, the Office of the Inspector General 2004.

Secondary and tertiary care is provided through a network of general hospitals in rural and urban areas and specialized hospitals. There are total of 84 hospitals with total bed capacity of 19950 beds and 3.7 beds per 1000 population (See table 8.3). These facilities are besides the social and rehabilitation services supervised by the social solidarity fund.

Almost all levels of health services are decentralized. All hospitals are managed by secretariats of health at shabiat (district) level except Tripoli Medical Centre and Tajoura Cardiac Hospital and Shabrata cancer center, which are centrally run.

Main hospitals with number of beds is given below

- Tripoli medical centre 1438 beds
- Tripoli trauma hospital 480 beds
- Burns hospital Tripoli 220 beds
- Batnan medical center 425 beds
- Mosrata hospital 500 beds
- Benghazi aljala trauma hospital 480 beds
- Benghazi medical center (Under construction) 1200 beds
- Beda central hospital 462 beds
- Ben-sena (Sirt) 220 beds

- Sorman general hospital 130 beds
- Sabrata central hospital 220 beds

Table 8.3: Total Number of Hospitals & Hospital Beds in Jamahiriya by Shabia

NO	Names of Shabiat	Hospitals				
		Specialized	General	Rural	Total	No, of beds
1.	Albetnan	0	1	2	3	540
2.	Derna	0	1	2	3	632
3.	Al - Gebal - Alakhdar	1	1	2	4	752
4.	Almarege	0	1	3	4	615
5.	Benghazi	10	2	2	14	3245
6.	Al - Wahat	0	2	1	3	402
7.	Al -Kufra	0	1	1	2	180
8.	Sirte	0	1	1	2	283
9.	Al – Jufra	0	1	1	2	196
10.	Misurata	2	3	1	6	1840
11.	Al -Merghip	0	3	3	6	864
12.	Tripoli	9	4	0	13	4777
13.	Joufara	1	0	0	1	201
14.	Alzawea	0	2	0	2	616
15.	Al - Gebal -Elgharbi	0	3	6	9	1110
16.	Naloot	0	2	3	5	552
17.	Sebha	0	1	0	1	480
18.	Ghat	0	1	0	1	120
19.	Morzig	0	1	1	2	180
20.	Wadi-Alhiat	0	0	1	1	120
21.	Wadi- Alshati	0	1	2	3	240
22.	Al -Nequt-Alghmis	0	4	0	4	723
23.	Central Hospitals	4	0	0	4	2041
	TOTAL	**27**	**36**	**32**	**95**	

Public/private distribution of hospital beds

Libya has relatively high number of hospital beds. The ratio of population to hospital beds is the highest (3.7 per 1000) among the countries of the Eastern Mediterranean, due in part to the size of the country but the occupancy rates are generally low, around 50%. There appears to some room for increased efficiency in this area.

Figure: Number of Private health Facilities and beds by Shabiat

NO	Names Of Shabiat	Private Sector				
		In Patient Clinics	No of Beds	Out Patient Clinics	Dental Clinics	Pharmacies
23.	Albetnan	1	20	7	2	38
24.	Derna	2	12	7	4	38
25.	Al - Gebal - Alakhdar	0	0	11	4	42

26.	Almarege	0	0	9	3	33
27.	Benghazi	16	272	78	41	250
28.	Al - Wahat	0	0	10	4	27
29.	Al -Kufra	0	0	3	1	5
30.	Sirte	2	26	6	5	45
31.	Al – Jufra	0	0	3	1	12
32.	Misurata	9	112	27	25	81
33.	Al -Merghip	11	120	33	5	39
34.	Tripoli	27	502	126	124	426
35.	Joufara	1	120	26	7	135
36.	Alzawea	3	82	32	6	79
37.	Al - Gebal -Lgharbi	0	0	16	7	55
38.	Naloot	0	0	2	2	20
39.	Sebha	4	25	7	12	57
40.	Ghat	0	0	0	0	2
41.	Morzig	0	0	2	1	9
42.	Wadi-Alhiat	0	0	2	2	16
43.	Wadi- Alshati	0	0	6	2	29
44.	Al -Nequt-Alghmis	8	70	18	1	64
	TOTAL	**84**	**1361**	**431**	**259**	**1502**

8.6 Long-Term Care

No information available.

8.7 Pharmaceuticals

Until recently, the National Pharmaceutical and Medical supplies Company provided pharmaceutical supplies centrally to both the public and private sector. Now the Libyans professionals are allowed to have agencies for the international pharmaceutical companies and they are able to provide medicines and supplies of international quality to both public and private health sector.

Essential drugs list: by level of care

Essential list of drugs is not available.

Manufacture of Medicines and Vaccines

Drugs and medical equipment used to be supplied solely by the National Pharmaceutical and Medical Equipment Company, which is a public company. The government has decided to allow the private hospitals and specialized private companies to import drugs. The National Committee for Drugs is charged to review the national standard list of drugs and to formulate the norms and standards for drug safety.

National Pharmaceutical and Medical Supplies Company

Company objectives:

1. To establish and manage factories of pharmaceuticals and medical supplies

2. To establish quality control laboratories for its products
3. To establish a research and development center for the pharmaceutical technology in coordination with the concerned authorities
4. To make use of and develop natural resources available locally in the field of pharmaceutical industries
5. To cooperate with international resources to make use of modern techniques, in order to create national expertise
6. To operate its factories in full production capacities and to produce the largest number of pharmaceuticals

Company activities and field of work

1. Producing different pharmaceutical dosage forms
2. Producing medical sundries and equipment
3. Producing raw materials for pharmaceutical products required in the formulation of pharmaceutical dosage forms
4. Marketing its products locally and exporting abroad
5. Studying the possibility of producing new pharmaceutical items of therapeutic potential and economic feasibility

National Pharmaceutical and Medical Equipment Company owns two pharmaceutical factories; Al-Maya and Al-Rabta pharmaceutical factories.

Al-Maya pharmaceutical factory was established in 1995 to supply pharmaceutical products to the health sector and to support the national economy. The factory was equipped in 2000 and signed an agreement for technical assistance with a foreign company to complete and maintain, train the staff and transfer the technology. The factory commenced production in 2001 with nine items as first stage. Today number of items manufactured is 31. It is planned to increase the number of items in the near future. The ideal, annual capacity of the factory is 400 million tablets, 18 million bottles, 5 million tubes and 16 million suppositories. The factory implements good clinical, storage and distribution practices as well as several in-process control and quality assurance mechanisms. The other factory is called Al-Rabta. It produces two items of raw material; acetyl salicylic acid and acetaminophen. A strategy has been formulated by the company for AlRabta factory to provide countries of African union with its products at economical costs. The factory has an annual expected capacity of producing 500 million tablets and capsules.

Regulatory Authority: Systems for Registration, Licensing, Surveillance, quality control, pricing

For national drug policies based on essential drugs, a department for drug quality control has been established. Rational use of drugs, compliance to essential drugs and a drug regulatory system need to be assessed and developed. At the moment, there is no specific laboratory which is responsible for this function. The department is using some laboratory facilities available in the Faculty of Pharmacy and Al Maya factory. WHO support is being provided for the establishment of a drug quality control laboratory, for capacity-building and for installing a system for inspection, registration and laboratory control.

8.8 Technology

Trends in supply, and distribution of essential equipment

The challenges of applying information and communication technology (ICT) should not be underestimated. Health care is undoubtedly one of the most, if not the most, complex sector of the economy. Sizable capital investments and multiyear commitments to building systems will be needed. Widespread adoption of many e-health applications also will require behavioural adaptations on the part of large numbers of clinicians, health care providers, organizations and patients.

The following constraints have been identified which require action over the coming five years.

1. Although ICT has been recognized as an essential element to support health care services, it still lacks proper definition of why, where, what, how and who.
2. Activities for utilization of ICT are isolated and uncoordinated, with no attempt at joining forces for a well studied programme.
3. There is lack of awareness of ICT issues and high computer illiteracy. Many health care professionals are not fully aware of the value and impact of using ICT in health. Most of them have never had any training or orientation in this field.
4. Health care informatics expertise is inadequate. Trained professionals in this area are rare. Many of those working in ICT in health are health professionals with an interest in ICT or ICT professionals who found themselves in the health sector.
5. The information and telecommunication infrastructure in health care institutions is weak. Most hospitals, primary health care centres, medical colleges and other health facilities do not have the necessary infrastructure to deploy e-health solutions.
6. The penetration rate of the internet in health care institutions is low. Access to health information on the internet and the use of internet for delivery and promotion of health care services are still very limited.

The availability of equipment in Libyan hospitals is patchy. While some “headline” equipment such as MRI machines or CAT scans is available in central hospitals in major urban centers, basic equipment is often lacking, especially in outlying areas. This leads to difficulties in both diagnosis and treatment. Even where equipment is in place, it may not be working due to the lack of qualified technicians to maintain and repair it. The level of computerization at all levels of Libyan public health care leaves a lot to be desired, yet it is vital for the accurate maintenance of a health information system and for knowledge transfer with health systems in other countries.

Table. Number of Advanced Medical Equipment by Shabiat

NO	Names of shabiat	PUBLIC & PRIVATE SECTOR							
		CT Scan		M.R.I		Angiography		Radio Therapy	Kidney Stone
1.	Albetnan	1		1		1		0	0
2.	Derna	1		1		0		0	0
3.	Al - Gebal - Alakhdar	1		0		0		0	0
4.	Almarege	0		0		0		0	0
5.	Benghazi	2+*3*		2+*2*		2+*1*		1	0
6.	Al - Wahat	0		0		0		0	0
7.	Al -Kufra	0		0		0		0	0
8.	Sirte	1		1		0		0	1
9.	Al – Jufra	0		1		0		0	0
10.	Misurata	3+*1*		2+*2*		0		0	0
11.	Al -Merghip	1+*2*		0		0		0	0
12.	Tripoli	7+*4*		4+2		5+*2*		2	1
13.	Joufara	2+*1*		1+*1*		0		0	1
14.	Alzawea	2+*3*		1		0		0	0
15.	Al - Gebal -Lgharbi	2		0		0		0	0
16.	Naloot	0		0		0		0	0
17.	Sebha	1		*1*		0		0	0
18.	Ghat	0		0		0		0	0
19.	Morzig	1		0		0		0	0
20.	Wadi-Alhiat	0		0		0		0	0
21.	Wadi- Alshati	0		0		0		0	0
22.	Al -Nequt-Alghmis	2+1		0		0		1	0
	TOTAL	**26**	***15***	**12**	***8***	**8**	***3***	**4**	**3**

Note : Numbers in red italic is for the private sector

9 HEALTH SYSTEM REFORMS

9.1 Summary of Recent and planned reforms

No information available.

10 REFERENCES

Source documents

List of referenced documents used

- Annual statistical health reports 1995, 2001 {S.O.H}.
- The report of health and social services in Libya 1969 -1999.
- Annual Statistical Report, the Office of the Inspector General 2004.
- Health Information Center Annual statistical health reports 2005 , 2006 .
- Libyan maternal and child health survey (pan-Arab ,project for childe development 1995) .
- {MICS} report 2004 {National center for infectious diseases}
- Social and economic survey 2004 report: National Corporation for information and documentation.
- Economic development in Libya - 1970 – 2003 General secretariat of planning
- Population general census report 1995.2006
- Social and economic survey 2004 report {: N.C.I&D}
- General authority for information 2005
- Economic development in Libya - 1970 – 2003 {general secretariat of planning)
- Social and economic survey 2004 report {: N.C.I & D}
- Vital statistics report {: N.C.I& D }
- Joint report for immunization coverage in Libya, UNICEF, WHO and NCIDC Libya
- Libyan development report 1999
- Libyan Public Health Act 106 -1993
- ACT No, 1 – 2006 for people's Congresses and r people's Committees.

11 ANNEXES

Summary of annexes

List of annex titles

1. Annex 1 Organizational chart of SOH & E
2. Annex 2 SOH &E Budget from 1993-2006
3. Annex 3 Government health expenditure 2000-2006
4. Annex 4 Immunization schedule

The Regional Health Systems Observatory is an undertaking of the WHO Regional Office for the Eastern Mediterranean. The Observatory supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health systems in the EMR. Its primary goal is to contribute to the improvement of health system performance and outcomes, in terms of better health, fair financing and responsiveness of health systems. The aim of this initiative is to provide relevant comparative information to support policy-makers and analysts in the development of health systems and to serve as repository of information on health systems.

This document is part of a series of in-depth health systems profiles, produced and updated by the Observatory using standardized approach that allows comparison across countries. They provide facts, figures and analysis and highlight reform initiatives in progress.

World Health Organization

Regional Office for the Eastern Mediterranean
Abdel Razek El Sanhouri Street,
PO Box 7608, Nasr City, Cairo 11371, Egypt
Phone: +202-6702535, Fax: +202-6702492
URL: www.emro.who.int