WHO-EM/PHP/054/E

Health System Profile

Occupied Palestinian Territory

2012

World Health Organization
Regional Office for the Eastern Mediterranean

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Executive summary

Socioeconomic geopolitical mapping

Palestinian people are living in two distinct areas (the West Bank, including East Jerusalem, and the Gaza Strip) that form the Occupied Palestinian Territory. The Occupied Palestinian Territory ranked 110 out of 182 countries on the United Nations Development Programme (UNDP) Human Development Index in 2008. The rates for both total literacy and female literacy have improved over the past decade, and the proportion of women participating in the labour force increased from an estimated 13.4% in 2004 to around 18.0% in 2008.

Demographics and health status

The total Palestinian population according to the 2010 estimate was 4 048 403, of whom 62.0% reside in the West Bank, 49.2% are females, 41.1% are under 15 years old, and 2.9% are above 65 years old.

A review of health status outcomes over the past decade shows quite different patterns: life expectancy at birth stalled at around 72 years, mortality indicators, however, improved, with a decrease in infant mortality rate (from 25.5/1000 live births in 2000 to 20.6 in 2010) and under-five mortality rate (from 28.7/1000 live births in 2000 to 25.1 in 2010). In contrast, indicators related to childhood malnutrition and chronic diseases and conflict-related injuries have worsened over time: the rate of stunting in children has risen by about 41.3%, and common chronic diseases have increased in prevalence by about 58.2% since 2000.

Health system organization

There are four major health service providers in the Occupied Palestinian Territory: the Ministry of Health (MoH), United Nations Relief and Works Agency (UNRWA), non-governmental organizations (NGOs), and private for-profit providers. The MoH provides primary, secondary and tertiary health services and purchases unavailable tertiary health services from domestic and foreign providers. The UNRWA provides primary care services only for refugees, and purchases secondary care services for hardship cases. NGOs provide primary, secondary and some tertiary services. The private for-profit sector provides all three levels of care though a variety of specialized hospitals and investigation centres.

Governance/oversight

The legal institutional framework governing the health sector is embodied in the Palestinian Constitution 2003 and Public Health Law No. 20-2004. Accordingly, the MoH is the steward of the health system and is responsible by law for overseeing the system and ensuring equitable and affordable access to quality health services for all

Palestinians. Public health services are directed in a centralized manner. In line with the decentralization agenda of the MoH, however, a new organizational structure was adopted in 2008. This offered greater executive authority to the general directorates in the governorates.

Health care finance and expenditure

Total health expenditure grew steadily during the past decade (from US$ 384.3 million in 2000 to US$ 893.8 million in 2008). Similarly, the share of gross domestic product (GDP) committed to health grew from 9.5% in 2000 to 15.6% in 2008, while health expenditure per capita grew from US$ 137 to US$ 248 over the same period. Health care is funded through: the public sector (average contribution over the last decade 32.7%, supported by the MoH and transfers from the Ministry of Finance and external donations); the private sector (37.4% by household direct out-of-pocket payments), the private not-for-profit sector (UNRWA and NGOs) 22.0%, and 2.9% from external sources. Financing through contributions to governmental health insurance and private health insurance companies averaged about 2.4% and 2.3% respectively between 2000 and 2008. The contribution of each the above sources has fluctuated considerably since 2000, particularly during 2002–2005.

Human resources

The MoH is the largest employer within the Palestinian health sector, employing a total of 14 619 individuals (59% of health human resources in 2010). A review of the MoH human resource profiles during the last decade shows significant variations in overall employment as well as in the distribution of key human resources, indicating the impact of various ad hoc factors rather than a planned policy for human resources development. Overall, the ratios of health professionals to population indicate a favourable situation in terms of the overall supply of health professional categories in the Occupied Palestinian Territory. The physician to population ratio increased from 56.6/100 000 in 2002 to 77.2/100 000 in 2010. Significant increases were also observed for the ratios of dentists, pharmacists and nurses to population.

Health service delivery

Primary health care (PHC) services are provided by the four health providers: the MoH, NGOs, UNRWA and the private sector. The MoH operates the majority of PHC centres (56% in 2010); there are 1.9 centres per 10 000 individuals. The distribution of PHC facilities indicates a regional imbalance between the West Bank (1.5/10 000 population) and the Gaza Strip (0.4/10 000 population). Secondary services are provided by 76 hospitals with a total stock of 5108 beds (about 1.3 beds per 1000 capita in 2010). The average number of patients admitted to hospitals in 2010 is estimated at 8 per 1000 capita. The average length of stay is estimated at 2.5 days. The average occupancy rate shows an increase from 72% in 2000 to 81% in 2010; a rate similar to the bed occupancy rates in most Organisation for Economic Co-

operation and Development (OECD) countries. Tertiary care services are provided through a limited number of specialized hospitals, with these being concentrated in the urban areas or in inaccessible areas of Jerusalem.

Health system reforms

A new National Health Strategy Plan for the period 2011–2013 was published by the MoH. Contrary to previous plans, the latest plan was developed with inputs from many health care stakeholders. In addition, the health system objectives were consolidated into four national health programmes with target completion time, budgeting, task responsibilities and planned outcomes all being detailed.

1. Socioeconomic geopolitical mapping

Sociocultural factors

Palestinians of the Occupied Palestinian Territory live in two geographically distinct territorial units, the West Bank (of the Jordan River), including Arab East Jerusalem, and the Gaza Strip. The Occupied Palestinian Territory is the nomenclature used by the United Nations (UN) to refer to those parts of historical Palestine that were occupied by Israel after the Arab–Israeli war of 1967 (*1*). The West Bank and Gaza Strip, differing in their natural landscape, demographic, sociocultural and socioeconomic characteristics (*1*), are inhabited by about 3.8 million individuals, of whom 62% (2 350 583 people) reside in the West Bank (*2*). The latter has a relatively low population density (461 inhabitants per km^2) and about one-fifth of the population are refugees from the 1948 Arab–Israeli war, 60% live in 400 villages and 19 refugee camps, and the reminder in urban refugee camps and cities. On the other hand, the Gaza Strip (an area of 365 km^2) is one of the most densely populated areas of the world with 4117 inhabitants per km^2, of whom 65% are refugees (*3*). The population is mainly concentrated in one city, six towns, twelve villages and eight refugee camps that contain two-thirds of the population. The two Palestinian compartments have diversified communities, with observable differences in lifestyle and living conditions among urban, rural and refugee camp communities with their respective subdivisions. Most Palestinians (94%) are Muslim, about 6% are Christian, and only a few are Jewish (*4*).

Table 1.1 summarizes the main sociocultural indicators. The West Bank and Gaza Strip rank 110 out of 182 countries on the UNDP 2008 Human Development Index,

Table 1.1 Sociocultural indicators, West Bank and Gaza Strip, 2002–10

Indicator	2002	2004	2006	2008	2010
HDI*	0.726	0.736	0.731	0.737	–
HDI rank[a]	102	100	106	110	–
Literacy, total (%)	–	91.0	92.40	93.81	–
Literacy, female (%)	–	–	89.65	90.33	–
Women as % of workforce	13.39	13.05	13.21	18.0	–
Primary school enrolment (%)	–	95.2	–	–	–
Female primary school pupils (%)	–	90	–	–	–
Enrolment in primary and secondary school; female to male ratio (%)	–	103.0	103.9	104.1	–
Urban population (%)	70.8	71.5	71.6	–	72.1

HDI = Human Development Index.
[a]From 185 countries.
– = data unavailable.
Source: Programme on governance in the Arab Region. United Nations Development Programme on Governance in the Arab Region (UNDP–POGAR) (http://www.arabstats.org/country.asp?cid=14&ind=3, accessed 3 May 2012).

which measures a country's achievements in terms of life expectancy, educational attainment and adjusted real income. The index in 2008 was 0.737, implying medium human development. Both total literacy rate (≥ 15 years of age who are able to read and write) and female literacy rate have improved over the last decade whereas the percentage of women (> 15 years of age) participating in the labour force has increased from 13.4% in 2004 to 18.0% in 2008.

Economy

The Occupied Palestinian Territory has one of the least-developed and worst-performing economies in the Middle East and North Africa (MENA) region. Some of the major indicators are shown in Table 1.2.According to MENA rank, its GDP per capita for the last decade was one of the lowest in the world (e.g. its MENA rank for the year 2008 was 19 of 23, while the GDP per capita compared to the whole world, which was estimated at US$ 10 500 per capita, was 72% less than that of the world average) (*5*). A number of recent reports (*6–8*) commenting on the overall performance of the Palestinian economy showed that the economy today is at least 28% smaller than that of the late 1990s, as measured by real GDP, while real gross national income (GNI) per capita declined by about 13% (from US$ 1750 in 1999 to an estimated US$ 1532 in 2008).

The deteriorating Palestinian economy of the last decade had a marked impact on the health care system. In addition to a substantial drop in the levels of public expenditures, the health care system experienced what could be called "*spontaneous shocks*" (*9*). Struggling with serious budgetary imbalances, the Palestinian National Authority (PNA) expenditures on health has become increasingly dependent on

Table 1.2 Main economic indicators

Indicator	2000	2006	2007	2008	2009	2010
GNI per capita (Atlas method) (current US$)	1771.0	1392.7	1429.1	1459.4	1513.8	–
GDP per capita (Atlas method) (current US$)	1484.0	1275.4	1303.2	1356.3	1415.7	1502.4
Real GDP growth (%) (1997 base)[a]	N/A	–4.8	–1.2	2	5	6.5
Real GDP per capita ($)[a]	N/A	305.5	N/A	N/A	N/A	N/A
Unemployment (%)[a]	14.1	23.7	21.7	26.6	24.5	23.7
Major exports (million US$)	933.1	535.2	N/A	593.8	N/A	634.0
Major imports (million US$)	3866.5	2203.8	N/A	2763.6	N/A	2950.7

GNI = gross national income.
PPP = purchasing power parity.
GDP = gross domestic product.
N/A = data unavailable.
Source: Annual Statistical Yearbook, No. 11. Ramallah, Palestine, Palestinian Central Bureau of Statistics, 2010.
[a]Labour Force Survey, National Income Accounts (various issues). Ramallah, Palestine, Palestinian Central Bureau of Statistics.

donor assistance – recent estimations indicate that up to 50% of the Palestinian MoH recurrent expenditures are covered by donors (*10*). On the other hand, a rise in the share of private financing was also noticeable, with over half of total health expenditures being funded by direct out-of-pocket payments (*11,12*). Moreover, the dramatic political changes and chronic impediments in the mid of the last decade, and which accentuated with the progression of the internal political impasse between the Palestinian National Liberation Movement (known as Fatah) and the Islamic Resistance Movement (known as Hamas), have further compromised the performance of the Palestinian health care system, and culminated into an acute financial crisis. Especially, due to: the Israeli and international boycott of Hamas, the imposed closures and restrictions on movement of goods and individuals; the termination of tax revenues transferred by Israel to the PNA; the indigent performance of the local economy; the very small tax-base and the existence of other competing proprieties, the resources allocated from the PNA's general revenues to the health care have plummeted (*11*).

Nonetheless, all of the above has had a devastating impact on the wellbeing of Palestinians in many dimensions including, health status, education, political power, and real incomes – with a spiralling rate of unemployment (*13*)), resulting in 57% of households living under the poverty line of US$2.8 per capita per day in 2009, and about half of them, 30%, live in extreme poverty, defined as household of two adults and four children live on NIS 1000 (US$ 250.6) per month or less (*14*). This massive impoverishment of the population has undoubtedly compromised the accessibility to health services. The latter greatly depends on the political situation, which not only poses financial barriers due to increased impoverishment, but also physical barriers due to the separating wall and the permanent military checkpoints that often impede individuals from reaching the required health care (*15–17*). A national survey conducted in 2004, indicated that about 13% of those who needed health care did not receive it, whereas about 5.0% of the population indicated that they needed more than an hour to reach a health facility. In terms of cost 33.3% of those seeking health care did not receive any due to high costs, including transportation costs, which rose significantly after 2000 (*18*); again indicating the effects of the imposed physical barriers on access to care in the Occupied Palestinian Territory.

Despite the unstable political environment, the PNA has recently attempted a number of reform measures under the Palestinian Reform and Development Plan (PRDP) in 2008. This was launched at Paris donor conference on 17 December 2007. Its objectives are institutional reform and economic and social development. The plan also emphasizes civil and security governance reforms, fiscal stability, generating employment, and improving public services. The PRDP has mainly focused on enhancing the efficiency and transparency of government institutions, curbing the fiscal deficit and improving security in the West Bank (*19*). These reforms were supported by substantial donor assistance, with total support reaching US$1.9 billion in 2008, including US$ 1.8 billion for budgetary support (up from US$1 billion in 2007). As far as health sector is concerned, an amount of $20 million was allocated under a programme entitled "*Health Care Affordability*" (*19*). However, Israeli policy

persistently pulled the economy along an adverse path, with heightened internal and external barriers to the movement of Palestinian people and goods within/from/to the West Bank and Gaza Strip. Such restrictions are the main mechanisms undermining the recovery of the Palestinian economy by pre-empting the intended benefits of foreign aid and reforms (*19*).

Geography and climate

The current geography of the Occupied Palestinian Territory can be understood in the context of its complex political history (*1*). Administratively, the Occupied Palestinian Territory, a combined area of 6000 km^2 , are composed of two geographically discontinuous compartments: the West Bank, (5640 km^2) and the Gaza Strip Gaza Strip, (360 km^2) separated by the State of Israel (*20*). The West Bank is a mountainous region comprised of three ranges: the Nablus Mountains in the north, the Jerusalem Mountains in the centre and the Hebron Mountains in the south. The West Bank ranges fall between the coastal plain in the west and the Jordan valley in the east with a width of 40–65 km and an average height of 2400 feet. The land in the north and the south are good for cultivation with an average annual rainfall of 450–600 mm. Gaza Strip is situated along the Mediterranean Sea in between Egypt and Israel with length of 45 km and width of 5–12 km. The annual average rainfall varies from 350 mm in the north to 150 mm in the south.

Following the signing of the Oslo Peace Accords in September 1993, the Occupied Palestinian Territory of the West Bank and Gaza Strip were divided into three administrative zones (zone A, zone B, and zone C) and 16 governorates under the jurisdiction of the PNA (*21*). These governorates are divided into two main categories depending on their location. Jenin, Tubas, Tulkarm, Nablus, Qalqilya, Salfit, Ramallah and Al-Bireh, Jericho, Jerusalem, Bethlehem and Hebron are called Northern Governorates, whereas the remaining five governorates – North Gaza, Gaza, Deir el-Balah, Khan Yunis, Rafah – are all located in the Gaza Strip and called the Southern Governorates.

Political/administrative

The PNA is the current political and administrative body governing the West Bank and Gaza Strip. It was formed following the Declaration of Principles on Interim Self-Government Arrangements, otherwise known as the Oslo Accords, signed between the Palestine Liberation Organization (PLO) and the state of Israel on September 13, 1993 (*22*). Initially, the PNA was supposed to govern parts of the West Bank and Gaza Strip for an interim period of five years, during which negotiations of a final peace treaty between the two parties were to be completed (*22*). However, as of 2011, a final status has not yet been reached, and the PNA continue to operate on the basis of these accords. Accordingly, the PNA remains responsible of both security-related issues and all civilian administration, including health, in the urban areas, which constitute about 3% of the Occupied Palestinian Territory (zone A), but has only civilian control over rural areas (zone B constituting about 27% of the Occupied

Palestinian Territory), and no control over the remaining 70% of the land (zone C), which includes East Jerusalem, the Jordan valley, the agricultural land and areas with low population density, and Israeli settlements and military areas. The PNA did not have, and still does not have, any sovereignty over borders, land, water, and movement of people and goods (*23*).

The politics of the PNA take place within the framework of a semi-presidential multi-party system, with an elected Palestinian Legislative Council (PLC), an executive President, and a Prime Minister leading a Cabinet (the Ministerial Board) (*21*). According to the Palestinian Basic Law, which was signed by the then president of the PNA (Mr. Yasser Arafat) in 2002, the current structure of the PNA is based on three separate branches of power: executive, legislative, and judiciary (*24*). The PLC, which is composed of 132 elected members, must approve the nomination of the Prime Minister and all government cabinet positions. The President of the PNA is directly elected by the people, and the holder of this position is also considered to be the commander-in chief of the armed forces. However, in an amendment to the Basic Law approved in 2003, the president appoints the Prime minister who is also chief of the security services in the Palestinian territories. The prime minister chooses a cabinet of ministers and runs the government, reporting directly to the president (*25*).

The second legislative elections took place in January 2006, after a delay of almost five years, resulting in the win of the Islamic Resistance Movement (known as Hamas) of the majority of the PLC's seats. However, most of the western countries and Israel refused to deal with the newly elected administration and responded by cutting the donor funding and withholding the Palestinian tax revenues by Israel, which together constitute about 75% of the PNA budget (24). In an attempt to resolve the political and financial impasse, a Palestinian national unity government was formed in March, 2007 with representatives from the two main Palestinian parties: Fatah (the Palestinian national liberation movement) and Hamas. However, the national unity government was not accepted by the western countries and Israel and soon collapsed (*23*). Consequently, an emergency government excluding Hamas was formed in the West Bank and Israel and the international community ended the boycott of the PNA (*26*). However, factional clashes between Fatah and Hamas movements have resulted in complete separation of the administrations in the West Bank and the Gaza Strip (*27*). Recently, attempts were to re-unify the political administrations and governments of the two geographically isolated regions and a reconciliation agreement was reached by the two Palestinian factions in April 2011 in Cairo. However, up till now, these initiatives are still unable to erase the five years of internal political schism during which Gaza Strip has been ruling by Hamas while the West Bank by Fatah.

2. Health status and demographics

Health status indicators

The health status outcomes related to general life expectancy at birth, under-five infant mortality and maternal mortality rates in the Occupied Palestinian Territory are summarized in Table 2.1. Estimates of general life expectancy at birth have actually stalled at around 72 years over the last decade: it decreased slightly (from 71.1 years in 2004 to 70.8 years in 2010 for males and from 74.1 years in 2004 to 73.6 years in 2010 for females). By contrast, mortality indicators have improved in the last 10 years with a decrease in both infant mortality rates (from 25.5 per 1000 live births in 2000 to 20.6 in 2010) and in under-five mortality rates (from 28.7 per 1000 live births in 2000 to 25.1 in 2010).

Table 2.1 Indicators of health status, 2000–2010

Indicators	2000	2004	2006	2008	2010
Life expectancy at birth, years					
All	72.7	72.6	72.5	72.0	72.2
Males	71.8	71.1	71.7	70.5	70.8
Females	73.5	74.1	73.2	73.3	73.6
HALE	–	–	–	–	–
Neonatal mortality (per 1000 live births)	–	–	11.9	–	–
Infant mortality (per 1000 live births)[a]					
All	25.5	–	–	–	20.6
West Bank					18.8
Gaza					23.0
Under-five mortality (per 1000 live births)[a]		–	–	–	
All	28.7				25.1
West Bank					22.1
Gaza					29.2
Maternal mortality (per 100 000 live births)	37.3	–	–	–	32.0
Normal birth weight babies (%)	–	98.8	93.1*	–	93.6*
Prevalence of stunting/wasting[a] (%)	7.5	9.4	10.2	–	10.6

HALE = healthy life expectancy.
Sources: Annual Health Reports, various issues. Ramallah, Ministry of Health, Health Information Centre.
*Palestinian Central Bureau of Statistics. Palestinian Family Survey, 2010.
– = data unavailable.

Table 2.2 Service delivery data and trends in the West Bank (WB) and Gaza Strip (GS), 2006–2010

Category	2006				2008				2010			
	WB		GS		WB		GS		WB		GS	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Married women (15–49 years) using contraceptives[a]	4 050	54.8	3 337	45.2	6 966	67.4	3 364	32.6	12 026	63.0	7 068	37.0
Pregnant women attended by trained personnel[b]	15 797	32.3	13 946	28.9	21 253	37.9	–		25 033	38.3	–	
Deliveries attended by trained personnel[c]	29 533	52.1[d]	–			76.1[d]	–		51 518	78.8[d]	–	
Infants immunized with BCG	51 870	87.3	48 194	100.0	63 884	100.0	54 089	100.0	66 742	100.0	60 766	100.0
Infants immunized with DPT3	50 027	84.2	46 193	98.7	63 063[e]	100.0	50 457[e]	100.0	63 788	99.3	55 648	100.0
Infants immunized with Hepatitis B3	50 574	85.1	45 805	97.9	62 904[e]	100.0	50 484[e]	100.0	63 704	99.2	54 845	100.0
Infants fully immunized (measles)	51 813	87.2	46 920	100.0	56 942[e]	90.7	51 032[e]	100.0	58 589	91.2	57 760	100.0

Percentages indicate coverage rate.
[a]Data from Ministry of Health Family Planning Centres.
[b]Total number of pregnant women attending the Ministry of Health Centres for Mother and
[c]Number of registered deliveries in the Ministry of Health Centres for Mother and Child.
[d]Figures for 2009.
– = data unavailable.
Source: Annual health report, various issues. Ramallah, Palestine, Ministry of Health, Health Information Centre.

These improvements in the mortality outcomes generally reflect the high immunization coverage rate achieved by the Palestinian health system. For instance, the vaccination coverage rates for measles, polio and other infectious diseases were all over 90% (see Table 2.2). Similarly, maternal mortality ratio (defined as the number of maternal deaths per 100 000 live births) has also decreased from 37.3 per 100 000 live births in 2000 to 32.0 in 2010. This decrease in maternal deaths reflects, inter alia, an improvement in the quality and accessibility of reproductive health services over recent years (Table 2.2).

It is worth noting that these good mortality outcomes do not reflect the underlying health status inequalities nor do they reflect the underlying trends in morbidity. Indeed, significant geographic and socioeconomic inequalities in mortality-related health status were observed (*28*). For instance, although average infant mortality was 20.6 deaths per 1000 live births in 2010, significant differences exist in health status between the West Bank and Gaza Strip. Recent data from the "Palestinian Family Survey 2010", indicate an infant mortality rate in the West Bank of 18.8 deaths per 1000 live births while in Gaza Strip, it was 23 deaths per 1000 live births. Other study indicates that in the Gaza Strip a Palestinian infant born into the poorest income quintile is twice as likely to die as an infant born into the richest income quintile (*29*). These substantial inequalities in mortality-related health status warrant policy concern by the MoH and the other health stakeholders.

Nonetheless, although infant and maternal mortality rates have defied the deteriorating geopolitical and socioeconomic circumstances paralysing large segments of the Palestinian health care system, other indicators related to childhood malnutrition, chronic diseases and conflict-related injuries have tended to worsen over time (29*,30*). The proportion of Palestinian children younger than 5 years suffering from stunting rose by about 41.3% since 2000 (from 7·5% in 2000 to 10·6% in 2006) (*31,32*). Data from 2010 indicate that of every 100 children, 11 were stunted (*33*): 11.3% of children under the age of five in the West Bank and 9.9% in the Gaza Strip. Stunting during childhood is an indicator of chronic malnutrition, and is associated with increased disease burden, including compromised cognitive development and educational performance, and obesity and chronic disease in adulthood (*34*). Common chronic diseases increased in prevalence by about 58.2% since 2000, with about 18.2% of persons aged 18 years and above in the Occupied Palestinian Territory in 2010 reporting at least one chronic disease compared to 11.5% in 2000.

The 10 leading causes of mortality in the Occupied Palestinian Territory in 2010 are shown in Table 2.3. Non-communicable diseases such as cardiovascular and cerebrovascular disease, cancer and diabetes have overtaken communicable diseases as the main causes of morbidity and mortality, with about 25% of the total recorded deaths in the West Bank being due to cardiovascular diseases; cerebrovascular diseases were responsible for 12.1% of total recorded deaths. Deaths due to cancer-related diseases came in third place with about 11% of total deaths (*35*). The prevalence of HIV/AIDS is very low (from 1988 to 2010 were 51 cases of AIDS and 15

Table 2.3 Top 10 causes of mortality/morbidity, 2010 (figures reported only available for the West Bank)

Rank	Condition	% of total mortality
1	Cardiovascular diseases	25.4%
2	Cerebrovascular diseases	12.1%
3	Cancer deaths diseases	10.8%
4	Respiratory system diseases	8.4%
5	Conditions of infant diseases & prenatal conditions	7.3%
6	Diabetes mellitus	5.7%
7	Senility	3.9%
8	Renal failure	3.8%
9	Infectious diseases	3.5%
10	Septicaemia	3.4 %

Source: Annual Health Report, 2010. Ramallah, Ministry of Health, Health Information Centre, 2011.
– = data unavailable.

of HIV were recorded) (*35*), and the population is classed as free of poliomyelitis as according to World Health Organization criteria. Communicable diseases of childhood have already been mostly controlled with effective immunization programmes (*36,37*).

Demography

Palestinians living in the Occupied Palestinian Territory are undergoing rapid demographic and epidemiological transition (*26*). The population was estimated at 3.77 million at the end of 2007, distributed as 2.35 million (63.2%) in the West Bank and 1.42 million (36.8%) in the Gaza Strip (*2*). The growth rate of the population was estimated at 3.0% in 2010; this compares with 2.5% in 2004 (*38*). Table 2.4 summarizes the main demographic indicators of the Palestinians living in the Occupied Palestinian Territory, including comparisons between the West Bank and the Gaza Strip. According to the latest population census (*2*), about 44.4% of the population are under 15 years old and 3.3% are above 65 years old. The proportion of the population younger than 15 years of age has, however, declined over the last decade from 46.9% in 2000 to 41.1% in 2010. This reflects the falling fertility rate, which has declined by 28.8% during the past 10 years (from 9.5 births per woman in 2000 to 4.2 in 2010) (*33*). Both the crude birth rate and the crude death rate declined during the first half of the decade then increased in 2010. A significant decline of 22% in the dependency ratio (calculated as the number of persons below 15 years old and above 65 per 100 persons aged 15–65 years) is also remarkable.

Table 2.4 Demographic indicators by region

Indicators	2000	2004	2006			2008			2010		
	Total	Total	WB	GS	Total	WB	GS	Total	WB	GS	Total
Crude birth rate (per 1000)	33.2	28.6	20	33.4	25	23.5	–	–	26	39.2	31
Crude death rate (per 1000)	3.2	2.8	2.5	3.1	2.6	2.7			2.6	2.7	2.7
Population growth rate (%)	–	2.5	3.0	3.8	2.2	2.1	–	–	2.7	3.3	2.9
Dependency ratio (%)	100.3	97.5	90.0	107.0	98.5	–	–	–	73.7	87.4	78.7
Population < 15 years (%)	46.9	46.3	43.9	48.8	45.7	40.4	48.3	44.4	39.2	44.2	41.1
Total fertility rate[a]	9.5	4.1	4.1	5.8	4.6	–	–	4.6	3.8	4.9	4.2

WB = West Bank; GS = Gaza Strip.
– = data unavailable.
Sources: Annual Health Reports, various issues. Ramallah, Ministry of Health, Health Information Centre.
[a]Palestinian Family Surveys, 2010. Palestinian central Bureau of Statistics, 2011.

3. Health system organization

Brief history and evolution of the health care system

As has been observed elsewhere, the evolution and performance of the Palestinian health system has been profoundly influenced by the country's complex political history (*39*). The two regions, the West Bank and the Gaza Strip, have been continuously subject to different organizational structures imposed by their diverse geopolitical and historical contexts (*1,26*). This is in addition to their dissimilar sociodemographic and socioeconomic characteristics (*39*). Over the past nine decades the Palestinians of the West Bank and Gaza Strip have experienced four different systems of governance: the British Mandate (1922–1947), the Jordanian governance in the West Bank and the Egyptian rules in the Gaza Strip (1948–1967), the Israeli Administration (1967–1994) and the partial autonomy under the PNA (1994–present). Although, the Gaza Strip, which is geographically disconnected from the West Bank, split away from the PNA under de facto control of the Hamas government in 2007.

A Palestinian Ministry of Health was established under the auspices of the PNA in 1994. Prior to its establishment, the Palestinian health care system was highly fragmented and under-financed (*40*). Some notable features, which were inherited from the Israeli Civil Administration can be highlighted (*1,40,41*):

- a heavy reliance on external assistance for a significant part of health financing (over 40% in 1991, including UNRWA);
- relatively limited contribution from the Israeli Civil Administration (under the Ministry of Defence and not the Ministry of Health), derived primarily from health insurance and accounting for less than a fifth of total health expenditure and covering only about a fifth of the Palestinian population;
- direct household expenditures that accounted for about 40% of the total health expenditures.

Four systems have developed independently without any overall plan, coordination or regulation. The result has been a costly health service, inefficient resource allocation with overlapping of services in some places while some areas were under-covered, great variation in quality of care, lack of standards and regulatory mechanisms, and unclear division of responsibility between the public and private providers.

Aided by substantial donor assistance (e.g. donors committed some US$ 353 million to the health sector from 1994 to mid-1999, and disbursed approximately half of that amount in actual assistance) (*42*), the MoH started to implement the recommendations of the First Palestinian National Health Plan - 2004 (*43*), with a particular focus on the task of reorganizing, coordinating and rebuilding the health care system. Fundamental changes in the health care system have been carried out; the most discernible of these have been in upgrading and expanding infrastructure,

e.g. new hospitals and PHC centres were constructed, a ministerial structure was set up, a national health information system was implemented, a government health insurance scheme was promoted, a plan for human resource development was developed, and participatory planning with the various categories of service providers in developing policies and protocols was undertaken (*1*). Reforms included expanding and enhancing health care provision capacity, improving management, developing human resources, and adjusting public financing and the health insurance scheme. The aim of these reform initiatives was to reconstruct the system and to assure the provision of appropriate services for the entire Palestinian population. Attempts were also made to unify the fragmented organizational structures of the two geographically isolated health care systems. Today, however, these initiatives are still unable to erase the years of separation (*1*).

Public health care system

Organizational structure of the public system

A new organizational structure of the MoH was approved and adopted in 2008 (*44*). An abridged version of this structure is provided in Annex 1 and the key organizational changes taken place during the last five years are discussed in the next sub-section.

According to the 2008 organizational structure (*44*), the MoH continues to operate through a highly centralized structure with three levels of commands headed by the Minister, followed by the Deputy Minister and the Director General. High policy decisions remain the responsibility of the "National Planning and Policy-Making Council", which is headed by the Minister and composed of the Deputy Minister and the Director General of the Ministry as well as three minister's consultants. There are eight central departments related directly to the Minister including: international cooperation, cabinet affairs, Jerusalem affairs, public relations, legal adviser, internal oversight, voluntary work, and complaints unit. There are nine general directorates, including research, planning and policy; women health and development; health insurance; health education; public and primary health care; and hospitals. Each directorate is headed by a general director who reports directly to the Deputy Minister. The latter has two assistants, one for planning affairs and the other for administrative and financial affairs, and supervises six managerial and specialized units, including the licence and accreditation unit, and the NGOs and private sector coordination unit.

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

Three key organizational changes incorporated in the 2008 MoH organizational structure can be highlighted. First, the Outside Referrals Department was brought under the authority of a new general directorate of health insurance system. Such an organizational change is expected to have important implications for the

performance of the health insurance system since it brings together the collections and outlays functions of the health insurance system under one administrative unit. Second, quality assurance units were created throughout the new organizational structure. This can indeed help improve the overall efficiency of the MoH while ensuring greater quality standards at the different levels of the Ministry. Third, in line with the decentralization agenda of the MoH, the new organizational structure offered greater executive authorities to the general directorates in the governorates.

Planned organizational reforms in the public system

A new structure for the Human Resource Department was proposed and is currently under consideration by the MoH. The proposed structure includes two important reforms: integrating the Personnel Department into a new Human Resource Department with three sub-units responsible for personnel, payroll and benefits, and training and organizational development; and establishing a new training centre to enhance the needed clinical and administrative training of the MoH human resources.

Private health care system

Modern, for-profit

A wide range of private practices, including those of self-employed physicians and dentists, hospitals, diagnostic centres, and pharmacies, represent the "for-profit private" health care sector (*26*). The private sector has expanded rapidly in the past few years, with phenomena such as group practices and private health insurance schemes beginning to develop. An increasing number of small private hospitals offering special types of curative care such as maternity and obstetrics, surgical and in vitro fertilization (IVF) services was also observed (*45*). Most of the private hospitals are owned by individuals or small companies.

There are many private health diagnostic facilities scattered throughout the Palestinian governorates. These cover routine investigations and tertiary diagnostic facilities such as computed tomography (CT), magnetic resonance imaging (MRI), and other tertiary diagnostic facilities. Generally, the MoH encourages private health care activities. The extent to which its practices are monitored and regulated, however, as well as the implications of its rapid growth for the public sector remain unclear (*1,45*). In addition, a comprehensive system of adequate and reliable data about the private, for-profit health sector is still lacking. A prominent aspect of the private, for-profit services is their concentration in the urban areas of the West Bank (*45*).

Modern not-for-profit

The modern not-for-profit sector is represented by a network of Palestinian private voluntary NGOs, and the UNRWA (*1,2*6). NGOs had a central role in providing health care before the creation of the Palestinian MoH in 1994 (*1*). The NGOs are largely funded from international donations through UN agencies, foreign

developmental agencies, and foreign private institutions. Local and foreign donations from rich Palestinian and Arab individuals also play an important role in supporting the charitable and religious organization in Palestine (*46*). Currently, there are about 49 non-governmental, not-for-profit health societies. These contribute to the provision of all levels of health care, but they generally tend to provide PHC services to communities under-served by the other agencies, especially in rural areas of the West Bank.

The number of PHC centres run by NGOs fell from 242 in 1992 to 177 in 1994 (*40,47*), and from 214 in 2004 to 185 in 2005, which represent about 28.3% of the total PHC centres in the Occupied Palestinian Territory. While the decline in recent years was attributed to a new classification system (*48*), the earlier decline following the Oslo accords was mainly a result of abrupt changes in donors' aid policies and the PNA budget allocation strategy (*47*). It is important to note that this decline was more than made up for by the increase in the number of MoH PHC centres: about 170 new PHC facilities were opened. mostly in the West Bank, in under 13 years (*49*). The average population served has, however, grown from 5294 persons per facility in 2000 to 5752 persons per facility in 2006 (*49*). Services at some facilities have been integrated and coordinated between the MoH and certain NGOs, with joint clinics now available in some sites (*49*).

In addition to PHC centres, the non-governmental sector operates some 1681 beds in 30 hospitals (representing 33.5% of the total beds). Compared with those run by the MoH, the non-governmental hospitals are under-utilized, with a substantial portion of their workload being cases referred by the MoH (*50*).

UNRWA provides a variety of social services for education, health care, and social relief and support to registered Palestinian refugees in the West Bank and Gaza Strip (including East Jerusalem), as well as in the neighbouring Arab countries (*51*). Today, UNRWA counts 4.1 million registered Palestinian refugees, of whom 1.6 million live in the West Bank and Gaza Strip (about 45% of the population of the Occupied Palestinian Territory). Consequently, almost half the Occupied Palestinian Territory population should, in principle, be entitled to UNRWA services. However, only a segment of the registered refugees receives health services at UNRWA facilities while the rest seek health care elsewhere (*41*). UNRWA primarily focuses on basic health services such as disease prevention and control, primary care, family health, health education, physiotherapy, psychological support and environmental health (*52*). Health services are provided through a network of PHC centres throughout the West Bank and Gaza Strip, 35 in the West Bank and 18 in the Gaza Strip, representing about 8.1% of all PHC centres in the Occupied Palestinian Territory. In addition, UNRWA provides some secondary care services (for which patients must pay 10%–25% of the cost) through a limited number of contractual agreements for hospital care with NGO providers, as well as in its hospital in the West Bank (63 beds).

Traditional

There are no data on the size or the role of the traditional healers/practices in the local context of the Occupied Palestinian Territory. However, the unavailability of such data does not necessarily indicate the absence of such practices, which may be exercised particularly in rural and remote areas.

Key changes in private sector organization

Despite the explicit policy support of private health care activities on the part of the MoH, there are, to date, no explicit regulations or particular incentives for the private activities in health apart from accreditation and registration. Units for accreditation of and coordination with the private and NGO sector exist in the MoH under the direct supervision of the Deputy Minister (*45*).

Public/private interactions (institutional)

The institutional interactions between the public sector and the private and NGO sectors occur mainly through the "coordination unit" in the MoH, which is under the direct supervision of the Deputy Minister (*45*). There is, however, another important area of interaction and cooperation between the two sectors. This is through "special treatment referrals", according to which the MoH purchases health-care services that are unavailable in the public sector from the private sector. A new reform, which is expected to enhance the competitiveness of the private health sector in this particular area of cooperation, was recently undertaken by the MoH (see Section 8, Health system reforms, for details). Particular cooperation between the public and the NGO sectors is also apparent, especially during the emergency situation.

Public/private interactions (individual)

A certain degree of public/private "complementarity" and "individual interaction" have been identified following political predicaments and economic hardships (*41*), where substantial patient transfers from one provider to another have taken place (*50*).

Planned changes to private sector organization

"Public– private partnerships" and "cross-sectoral collaboration and cooperation" were listed amongst the National Health Strategy Priorities for the period 2011–2013 (*53*). However, the plan did not state how such partnerships and collaborations will be reinforced in the future.

Overall health care system: brief description of current overall structure

The organizational structure of the Palestinian health care system is very complex. This is seen in terms of both health care provision and financing, and is primarily a result of the heterogeneity of providers and the extreme fragmentation

of the structure, compounded by complex public and private provision and financing arrangements (*40*). A diagram depicting the structure of, and interactions within, the Palestinian health care system is provided in Annex 2.

There are four health service providers in the Occupied Palestinian Territory: the MoH, UNRWA, NGOs, and the private, for-profit providers. The MoH provides primary, secondary and some tertiary health services and purchases some tertiary services from private providers domestically and abroad. The MoH plays the main role in providing and controlling immunization schemes, public health activities, licensing and registration of private clinics and non-public health institutions. Health-care financing is mainly through the MoH (through tax revenues and donor assistance), and private, out-of-pocket household spending, which remains the largest source of health financing in the Occupied Palestinian Territory. There are other limited public health providers besides the MoH, the main one being the Police Health Services. There is a governmental health insurance scheme covering civil service employees, and individuals and groups on a voluntary basis in addition to the poor and vulnerable groups who are covered financially by the Ministry of Social Welfare. There is some private insurance activity, but with low coverage in the population.

4. Governance/oversight

Policy, planning and management

National health policy and trends in stated priorities

In the Occupied Palestinian Territory, national health planning and policy development efforts were initiated in 1991, before the establishment of the PNA (*41,54*). However, the first official Palestinian National Health Plan was published in 1994 by the Planning and Research Centre, which is a Palestinian non-governmental body under of the auspices of the Palestinian Red Crescent Society in exile (*54*). Besides serving as a baseline for the subsequent five-year national plan of the MoH (*55*), the 1994 National Health Plan clearly stated the overall objectives of the national health policy as well as the key priorities for health system reform. Accordingly, special attention was paid towards re-organizing and regulating the health sector and integrating the activities of the four main health care providers. Since then, four other detailed National Health Plans have been concluded by the MoH: the Five-Year National Strategic Health Plan for the period 1999–2003 (*55*), the Medium-Term Development Plan 2006–2008 (*56*), the Medium-Term National Strategic Health Plan for the period 2008–2010 (*57*), and the newly published National Health Strategy Plan for 2011–2013 (see "Determinants and objectives of health system reforms" in Section 8) (*58*).

The first Five-Year National Strategic Health Plan, 1999–2003 was published by the MoH. This included a review of the changes that took place in the health sector following the inception of the MoH. Besides addressing system-wide development issues, the plan provided micro-level assessment of needs, resources and the feasibility of changes in many areas, e.g. the number, type, and geographic distribution of primary care clinics and the different types of health care providers. Since many of the goals included in the 1999–2003 plan were not fully achieved, mainly due to the shift towards other priorities following the start of the second Palestinian uprising, these goals were repeated in the successive medium-term plans. For instance, the 2008–2010 National Strategic Health Plan re-emphasized the core goals of health system reform (*57*): (i) improving health status outcomes; (ii) ensuring sustainable financing of the health care system; (iii) improving the infrastructure of health service delivery; (iv) ensuring adequate and appropriate workforce levels; and (v) improving national health policy, planning and management. In addition, two specific national programmes were presented: the health quality improvement programme and the health care affordability programme. Among the priorities reform areas, special attention was given to reforming the referral system, particularly mechanisms of purchasing medical services from outside Palestinian facilities, restructuring and developing the health insurance system, and improving the managerial and financial capacity and the supervisory role of the MoH. Apart from laying out the medium-term priority reforms, the plan also provided updated information on donor commitments towards supporting different areas of reform. A

review of these commitments shows that there is a particular focus on the part of donors on investment in health service infrastructure, public health programmes to improve health status outcomes, and national health planning efforts; and to a lesser degree on health financing reforms and human resource development.

Formal policy and planning structures, and scope of responsibilities

At the general level, the legal institutional framework governing the health sector is embodied in the Palestinian Constitution-2003 (*59*) and Public Health Law No. 20–2004 (*60*). According to the Constitution, the PNA shall guarantee health services to particular subgroups of the population including families of martyrs, prisoners of war, the injured and the disabled (*59*). Public Health Law-2004 lists 16 functions of the MoH covering infrastructure development (public health facilities), health insurance, licensing of private providers, pharmaceutical companies, drugs, public health regulations, and the provision of public health services (preventive, diagnostic, curative and rehabilitative care). Public Health Law-2004 also mandates the MoH to develop health policy and planning, though it does not explicitly define the key parameters governing the planning process, structure or scope of responsibilities. The latest National Strategic Health Plan 2008–2010 does so through formally identifying policy and planning processes, and institutionalizing structures and the scope of responsibilities (*37*). Accordingly, the National Health Policy and Strategic Planning Council, which is chaired by the Minister of Health and consists of 25 members including MoH high ranking officials and representatives of all stakeholders in the health sector, is deemed responsible for the overall planning and policy-making processes.

More specifically, the major duties and responsibilities of the National Health Policy and Strategic Planning Council, as identified in the National Strategic Health Plan 2008–2010, include the following (*37*):

- Supervise and guide the development of national health planning and policy processes, including financial health policies.
- Supervise, guide the development of and recommend national strategic and development health plans and programmes.
- Coordinate the roles and responsibilities of different health providers and enhance the consultation process between the different stakeholders.
- Overview the implementation of programmes, strategic plans, developmental plans and projects, including monitoring and evaluation of the health sector performance.
- Ensure political and financial commitment and support to the strategic health plan implementation.
- Ensure coordination and dialogue with donors to support the development and implementation of the strategic and developmental health plan.
- Review and advise on health regulations, laws and bills.
- Carry out other related tasks assigned to the council by the Minister of Health.

In addition to the National Health Policy and Strategic Planning Council, there is a Health Policy and Planning Unit in the MoH; this is a technical body under the direct supervision of the Minister. This unit is aimed at strengthening and developing the health planning process and promoting dialogue with all stakeholders to assure their input to the health policy and national strategic planning processes. The specific responsibilities of the Health Policy and Planning Unit, as identified in the National Strategic Health Plan 2008–2010 (*37*) include the following:

- coordinating the national strategic health planning process with other health care providers and stakeholders;
- establishing, sustaining and supporting planning processes within the MoH through continuous feedback from and to MoH departments;
- identifying and analysing alternative policy options and assessing them;
- reviewing and conducting necessary research and health policy analysis to inform policy and support decision- making processes;
- designing programmes and operational plans for the implementation of polices and strategic plans;
- identifying major problems, national needs and priorities and presenting recommendations;
- strengthening the links between the policy making and operational levels both within the MoH departments and with other health care providers;
- identifying information and indicators needed for the management and planning of the health system;
- performing other duties related to health planning assigned by the minister.

The organizational structure of the health planning and policy making process is provided in Annex 1.

Analysis of plans

Although a comprehensive analysis of the successive National Health Plans and their implementations at both the macro- and micro- levels is beyond the scope of this report, some comments and concerns, previously raised by several researchers (*40,41, 50,61–65*), are worth highlighting:

Although the first national health plan was developed with inputs from many stakeholders, several researchers (e.g. *1,41,61–63*) have expressed serious concerns regarding the planning process overall; with claims that the non-ministry stakeholders were not effectively involved in the successive planning and policy-making process. There has been no overall development policy around which national and provider-specific policies could be developed.

Although many of the objectives in successive national strategic health plans were clear and restricted, few have had target completion times or adequate budget preparation and prioritization (*64*). This is being attempted in the latest plan.

Although analysis of plan implementation is the responsibility of the MoH in cooperation with other health providers, there have been no regular reviews or updates of stated objectives taking account of achievements and changing circumstances.

Despite the four National Health Plans to date, the declared goals remain far from being met (*40,65,66*). This failure was mainly attributed to three interrelated factors (*42*): endogenous Palestinian features, external donors' policies, and political havoc that severely influenced the stated goals and priorities.

It is worth noting here that many of the aforementioned critiques have recently been taken into account by the MoH in the preparation of the recently published National Health Strategy Plan 2011–2013. The latter has stressed effective collaboration and coordination between all health care stakeholders in the preparation process. In addition, the health system objectives were consolidated into four national health programmes with target completion times, budgeting, task responsibilities and planned outcomes all being detailed (*53*). More details on the National Health Strategy Plan 2011–2013 are provided in Section 8 (Health system reforms).

Key legal and other regulatory instruments and bodies: operation

Although the MoH remains the main statutory and legal body and plays the main role in the planning and policy-making process, the governance of the health sector is fragmented across two authorizing institutions in the West Bank and the Gaza Strip. The political and institutional schism between the PNA in the West Bank and the Hamas-led government in the Gaza Strip has exacerbated the already fragmented institutional framework, effectively creating two de facto Ministries of Health and fragmenting decision-making related to operational issues, investment planning and government initiated-reforms in the health sector.

In addition, the presence of two institutions governing the delivery of health-care services and the practice of medicine created uncertainty, and negatively impacts the effectiveness of health service provision and the capacity to implement national reforms.

Decentralization: key characteristics of principal types

Within the Ministry of Health

The MoH runs the health system in a centralized way with all financial, administrative, recruiting, planning and procurement issues being determined by (or having to be endorsed by) the top-level management. However, in line with the decentralization agenda of the MoH, two important changes took place during 2007–10: quality assurance units were created throughout the new organizational structure of the MoH and greater executive authority was granted to the general directorates in the governorates.

State or local government

There is some level of decentralization at the level of governorates, mainly for PHC, where local directorates were granted greater authorities in controlling and managing all executive and community PHC activities in their respective governorates.

Greater public hospital autonomy

Public hospitals are centrally organized through their directors, who are controlled and supervised by the general directorate of hospitals in the MoH. Their work is mainly administrative and technical through the head of the clinical departments. Public hospital directors have nothing to do with any financial job related to their hospitals. All budgeting and financial matters are controlled and run by the central financial department in the MoH. Public hospital directors may participate in the planning, procurement and human resource development of their hospitals.

Private service providers, through contracts

The MoH purchases most of the tertiary and high-tech investigation services from the private sector (for-profit and NGOs), as well as non-technical services, mainly cleaning and transportation services. The contracting process is organized through bidding from the non-clinical services and according to negotiation, speciality and geographical factors for the clinical services. There is a little evidence of policy of quality assurance supervision in the clinical and non-clinical services. Consumer satisfaction is the only method used to assure the quality of the provided services.

Integration of services

The governance of the health sector remains fragmented across two authorizing institutions in the West Bank and Gaza Strip. The division between the PNA in the West Bank and the Hamas-led government in Gaza Strip has effectively created two Ministries of Health and fragmented the decision-making related to operational issues, investment planning and government initiated-reforms in the health sector.

Health information systems

Organization, reporting relationships, timeliness

A diagram of various components of the Palestinian health information system and their reporting relationships is provided in Annex 3. In accordance with Palestinian Public Health Law No. 20-2004 (*60*), the MoH is ultimately responsible for the management and dissemination of all health-related information. The Health Information Centre was established in 2003 as a department within the MoH with the goal of building a unified national health information system to support the promotion of evidence-based policy in Palestine. This centre is responsible for information management and health information technology. In addition to collecting data directly from the MoH facilities, it collects and compiles health-related data about the activities of the other non-ministry stakeholders, including

UNRWA and the NGO sectors. However, reliable information about the private sector is still lacking. In addition, data from the Gaza Strip has not been available during the past three years, reflecting again the adverse impact of the political and institutional schism between the two Palestinian regions on the availability of evidence-based data for national policy formulation.

Data about mortality, delivery and main health care provision are collected directly from site-of-service to the province directorate and region (West Bank and Gaza Strip), then collated, recorded and interpreted at central level through the Central Information Centre in the MoH. The data are then used in preparing the *Annual Health Status Report in Palestine*, the first volume of which was published in 2003. This report covers a variety of topics and provides data on population and demography, women's health, health care system including PHC, communicable and non-communicable diseases, environmental health, hospitals, pharmaceuticals, human resources, health finance, and government health insurance.

Data availability and access

All data collected are made available and disseminated free-of-charge through the MoH *Annual Health Report* and also made accessible through the MoH official website, www.moh.gov.ps. However, despite the progress made by the ministry over the last decade to strengthen health information management, data collection, analysis and reporting still need further development. A number of studies (*41,50,67,68)* commenting on health status and the health care system in the local context of the Occupied Palestinian Territory expressed concerns about the quality of data, their comprehensiveness and reliability, and their usage in planning and policy development. Many types of data that are essential for effective health system planning and operating are not consistently available. Moreover many providers, NGOs and international agencies collect and analyse data for monitoring purposes for their own programmes, resulting in a scattered, and sometimes inconsistent and contradictory, flow of information. This is an indication of the persistence of barriers to promoting a culture of "evidence-based practice": huge amounts of data being collected but improperly analysed and not fully used for policy formulation. Moreover, several researchers (*41,50,68*) indicate there is a lack of effective partnership with those who are supposed to use the evidence, and their disengagement from the implementation process.

Sources of information

In addition to the MoH Palestinian Health Information Centre, the Palestinian Central Bureau of Statistics is another important source for primary health data collection. The bureau collects health-related data through nationally representative sample surveys. It disseminates the primary results of each survey through a press release and the information is made available on the website: http://www.pcbs.gov.ps/.

Health systems research

There is no independent health systems research department or unit in the MoH. The Health Policy and Planning Unit helps formulate plans for health development using the data available, and is responsible for monitoring and evaluating the implementation of health plans. Most of the health-related research is carried out by health research institutions, universities, and some local and international NGOs.

Accountability mechanisms

There are few existing standards for dealing with misconduct of health workers in the public or private sectors. There is a financial inspection and auditing system controlled by the Ministry of Finance regarding the budget and expenditure of the MoH, but there is no supervision or inspection system over the private, for-profit health institutions. The private sector is less accountable in practice for their actions in relation to vulnerable groups and poorer sections of society: the public sector is responsible for covering the health needs of these groups. The procurement and recruitment process in the public health sector is transparent to the public, Cabinet and Parliament, and is carried out according to the current regulations (bidding, selection, financial coverage, inspection, etc.). Personnel recruitment is run centrally through the Civil Service Council and controlled by the Cabinet and the Ministry of Finance.

5. Health-care finance and expenditure

Health expenditure data and trends

National health accounts for the Occupied Palestinian Territory indicate that total health care-expenditure grew steadily during the last decade (from US$ 384.3 million in 2000 to US$ 893.8 million in 2008) (Table 5.1). Similarly, the share of GDP committed to health grew from 9.5% in 2000 to 15.6% in 2008, while per capita health expenditure grew from US$ 137.25 to US$ 248.30 over the same period.

Trends in health financing according to source for the period 2000–2008 are shown in Table 5.2. A look at the average contributions from each source shows that about 32.7% of total health care expenditure was funded by the government (MoH through Ministry of Finance and external donations), 37.4% by household direct out-of-pocket payments, 22.0% by the private not-for-profit sector (NGOs), and 2.9% from external sources.

It is important to note here that the figure related to funding through external sources does not reflect the actual total contribution of external sources to health financing. External sources still contribute a high share in supporting the health sector in the Occupied Palestinian Territory. This is distributed between supporting the MoH recurrent budget and investments, UNRWA, and NGOs.

Financing through contributions to governmental health insurance and private health insurance companies averaged about 2.4% and 2.3%, respectively, between 2000 and 2008. There was a significant increase in the relative contribution from governmental health insurance to total health expenditures (from 0.6% in 2000 to 7.0% in 2008). It is worth noting that the contribution of each the above sources has fluctuated considerably since 2000, particularly during 2002–2005 (*46*).

A general overview of the health financing system is given in Annex 4.

Table 5.1 Health expenditure in the Occupied Palestinian Territory, 2000–2006

Indicator	2000	2002	2004	2006	2008
Total health expenditure (million US$)	384.3	386.2	528.3	624.0	893.8
Total per capita health expenditure (US$)	137.25	128.73	165.10	183.53	248.30
Total health expenditure, % of GDP	9.5	12.0	12.9	14.0	15.6
Public sector expenditure, % of total health expenditure	32.7	32.4	40.1	35.5	36.7

GDP = gross domestic product.
– = data unavailable.
Source: National health accounts: basic results. Ramallah, Palestine, Palestinian Central Bureau of Statistics & Ministry of Health, 2011.

Table 5.2 Sources of finance, estimates for 2000–2008 (% of total)

Source	2000	2002	2004	2006	2008
Government	32.7	32.4	40.1	35.5	36.7
Central Ministry of Finance	–	–	–	–	–
State/provincial public firms funds	–	–	–	–	–
Local	–	–	–	–	–
Social security (governmental health insurance)	0.6	3.3	0.5	0.6	7.0
Private					
Private social insurance	2.6	2.0	1.8	2.4	3.3
Other private insurance	–	–	–	–	–
Out-of-pocket (households)	39.5	34.7	36.5	34.5	36.7
Non-profit institutions	23.4	25.5	20.6	21.5	21.1
Private firms and corporations	–	–	–	–	–
External sources (donors)	1.8	5.4	1.0	6.1	2.2

Source: National Health Accounts: Basic Results. Ramallah, Palestine, Palestinian Central Bureau of Statistics & Ministry of Health, 2011.
– = data unavailable.

As in many other developing countries, curative care takes up a disproportionately large share of spending on health in the Occupied Palestinian Territory (about 70% of total health expenditure) (Table 5.3) . This is mainly distributed between spending on outpatient services (38%) and inpatient care (25%). The distribution of health expenditure by item shows that, on average, about half the total health expenditure is absorbed by staff costs.

Tax-based financing

Levels of contribution, trends, population coverage, entitlement

There is no specific (earmarked) tax allocated to health services financing in the Occupied Palestinian Territory. The MoH budget is supported by the Ministry of Finance through general tax revenues and donor assistance. The MoH provides health services in government facilities to the general population, with some level of cost-sharing. Reliable data on the share of health expenditure that is financed through general taxation is still lacking. However, it is estimated that up to 60% of the total MoH recurrent expenditure was financed by the MoH through general tax receipts and other revenue pools available in the public budget (*69,70*). Contributions from this source have also fluctuated considerably since 2000, particularly during 2002–2005 (*46*).

Table 5.3 Health expenditure distribution, 2000–2010

Health expenditure	2000	2002	2004	2006	2008	2010
Total expenditure: (million US$)	384.3	386.2	528.3	624.0	893.8	–
Service category (%)						
Curative care	71.2	66.5	70.3	69.7	69.9	–
Rehabilitative care	0.7	0.2	0.1	0.0	0.0	–
Preventive care	6.5	9.5	6.2	12.2	7.6	–
Administration	0.6	3.3	0.5	0.6	7.0	–
Item (%)						
Staff costs[a]	47.5		61.0			43.0
Drugs and supplies[a]	20.9		19.9			22.0

MCH = maternal and child health.
– = data unavailable.
Sources: National Health Accounts: Basic Results. Ramallah, Palestine, Palestinian Central Bureau of Statistics & Ministry of Health, 2011.
[a]Annual reports (various issues). Ramallah, Ministry of Health, Health Information Centre.

Key issues and concerns

The PNA still has no independent fiscal system. The tax system was established in 1995 based on the so-called "Paris Economic Agreement" between the State of Israel and the PNA. Accordingly, the PNA only has direct control over income and municipalities taxes whereas tariffs on foreign imports and value added taxes (VAT) are collected by Israel. Although a large part of the MoH budget is supported by the general tax revenues, tax-based financing in the Occupied Palestinian Territory is generally challenged by the narrow fiscal space: the very small size of the tax-base and the limited tax collecting capacities (*71*). This is in addition to the fiscal pressures stemming from a combination of economic closure policies and restrictions on movement of goods and individuals; the withholding of Palestinian taxes collected by Israel; the indigent performance of the local economy; and the existence of other competing priorities (*2,72*). In effect, the steep declines in general taxation revenue have gravely impacted health service availability and induced a much greater dependence on external donor financing (*42*).

Insurance

Trends in insurance coverage

The governmental health insurance is the main health insurance system in the Occupied Palestinian Territory. It existed before the creation of the PNA and continued as a department under the administration of the MoH (*73*). Under Israeli administration (1967–1994), governmental health insurance was restricted to public sector employees and Palestinians working in Israel, and priced to be self-funding,

so that the premiums corresponded to the annual average cost of services used by enrolees (*52*). Although the functioning of governmental health insurance under the MoH administration remains generally similar to that run by Israel, some key changes have been introduced (*74*). First, a strategy of extending coverage to include private sector employees and workers in the informal sectors, with a goal of "universalism", has been in operation since the handover of health sector responsibility in 1994 (*75*). Second, a policy of "adjusting" or "re-structuring" premiums was applied, with the aim of promoting more "affordable contributions" to different groups of the population. Generally, this was done through cutting contribution rates, with a reduction of about 24% compared with those charged under the Israeli administration; flattening the contributions made by government employees to a rate of 5%–7% of monthly salary; imposing a ceiling, where no one should pay more than a certain amount irrespective of his/her earnings, and partially or fully subsidizing the contributions of population vulnerable groups, referred to as "hardship cases" (*76*).

These actions have been generally effective in expanding the coverage of governmental health insurance from less than 20% of the total West Bank and Gaza Strip population under the Israeli administration to over 50% in 2000 (*74*). Currently, health insurance covers about 60.4% of the Palestinian population, 350 460 families (105 222 in the West Bank), but only half of them (29.9%) pay premiums (*52*).

Social insurance programmes: trends, eligibility, benefits, contributions

Four types of insurance arrangements/participation in the governmental health insurance can be identified (*74,77*):

- **Mandatory**: this covers all individuals working in the public sector (including municipalities, police and security forces, retired employees and their dependents) who are required by law to contribute to governmental health insurance, and from whom flat rate contributions of 5%–7 % are deducted directly from their salary by the Ministry of Finance. This category constitutes the major group of participants in the governmental system and its funding (32% of all insured families; 57% of the total governmental health insurance revenues). In 2005, this category represented 37% of all those insured and resulted in 56.1% of the total governmental health insurance revenues.
- **Voluntary individual contracts**: this category mainly covers self-employed individuals and workers in the informal sector who pay a premium in the range US$ 12–US$ 18 per month for coverage. In 2000, this category represented 20% of families insured under the governmental system and 16% of its total revenues. The flagging of the Palestinian economy after 2000 affected this type of enrolment. In 2005, this category represented only 1.4% and resulted in 2.1% of governmental health insurance revenues.
- **Group contracts**: this is also a voluntary arrangement through which special contributions rates may be negotiated. Enrolment in this category is usually undertaken by private sector employers, NGOs and self-employed groups. The participation in governmental health insurance under this arrangement also

decreased from 23.0% of the total number insured in 2000 to 5.1% in 2005, with a decrease in the corresponding revenues from 19.2% to 14.0% in 2005.

- **Social affairs insurance**: this arrangement concerns mainly indigent families. Enrolment is usually made through application to the Ministry of Social Affairs, which assesses need and considers the assistance. The number of families granted assistance under such arrangement showed an increase from 29 907 in 2000 (3% of total governmental health insurance participants) to 47 740 in 2005 (14% of total governmental health insurance participants). There are, however, no precise figures available about the number of applicants refused assistance and the amount of assistance granted, i.e. whether contributions were fully or partially subsidized.

Another category of enrolment, labelled "Al-Aqsa insurance", was set in place after a decree issued by the then president of the PNA. In accordance with this, the MoH waived governmental health insurance premiums for some groups, mainly Palestinian labourers in Israel who became unemployed and were allowed free cover. Then a low-priced voluntary enrolment system was introduced to cater for the unmet needs of low-income groups and the unemployed. As a result, governmental health insurance revenues from premiums declined from a total of US$ 29.5 million in 2000 to US$ 21.8 million in 2002 before peaking again at US$ 29.9 million in 2005 (*74*).

Though the expansion of insurance eligibility and the reduction of premiums were largely fuelled by the overwhelming need to promote equity in the provision of public health care through offering low-priced coverage to the most affected classes of the population, the practice followed more recently has made such coverage available to a high proportions of households, regardless of any income-related criteria. This increase in the number of individuals entitled to public services has not, however, been associated with a proper expansion in the capacity of the services, leading to an increase in the public system's liabilities and a deterioration in the quality of care provided, including a lack of essential drugs and supplies (*2,78*). The net effects of all these changes on equity in financing and delivering health care were seen as highly questionable (*2,76*). Even for people whose premiums were waived or reduced, some charges and co-payments remain. For instance, individuals who are referred by a private provider to public services are charged US$ 4 per referral (*52*). Then again, for voluntary enrolees the fixed premiums means that lower-income groups still spend a greater proportion of their income on insurance (*76*). In addition, the existence of the ceiling for mandatory enrolees can make insurance a less progressive (or even a regressive) source of finance.

Benefit package

The governmental health insurance benefit package includes inpatient and outpatient services, which are provided at MoH facilities, with co-payments (ranging from 5% to 25% of the cost) paid for a number of specified medical services and for medications. For example, insured patients are charged US$ 0.21 per laboratory

test and for imaging services,; patients who obtain drugs from MoH clinics are charged, on average, US$ 0.63 per prescription. Medications obtained from private pharmacies and clinics are not covered by the governmental health insurance. Some services are offered free of charge and regardless of insurance status. These include health services to the handicapped and mental retardation cases; to those with hereditary blood diseases such as thalassaemia and haemophilia; health care to children aged 0–3 years; vaccinations; and high risk pregnancy and family planning services. Since all members of an enrolee's household are usually entitled to public services, contribution rules are generally applied to families rather than individuals.

Private insurance programmes: trends, eligibility, benefits, contributions

There are seven private, for-profit insurance companies providing diverse employment-based and individual-based plans for health insurance. Members of the private insurance schemes are mostly private organizations that contract insurance plans to cover their employees, e.g. private firms, banks, universities and local and international NGOs (*79*). Contributions to the private schemes are made by both employers and employees. Special rates can be negotiated based on the number of employees insured and the benefit packages. In general, private coverage excludes many pre-existing conditions and chronic illnesses such as diabetes, heart disease, etc. Some medical services, such as pre- and post-natal care are available upon payment of additional premiums. In many cases, a maximum ceiling is imposed for claims during a one year period (*80*).

Owing to the relatively high premiums especially (about three times higher than the governmental health insurance), private schemes only cater for a tiny proportion of the population. Enrolment in private insurance schemes peaked at around 17% of the total Occupied Palestinian Territory population in 2000 (*81*), indicating a relatively high coverage for private schemes compared with countries with similar income levels (*82*). However, the economic hardships accompanying the second Intifada have affected private demand for, and participation in, private insurance schemes (*52*). The latest estimates available from the household health expenditure survey (*83*) suggest a coverage private level up to 11% of total surveyed households; with some regional differences between the West Bank and Gaza Strip in terms of both enrolment levels and average premiums: while average premiums in the West Bank is estimated to be about two times higher than that reported in Gaza Strip, the majority of private insurds were concentrated in the West Bank (11.9% of the total households) compared with only 7.6% in Gaza Strip. Overall, these schemes make a non-significant contribution to health care financing-mix in the Occupied Palestinian Territory. Recent estimates from the national health accounts (*84*) indicate an average contribution of 2.4 % of total health expenditure. As elsewhere, the role and practices of private schemes in the local context of the Occupied Palestinian Territory have been somewhat controversial (*2,76*), not only because schemes often reach the better-off segments of the population, but also because of the lack of adequate regulations to mandate certain insurance practices such as premiums calculation, and acceptance of applicants.

Out-of-pocket payments

Out-of-pocket payments constitute a major source of health care finance in the Occupied Palestinian Territory. Recent estimates from the national health accounts (*84*) indicate that, on average, about 37.4% of total health care expenditure was funded directly through out-of-pocket payments during 2000–2008. Available data from a series of household consumption and expenditure surveys conducted by the Palestinian Central Bureau of Statistics during 2000–2008 (*85–89*) reveal significant increases in the incidence (head counts) and intensity (overshoot) of health care expenditures that are deemed "catastrophic", with an approximately 100% increase in the proportion of households spending 40% or more of their discretionary (non-food) expenditures on health care services, and an increase (almost three-fold) in the actual magnitude of the catastrophic amounts paid. Such findings suggest inadequate capacity of the current financial protection mechanisms; this is despite the successive extensions in the breadth of governmental health insurance coverage.

Public sector formal user fees

In principle, all Palestinians residing in the West Bank and Gaza Strip are entitled, by statute and government policy, to immunizations, prenatal and postnatal care, preventive and curative care for children until age three years old, and community mental health services, without cost sharing. The scope of public sector cost-sharing fees is, thus, limited to registration, drug prescription, and some predefined investigations as well as co-payment for referral abroad. Patients are charged about US$ 0.63 per prescription for medications (US$ 0.21 for children up to age three years) which are available in the public health sector, but fully pay for those obtained from private pharmacies, even if they were prescribed by public clinics but were unavailable in the MoH pharmacies. Some cases such as individuals in extreme poverty and patients with chronic blood disease, cancer, and renal failure are exempted from paying the cost sharing fees.

Private sector user fees

The private sector is totally financed through fee-for-service. The fees in the private sector are mainly market-driven, with no regulatory mechanisms on setting the level of fees. The structure of the private sector user-fees is described as being rigid (*40*), with generally no stated price differential (or banding) to take into account individual financial status and ability to contribute and no provision of services to the economically worse-off segments of the population.

Public sector informal payments

There are no data or evidence about informal payments being charged in the public sector facilities. However, the unavailability of such data does not necessarily indicate the absence of such practices, which may possibly be exercised by some physicians, particularly in their private clinics.

Cost-sharing

Cost-sharing at MoH facilities (5%–25% of total cost) pays for a number of specified medical services and for medications. This plays some role in containing costs, generating additional revenues and encouraging consumer responsibility, but the charges are far from being based on the real costs of treatment or interventions. Information is not available on the revenue generated by these fees as a proportion of expenditure. Cost-sharing is centrally set and include (*69*):

- drug co-payment per item,
- laboratory and radiology co-payment per test,
- referral system co-payment: the referred patient pays 5%–25% of the total inpatient and outpatient cost of the service needed,
- poor households who cannot afford the required co-payment can be exempted following a social status assessment by the Ministry of Social Affairs.

External sources of finance

Levels, forms, channels, use and trends

Since the establishment of the PNA in 1994, the Occupied Palestinian Territory has received very high levels of international aid. Estimates indicate a total international aid of US$ 8 billion between 1994 and 2004, averaging roughly between US$ 250 to US$ 400 per capita over this period, and equivalent to 10%–30% of GDP per year (*90*). In the local context of the Occupied Palestinian Territory, external aid was conceived not only as development assistance but also as investment in peace and a contribution to building the state (*91*). Such political motivation explains the presence of multiple donors and international agencies, and the elaborate aid coordination

Table 5.4 Ministry of Health average monthly salaries for the West Bank and Gaza Strip, 2007

Speciality	West Bank		Gaza Strip		Total	
	No.	Average salary (US$)	No.	Average salary (US$)	No.	Average salary (US$)
Specialist	164	1 232	565	1 126	729	1 150
General practitioner	410	1 122	783	951	1 193	1 010
Dentist	41	757	139	934	180	893
Pharmacist	209	690	337	723	546	710
Nurse	1 342	646	1 464	731	2 806	690
Other hospital	475	597	547	643	1 022	621
Administrative	1 506	611	3 696	576	5 202	586
Total	4 263	764	7 626	703	11 889	725

Source: Annual Health Report, 2008. Ramallah, Palestine, Ministry of Health, Health Information Centre, 2009.

structures that have been developed over the last decade (*92*). As far as the health sector is concerned, recent estimates suggest that donor assistance represents the largest source of health financing in the West Bank and Gaza Strip, with an average 42% of total health-care expenditure being funded through donor assistance. About 25% of this external funding flows to UNRWA, whereas the remaining supports both the PNA and NGOs. A certain proportion of donor funding is also given as in-kind contributions; these are often not included in the reporting of donor assistance (*92*).

The contribution of this source of financing has, however, fluctuated considerably during the last decade, particularly during 2002–2006 (*92,93*). For instance, during 2001–2002, donor assistance constituted about half (US$ 47.3 million out of US$ 95.3 million) of the budget allocated by the Ministry of Finance to cover MoH non-salary recurrent expenditures. This peaked at around 87% during 2003–2004, and then declined to 29% of the approved MoH budget for 2005 before rebounding again in 2006 to cover about 80% of MoH non-salary spending (*92*).

Aid coordination structure

To improve the effectiveness of donor aid, and in particular to reduced the adverse impact of aid unpredictability on the performance of the health sector, the international donor community has recently formed a trust fund administered by the World Bank. The purpose of this fund is to protect the MoH from the severe impact of cash shortfalls previously experienced through covering up to 50% of non-salary recurrent health expenditures (*92,94*).

Provider payment mechanisms

Hospital payment methods and recent changes: consequences and current key issues/concerns

Public hospitals are paid through the traditional line-item budgeting within the MoH, while the budget is determined by a centralized mechanism through the allocated MoH budget. In cases where the required services are not available in MoH hospitals, patients may be referred to local private hospitals or to hospitals abroad. Contracting and purchasing arrangements are in place to purchase hospital services from the private sector, for instance, the MoH has negotiated a schedule of fees with each of the private and foreign institutions authorized to deliver certain services on its behalf. These purchased external services, which are the most rapidly growing item of expenditure on the MoH balance sheet, were based on “case payments”. These payments have caused a number of problems, mainly a lack of regard for cost–effectiveness and quality of service. Recently, the MoH has moved towards improving its contracting/payment mechanisms by moving towards a competitive bidding process based on price, quality standards and general service availability.

Payment to health care personnel: methods and recent changes: consequences and current issues/concerns

All health personnel in the public sector are remunerated according to the civil service scale of five regular grades and one special grade for high-level ministerial officials. In addition to their basic salary, MoH employees are entitled to various allowances, which can represent up to 35% of the total monthly salary, and can be divided into six different categories: family, transportation, specialty, rarity, job type and administrative allowances, and incentives for overtime duties. The job type allowances, which include hazardous jobs and the administrative allowances, are mainly designated for high-level officials. Average monthly salaries of MoH employees in 2007 are displayed in Table 5.4. The average monthly salary overall was US$ 725. The average monthly salary of health professionals in the West Bank was generally higher than that of their peers in the Gaza Strip except for dentists, nurses and pharmacists, with the greatest difference being among dentists.

6. Human resources

Human resources availability and creation

The MoH is responsible by law for overall planning and development of human resources in the health sector, and is mandated with overseeing the licensing and monitoring of medical and auxiliary health professionals and for supervising the health education institutions under its direct authority. There are, of course, other stakeholders playing an important role in the development of human resources for health, including the ministries of higher education, finance and planning, as well as the Government Personnel Council and NGOs.

The MoH is the largest employer within the Palestinian health sector, employing a total of 14 619 individuals in 2010. In terms of registered health professionals, the MoH employs around 26% of all physicians, 9% of dentists, 14% of pharmacists and 42% of nurses (excluding midwives). The second largest employer is UNRWA with a total health workforce of 1411 individuals, of whom 55% are physicians and nurses (*95*). The remaining health professionals are either employed by the security health services or by NGOs and the private sectors. The largest group of professionals in the public sector is administrators, numbering 2177 in the West Bank in 2010 and 3314 in the Gaza Strip (about 44% of the overall MoH workforce) (Table 6.1). Comparing the composition of the MoH workforce with that of UNRWA, where administrative workers represent only 12% of the total health staff (*95*), indicates inefficiencies in the current composition of the MoH staff.

Table 6.1 Distribution of health care personnel by region and sector, 2010 (latest available data)

Personnel	Public sector*		Other sectors**		Total	
	WB	GS	WB	GS	WB	GS
Physicians	963	2 161	4 528	441	5 491	2 602
Dentists	47	238	1 660	172	1 707	410
Pharmacists	172	240	2 736	936	2 908	1 176
Nurses	1 975	1 597	2 635	803	4 610	2 400
Paramedical staff	752	759	–	–	–	–
Midwives	200	84	258	35	458	119
Administration & services	2 117	3 314	–	–	–	–
Total	6 226	8 393	11 817	2 387	15 174	6 707

WB = West Bank; GS = Gaza Strip.
*Ministry of Health.
**Includes NGOs, UNRWA, and the private, for-profit sector.
– = data unavailable.
Source: Annual health report, 2010. Ramallah, Palestine, Ministry of Health, Health Information Centre, 2011.

Table 6.2 Health care personnel employed by the Ministry of Health, 2002–2010

Personnel	No. per 100 000 population				
	2002	2004	2006	2008	2010
Physicians[a]	56.6	57.6	60.7	64.0	77.2
Dentists	3.2	3.5	5.2	5.7	7.0
Pharmacists	3.1	2.9	10.4	10.4	10.2
Nurses	79.9	88.9	87.1	90.9	88.2
Paramedical staff	24.3	27.2	34.5	36.3	37.3
Midwives	2.8	5.3	5.9	7.1	7.0
Community health workers	–	–	4.4	8.3	–
Administration & services	82.0	83.1	98.4	123.5	134.2

[a]General practitioners and specialists.
– = data unavailable.
Source: Annual Report, various issues. Ramallah, Palestine, Ministry of Health, Health Information Centre.

A review of the MoH human resources profiles during the last decade shows significant variations in overall employment as well as in the distribution of key human resources, indicating the impact of various ad hoc factors rather than a planned policy for the development of human resources. For instance, a significant employment expansion of about 75% took place during the first six years of the 2000s (from 7500 employees in 2000 to 13 057 in 2006), reflecting the broad employment expansion policies of the PNA during a period of economic distress in the private sector. The greatest expansion was among physicians, dentists and pharmacists, followed by paramedical workers and administrators. Much of this expansion took place in the Gaza Strip rather than the West Bank. In contrast, the total number of MoH employees decreased by about 7% between 2006 and 2008 (from 13 057 to in 11 880), the greatest decrease occurring among specialist physicians (25%), general practitioners (23%), and nurses (21%). The only category to witness an increase during this period was pharmacists (30% up).

Overall, the ratios of health professionals to population indicate a favourable situation in terms of the overall supply of health professional categories in the Occupied Palestinian Territory (Table 6.2). For instance, the physician (general practitioners and specialists) to population ratio has increased from 56.6 in 2002 to 77.2 per 100 000 population. Significant increases can also be observed for the ratios of dentists, pharmacists, and nurses to population.

Accreditation and registration mechanisms for human resources institutions

The Ministry of Education and Higher Education is the main body responsible for accreditation of the institutions at university level, while the MoH shares the responsibility for accreditation of the vocational health institutions. Table 6.3

Table 6.3 Human resource training institutions for health

Type of institution*	No. of institutions	No. of graduates
Medical schools	2	18
Schools of dentistry	1	15
Schools of pharmacy	4	95
Nursing schools	15	351
Midwifery schools	3	45
Paramedical training institutes	11	381
Schools of public health	2	5

Source: Statistical Guide of Higher Education, 2009/2010. Ramallah, Palestine, Ministry of Education and Higher Education, 2010.
– = data unavailable.

provides data on the main human resource training institutions in the Occupied Palestinian Territory. There are 38 educational institutions (14 providing graduate level degrees) with about 910 individuals graduating in 2009/2010. In addition, the Human Resource Development Directorate of the MoH provides in-service training courses for MoH staff according to their needs. These courses cover topics such as emergency medicine for PHC doctors, emergency in cardiac and vascular diseases for doctors in hospitals and PHC, and intensive courses for general practitioners and specialists in new trends in their particular specialty.

All in-service training activities are coordinated through the Human Resource Development Administration in cooperation with other PHC centres, hospitals, and financial administrations in the MoH.

Human resources policy and reforms over the 10 years to 2010

Several attempts to strengthen human resources in the health sector were made over the last decade, with the MoH acting as the main steward. The first attempt was in 2001 with the preparation of the first National Plan for Human Resources for Health (*41,96*). This emphasized, among other priorities, the need to identify education and training priorities in clinical and non-clinical areas and to develop modern systems for the effective management of human resources in the health sector. Implementation of this first plan has, however, been challenged by several constraints, including shortfalls in financing, the lack of coordination between stakeholders, the lack of information on priority education and training needs, and the excessive centralization of the management of human resources (*42*). In addition, the progression of the Palestinian uprising (the 2nd Intifada) prompted the shift toward service delivery and emergency management rather than the implementation of institutional reform plans.

The second important attempt to modernize the general government system for public sector employment was made in 2005 with the passage of the Palestinian Civil

Service Law (*97*). This laid down a standardized wage structure for all civil servants with five regular grades, and rationalized, to a large extent, the prevailing system of allowances. While comprehensive and quite detailed, the new civil service law gave significant centralizing authority to the General Personnel Council.

A new plan emphasizing human resource development for health was embedded in the latest MoH National Strategic Health Plan for 2008–2010 (*37*). In addition to providing an overview of the current clinical educational programmes and the number of graduates in the West Bank and Gaza Strip, the plan provided an assessment of future human resources needs for physicians, nursing and auxiliary health services by year 2015, and identified priority areas for development and reforms.

Planned reforms

The MoH National Strategic Health Plan for 2008–2010 identified the following priority areas for development and planned reforms (*37*):

- developing and enforcing new licensing standards for Palestinian physicians,
- developing a system for accrediting education programmes,
- strengthening continuous education programmes,
- developing a system for effective human resources management and planning.

Planned reforms for human resources development were also included in the latest MoH National Strategic Plan for 2011–2013. The following strategic actions are to be undertaken by the MoH (*53*):

- develop a human resources policy and strategy, and review, update and implement national health human resources plan in collaboration with other relevant government institutions;
- facilitate a multi-professional contribution to better health and to effective and efficient management ;
- work with national universities to better address gaps in professional specialties;
- develop and implement continuing professional education programmes linked to licensing;
- review and strengthen human resource management especially systems and practices for recruitment, job descriptions, appraisal and motivation.

7. Health service delivery

Services delivery data for health services

The MoH is the steward of the health care system (*42*) and is responsible, by law, for ensuring equitable and affordable access to quality health services for all Palestinians (*60*). The planning of and investment in health infrastructure are, thus, the main responsibilities of the MoH. In setting priorities for infrastructure, the MoH relies on specific measures based on population distribution and needs assessment studies (*58*). There are no recent estate surveys available at any level, but the MoH gives priority to replacing or renovating old buildings according to local studies responding to community needs. All capital investments are negotiated with the Ministry of Finance and the Ministry of Planning, and are usually funded through external sources. The presence of multiple health care providers and the absence of effective coordination between them regarding planning and investment in infrastructure have often resulted in extensive overlapping, inappropriate distribution of facilities, and waste of resources (*42*).

Overall, the distribution of health care facilities between and within the two Palestinian regions, the West Bank and the Gaza Strip, has been described as inappropriate and inadequate in terms of the number, level and type of services (*41*). The spatial inequalities in the distribution of health care are especially pronounced in the case of secondary and tertiary health-care services rather than primary services, which are generally available in most areas (*29*). For instance, of the 25 hospitals in the Gaza Strip, 14 are located in Gaza City, with the others located in the remaining 4 areas. Similarly, while the centre of the West Bank has 20 hospitals, the northern and southern areas have 18 and 16 hospitals respectively (*50*). The unequal distributions of health facilities in favour of the central areas can be more clearly seen in terms of number of beds per capita: while Ramallah district has 1.1 and Gaza City has 2.1 beds per 1000 population , Salfeet district in the West Bank has only 0.2 and Rafah City in the Gaza Strip only 0.5 beds per 1000 population (*50*). Overall, the Gaza Strip has 1.4 beds per 1000 population whereas the West Bank has 1.2 . This contrasts with the distribution of PHC facilities, where the number of people per PHC facility in the Gaza Strip is much greater than in the West Bank: 11 106 versus 4692 individuals per PHC facility (*50*).

There is limited physical accessibility to health care owing to mobility restrictions imposed by multiple manned and non-manned military checkpoints and the separation wall. These impediments prevent patients and medical staff (and sometimes ambulances) travelling from rural to urban localities and between urban centres from accessing needed care (*50,98*). A national survey conducted at the end of 2003 reported that the number of people needing an hour or more to reach the appropriate health facility was increased *tenfold* by Israeli restrictions on travel (4.0% versus 0.4%) (*68*). The compromised access to health care has led to the introduction of a network of mobile clinics to cater for the needs of people living in remote and

isolated localities, the adaptation of many PHC centres to provide more than basic services, and the increase in the number of referrals for treatment abroad, with a consequent additional cost burden for both the system and the patients (*99*).

Package of services for health care

Government health insurance offers a benefits package of services to insured people through its facilities at the primary, secondary and tertiary levels. Some benefits are available to the whole population (regardless of insurance status). These cover vaccination against tuberculosis and epidemic diseases, mother and child health services, school health, chronic mental disorders, primary and secondary care for children under three years old, blood diseases, high risk pregnancy and family planning services (see Table **2**.2 for data). Services that are excluded from the benefit package are plastic interventions, curative and constructive dental services, optics and lenses, artificial aids, hormonal therapy outside the essential drug list, organ transplantation except kidney transplant when a donor is available. Some services, e.g. rehabilitation, are covered mainly by the NGO sector. UNRWA only provides PHC services to refugees, and purchases a few secondary care services for hardship cases. During the last decade, the public sector extended the emergency services to all areas in response to the Intifada causalities. Responding to popular demand, other services were added to the benefit package such as in-vitro fertilization and kidney transplants. The MoH is currently reviewing the benefit package under the new Health Insurance Law, which is currently under discussion.

Primary health care

Infrastructure: settings, models of provision and package of services

Primary health care has long been considered the backbone of the Palestinian health-care system, and a strategy towards the achievement of affordable and accessible health care for the entire population (*100,101*). As elsewhere, PHC represents the first level of contact for an individual, family or community with the health care system, and refers to basic health care provided by physicians (general practitioners) trained in family practice, internal medicine or paediatrics, or by non-physicians such as nurses. In the Occupied Palestinian Territory, PHC services comprise public health activities (such as immunization, childcare and health education, which are mainly provided by the MoH and UNRWA free of charge), reproductive health and front-line diagnosis and treatment. These are provided by a pool of PHC centres and a number of sole and group medical clinics (*77*). Following the establishment of the Palestinian MoH, the number of PHC centres has increased from 454 in 1994 to 619 in 2003 (+36.3%) and to 706 in 2010 (+55.5%) (*36*). Despite this significant increase in the number of PHC centres, the average number of centres per 10 000 individuals has slightly decreased (from 1.9 per 10 000 individuals in 2000 to 1.7 in 2010), reflecting the high growth rate of the population.

New models of provision over the last 10 years

PHC services, which are provided by the MoH, were defined according to four modalities/levels (according to the size of the population/geographical site covered and the package of services provided) as follows:

- **Health posts:** These are small facilities representing the first level, staffed by a health guide and a registered PHC nurse to serve population sites of less than 1000 individuals. They are designed to provide basic preventive care services such as health education on hygiene, safe water and sanitation, mother and child health services, and record keeping and follow-up. In addition, first aid curative services are provided by a visiting physician once or twice a week.
- **Health clinics:** These facilities are staffed by a general practitioners and nurses. They provide preventive services such as mother and child health, vaccination, environmental health, safe water and sewage and safe food products. In addition, they provide curative services in the form of general practitioner care services. They serve population sites ranging between 1000 and 3000 individuals.
- **Health centres:** These provide a wider range of services including basic laboratory tests and preventive dentistry in addition to the services provided by the health clinics. They are located in sites inhabited by a population ranging from 3000 to 10 000 individuals.
- **Comprehensive health centres:** These are located in areas with more than 10 000 individuals and provide full preventive and curative services such as general medicine, specialized consultations, and emergency care, in addition to the services provided by the health centres. Each centre has 24-hour emergency services.

Principal providers of services: public/private, modern/traditional, balance of provision

- **Principal providers of services**: PHC services are provided by the four principal health providers: the MoH, NGOs, UNRWA and the private sector. The MoH owns and operates 453 PHC centres, constituting about 55.8% of the total number of PCH facilities (706 PHC centres in 2010) in the West Bank and Gaza Strip (*36*). The remaining 44.2% of centres are operated by NGOs (194 in total, of which 137 are in the West Bank) and the UNRWA (59 in total, of which 41 are in the West Bank). The distribution of PHC facilities demonstrates the regional imbalance between the West Bank (572 facilities; 1.5 per 10 000 population) and the Gaza Strip (134 facilities; 0.4 per 10 000 population).
- **Private sector:** range of services, trends: The private sector offers a variety of PHC services based on fee-for-services. These services include: dental clinics, general practitioner and specialist practices, pharmacies, medical laboratories, radiology and imaging centres, physiotherapy clinics, and maternity and obstetrics hospitals. The private sector operates mainly in urban areas where an individual's ability to pay tends to be greater. There is no government regulation of the private health sector. Adequate and reliable data about its role in the

provision of health care is still lacking. It is important to point out here that facilities owned by the private, for-profit sector consist of the practices of self-employed dentists and general practitioners as well as specialized physicians.

Referral systems and their performance

As mentioned above, PHC represents the first level of contact for individuals; families and the community with the health care system. Typically, a PHC referral form is required in order to receive a higher level of medical care within the public health-care sector, except for emergency cases. In cases where the needed service is not available in the public health-care sector, referral to outside public facilities requires approval from a referral committee. This is particularly the case for tertiary health care (*102*). The performance of both the internal and external referral mechanisms has been criticized, both being regarded as ineffective gate-keepers (*29*).

Utilization: patterns and trends

Annual records of the MoH indicate a relatively high level of PHC utilization in the Occupied Palestinian Territory. Recent figures, which were only available for the West Bank, show that a total of 2 317 052 visits to general practitioners occurred at the MOH PHC centres in 2010 (*36*) compared with 1 801 680 in 2002 (*70*) (an increase of 29%). The annual rate of visits has also increased, from 0.82 visits per person in 2002 to 1.00 in 2010. Similarly, the annual rate of visits seen by nurses increased over the same period (from 0.2 to 0.5 per person). The increase in the level of health care utilization was even more pronounced in the case of visits to specialized clinics: the number of reported visits increased by 147 % (from 146 949 in 2002 to 362 972 in 2010), with an annual rate of visits per person of 0.20 in 2010 compared with 0.07 in 2002. The available data show significant differences across different governorates, but do not provide details on urban-rural levels.

Planned reforms to delivery of primary care services

New measures have been recently undertaken by the MoH to reform the referral system. It has been consolidated under a new General Directorate for Health Insurance, which is charged with the responsibility of developing stricter eligibility criteria for referrals, both in terms of clinical indications and location of services.

Non personal services: preventive/promotive care

Availability and accessibility

There are no recent data on the availability and accessibility of non-personal services in the Occupied Palestinian Territory. However, data from earlier years indicate that about 94% of the Palestinian population have access to safe water (92.9% in the urban areas, 96.6% in rural areas and 83.8% in the refugee camps), and about 46% of households were connected to the public sewerage system and 53.2% use cesspools.

Affordability

There is no significant financial barrier to access to safe water.

Acceptability

Palestinian people are well informed about the importance of safe water drinking and good sanitation standards. The MoH, Environment Protection Authority, and the municipalities are working together to improve the environmental health status.

Organization of preventive care services for individuals

As yet, no preventive programmes have been developed for the early detection of pathology in Palestine.

Environmental health

There are many organizations responsible for environmental health, food safety, and sanitation. The Environment Protection Authority is the main governmental body responsible for environmental health at national level. Activities for environment health, food safety and sanitation are included within the role of the municipalities and the environmental health department in the MoH. The Environment Protection Authority is responsible for planning and implementing environmental projects at national level in cooperation with the MoH and the municipalities. There is a formal mechanism in place for collaboration between the MoH and the municipalities.

Health education/promotion

The Health Promotion Department is one of the departments that are directed and supervised by the Minister. Physicians, nurses, specialized health educators and social workers run this department. The department has conducted many programmes such as adolescence programmes in the youth camps for reproductive health. The staff conducted more than 12 000 site visits in 2004 to PHC clinics and hospitals and discussed breast-feeding, nutritional issues, vaccination, personal hygiene, heart disease and blood pressure, smoking cessation, women's health, mental health and oral health. The department issues a number of booklets, fliers, posters and video films covering health education and promotion topics.

Changes in delivery approaches over last the 10 years

No information is available

Current key issues and concerns

There is a critical need to enhance health education programmes related to chronic diseases such as diabetes and hypertension since recent data indicate an increasing prevalence of these diseases and related complications (*34*).

Planned changes

Given the increasing prevalence of chronic diseases, the MoH has planned to redirect policies and strategies in the next three years to give greater importance to health promotion and prevention of chronic diseases and to enhancing healthy lifestyles (*53*).

Secondary and tertiary care

Infrastructure, structure of provision and utilization patterns

There are 76 hospitals in the Occupied Palestinian Territory, of which 51 are located in the West Bank (Palestinian East Jerusalem), with a total stock of 5108 beds (793 individuals per hospital bed: 751 in the Gaza Strip and 828 in the West Bank) (*36*). Table 7.1 provides further details on the patterns of inpatient utilization and performance. Overall, in 2010 the Occupied Palestinian Territory had about 1.3 hospital beds per 1000 population (1.2 in the West Bank and 1.4 in the Gaza Strip), slightly lower than in 2000 (1.4 per 1000 population).

Table 7.1 Health infrastructure in the West Bank (WB) and Gaza Strip (GS), 2010

Infrastructure	Number						
	Public		Private		NGO		Total
	WB	GS	WB	GS	WB	GS	
Hospitals	13	15[a]	18	2	20[b]	8	76
Beds	1402	1707[a]	448	28	1213[b]	310	5108
General hospitals	11	7	6	1	10	7	42
Specialized hospitals	1	5	3	0	2	0	11
Rehabilitation hospitals	0	0	0	0	3	1	4
Maternity hospitals	0	1	9	1	5	0	16
Primary health centres	394	59	–	–	176[c]	75[c]	706
Specialized clinics[d]	299	57	–	–	–	–	356
Dental clinics[d]	30	24	–	–	–	–	54
Pharmacies	–	–	–	–	772	448	1220
Laboratories[d]	132	33	–	–	–	–	165
Other[d]	147	20	–	–	–	–	167

NGO = nongovernmental organization.
– = data unavailable.
[a]Of which two hospitals are owned and run by the Palestinian Military Services (72 beds).
[b]Of which one hospital is owned and run by UNRWA (63 beds).
[c]Of which 56 are owned and run by UNRWA, 41 in the West Bank and 15 in the Gaza Strip,.
[d]Figures indicate facilities owned and run by the Ministry of Health; recent data on the number of facilities owned and run by other sectors are unavailable.
Source Annual health report 2010. Ramallah, Palestine, Ministry of Health, Health Information Centre, 2011.

Accessibility and coverage

The average number of patients admitted to hospital in 2010 is estimated at 8 per 100 population (Table 7.2); this is a high percentage for a young population: the proportion of the population over 65 years old is around 3% (*103*). The average length of stay is estimated at 2.5 days. The high rate of admissions to hospitals and the short length of stay may indicate either unnecessary admissions or early discharge (*50*). Lastly, the average occupancy rate shows an increase from a rate of 72% in 2000 to 81% in 2010 (85% in the West Bank and 78% in the Gaza Strip) (Table 7.2), a rate similar to the bed occupancy rates in most OECD countries.

Hospitals providing the secondary health care services in the Occupied Palestinian Territory are classified into four main categories as follows (*36,70*):

- **General hospitals** provide basic secondary health care services to a local geographic area. Some of those hospitals are large enough to provide a full complement of advanced secondary and to some extent tertiary health care services. The total number of general hospitals has increased during the last 10 years, from 39 hospitals in 2000 (with a total capacity 2812 beds) to 42 hospitals with a total capacity of 3803 beds in 2010 (Table 7.1).
- **Specialized hospitals** provide full complement of advanced secondary and tertiary services in one specialty domain. There are 11 hospitals with a total capacity of 822 beds as per 2010 (Table 7.1).
- **Maternity hospitals** are designated to serve mothers. There are 16 such hospitals with a total capacity of 316 beds as per 2010 (Table 7.1).
- **Rehabilitation hospitals/centres** are designed to provide full band of rehabilitative services. There are 4 hospitals/centres with a total capacity of 167 beds as per 2010 (Table 7.1).

Public/private distribution of hospital beds

Secondary and tertiary health care services are provided through a mixture of the public, NGO, UNRWA and private sectors, with a developing governmental insurance system. The MoH is responsible for a significant portion of the secondary health care delivery system and some of the tertiary care. Of the 76 hospitals in the Occupied

Table 7.2 Inpatient use and performance for hospitals in the Occupied Palestinian Territory, 2000–2010

Variable	2000	2004	2006	2008	2010
Hospital beds/1000 population	1.40	1.30	1.29	–	1.26
Admissions/100 population	5.9	8.6	7.0	–	8.08
Average length of stay (days)	2.8	2.6	2.5	–	2.5
Occupancy rate (%)	72.4	81.1	73.7	–	80.8

– = data unavailable.
Source: Annual health reports, various issues. Ramallah, Palestine, Ministry of Health, Health Information Centre.

Palestinian Territory (1.3 beds per 1000 population 1.2 in the West Bank and 1.4 in the Gaza Strip), the MoH currently owns and operates 24 hospitals with a total stock of 2864 beds, representing 57% of all hospital beds (about 5024 beds); 45% of these are in the West Bank and the remaining 55% are in the Gaza Strip. Most of the MoH hospitals are overutilized, with an average occupancy rate of 81%. Consequently, the MoH hospitals frequently have to reject cases due to full occupancy (*50*).

It is important to note that the MoH does not operate any health services in Palestinian East Jerusalem, in contrast to other health-care providers, since Israel considers it part of its State, taking control of health care in that area.

On the other hand, the MoH outsources specific tertiary health care and advanced diagnostic services to local and overseas providers. The total number of referred cases for hospitalization (57.5% of cases) and consultation (42.5% of cases) was 10 764 in 2001 (*77*). Patients are mainly referred to other local providers, including Palestinian NGOs and the private sector (61.6% of cases), and to Egypt (17.6%), Jordan (12.3%) and Israel (8.5%) (*77*).

The second largest provider of hospital beds is the NGO sector with 1654 beds (1246 in the West Bank and 399 in the Gaza Strip), jointly representing 31.6% of the total stock of hospital beds in the Occupied Palestinian Territory. The NGO sector has 6 hospitals located in East Jerusalem (Augusta Victoria, Al Makased, Saint John, Saint Joseph, Palestinian Red Crescent Hospital and the Princess Basma Rehabilitation Centre), operating approximately 592 beds and employing around 1170 health professionals. Compared with those run by the MoH, the NGO hospitals are underutilized, with a substantial part of their workload being cases referred by the MoH (*50*).

The third and fourth largest hospital providers are private hospitals and the military services. The private hospitals are 23 in number, manage 466 beds in total and specialize mainly in maternity services. They are generally located in urban centres. The military services facilities consist of two small hospitals under the Ministry of the Interior, with a total capacity of 73 beds (*37*).

Key issues and concerns in secondary/tertiary care

Secondary and tertiary care services are provided through a limited number of general and specialized hospitals, mainly, located in the urban areas. There is clear shortage in tertiary health care services, with those available being concentrated in inaccessible areas in Jerusalem, owing to Israeli restrictions prohibiting Palestinians from accessing the city (*104*).

This distribution of MoH hospital beds indicates a geographic imbalance between the more populous West Bank and the Gaza Strip. There is a need to rationalize further investment planning by the MoH over the medium term (depending on hospital investment trends in the private sector). The average occupancy rate in MoH hospitals indicates an overall efficient use of MoH service capacity. The occupancy rate for all Palestinian hospitals, however, is estimated at 65%; indicating that there is underutilized service capacity in the private and NGO sectors (*38*).

Reforms introduced over last 10 years

Several reforms have been initiated by the MoH over the last 10 years to improve hospital infrastructure and management. Some of the important reforms are worth noting:

- introducing new medical technologies such as CT scanning in several hospitals, and establishing catheterization laboratories in two hospitals (Ramallah and Shifa Hospital in the Gaza Strip);
- establishing the "Palestine Medical Complex" as a national centre of excellence and a pilot approach to introducing decentralized hospital management;
- consolidating the special treatment referrals under a new General Directorate for Health Insurance;
- adopting a new contracting mechanism using a "request for proposals" framework for purchasing secondary and tertiary services from non-ministry hospital facilities.

Planned reforms

The latest National Health Strategic Plan for 2011–2013 includes the following planned reforms (outputs) to be achieved by 2013 (*53*):

- comprehensive, efficient monitoring system producing regular, useful information on adherence to standards and plans;
- improved governance in hospitals;
- universal use of guidelines, protocols, and standards of care;
- indicators of achievement include, among others, decrease in death rate in hospitals and increase in health centres in line with national health facility coverage plan.

Long-term care

Structure of provision, trends and reforms over the last 10 years

In the local context, long-term care is mainly provided by NGOs institutions and private voluntary and charitable organizations. There are no recent data on long-term care services in the Occupied Palestinian Territory. Data from earlier years indicate that there are about 26 homes and institutions which care for the elderly (23 in the West Bank and 3 in the Gaza Strip) (*13*). Of the 21 institutions on which information was available, 7 were located in the Bethlehem district, four in Jerusalem, two in Ramallah, two in Jericho, two in Nablus, one in Hebron, and one in Jenin. Those located in the Gaza Strip operate in Gaza city itself.

As with to other secondary and tertiary services, geriatric services tend to be more concentrated in the centre of the territory, where more than half of the institutions are located, but where no more than one-quarter of the population lives. Previous evidence shows that the large majority of elderly residents in the West

Bank and Gaza Strip are cared for at home; those who are in institutions are the ones whose families can no longer care for them (among institution residents are those with urinary incontinence, faecal incontinence and those suffering from mild to severe dementia). Most notably, the available geriatric services focus largely on housing for the elderly and the destitute.

In addition to elderly patients, physically disabled (e.g. Down syndrome) people and children with a learning disability (speech and hearing problems) receive care in institutions through community-based activities. Similarly, the mental health services are mainly provided through community-based programmes run by specialized NGOs institutions or through the Mental Health Department in the MoH.

Current issues and concerns in provision of long-term care

The number of elderly people in the West Bank and Gaza Strip is rising, reflecting a rise in average life expectancy as well as increasing population growth (people aged 65 years and over comprise about 3% of the population according to the 2010estimate). Nevertheless, recent data from the *Palestinian Family Survey-2010* indicate a rise of about 52% in the percentage of elderly people suffering from at least one chronic disease, with about 71% of those aged 60 years and over reported as having at least one chronic disease (75.1% of elderly females; 64.7% of males) (*34*). Although adequate data about long-term care are unavailable, there is evidence on the lack of some essential services in geriatric institutions and in home-services; services principally consist of administering medication. Services covering physiotherapy, exercise services, psychological counselling services, entertainment and general stimulation are lacking.

All of the above raises serious concerns about the capacity of the current health-care arrangements to meet the increased needs for long-term care for the elderly, who have been shown to be least considered when planning for a health services delivery system. Indeed, every effort must be made to consider the medical and health needs of the elderly both in institutions and in-home when planning the Palestinian health service delivery system.

Planned reforms in provision of long-term care

In spite of the observed growing need for long-term care, especially for elderly, there are no planned reforms in the national strategic health plans regarding the provision of this type of care.

Pharmaceuticals

Essential drugs list: level of care

The Essential Drugs List was first prepared in 2000 based on recommendations by the World Health Organization (WHO). It has been reviewed several times by the MoH and the most recent update was in October 2007. Currently, the Essential Drugs List includes about 450 different medicines, arranged by drug category rather than by level of care (*36*).

Manufacturers of medicines and vaccines

There are six local pharmaceutical manufacturers in the Occupied Palestinian Territory (including one in Gaza), covering about 160 of the 450 drugs on the MoH Essential Drugs List (*105*). They produce more than 1000 medical products, serving about 40%–50% of domestic demand for pharmaceuticals through both the private retail market and the MoH and NGO sectors. The market size of the Palestinian pharmaceutical industry is US$ 105 million (2008), with annual revenues estimated at US$ 38 million at ex-manufacturer prices. However, the data could be underestimates owing to the common practice of in-kind rebates for retailers. The wholesalers take a profit of 8%–10% on the ex-factory price, pharmacies add about 30%, and the client pays value-added tax of 17% on the wholesale price. Some companies have received a provisional "good manufacturing practice" certificate from the PNA supporting recognition of their export activities and the overall quality of the medicines (*106*).

Regulatory systems for registration, licensing, surveillance, quality control and pricing

The Palestinian pharmaceutical sector is regulated and administered by the MoH, yet the relevant legislation governing public sector regulation of the pharmaceutical sector needs strengthening. There is no national regulatory authority for drugs. Local factories have to register their products with the MoH before putting them on the market. All local medical products have a fixed sale price from the manufacturer; this is not related to MoH control. There is no price control for generics in the Occupied Palestinian Territory, and control of over-the-counter products is weak, particularly in the remote areas. There are regulations controlling pharmacy operation, e.g. licensing and inspection by the MoH. Direct-to-consumer advertising of prescription drugs is not permitted, but some advertising is run through newspapers after registering and with the consent of the MoH. Mail order/Internet pharmacies are not permitted, but there are no controls for this activity.

Systems for procurement, supply and distribution

The Palestinian pharmaceutical sector consists of:

- the MoH public sector, which procures medicines according to the Essential Drugs List;
- the private sector, in which medicines are available in privately-owned pharmacies;
- the NGO sector, which serves a large segment of population, particularly marginalized groups;
- UNRWA, which serves the refugee population.

The processes for drug acquisition, supply and distribution are well established by the MoH. MoH drug purchases are based on regular bidding mechanisms. A special drug purchasing committee approves the requested types and amounts after studying all requests from PHC centres and hospital departments. The MoH gives

the order for receiving samples from all bidders to be tested and after checking drug quality, the MoH receives medicaments from the winning bidder to central drug stores in the West Bank and Gaza Strip. The purchased drugs are then distributed on a quarterly basis to PHC and hospital headquarters, to be finally distributed to the hospitals and PHC clinics.

Medicines may be obtained in the 604 MoH health-care facilities equipped with a dispensary. In addition, there is a flourishing private sector, including 83 drug wholesalers and importers and about 838 private pharmacies (*106*). Apart from the NGOs and UNRWA service providers, in total, there is one pharmaceutical dispensary (pharmacies, health care facility, etc.) per 2400 inhabitants, which is a very high ratio by international standards (*106*). Availability of medications has, however, fluctuated in during the last 10 years, resulting in major shortages in the public sector. For instance, a report in 2007 by the donor community found a selection of medicines such as analgesics, antibiotics and anti-inflammatories to be out of stock in one-third of the PHC centres (*107*). In 2008, 19% of medicines were found to be out of stock and for 9.5% of outlets, less than one month's stock was left (*108*). Recent data from the MoH, has, however, indicated a slight improvement in the situation. Nonetheless, about 30%–40% of the 4500 different products (with several pack sizes) in the market are not yet registered in the West Bank and Gaza Strip (*106*).

Reforms over the last 10 years

The MoH has initiated several important reforms over the last 10 years. These include:

- organizational reform in the MoH through establishing a new "procurement unit" reporting directly to the Minister and a "pharmaceutical policy unit" reporting to the General Director of Pharmacy;
- separation of the registration and inspection procedures;
- drafting a new "pharmaceutical pricing ordinance".

Current issues and concerns

In spite of the improvements already mentioned, there are still inefficiencies in some regulatory and procurement functions. Some key issues are worth highlighting.

- Current procurement guidelines and the legal framework for public procurement were shown to be insufficient to provide a clear, rules-based environment for conducting public procurement of pharmaceuticals(109). For instance, the current practice includes all Essential Drugs List medicines into a single tender, hence, limiting negotiations with certain suppliers of expensive drugs.
- Contractual sanctions and penalties against violations of contractual terms are still not applied.
- Importation of medicines remains highly restricted by the "Paris Economic Protocol" and the granting of "exclusive distribution contracts", hindering import of the same originator brands from different sources. Consequently, all

on-patent medicines are supplied by a single provider, while the prices offered are approved by the MoH regardless of their affordability for patients.

Planned reforms

The MoH is in the process of re-structuring pharmaceutical pricing.

Technology

Trends in supply, and distribution of essential equipment

The process for purchasing medical equipment and devices is similar to that of medicines. The MoH has a department charged with maintenance and follow-up for all high technology equipment.

Effectiveness of controls on new technology

Apart from the budgetary constraints, there are still no control regulations or cost-effectiveness assessment regarding the acquisition of new advanced medical technologies. Nonetheless, private sector is free to by and run advanced technology without consent from MoH or any public institution.

Reforms in the last 10 years, and results

Key reforms in this area include the establishment of the Palestinian Health Information Centre in 2003 as a department within the MoH. In addition, efforts were made to enhance the computerized systems in all MoH departments and to unify all these systems into a national health system. Today, computerized registration is available in almost all central PHC and hospital departments. There are plans to introduce electronic medical records in all clinics and hospitals. and to extend the implementation of the Clinical Information System to more clinics.

Current issues and concerns

There is a need to set up control regulations and to conduct cost–effectiveness assessment regarding the acquisition of costly medical technologies.

Planned reforms

Planned reforms as reported in the latest National Health Strategic Plans (2011–2013) include the consolidation of the health management information system of the MoH in order to improve collection, organization and maintenance of relevant data and to carry out these tasks in a timely way.

Besides reinforcing the information management capacity at district level, an integrated health management information system will be developed in order to fully cover the following topics (*53*):

- financial information,
- human resources,

- physical assets and equipment and inventory,
- health care service delivery/medical records system,
- surveillance.

8. Health system reforms

Summary of recent and planned reforms

Chronology and main features of key reforms

The last decade has witnessed several changes aiming at enhancing the performance of the health care system. The main achievements and features of key reforms can be summarized as follows:

- An expansion in the infrastructure of the governmental health services and public sector involvement in health care delivery This is mainly manifested by a significant increase in the number of PHC centres, significant increases in capacity in governmental general hospitals, the introduction of new medical technologies, e.g. CT scanning in several hospitals, and establishing catheterization laboratories in two hospitals (Ramallah and Shifa Hospital in the Gaza Strip).
- Changes in public policy regarding contracting out of health services with the aim of rationalizing public sector health spending on specialty care services and enhancing governmental tertiary care capacity The main features of reforms undertaken by the MoH in this area included consolidating the special treatment referrals—traditionally performed by an administrative unit independent of the Directorate responsible for governmental health insurance scheme—under a new General Directorate for Health Insurance. This was charged with the responsibility for developing stricter eligibility criteria for referrals, both in terms of clinical indications and location of services.
- Development and adoption of a new contracting mechanism for purchasing services from hospital services with the aim of building a strategic purchasing capacity within the MoH, improving the efficiency of MoH spending and ensuring higher quality standards on the part of the contracted service providers The MoH has developed a new contracting mechanism using a "request for proposals" framework for purchasing specialty care services. This new mechanism was implemented by the MoH for the first time in 2007–2008. Accordingly, purchasing of health services is conducted using a transparent, competitive approach based on a prequalification process. As part of the bidding process, the MoH request for proposals invites all interested specialty care providers to provide detailed information about their clinical staff, the quality of their physical infrastructure; the clinical and administrative data they collect and the range of services provided by their facilities. This information is then used to make new determinations about the eligibility of these providers to participate in the tendering process.
- Reforming the MoH financial management system with the aim of improving public sector financial capacity, accountability and financial control In line with the PNA broad-scale public financial management (2007–2008) reforms,

the MoH has initiated, with the assistance of the Ministry of Finance and some external agencies, several attempts to strengthen financial capacity and accountability. The main features of reforms undertaken by the MoH in this area included: the adoption of a consistent approach to improving the annual budgeting process; the introduction of programme budgeting structure for health-related expenditure, including items related to both development and recurrent expenditure; and the development of a new financial management information system by the Ministry of Finance. This system will provide the MoH with the capability to make health-related payments for specific expenditure types without the direct approval of the Ministry of Finance.

- Drafting of the National Health Insurance Law. The main features of reforms proposed for health insurance include: mandatory participation for the entire population and separating the health-care provider from the health-care purchaser through establishing an autonomous entity to run the health insurance system.
- The initiation of a pilot approach to decentralized hospital management through establishing the Palestine Medical Complex in Ramallah. The complex comprises two newly established hospitals and two existing facilities in addition to the central blood bank. The consolidation of these five facilities into one independent entity will help improve the provision of quality health services under a decentralized management structure.

Determinants and objectives of health system reforms

A National Health Strategy for the period 2011–2013 has been adopted. The major objectives of the health system reforms identified in the strategy include (*53*):

- governance and institutional development of the MoH,
- human resource development,
- healthy behaviours,
- access to quality health services,
- health financing and financial management,
- aid effectiveness,
- public–private partnerships,
- cross-sectoral collaboration and cooperation.

Process of implementation: approaches, issues, concerns

The MoH has adopted a participatory approach, including the involvement of local and international stakeholders as well as relevant line ministries, in preparing the National Health Strategy 2011–2013. Moreover, to ensure the implementation of the plan, the MoH has employed an evidence-based approach, including a review of past experiences, both at the local and international level, formation of thematic groups of experts to focus on specific subjects, and the institutionalization of

dialogue with all stakeholders through the consultative meetings and workshops at the annual national health conference

For budgeting purposes, the above eight objectives of health system reform were consolidated into four national health programmes (reflecting the first four objectives) with costs associated with each one being estimated and divided into operating costs and development costs. In addition, the MoH lead responsibility for the implementation of each programme was identified.

Process of monitoring and evaluation of reforms

A monitoring and evaluation mechanism was established to track activities outlined in the annual action plans; it enables those responsible to be held accountable. The monitoring and evaluation process at the MoH is in line with the national process established by Ministry of Planning and Administrative Development. During 2008–2010, the MoH strengthened the institutional planning process by development of annual action plans in line with the three-year strategy as well as the annual budget submission (*53*).

References

1. Giacaman R, Abdul-Rahim HF, Wick L. Health sector reform in the Occupied Palestinian Territories (OPT): targeting the forest or the trees? *Health Policy and Planning*, 2003, 18(1):59–67.
2. *Population and housing census (PHC-2007), statistical brief* (summary of census results). Ramallah, Palestine, Palestinian Central Bureau of Statistics, 2009.
3. Khawaja M. The recent rise in Palestinian fertility: permanent or transient? *Population Studies*, 2000, 54(3):331–346.
4. Usher G. Who are the Palestinians? *New Statesman*, 2004, July 12:18–20.
5. *Policy alternatives for Palestinian sustained development and state formation*. United Nations Conference on Trade and Development. New York & Geneva, UN, 2009, (UNCTAD/GDS/APP/2008/1).
6. *Prolonged crisis in the Occupied Palestinian Territory: socio-economic developments in 2007*. Gaza, United Nations Relief and Works Agency, 2008 (Report No. 3).
7. *Economics of "policy-induced" fragmentation: the costs of closures regime to the West Bank and Gaza, in Middle East and North Africa*. Washington DC, World Bank, 2008 (Working Paper Series 50).
8. *Press release: poverty and living conditions in the Palestinian territory - 2007*. Ramallah, Palestinian Central Bureau of Statistics, 2008.
9. Abu-Zaineh M. *Contribution to the Analysis of Health Equity: measurement and explanation of inequality and inequity in the health care sector in the context of developing countries: the Palestinian case*. Berlin, VDM Verlag, 2009.
10. *Health Sector Surveillance Indicators: monitoring the health sector in the oPT*. Jerusalem, World Health Organization, 2008 (Issue No. 24) (http://www.emro.who.int/palestine/index.asp?Page=library&option=monitoring.WHO_monthly_monitoring, accessed 05 February 2012).
11. *Household health expenditure survey, 2004*. Ramallah, Palestinian Central Bureau of Statistics, 2004.
12. *Health care providers and beneficiaries survey, 2005 - main findings*. Ramallah, Palestine, Palestinian Central Bureau of Statistics, 2006.
13. [*Palestinians in numbers*]. Ramallah, Palestine, Palestinian Central Bureau of Statistics, 2007 [in Arabic].
14. UNDP. Poverty in the occupied Palestinian territory 2007. Jerusalem, *Development Times*, 2007 (Issue No. 1).
15. *Dignity denied in the occupied Palestinian territories.* Jerusalem, International Committee of the Red Cross, 2007.
16. *Access to health services for Palestinian people: case studies of five patients in critical conditions who died while waiting to exit the Gaza Strip*. West Bank and Gaza, World Health Organization, 2008.
17. Barghouthi M et al. *Health and segregation II: The impact of the Israeli wall on access to health care services*. Ramallah, Health, Development, Information, and Policy Institute, 2005.
18. *Access to health services survey 2003: main findings*. Ramallah, Palestinian Central Bureau of Statistic, 2004 (http://www.fateh.plo.ps/doc/ebooks/book1047_e.pdf, accessed 5 February 2012).
19. *An investment guide to Palestine*. Publication prepared for the Palestine Investment Conference, Bethlehem, 21–23 May, 2008. Ramallah, Palestine, Palestine Economic Policy Research Institute-MAS, 2008.
20. Sabbagh K. *Palestine: a personal history*. New York, Grove Press, 2007.
21. Watson GR. *The Oslo Accords: International Law and the Israeli-Palestinian Peace Agreements*. Oxford, Oxford University Press, 2000.
22. Hilal J. *The formation of the Palestinian Elite. From the Palestinian national movement*

to the rise of the Palestinian Authority. Ramallah, Muwatin, the Palestinian Institute for the Study of Democracy, 2002.

23. Sayigh Y. Inducing a failed state in Palestine. *Survival*, 2007, 49:7–40.

24. Hilal J. *Where now for Palestine? The demise of the two-state solution*. London, Zed Books, 2007.

25. Hilal J. *The Palestinian political system after Oslo: a critical assessment, 2006*. Ramallah, Muwatin, Palestinian Institute for the Study of Democracy, and Beirut, Institute of Palestine Studies, 2006.

26. Giacaman R et al. Health status and health services in the occupied Palestinian territory. *Lancet*, 2009, 373(9666):837–849.

27. Devi S. Hospitals in Gaza struggling after factional fighting. *Lancet*, 2007, 369(9580):2147–2148.

28. Abu-Zaineh M et al. Measuring and decomposing socioeconomic inequality in health care delivery: a micro-simulation approach with application to the Palestinian conflict-affected fragile setting. *Social Science & Medicine*, 2011, 72(2):133–141.

29. Rahim HFA et al. Maternal and child health in the occupied Palestinian territory. *Lancet*, 2009. 373(9667):967–977.

30. Halileh S et al. Determinants of Birthweight: Gender Based Analysis. *Maternal and Child Health Journal*, 2008**,** 12(5):606–612.

31. *Demographic and health survey-2004. Final report*. Ramallah, Palestine, Palestinian Central Bureau of Statistics, 2006.

32. *Palestinian family health survey, 2006: preliminary report*. Ramallah, Palestine, Palestinian Central Bureau of Statistics, 2007.

33. *Palestinian family survey, 2010: preliminary report*. Ramallah, Palestine, Palestinian Central Bureau of Statistics, 2010.

34. Sawaya A et al. The link between childhood undernutrition and risk of chronic diseases in adulthood: a case study of Brazil. *Nutrition Review*, 2003, 61(5 Pt 1):168–175.

35. *Annual health report-2010*. Ramallah, Palestine, Ministry of Health, Health Information Centre, 2011.

36. *National strategic health plan. Medium-term development plan 2008–2010*. Ramallah, Palestine, Palestinian National Authority, Ministry of Health, Health Planning Unit, 2008.

37. *Health status in Palestine-2008*. Nablus, Palestine, Palestinian National Authority, Ministry of Health, Health Information Centre: 2009.

38. *Statistical Atlas of Palestine*. Ramallah, Palestine, Palestinian Central Bureau of Statistics, 2011.

39. Abu-Zaineh M et al. Equity in health-care financing in Palestine: the value-added of the disaggregate approach. *Social Science & Medicine*, 2008. 66(11):2308–2320.

40. Hamdan M, Defever M, Abdeen Z. Organizing health care within political turmoil. *International Journal of Health Planning and Management*, 2003, 18(1):63–87.

41. Mataria A et al. The health-care system: an assessment and reform agenda. *Lancet*, 2009. 373(9670):1207–1217.

42. Government of Japan, World Bank. *Aid effectiveness in the West Bank and Gaza*. Jerusalem, World Bank, 2000.

43. *National health plan (1991–1993)*. Jerusalem, Palestinian Council of Health, Health Planning and Management Unit, 1991.

44. *Organizational structure of the Ministry of Health*. Ramallah, Palestinian National Authority, Ministry of Health, 2008.

45. Mataria A, Khouri P. *Public policies to enhance private sector competitiveness in providing tertiary health care in Palestine: assessment and recommendations*. Ramallah, Palestine, Palestine Economic Policy Research Institute (MAS) , 2008.

46. Barghouti M et al. *Health and segregation II: the impact of the Israeli Wall on access to health care services*. Ramallah, Palestine,

Health, Development, Information and Policy Institute, 2005.

47. Barghouthi M, Lennock J. *Health in Palestine: potential and challenges*. Ramallah, Palestine, Palestine Economic Policy Research Institute, 1997 (MAS Discussion Papers).

48. *Health status in Palestine: annual report 2005*. Ramallah, Palestine, Ministry of Health, Health Management Information System, 2006.

49. *National strategic health plan: medium term development plan (2008–2010) (Draft, January 2008)*. Ramallah, Palestinian National Authority, Ministry of Health - Health Planning Unit, 2008.

50. Mataria A et al. The health-care system: an assessment and reform agenda. *Lancet*, 2009, 373(9670):1207–1217.

51. *The United Nations Relief and Works Agency for Palestine Refugees in the Near East Guide*. Vienna, United Nations Relief and Works Agency for Palestine Refugees, Public Relations Department, 1995.

52. Schoenbaum M, Afifi AK, Deckelbaum RJ. *Strengthening the Palestinian health system*. Santa Monica, Rand Corporation, 2005.

53. *Palestinian National Health Strategy 2011–2013: setting direction - getting results*. Ramallah, Palestinian National Authority, Ministry of Health, 2011.

54. *National health plan for the Palestinian people: objectives and strategies*. Jerusalem, Palestinian Planning and Research Centre, 1994.

55. *National strategic health plan: 1999–2003*. Ramallah, Palestinian National Authority, Ministry of Health, 1999.

56. *Ministry of Health medium-term development plan: 2006–2008*. Ramallah, Palestinian National Authority, Ministry of Health, Health Planning Unit, 2006.

57. *National strategic health plan: 2008–2010*. Ramallah, Palestinian National Authority-Ministry of Health, 2008.

58. *Achievements of the Ministry of Health*. Ramallah, Palestinian National Authority, Ministry of Health, Public Relations and Media Unit, 2010.

59. Brown NJ. *The third draft constitution for a Palestinian State*. Ramallah, Palestinian Centre for Policy and Survey Research, 2003.

60. *Public Health Law No. 20 (2004)*. Ramallah, Palestinian National Authority, Palestinian Legislative Council, 2004.

61. Miranda JJ. Ambulances and curfews: delivering health care in Palestine. *Lancet*, 2004, 363(9412):895–896.

62. Giacaman R et al. Quality of life in the Palestinian context: An inquiry in war-like conditions. *Health Policy*, 2007, 81(2007):68–84.

63. Horton R. Palestinians: the crisis in medical care. *New York Review of Books*, 2007, 54(4): 22–24.

64. Oxford Policy Management. *West Bank and Gaza health sector: expenditure review*. London, Department for International Development, 2006.

65. Abu-Zaineh M et al. Equity in health care finance in Palestine: the triple effects revealed. *Journal of Health Economics*, 2009, 28(6):1071–1080.

66. World Bank and Bisan Center for Research and Development. *The role and performance of Palestinian NGOs: in health, education and agriculture*. Washington DC, World Bank, 2006.

67. Heilskov RJ et al. Effects of armed conflict on access to emergency health care in palestinian West Bank: systematic collection of data in emergency departments. *British Medical Journal*, 2006, 332(7550):1122–1124.

68. Giacaman R et al. Health status and health services in the occupied Palestinian territory. *Lancet*, 2009, 373(9666):837–849.

69. Schoenbaum M, Afifi A, Deckelbaum R. *Strengthening the Palestinian health system*. Arlington, Rand Corporation, 2005.

70. *Annual Health Report-2002*. Ramallah, Palestine, Palestinian National Authority, Ministry of Health, Health Information Centre, 2003.

71. Shaw RP, Ainsworth M. *Financing health services through user fees and insurance: lessons from Sub-Saharan Africa*. Washington DC, World Bank, 1996 (World Bank Discussion Paper 294).

72. Ajluni S. The Palestinian economy and the second Intifada. *Journal of Palestine Studies*, 2003, 32(3):64–73.

73. *West Bank and Gaza: medium-term development strategy for the health sector*. Washington DC, World Bank, 1998

74. *Governmental health insurance in Palestine, 2005*. Ramallah, Palestine, Ministry of Health, Health Information Centre, 2006.

75. *National health plan for the Palestinian people: objectives and strategies*. Jerusalem, Palestinian Council of Health, Planning and Research Centre, 1994

76. Lennock J, Shubita A. *Health insurance and health services utilisation in West Bank and Gaza Strip*. Ramallah, Palestine, Health, Development, Information and Policy Institute, 1998.

77. *Health status in Palestine: annual report 2001*. Ramallah, Ministry of Health, Health Management Information System, 2002.

78. *Social Monitor 3*. Ramallah, Economic Policy Research Institute, 2000:13.

79. Hamdan M, Defever M, Abdeen Z. Organizing health care within political turmoil: the Palestinian case. *International Journal of Health Planning and Management*, 2003, 18(1): 63–87.

80. Lennock J, Shubita A. *Health insurance and health services utilisation in West Bank and Gaza Strip*. Ramallah Health, Development, Information and Policy Institute, 1998.

81. *Health survey in West Bank and Gaza Strip, 2000*. Ramallah, Palestinian Central Bureau of Statistics, 2000.

82. Sekhri N, Savedoff W. Private health insurance: implications for developing countries. *Bulletin of the World Health Organization*, 2005, 83(2):81–160.

83. *Household health expenditure survey*. Ramallah, Palestinian Central Bureau of Statistics, 2004.

84. *National health accounts: basic results*. Ramallah, Palestinian Central Bureau of Statistics & Palestinian Ministry of Health, 2011.

85. *Palestine household consumption and expenditure survey 1998*. Ramallah, Palestinian Central Bureau of Statistics, 1998.

86. *Palestine household consumption and expenditure survey 2004*. Ramallah, Palestinian Central Bureau of Statistics, 2004.

87. *Palestine household consumption and expenditure survey 2005*. Ramallah, Palestinian Central Bureau of Statistics, 2005.

88. *Palestine household consumption and expenditure survey 2006*. Ramallah, Palestinian Central Bureau of Statistics, 2006.

89. *Palestine household consumption and expenditure survey 2008*. Ramallah, Palestinian Central Bureau of Statistics, 2008.

90. Brynen R. *Public finance, conflict, and state building: the case of Palestine*. Montreal, Canada, McGill University, 2007 (http://site.iugaza.edu.ps/walhabil/files/2010/11/Public-Finance-Conflict-and-State-Building-Case-of-Palestine.pdf, accessed 1 May 2012).

91. Poston M. Aid in the occupied Palestinian territories: a donor perspective. London, Overseas Development Institute, *Humanitarian Exchange*, 2007, Issue 37 (March).

92. *West Bank and Gaza. Public Expenditure Review. From Crisis to Greater Fiscal Independence*, vols 1 and 2. Washington DC, World Bank, Middle East and North Africa Region. Social and Economic Development Group, 2007 (Report No. 38207-WBG).

93. *Palestinian economic prospects: Gaza recovery and West Bank revival: economic monitoring report to the ad hoc liaison committee*. Washington DC, World Bank, 2009.

94. *Reforming prudently under pressure: health financing reform and the rationalization of public sector health expenditures, in West Bank and Gaza: Health policy report*. Washington DC, World Bank, Human Development Sector, Middle East and North Africa Region, 2008

95. *The annual report of the department of health, 2010*. Geneva, United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), 2011.

96. Hamdan M, Defever M. Human resources for health in Palestine: a policy analysis. Part I: Current situation and recent developments. *Health Policy*, 2003, 64(2):243–259.

97. *Civil Service Law*. Ramallah, Palestinian National Authority, Legislative Council, 2006.

98. *Access to Health Services Survey - 2003: main findings*. Ramallah, Palestinian Central Bu*reau o*f Statistics, 2004.

99. Mataria A, Khouri P. *Public policies to enhance private sector competitiveness in providing tertiary health care in Palestine: assessment and recommendations*. Ramallah, Palestine Economic Policy Research Institute (MAS), 2008.

100. *National health plan for the Palestinian people: objectives and strategies*. Jerusalem, Palestinian Planning and Research Centre, 1994.

101. *National Strategic Health Plan (1999–2003)*. Ramallah, Palestine, Palestinian National Authority, 1999.

102. *Annual health report: treatment abroad*. Ramallah, Palestine, Palestine Ministry of Health, Health Information Centre, 2006.

103. *Health care providers and beneficiaries survey-2005: main findings*. Ramallah, Palestine, Palestinian Central Bureau of Statistics, 2006.

104. *National Strategic Health Plan: Medium Term Development Plan (2008–2010)*, draft January 2008. Ramallah, Palestinian National Authority, Ministry of Health, 2008.

105. Waleed SM et al. Pharmacy education and practice in West Bank, Palestine. *American Journal of Pharmaceutical Education*, 2009, 73(2).

106. *Palestinian Pharmacy Handbook 2008*. Jerusalem, Palestine Pharmacists Association, 2009.

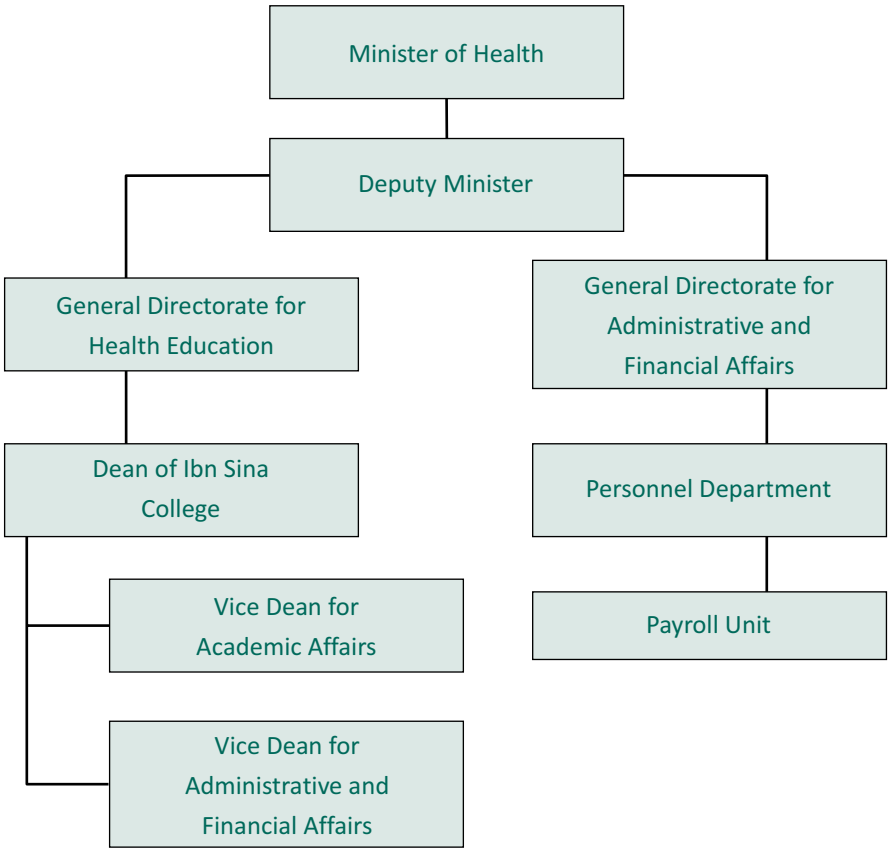
107. Abed Y. *Joint report on health sector review (HSR): a summary report*. Palestine, World Health Organization, 2007 (http://www.emro.who.int/palestine/reports%5Chealth_policy_planning%5CHealth_Sector_Review_Report_2007.pdf, accessed 1 May 2012).

108. Othman R. P*ublic procurement in Palestine* (Presentation at Ministry of Health & World Bank Pharmaceutical Workshop, Ramallah, 22 August 2008).

109. *West Bank and Gaza: improving governance and reducing corruption*. Washington DC, World Bank, 2011.

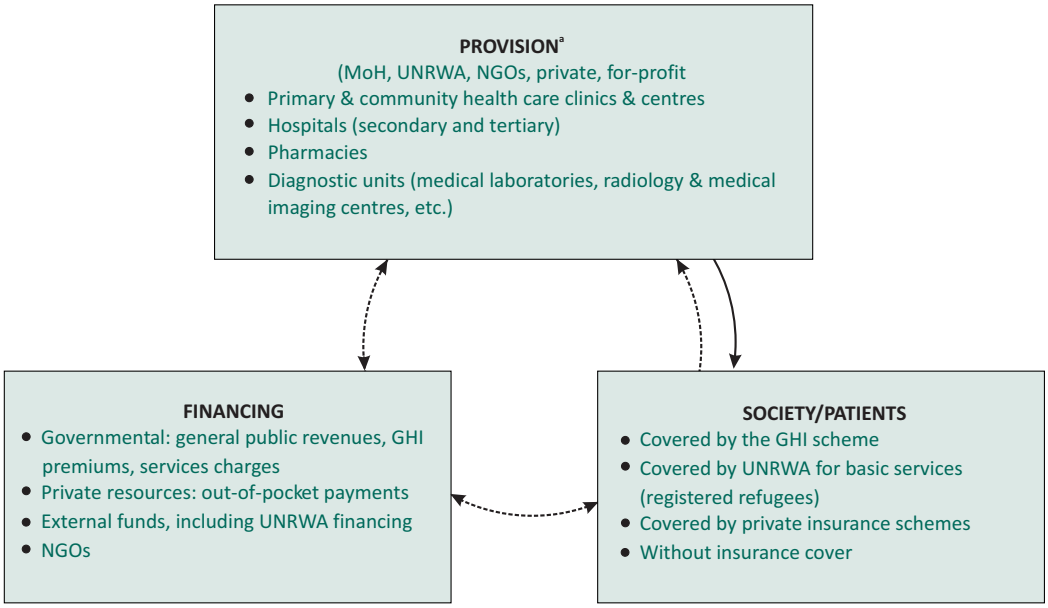
Annexes

Annex 1 Organizational structure of the Ministry of Health, 2008



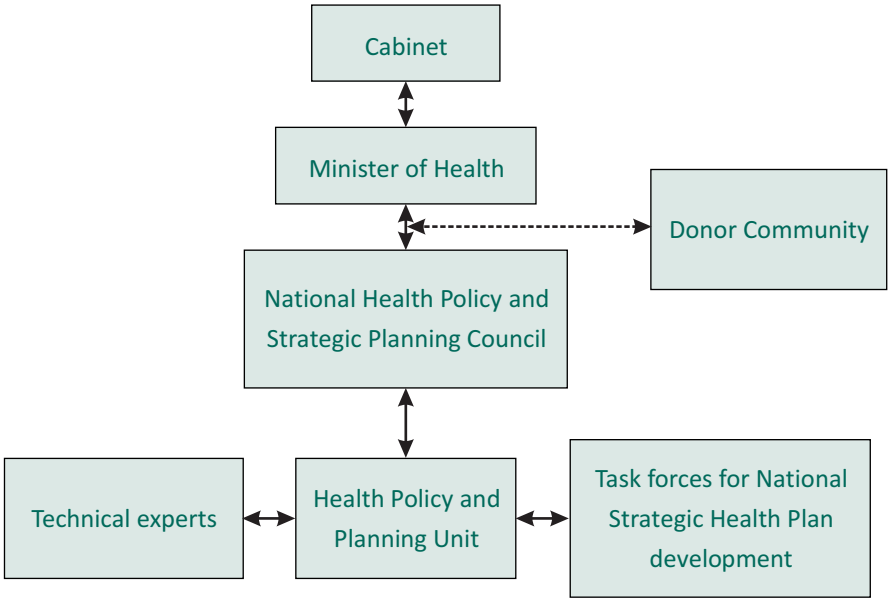
Source: Adapted from Medium Term Development Strategy Plan for the Health Sector, 2008.

Annex 2 Structure of the Palestinian health system



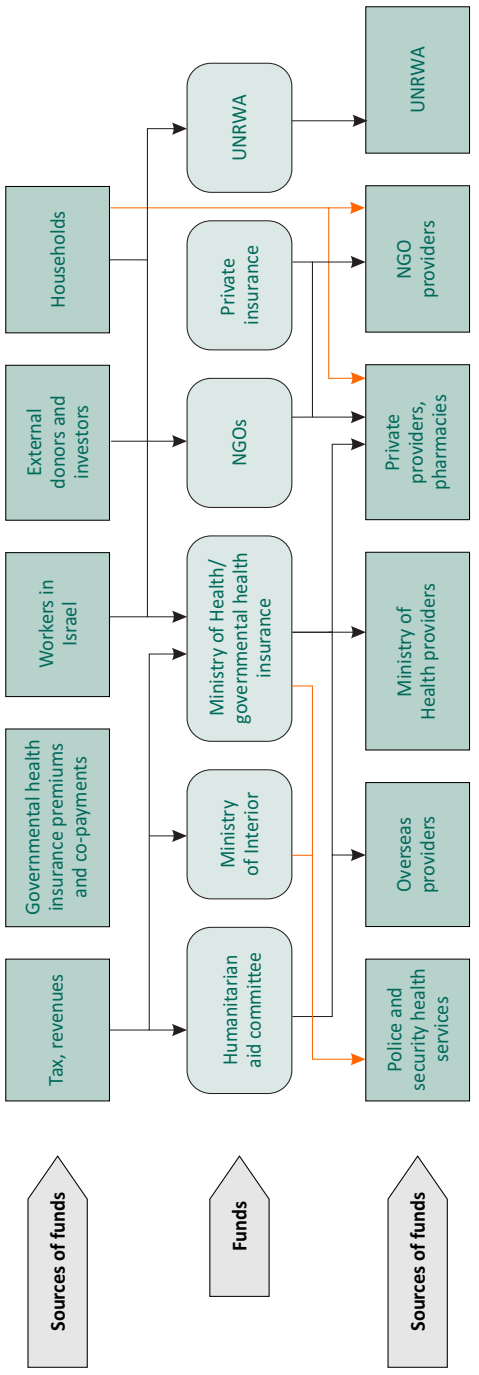
[a]Some overseas providers are contracted for tertiary care.
→ *Relationship between health care services, e.g. supplies, coverage, entitlement*
⇢ *Monetary relationships, e.g. remuneration of providers, user fees/patient contributions, premiums and service revenues, etc.*
Source: Hamdan M et al. Organizing health care within political turmoil: the Palestinian case. International Journal of Health Planning and Management, 2003, 18(1):63–87.
MoH = Mionistry of Health; UNRWA = United Nations Relief and Works Agency; NGO = nongovernmental organization; GHI = governmental health insurance.

Annex 3 Components of the Palestinian Health Information System and their reporting relationships (showing proposed relations between the National Health Policy and Strategic Planning Council and existing structures)



Source: Medium-term development strategy plan for the health sector, 2008–2010.

Annex 4 Health financing system in Palestine



NGO = nongovernmental organization
Source: Adapted from Medium-term development strategy and public financial priorities for the health sector. Washington DC, World Bank, 2008.