PRIMARY HEALTH CARE
IN THE SOUTHERN MEDITERRANEAN REGION

M.G. Weide
F. El Fakiri
I. Kulu Glasgow
S.J. Grielen
J. van der Zee

November 1998

NIVEL - Netherlands Institute of Primary Health Care
P.O. Box 1568 - 3500 BN Utrecht - The Netherlands
Telephone .. 31 30 272 97 00 - Telefax .. 31 30 272 97 29

ISBN 90-6905-406

CONTENTS

INTRODUCTION

This book provides an overview of the organisation and structure of the health care system in the Southern Mediterranean region, with an accent on primary health care. It was written at the request of the Netherlands Ministry of Health, Welfare and Sports in the context of the Euro-Mediterranean Conference on Health & Social Welfare held December 1997 in The Hague.[1] The conference was organised for the European Commission, the 15 Member States of the European Union and twelve Mediterranean countries, Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, the Palestinian Authority, Syria, Tunisia and Turkey, who signed a partnership in the Barcelona declaration of 1995. In the declaration, these partners emphasise the importance of the health sector in achieving sustainable development. They further express their intention of promoting effective community participation in activities aimed at improving health and well-being. Primary health care was one of the themes discussed at the conference in a workshop.

The book consists of two parts. Part I discusses the state of the art on health and primary health care in the twelve Southern Mediterranean countries that take part in the Euro-Mediterranean partnership. Part II gives a country report for each country containing a general description of the country, key statistical figures (demographic and health statistics), information on the structure and financing of health care, the organisation of primary health care (including mother and child care and immunisation programmes), health policies, and problems and recent developments. The information is compiled from different sources. Written material was obtained by way of searches of Medline, Popline and the internet, visits to specialised libraries, and via central offices of statistics, Dutch embassies and personal contacts in the twelve countries. The content of the country report was checked by at least one personal contact in that country.

The study would not have been realised without the kind co-operation of many persons in the twelve Southern Mediterranean countries who provided us with information and/or reviewed the country report. The authors thank them for their contribution.

References

1. Expert meeting Health and social welfare in the Euro-Mediterranean region. A society for all. 9-11 December 1997. Kurhaus Hotel, The Hague, the Netherlands.

PART I

PRIMARY HEALTH CARE IN THE SOUTHERN MEDITERRANEAN REGION

PRIMARY HEALTH CARE IN THE SOUTHERN MEDITERRANEAN REGION

M.G. Weide
J. van der Zee

Introduction

Primary health care is generally perceived as an important aspect of the health care system. Its main elements are first contact, continuity, comprehensiveness and co-ordination. Accessibility is an important precondition of primary health care. A primary care orientation has proven its value; it is more effective, efficient and equitable than a speciality orientation.[1,2] The global strategy for Health for All by the Year 2000 founded on primary health care principles, has provided a common health policy framework in the last two decades.[3] Countries in the Southern Mediterranean region are confronted with many social and health problems, and important concerns are improving the population's health, ensuring equality and access, and improving the efficiency, effectiveness and quality of the system. In this context the importance of primary health care is stressed.

Definition of primary health care

In September 1978 at Alma Ata the International Conference on Primary Health Care, organised by the WHO and UNICEF was held. As a result of the conference primary health care was defined as follows:

"Primary Health Care is essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and country can afford. It forms an integral part both of the country's health system of which it is the nucleus and of the overall social and economic development of the community.

Primary Health Care addresses the main problems in the community, providing promotive, preventive, curative and rehabilitative services. Since these services reflect and have evolved from the economic conditions and social values of the country and its communities, they will vary in terms of country and community, but will include at least: promotion of proper nutrition and an adequate supply of safe water; basic sanitation; maternal and child care, including family planning; immunisation against the major infectious diseases; prevention and control of local endemic diseases; education on prevailing health problems and the methods of preventing and controlling them; and appropriate treatment for common diseases and injuries."[4]

Three aspects of primary health care

On the basis of this definition the following three aspects of primary health care can

be discerned:

1. *basic conditions*: proper nutrition, adequate supply of safe water and basic sanitation;
2. *preventive health care*: proper maternal and child health care including family planning and immunisation against the major infectious diseases; prevention and control of locally endemic diseases;
3. *curative and rehabilitative health care*: appropriate treatment for common diseases and injuries.

An aspect of primary health care which can be applied to all three categories is *education concerning prevailing health problems and the methods of preventing and controlling them.*

For all these aspects the following question can be asked:
Does it apply to the country and population as a whole, or are there either geographical areas and/or specific groups in the population that either lack basic conditions, do not (fully) participate in prevention programmes or do not have access to curative and rehabilitative health services?

The situation in the Southern Mediterranean region

The twelve countries in the Southern Mediterranean region all subscribe the WHO's objective of Health for All by the Year 2000, which has been adopted by the World Health assembly in 1977. By subscribing to the objective of health for all, governments commit themselves to "attain as a minimum by all peoples in all countries, a level of health that enables them to work productively and participate actively in the social life of the community in which they live".[3] Health for all goals include equitable distribution of resources and primary health care available to the whole population. Primary health care targets by year 2000, include access to safe water (85%), adequate sanitary facilities in the home (75%), immunisation (90%), local health care (first-level facilities), trained personnel for pregnancy, childbirth, and care for children at least up to the age of one (100%), and a reduction of infant, child and maternal mortality.[3]

There are large differences in the health problems the twelve countries in the Southern Mediterranean region have to deal with. A few countries are still in the process of improving the basic conditions (access to safe water and sanitation for all), others are strongly involved in preventive health care (maternal and child care, immunisation, prevention and control of local endemic diseases), while others are mainly concerned with problems at the level of curative and rehabilitative health care (coverage and access, supply and organisation). There is a clear relation between the economic development of a country, the health problems it faces and the aims of its health policy. In countries with higher standards of living, basic conditions are often met and

child and maternal mortality is low. In these countries, the focus is shifting to other health problems, such as chronic diseases, and to the organisation and accessibility of curative health services.
In the next part of this chapter development and health indicators, basic conditions, preventive health care, and curative and rehabilitative health care in the twelve Southern Mediterranean countries will be discussed, in sequence.

Development and health indicators
In table 1 an overview is given of development and health indicators per country. The countries are ranked according to their general national product (GNP) per capita in $. There is a clear distinction in development and health indicators between the Arab countries and Turkey on the one hand and Israel, Cyprus and Malta on the other hand, although illiteracy rates are relatively low in Lebanon and Jordan. These differences are reflected in the health policy of the countries.

Table 1 Development and health indicators Southern Mediterranean region (1995-1996)

	GNP per capita in $	illiteracy rate men	illiteracy rate women	infant mortality rate per 1,000	under-5 mortality rate per 1,000	maternal mortality ratio per 100,000
Egypt	790	36	61	32	40	174
Morocco	1,110	43	69	57	76	332
Syria	1,120	14	44	32	40	179
Algeria	1,600	26	51	55	42	140
Jordan	1,600	9	19	32	34	40
Palestinian Authority	1,700	8	23	25	28	70/80
Tunisia	1,820	21	45	31	38	69
Lebanon	2,660	5	10	28	40	300
Turkey	2,780	8	28	48	63	183
Malta	7,970	14	18	7	12	0
Cyprus	11,650	2	10	8	10	5
Israel	15,920	5	11	8	9	5

Sources: World Bank estimates 1997; UNICEF statistics 1997; national sources.

In most Arab countries and Turkey, improving basic conditions and maternal and child health care are still main issues of health policy. In Malta, Cyprus and Israel the priorities of the government are of a different nature. Reorganisation and managing of the curative health sector are important issues. Much attention is given to matters concerning the quality, efficiency and effectiveness of the system. Health promotion has also become a major issue in these countries.

Basic conditions

Basic conditions such as proper nutrition, safe water and sanitation have an enormous impact on the health of a population, especially on life expectancy and infant mortality rates. All governments consider it their core task to provide these conditions. In most countries over 85% of the inhabitants have access to safe water (table 2). However, in some countries access to safe water remains a problem, especially for the rural population.

Table 2 Access to safe water and sanitation, immunisation rates Southern Mediterranean region (1995-1997)

	access to safe water	access to sanitation	immunisation rate, % children at age 1 DPT	polio	measles
Egypt	80	48	91	92	89
Morocco	59	63	79	79	92
Syria	87	78	100	96	95
Algeria	78	91	77	90	75
Jordan	98	65	100	100	98
Palestinian Authority	84	31	96	96	95
Tunisia	86	72	90	92	91
Lebanon	94	63	94	95	82
Turkey	92	94	86	77	75
Malta	100	100	85	90	na
Cyprus	100	96	96	96	83
Israel	100	70	92	93	94

Sources: World Bank estimates 1997; UNICEF statistics 1997; WHO statistics 1996; national sources.

Access to sanitation is a larger problem. In many countries, such as Egypt, Jordan, Morocco it still needs attention, and efforts are taken to improve this condition. In the West Bank and Gaza strip access to sanitation is still a main problem, especially for the refugees who live in camps.

Preventive health care

Preventive health care generally is considered a primary responsibility of the government. Each of the twelve countries, irrespective of its degree of economic development, provides mother and child care. In many Southern Mediterranean countries infant, child and maternal mortality rates are still high (see table 1) and major efforts have been made to reduce these figures.

Maternity care and family planning are often given priority status in the health policy of these countries, and in many countries maternal clinics, health stations or hospitals exist, where antenatal services are provided. However, a major problem in some

countries remains that many women do not receive -sufficient- antenatal care and deliveries take place at home without the assistance of trained health personnel, especially in rural areas.
Immunisation programmes have been implemented in all countries and the percentages of children immunised at age 1 against DPT, polio and measles generally is high (table 2).
As diarrhoeal diseases and acute respiratory infection still are a principal cause of death in many countries, many governments pay attention to prevention of these diseases (in the case of diarrhoeal diseases by promotion of oral rehydration therapy), sometimes by means of special disease-oriented programmes or projects (e.g. Turkey), sometimes by a more comprehensive approach (e.g. Egypt).

Curative and rehabilitative health care
Where basic conditions and preventive health care form an essential part of the primary-health-care-concept, this is not automatically the case with curative and rehabilitative services. Here a distinction should be made between: directly accessible, ambulatory and generalist health services and institutional, specialist services that often require a referral from the directly accessible care. As regards curative and rehabilitative health services, one can distinguish:
- conditions governing coverage and access;
- the supply of health care providers and facilities;
- the demand for health services.

conditions
Coverage of the population varies widely from country to country, depending on the economic development of the country and the choices made by its government. Countries with a low or intermediate general domestic product (GDP) cannot afford to have high health expenditures; they either ration health care facilities more or less equally over the population (everyone entitled to a limited amount of services) or they allow a more uneven pattern, i.e. curative services available for those who have insurance or who can afford services out of pocket or with some private insurance.
Southern Mediterranean countries differ in their approach. In some countries public health services are free, and all inhabitants can make use of these services. In other countries these services are free for special groups (persons with a low income, government employees), while the rest have to pay for these services, or have to pay for health insurance. In some countries, lack of coverage of part of the population is still a problem. With a country's changing economic position and shift from a subsistence economy to an economy that is based on industrial and service products, increasing opportunities occur to introduce a (limited) health insurance or a taxation based national health service.

health care provision

Whatever the level of coverage against costs of illness is, an adequate utilisation of scarce resources is a relevant policy target in any health care system. Access to curative and rehabilitative health services depends also on the structure and organisation of the health care system. If there is no selection mechanism, people tend to seek the highest specialised level of care, when they or their children are ill. The only barrier is whether they can afford it. A division into directly accessible, generalist health services (community nurses, general practitioners, midwives, general health attendants) that treat most of the cases and refer the more complex cases to medical specialists and hospitals as gate-keepers is an accepted cost-effective way of health care organisation. Some indicators for curative and rehabilitative services are provided in table 3. These are crude and not necessarily reliable figures, because there is no single source of information. Besides, a distinction in primary care services, like district nurses and family doctors, cannot be made for most of the countries.

The amount spent on health care, expressed as proportion of the GDP, varies from 4% for Turkey and Morocco till 8.7% for Israel. Jordan spends a relatively high proportion on health care. It is clear that the countries with a higher GNP have a higher number of hospital beds. It is known that hospital expenditures, generally, are the major element in a country's health expenditures. Physician to population rates vary from 0.3 in Morocco to 4.6 per 1,000 inhabitants in Israel. Egypt and Lebanon have relatively high rates.

The nurses/population rates are generally somewhat higher than the physician/population rates. As mentioned, these figures have to be interpreted with care, because of different inclusion criteria. Israel and Cyprus have elevated nurses to population rates.

Table 3 Health care provision indicators in the Southern Mediterranean region (1993-1996)

	health expenditure % of GDP	hospital beds per 1,000	physicians per 1,000	nurses per 1,000
Egypt	5.0	2.1	2.1	2.6
Morocco	4.0	1.7	0.3	1.0
Syria	na	1.3	1.1	1.7
Algeria	4.6	2.2	0.9	3.0
Jordan	7.9	1.8	1.7	1.1
Palestinian Authority	na	1.1	0.7	1.5
Tunisia	6.2	1.8	0.7	2.8
Lebanon	5.3	1.7	2.0	1.0
Turkey	4.0	2.5	1.1	0.9
Malta	na	5.4	2.4	na
Cyprus	4.8	5.1	2.5	4.3
Israel	8.7	5.9	4.6	7.9

Sources: World Bank estimates 1997; WHO statistics 1996; national sources.

In the Southern Mediterranean countries there are differences in structure and organisation, but also some common problems. In most countries there are both a public and a private sector, while sometimes also non-governmental organisations (NGOs) provide different services. Often effective co-ordination between these sectors is a major problem.

Furthermore, often there is no co-ordination between primary and secondary health care. Also in some countries there are still large disparities in health care provision between areas. Rural areas and remote districts are being under-served.

demand for health care

Continuous education on health behaviour including an adequate utilisation of health care is one of the main challenges in any health care system. Which symptoms should worry the public; what to do with a child running a temperature; why finish an antibiotic treatment anyway if the symptoms are relieved; how to recognize health hazards? These are questions that a proper continuing programme at schools but also among the general public could answer. A high level of illiteracy is a barrier to health education; oral instruction is crucial in this case. This is still a matter of concern in some countries, especially as regards women.

References

1. Starfield B. Is primary care essential? The Lancet 1994;344:1129-33.
2. Starfield B. Is strong primary care good for health outcomes?
3. The World Bank Group. Health, nutrition, & population. Washington D.C.: The Human Development Network, the World Bank Group. 1997
4. World Health Organisation. Alma-Ata 1978. Primary health care. Geneva: WHO/UNESCO

PART II

COUNTRY REPORTS

ALGERIA

F. El Fakiri

The country

The Democratic and Popular Republic of Algeria is one of the largest countries of Africa, bordering Morocco to the west, Tunisia and Libya to the east and Mali, Mauritania and Niger to the south. Algeria has a young population (half of which is under 20 years old), and a high rate of population growth despite family planning efforts. Sixty-five percent of the Algerian population lives in only 4% of the country's land area in the north, while in the south, 10% of the people live in nearly 87% of the land area.[1] Algeria is also undergoing rapid urbanisation and internal migration, mainly from rural areas. Administratively, the country is divided into 48 wilayas, 160 dairas and 1,540 baladaias.

Statistical key figures, 1995-1996[1-3]

Population	
population in mln	28,4
population per sq.km	12
% annual growth	1.9
% urban	6
% under 20	50
% 60 and above	6
Development	
illiteracy rate men	26
illiteracy rate women	51
GNP per capita in $	1,600
% access to safe water	78
% access to sanitation	91

Natality, mortality and health	
crude birth rate (per 1,000)	25
total fertility rate	3.9
contraceptive prevalence rate	57
crude death rate (per 1,000)	6
infant mortality rate	55
under-5 mortality rate	42
maternal mortality ratio (per 100,000 births)	140
% DPT immunised at age 1	77
% polio immunised at age 1	90
% measles immunised at age 1	75
life expectancy men	68
life expectancy women	71

Structure and financing of health care

The Algerian health care system is divided into three sectors: public, private, and semi-public. The public sector is by far the biggest, providing nearly all hospital care, a large part of ambulatory care and all preventive medicine. The private sector consists mainly of medical, dental and pharmaceutical practices, and is very small, because private clinics have only been allowed since 1988. The semi-public sector comprises social security and company health facilities.

Algeria is divided into five health regions (Central, East, West, South-East and South-West), each comprising a specific number of wilayas.[4] Each wilaya is responsible for its health sectors, which are managed by wilaya health directorates. Health sectors

are the basic unit of the health system, and each consists of a number of sub-sectors for whose administration and human and material resources it is responsible. It is also responsible for all matters relating to preventive medicine, hygiene and epidemiology. Each sub-sector comprises a number of facilities providing both curative and preventive health care.[4]

Algeria's social security system was introduced during the colonial period, on identical lines to that developed in France a few years earlier. It is a combination of two systems: national insurance on the one hand, and free state health care for all citizens on the other.[5] It includes cover for medical costs, drugs, surgery, hospitalisation, analysis and laboratory costs. In 1990, the social security system covered 87% of the population, both salaried and non-salaried. Only unemployed people and their families do not benefit from national insurance cover.[5]

Because of the economic crisis, the country has seen a fall in real-term national health spending, from 6% of GDP in the 1980s to 4.6% in 1993. Per capita health spending also fell by 28% between 1988 and 1995.[1] This situation has directly affected the sector's ability to deal with health needs, and the way in which it is currently financed is completely out of step with the economic changes that are taking place.

The numbers of hospitals and health personnel are as follows (1995-1996): [1-3]

hospitals	200		
hospital beds	60,984	beds per 1,000 population	2.2
physicians	25,491	physicians per 1,000 population	0.9
nurses	85,082	nurses per 1,000 population	3.0

In addition to the 200 hospitals, there are eight inpatient clinics, 13 university hospitals (which count up 50 hospitals and clinics), 28 EHSs, and 448 public and 42 private maternity units.[3]

The country's specialists are concentrated in the wilayas of Algiers, Oran and Constantine, where 53% of those in the public sector and 34% of those in the private sector are located. In general, the number of physicians per head of population is satisfactory, though there are still some inequalities between wilayas. The number of private practitioners is small, but growing very rapidly.[1,5]

Organisation of primary health care

Primary health care

Primary health care is provided at a variety of facilities, including polyclinics (covering an estimated 25,000 people), health centres, health care and consultation rooms (which exist only in rural areas), rural and maternity hospitals, and family planning centres.[6] Rural regions, the Sahara, and the poor areas of towns and cities are

covered by mobile groups responsible for such things as vaccinations and checking drinking-water quality. These are supervised by the polyclinics.

Mother and child care

A minimum of four antenatal consultations must be provided, or more for high-risk pregnancies. One of these takes place in the first three-month period, one in the second, and two in the third. The consultations are provided by rural midwives, general practitioners or obstetricians working in health facilities and providing PMI services (basic care units, maternity units and hospitals). In addition, mothers must receive at least two doses of anti-tetanus vaccine to protect their babies; these are given four weeks apart, with the second at least two weeks before the birth.

In 1992, 57% of pregnant women received antenatal checks; of these, 68% were carried out by doctors, and 41% by midwives. There was better coverage in urban areas (70%) than in rural regions (47%).[7,8] Pregnant women who had not undergone these checks, particularly those in rural areas, said the main reason for this was the fact that no health service was available, or that it was too expensive. In 1991, 20% of pregnant women were vaccinated against tetanus. Throughout the country, 76% of births took place with medical assistance in 1992.[1]

Algeria's breast-feeding programme encourages mothers to feed their babies only breast milk for the first four to six months. Just over half of babies aged four months were breast-fed in 1992. The number of children fed only breast milk shows a linear decrease from 82% of babies aged less than one month to 17% for those between 18 and 24 months.[1]

Reproductive health and family planning services are widely available in Algeria, with a network of 2,000 units covering all the wilayas. These employ a large number of people, with one midwife per 900 women of childbearing age, and one gynaecologist per 7,000 women of childbearing age.[1]

Other programmes relating to mother and child health are in progress: these include campaigns on child respiratory disorders, nutrition, and acute rheumatoid arthritis.

Immunisation programme

The aim of the Expanded Vaccination Programme is to reduce or eradicate the six childhood infectious diseases: tuberculosis, diphtheria, tetanus, whooping cough, polio and measles. The intention is to achieve a vaccination rate of over 80% of the target population in each of the country's health regions. The programme has achieved visible results, but there are still differences between urban and rural areas; 71% of children have been fully vaccinated by the age of one year. A new vaccination schedule was introduced at the beginning of 1997, involving a polio vaccination at birth, a measles booster at the age of six, and DT boosters every ten years from the age of 18.

Health policy

Algeria's national health policy aims to provide universal access to health care by the year 2000. The policy has been reflected in the introduction of free public health care in 1974, which resulted in a major improvement in the national health care system. In addition, health insurance has gradually been expanded to cover nearly all social groups, beginning with those in employment and most recently being extended to vulnerable people. Physical access to health care has improved as a result of the increase in the size of the health infrastructure and its distribution across the whole of the country.[1] In terms of prevention, progress has also been made in terms of increasing the number of basic health units, achieving greater specialisation, and implementing integrated prevention programmes.

The national health policy considers prevention as a priority within primary health care. In terms of the Algerian constitution, the State is in complete charge of prevention. This policy tends to invert the process which has led to more investment in the curative than in the preventive system, in spite of the fact that prevention was given priority for many years by the public authorities.[3]

Problems and recent developments

In spite of the socialist orientation of the country and the influence of the Eastern European countries in terms of the organisation of health services, medical education and training have mainly been influenced by the French system. This means that the emphasis is in general placed on hospital care to the detriment of primary health care. The infant mortality rate is very high, in comparison not only with the developed countries, but also with other countries with similar income levels such as Jordan and Tunisia.[1,7] This level remains unacceptable high, taking into account the resources carried into effect.

Diarrhoeal diseases are one of the main causes of morbidity and mortality in children under 5. In 1994, 20% of child deaths before the age of 1 were believed to have been caused by diarrhoea. In order to reduce this mortality, efforts are being made to promote breast-feeding, make early use of rehydration salts and develop close links between basic health care units and local hospitals.[7] In addition, the availability of, access to and quality of antenatal and postnatal care need to be improved by increasing the number of primary health care centres, nurses and midwives.[6]

The problems encountered in the Algerian health system concern particularly the insufficiency of financial resources for the prevention and the inequalities in the medical coverage between the different regions of the country. Otherwise, some specialised educational profiles (e.g. epidemiology) are only present in the northern regions.[3]

Nevertheless, the public health services are developing ways to covering the southern regions of the country. Some domains have achieved a great deal of success, such as

the school health programme since 1995, the Vaccination Programme and the struggle against waterborne diseases. To develop these programmes, the public health services is looking for the participation of other sectors (local communities, national education, agriculture, social security etc.) to ensure the necessary intersectorial effort to carry prevention programmes into effect.[3]

References

1. Politiques de la population, de l'environnement et de la prévention. Ministère de la santé et de la population. ANDS, 1997.
2. Annuaire statistique de l'Algérie; Office National des Statistiques; Algiers, 1996
3. Ministry of Health and Population, Algiers, 1997
4. Boussouf R. Géographie et santé en Algérie. Office des publications universitaires, Algiers, 1992.
5. Grangaud MF. Systèmes de protection en matière de santé en Algérie; Médecins et protection sociale dans le monde Arabe by: B. Curmi and S. Chiffoleau. Les cahiers du Cermoc no. 5. 1993.
6. Stephen WJ. Primary Health care in the Arab World. Somerset House, UK. 1992.
7. Seminaire-atelier sur les programmes de santé maternelle et infantile. Ministère de la santé et de la population. ANDS, 1997.
8. Forts des J. Le droit de vivre et de bien vivre pour celles qui donnent la vie: le cas de l'Algérie. Migrations Santé. 1996:86:9-38.

Acknowledgement

The authors thank the following persons for supplying additional information and reviewing the draft of the report on Algeria:
Abdelkadir Samid, Ministry of Health and Population, Algiers,
Abdelkadir Guenar, Ministry of Health and Population Algiers.

CYPRUS

M.G. Weide

The country

Cyprus is an island of 9.251 sq.km, in the north-eastern part of the Mediterranean Sea. Under the 1960 Constitution Cyprus became an independent republic; a president is elected every five years. The island is divided into a Turkish-Cypriot and a Greek-Cypriot side, after a dispute followed by a military action of Turkey in 1974. The population is 85% Greek, 12% Turkish and 3% of other ethnic background.[1-3]

Statistical key figures, 1995[2-7]

Population		*Natality, mortality and health*	
population in mln (1996)	0.7	crude birth rate (per 1,000)	15
people per sq.km	79	total fertility rate	2.2
% annual growth	0.8	contraceptive prevalence rate	na
% urban	69	crude death rate (per 1,000)	8
% under 15	25	infant mortality rate	8
% 65 and above	11	under-5 mortality rate	10
		maternal mortality ratio	
Development		(per 100,000 births)	5
illiteracy rate men (1992)	2	% DPT immunised at age 1	96
illiteracy rate women (1992)	10	% polio immunised at age 1	96
GNP per capita in $	11,650	% measles immunised at age 1	83
% access to safe water	100	life expectancy men	75
% access to sanitation	96	life expectancy women	80

Structure and financing of health care

Cyprus has a dual system of health care delivery. The public system is run by the government, while the private system is provided by private hospitals and practitioners. The Ministry of Health (MOH), as the responsible ministry for promotive, preventive, curative and rehabilitative services, formulates national health policies and co-ordinates the activities of both the public and private sector. Primary health care services are also provided at the government outpatient centres and private medical practitioners' clinics, secondary care is mostly provided by the private sector (especially gynaecology, maternity and paediatrics), while tertiary care is provided almost entirely by the government sector.[2] There is no formal system of referral between the various levels.[1] Patients are free to choose the providers within the dual health care delivery system. They can walk in for a consultation at any private clinic or governmental hospital or outpatient department. For emergency services, patients can go to any Accident & Emergency department of the governmental hospitals and rural health

centres, which operate on a 24 hour basis.[2]

Although in Cyprus -as yet- no national health insurance scheme exists, a survey carried out in 1989 showed that 93% of the population believed themselves to be covered by government services (67%), both government services and one additional scheme (22%) or a non-governmental scheme (4%). In fact the public sector is free to families with a yearly income of less than 7,000 pounds and to certain categories of employees, which amounts to about 60% of the population. However, a large percentage of those entitled to medical care from the government health services sought health services in the private sector.[7]

The government health services are financed through the governmental budgets, and the private health services through direct out-of-pocket payment, or through the trade union medical schemes.[2] The total expenditure on health services is about 4.8% of GDP, which is funded by the government (35%), private medical funds, household budgets and international donors (65%).

The most recent numbers of hospitals and health personnel are as follows (1995).[4,8]

hospitals	10		
hospital beds	3,298	beds per 1,000 population	5,1
physicians	1,588	physicians per 1,000 population	2,5
nurses	2,767	nurses per 1,000 population	4,3

Of the hospitals, five are general hospitals, two special hospitals and three rural hospitals.

The number and qualifications of all health workers are controlled and evaluated through national mechanisms, special legislation and regulatory mechanisms. The required numbers are specified yearly according to the island's needs and approved by the Legislative Body. The qualifications, duties and responsibilities of all categories of health workers are also regulated by law. However, as most professionals study outside Cyprus, with the exception of nursing personnel and health inspectors, no mechanism exists to control the supply of the required human resources for all the sectors of the health care delivery system.[2]

Organisation primary health care

Primary health care

There is no formal system of primary health care in Cyprus, and primary health care is not a recognised speciality. There are very few doctors specialised in general medicine. All doctors in Cyprus are providing general practitioner services. In the governmental sector primary medical care is provided in urban and rural health centers. All essential drugs are available in the pharmacies of these centres. In rural areas there

are about 300 sub-rural health centers where a doctor visits a few times a week. In health centres primary care is provided by a team of physicians, nurses, health visitors etc. Also, primary care is frequently provided by specialist physicians and surgeons working in public-sector general hospitals in the outpatient department. In the private sector, all registered doctors are providers of primary health care; this is mostly provided by physicians, pediatricians and generalists.[2]

Mother and child care

In 1995 all pregnant women attended a public (33%) or private (67%) ante-natal clinic. Also, all deliveries were attended by trained personnel; virtually all women delivered in a public or private maternity clinic. Since 1996 mother craft and relaxation classes have been expanded all over Cyprus. In the same year the MOH formed a central committee to support breast-feeding and the establishing of the first "Baby Friendly Hospital". Family planning services are available in the public and private sector as well as through family planning association.[2]

Immunisation programme

Cyprus has a National Immunisation Programme, including immunisation of infants against poliomyelitis, diphtheria, tetanus, whooping cough and measles before their first birthday. At present neonatal tetanus and diphtheria have been completely eradicated, while only sporadic cases of whooping cough have been recorded. The coverage against measles (83%) needs further improvement.[2]

Health policies

As a member of the WHO, Cyprus is actively involved in most WHO-programmes and activities. The government subscribes the WHO's objective of health for all by the year 2000. Virtually all people on the island have access to safe drinking water and adequate excreta disposal. Deaths from diarrhoeal diseases due to lack of water supply or sanitation facilities were not observed for many years. To secure quality, safety and sustainability of water, various monitoring and research activities are undertaken by the MOH.[2]

Promotion of health care is one of the top priorities of the government. Since 1994 Cyprus is a member of the European Network of Health Promoting Schools. This project includes ten schools (six primary and four secondary schools) in a pilot study. Each school has a 'health team' composed of the head teacher, teachers, student representatives, health visitors and community representatives, which develops a plan for the promotion of a more healthy environment and for health promotion activities. Furthermore, many activities are aimed at health education in the area of smoking, nutrition, AIDS, hepatitis, accidents and occupational health, oral health, poisoning and food contamination. Food safety is considered of paramount importance for the

protection of public health. In order to secure food safety and quality, a multi-sectoral monitoring system has been implemented.[2]

Problems and recent developments

At the moment the supply side of the health care system in Cyprus is not well structured to meet the anticipated growth in demand. The system is fragmented, with little continuity of care and poor communication between doctors and between the public and private sector.[2] There is no comprehensive system of primary health care, and primary care is mostly provided by doctors who are not trained in general medicine. The emphasis in primary health care services lies upon cure rather than prevention. There is significant under-utilisation of most rural health centres and duplication of services due to the lack of a unified health care system.[2] Other problems mentioned by the MOH concern quality issues (lack of practice standards, long waiting lists in the public sector, lack of quality monitoring systems), and issues of efficiency and effectiveness (oversupply of physicians and other health care workers, oversupply of hospital beds, danger of inefficient and inappropriate technology, overuse/misuse of expensive drugs, poor management of public hospitals and a strong centralised management system).[2]

To remedy these problems, the government of Cyprus is planning to reform the health care system, including the introduction of a National Health Insurance Scheme.[9] An essential part of the reform plans is the establishment of a comprehensive primary health care system. Consultants requested to review the Cyprus health care system emphasised the need to introduce the family physician as 'gatekeeper' in the system.[9] In this way the flow of patients into the expensive hospital system could be controlled. At present, with the collaboration of a British university and the assistance of WHO, a training programme is being implemented for General Practitioners. Also a number of urban and rural primary health care centres have been built in view of expanding primary health care services to cover remote areas. These are staffed by both government as well as private physicians. The plans for reforming public-sector hospitals are aimed at improving management by the creation of information systems, and by decentralisation of management so that each unit can make decisions about its own affairs. Furthermore, as part of the reform plans, the government of Cyprus is in the process of implementing changes in the present structure of the MOH.[2] An important change is the establishment of a Department of Planning, Research and Information, which is responsible for strategic health planning and the development of a Health Information System.[2,10] In the present structure, such an unit is absent. Finally, the plans include full co-ordination between the government and the private health sector, which at present is limited.[2]

References

1. Ministry of Health. Cyprus public health at a glance. Cyprus: Nicosia 1997.
2. Ministry of Health. Health in Cyprus. Cyprus: Nicosia 1997.
3. CIA. The World Factbook page on Cyprus. Website: www.odcj.gov/cia/publications/nsolo/wv6-all.htm/
4. Ministry of Finance. Demographic report 1995. Department of Statistics and Research, Ministry of Finance. Cyprus 1996.
5. The World Bank. World Development Indicators 1997. Washington: The World Bank 1997.
6. UNICEF. Cyprus Statistics. Website: www.unicef.org/statis.
7. Ministry of Health. Health care in Cyprus. Cyprus: Nicosia 1993.
8. Ministry of Finance. Health and hospital statistics 1995. Department of Statistics and Research, Ministry of Finance. Cyprus 1997.
9. Consultancy team. Proposals for a national health insurance scheme. 1992.
10. Nuffield Institute for Health. Review of the management and organisation of the Ministry of Health, Republic of Cyprus. UK/Cyprus: Leeds/Nicosia 1993.

Acknowledgment

The authors thank the following persons for supplying additional information and reviewing the draft of the report on Cyprus:
Andreas Polynikis, Ministry of Health, Nicosia.

EGYPT

F. El Fakiri

The country

The Arab Republic of Egypt is one of the most densely populated countries on the African continent. It occupies the north-eastern corner of the continent, bordering Israel to the north-east, Libya to the west and Sudan to the south. The Mediterranean Sea and Red Sea adjoin the north and east of the country respectively. As over 90% of the country is covered with desert, the vast majority of the population is forced to live along the banks of the Nile River and delta. This situation exists despite the government policy of land reclamation and fostering of new settlements in the desert. Egypt is divided into 26 governorates and a city with particular characteristics (Luxor) which are commonly grouped into three main areas: Urban Governorates (Cairo, Alexandria, Port Said and Suez: 20% of population), Lower Egypt (nine governorates in the Nile Delta with 43% of population) and Upper Egypt (eight governorates in the Nile Valley: 35% of population). The remaining five Frontier Governorates are located on the eastern and western boundaries of Egypt and include less than 2% of the population[1].

Statistical key figures, 1996[2]

Population		*Natality, mortality and health*	
Population in mln	61.5	crude birth rate (per 1,000)	28
people per sq.km	59	total fertility rate (1995)	3.4
% annual growth	2.1	contraceptive prevalence rate	41
% urban	44	crude death rate (per 1,000)	6
% under 15	35	infant mortality rate (1992)	32
% 60 and above	5	under-5 mortality rate (1993)	40
		maternal mortality ratio (92/93)	
Development		(per 100,000 births)	174
illiteracy rate men	36	% DPT immunised at age 1	91
illiteracy rate women	61	% polio immunised at age 1	92
GNP per capita in $	790	% measles immunised at age 1	89
% access to safe water	80	life expectancy men	63
% access to sanitation	48	life expectancy women	66

Structure and financing of health care

Egypt's health services consist of three broad sectors:[3]

1. the government sector (including the Ministry of Health and Population), university hospitals, other ministries and the Public Organisation for Teaching;
2. the public sector including the Public Organisation for Health Insurance (HIO), the

Curative Care Organisations (CCOs) and other public organisations that provide mainly hospital services;

3. the private sector which provides its services through private clinics, polyclinics or group practices managed by private physicians or NGOs and private hospitals.

Health services are provided at the regional (governorate), district (markaz) and village levels. Each governorate in Egypt has a health director (or under-secretary) responsible for MOH activities. He is aided by a deputy director for public health and another for curative services. The governorates are divided into districts, headed by a general district officer appointed by the governor. Each district has a district health director, aided by a chief nurse and chief sanitation officer.[3]

In January 1996, the Ministry of Health and the Ministry of Population and Family Planning, which was established prior to the International Conference on Population and Development held in Cairo in 1994, merged to form the Ministry of Health and Population (MOHP). The MOHP has a nation-wide network of more than 4,000 primary, secondary and tertiary health care facilities through which maternal and child health care services are provided. In addition, the MOHP controls and regulates the work of all non-governmental health care organisations and facilities and all service providers.[3]

By 1984, health insurance was compulsory for about 3 million public sector and government employees and provided medical care and sickness benefits.[4] It was planned to extend coverage by 500,000 employees per year so that by 1990, 6.5 million people would be insured. At the end of 1995, there were 20,670,754 HIO beneficiaries, including 14,819,205 school children. Since 1 October 1997, every newborn child has been insured, so 1.5 million will be added every year. This means that by the end of the fifth year, there will be 7.5 million more beneficiaries.[2]

In 1994, total health expenditure was 5% of gross domestic product (GDP). Government expenditure is just over 3.4% of GDP and private sector expenditure is about 1.6%.[5]

The most recent figures available on health institutions and personnel are indicated below.[2]

hospitals	1,534		
hospital beds	117,802	beds per 1,000 population	2.1
physicians (1985)	125,561	physicians per 1,000 population (1992)	2.1
registered nurses (1985)	152,741	nurses per 1,000 population (1992)	2.6

There are about 882 government hospitals and an estimated 752 private hospitals. The total number of beds was 117,802: 59% were in MOHP hospitals, 20% in other

government hospitals, 10% in public business sector hospitals and the remaining 10% in private hospitals.[5] All government hospitals provide free outpatient services and inpatient and emergency care. For a small additional payment per day, and at half the cost of what the treatment would be in the private sector, better facilities, food and nursing care can be provided in government hospitals.[4]

Organisation of primary health care

Primary health care

The service delivery units are organised along different lines. These may be geographical (rural and urban), structural (rural health units, rural hospitals, urban health centres, etc.), administrative (health offices), functional (maternal and child health centres), or programme-related (immunisation, family planning, diarrhoeal disease control).[2]

The classification that is predominantly used is that of physical structure. According to 1995 statistics, the health facilities that provide preventive and PHC services based on "physical structure" are: Rural Health Units (RHUs), Rural Health Centres (RHCs), Rural Hospitals (RHs), Health Offices (HOs), Maternal and Child Health (MCH) Centres, Urban Health Centres (UHCs), and Maternal and Child (MCH) Hospitals.[2]

RHUs provide curative and PHC services in rural areas at the outpatient level. There are 2,209 RHUs. RHCs are responsible for providing curative and PHC services in rural areas for outpatients and inpatients. There are 416 RHCs with 5,976 beds. Each RHC has 15-20 beds, but these are hardly used, and so there are no inpatient services provided by RHCs. On the other hand, plans to convert RHCs to Rural Hospitals continue to be implemented. RHs provide curative and PHC services in rural areas on an outpatient and inpatient basis, including surgery, clinical pathology and radiology. There are 161 RHs with 4,021 beds. The number of beds per RH ranges between 30 and 60, and the average occupancy rate of these beds is less than 4%. Health Offices exist in urban areas and are responsible for providing birth and death registration, food inspection and control, and other preventive services. There are 354 HOs.

MCH Centres exist in urban areas and provide antenatal care, delivery, postnatal care and pre-school child health services. There are 334 beds within 244 MCH Centres. Not all MCH Centres have beds. There are two ongoing plans for the MCH Centres. One plan to upgrade the MCH Centres to Urban Health Centres led to a decrease in the number of stand-alone MCH Centres to 194 in 1997. The other plan is to improve their functions by introducing delivery rooms. Out of the 194 MCH Centres, 112 are government-owned and 82 are leased. UHCs provide integrated HO, MCH and outpatient services at the general practitioner (GP) level. There are 167 UHCs. This number has increased recently to 196 due to the upgrade of MCH Centres to UHCs.

MCH Hospitals provide antenatal care, delivery, postnatal care and pre-school child

health services. There are four MCH Hospitals with 390 beds.

Mother and child care

One of the fundamental goals of the health program in Egypt is ensuring adequate maternity care for women. It is recommended that pregnant women see a trained professional at least four times during pregnancy. Results from the Egypt Demographic and Health Survey, 1995 (EDHS-95) indicate that many Egyptian mothers do not receive antenatal care and that only 28% have frequent check-ups during pregnancy (four or more visits).[1] Antenatal care is more often provided by private doctors or clinics.

Since the late 1980s, tetanus toxoid coverage has increased rapidly in Egypt (from 11% in 1988 to 70% in 1995). This is most likely a result of the extensive public education campaign to promote tetanus vaccinations during this period.[1]

The majority of Egyptian babies are born at home without any assistance from trained medical personnel. Doctors or trained nurses/midwives assisted less than half (46% in 1995) of all deliveries and only around one-third of deliveries took place in a health facility (18% in governmental health facilities and 15% in private hospitals or clinics).[1]

Although the use of ORS packets or an equivalent home-made solution to combat dehydration is common in Egypt, diarrhoeal diseases are still a common cause of child mortality.

Immunisation programme

An essential element in improving survival in Egypt during childhood is increasing the proportion of children vaccinated against the major preventable diseases: 95% of children aged 12-23 months are fully immunised against tuberculosis, diphtheria, whooping cough, tetanus, polio and measles. More than 90% have also received the recommended three doses of the hepatitis vaccine.

Results from EDHS-95 indicate that only 3% of children had received no vaccination during the five-year period before the EDHS-95.[1]

Health policies

Health policy in Egypt is based on the public's right to free basic health services. Health promotion, prevention and control of health hazards, and rehabilitation of the handicapped form the objectives of health services. The MOHP continues to retain 'health for all by the year 2000' as its main objective.

Through different programmes, the Egyptian government gives special attention to mother and child care. The Child Survival Project of Egypt, which began in 1984, achieved considerable progress in the reduction of infant and child mortality through immunisation against the major childhood diseases, control of acute respiratory infections, and maternal and child health care and family planning.

The government of Egypt's five-year plan for 1992-1997 lays down strategies for a new MOHP policy under which subsidised health care will be targeted to people in need, and fees for services will be introduced for those who can pay. Emphasis is being placed on community participation in health and the continual upgrading of health information systems. The plan identified maternal and child health (MCH) and family planning as priority areas.[1] Following the President's designation of the period from 1989 to 1999 as the decade for the protection and development of the Egyptian child, the National Council of Childhood and Motherhood was formed. The council's task is to co-ordinate activities between ministries implementing programs affecting children and mothers.

Under the above policies, the MOHP has developed many national programmes such as a childhood immunisation programme and programmes to control diarrhoea and acute respiratory infections. In addition, the ministry has set targets to eliminate poliomyetis and neonatal tetanus before the year 2000. By 1997, remarkable progress had been made in this field.

Further, the MOHP is stressing the importance of integrating family planning and MCH. Emphasis is being placed on improving health facilities in areas which are not adequately served, such as rural Upper Egypt.

In addition, a policy reform agenda is under discussion. This includes alternatives for health financing and the expansion of health insurance to cover more beneficiaries, control and improvement in the quality of health services, health manpower distribution and ways of improving remuneration for health workers.[1]

Problems and recent developments

The most important problems are:[2]

- *lack of appropriate priorities* which will result in the best use of limited resources.
- *limited government and insurance finances* for primary care, and the competing demands of non-primary care facilities, have resulted in an imbalance between resources available and the promised benefit package. This imbalance must be corrected, so that a truly feasible package of services can be promised and provided at an adequate level of quality.
- *lack of appropriate incentives* for efficiency or quality for government and insurance organisations and the absence of mechanisms for introducing such incentives. Public organisations receive poor value for money in terms of both the quantity and quality of services provided by their employees. They are often over-staffed and make little or no use of well-known incentive mechanisms to achieve better performance. They are unable to control or compete with private incentives available to their employees.
- *poor incentives on the demand side.* Beneficiaries of both government and insurance services are already receiving much, if not most, of their primary care from

private providers outside of the formal systems they are supposed to be part of, despite the fact that they pay substantially for these services.
- *fragmented and inefficient organisation of services* in the government, public and private sectors.
- *insufficient capacities in health care systems*: areas such as financing, management, planning, and research to support significant restructuring of the system.

At present, there is no comprehensive strategy for breaking out of the current system.

References

1. El-Zanaty F, Hussein EM, Shawky GA, Way AA and Kishor S. Egypt Demographic and Health Survey 1995. National Population Council, Cairo, Egypt and Macro International Inc. Calverton, Maryland USA. September 1996.
2. Ministry of Health and Population, Cairo, 1997.
3. Roemer MI. National Health Systems of the World. Volume I. The countries. New York/Oxford. Oxford University Press, 1991.
4. Stephen WJ. Primary Health Care in the Arab World. Somerset House, UK; 1992.
5. Medistat - Country Profiles: Egypt, MDIS Publications Limited, MDIS House, United Kingdom; february 1996.

Acknowledgment

The authors thank the following person for supplying additional information and reviewing the draft of the report on Egypt:
Hosni Tammam, Ministry of Health and Population, Cairo.

ISRAEL

M.G. Weide

The country

The state of Israel is situated at the eastern shore of the Mediterranean Sea. In its current form, it has a relatively short, albeit tumultuous, history. Although as early as the 1920s, Jewish immigrants claimed the land, it was only after the Second World War in 1948 that the state of Israel was established. The conflict with the Palestinians over the territory has been a recurrent source of tension in the region for many years and led to the occupation by Israel of the West Bank and Gaza Strip in 1967.[1,2] In 1994 Israel and the Palestinians started a dialogue in order to find a peaceful solution of this delicate question, which resulted in an agreement to place these regions under the self-government of the Palestinian Authority.[3] The population of Israel has grown rapidly since the founding due to immigration of Jews from Eastern Europe, North Africa, Russia and other countries. It is predominantly Jewish (about 80% of the total population, half of whom are immigrants) with a minority of Palestinian Arabs, Druze and Circassians.[4]

Statistical key figures, 1995[3,5-9]

Population		*Natality, mortality and health*	
population in mln	5.8	crude birth rate (per 1,000)	20
people per sq.km	268	total fertility rate	2.4
% annual growth	2.7	contraceptive prevalence rate	na
% urban	92	crude death rate (per 1,000)	6
% under 15 (1993)	30	infant mortality rate	8
% 60 and above	11	under-5 mortality rate	9
		maternal mortality ratio (1992)	
Development		(per 100,000 births)	5
illiteracy rate men	5	% DPT immunised at age 1	92
illiteracy rate women	11	% polio immunised at age 1	93
GNP per capita in $	15,920	% measles immunised at age 1	94
% access to safe water	100	life expectancy men	75
% access to sanitation	70	life expectancy women	79

Structure and financing of health care

The Israeli health care system consists of an abundance of health resources of all types. The Ministry of Health (MOH) is responsible for the supervision, planning and budgeting of health services provision. It is organized through three main divisions: the medical division, planning and budgeting, and administration. The medical division includes the national public health service, which is responsible for environmental

health, food supervision, epidemiology (including public health laboratories), and personnel and community health services. To administer their services the Ministry maintains six district and 14 sub-district offices, with centrally appointed medical directors who are trained in public health.[1]

The MOH not only supervises, but also provides health services. It owns and directly operates about half of the acute care hospital beds and provides preventive, infant- and maternal, psychiatric and -to a limited extent- long-term care in family health clinics and hospitals. Health services are also provided by the national health insurance. Of the four sickness funds, Kupat Holim Clalit (KHC) is by far the largest. Originally KHC was a sub-organisation of the General Federation of Labour, the Histadrut. In part due to its direct link with the Labour Party and Labour Union, KHC has dominated the sickness fund market for a long time, providing medical care to about 60% of the population. The other three funds, Maccabi, Meuchedet and Leumit, are much smaller.[2,4,7,10] KHC provides the majority of primary care services, operating some 1,300 outpatient (community) clinics and one-third of the acute hospital beds. The smaller funds often contract with independent physicians for primary care and purchase hospital services from government hospitals, KHC, and other agencies. In addition there are several non-profit hospitals, operated by voluntary institutions like the Hadassah Medical Organisation, and some private hospitals.[10,11]

The National Health Insurance Law of 1 January 1995 guarantees all Israelis a basic package of health services, consisting of curative and preventive outpatient care as well as hospital care. The four Israeli sickness funds provide uniform benefit packets, but they can sell supplemental coverage for extra services. Health care is funded by the government (about half the funding), a 5% pay roll tax for workers (23%) and patient out-of-pocket contributions (including supplemental insurance premiums, 28%). With the National Health Insurance Law the basic feature of the former system, direct payment of membership dues by consumers to sickness funds, has been altered. Now the funds receive capitation payments from the government based on the number, age and health status of enrollees.[4]

In 1995, total health expenditure was 8.7% of gross domestic product (GDP). In 1993, 39% of health expenditure went to hospitals and 32% to outpatient clinics.

The most recent figures on health institutions and personnel are given below (1995).[12]

hospitals	259		
hospital beds	33,159	beds per 1,000 population	5.9
physicians	25,898	physicians per 1,000 population	4.6
registered nurses	23,853	nurses per 1,000 population	7.9
licensed practical nurses	19,536		

Of the 259 hospitals, 48 are for general care, 25 for psychiatric care, 184 for long-term care and two for general rehabilitation.[12] The number of physicians was already high in the eighties (3.3 per 1,000 population in 1986), primarily because of the immigration of Jewish physicians and the large proportion of Israeli citizens who were trained in medical schools abroad. Since 1990 the number has grown to dramatic proportions, in spite of a law passed in 1987 which requires foreign-trained physicians to pass a test in order to obtain an Israeli medical license.[13]

Organisation of primary health care

Primary health care

A widely distributed network of 860 preventive family health stations and over 1,300 community clinics guarantees easy access to primary health care for all Israeli citizens. Almost half of the employed physicians work as salaried staff in primary care clinics. Doctor-nurse teams may be assisted by social workers, health educators, and dieticians, especially in the larger urban clinics. Also each clinic has a pharmacy and sometimes a laboratory and specialists. Services at the patient's home are arranged with a home care team, including nurses, physical therapists, home helps etc.[1,14] In the more isolated clinics doctors may attend only a few times a week; hence the day-to-day work in rural clinics is often done by nurses. Kibbutzim, which are also often located in geographically remote areas, have qualified staff and well-stocked facilities at their disposal.[2]

Israel was the first country to recognize formal criteria for specialist status in general practice in 1962. In 1994, about 400 doctors had completed the 4-year family practice residency programme and an additional 300 were in training, together comprising 25% of the country's primary care physicians.[15]

Mother and child care

Virtually all Israeli women give birth in a hospital or maternal clinic. The delivery is performed by licensed midwives in 75% of cases. Difficult deliveries and the delivery of premature infants are managed by an obstetrician. The government operates a network of about 700 community-based maternal and infant health stations. The services provided include prenatal care, nutrition counselling, vaccinations and development monitoring for children, family planning services and guidance for mothers.[16]

Immunisation programme

A very large proportion of Israeli children (over 90%) has been immunised for diphtheria, tetanus, pertussis, polio, measles, mumps and rubella. Different immunisation strategies were used to eradicate poliomyelitis; since late 1988 no new cases have occurred.[17]

Health policies

The health policy of Israel is in accordance with the objectives of the WHO for attaining health for all by the year 2000.[18] Israel joined the European Region of the WHO in 1985, and participates in the WHO Healthy Cities programme.[19] Virtually all households in Israel are connected to the water supply network, and most households dispose of sewage through a central sewage system. Some small settlements use septic tanks and cesspools, but they are gradually being linked to the central sewage system.[9] The government of Israel has always put a high priority on health services, and the health system is highly developed and offers many services. With the National Health Insurance Law any Israeli resident can get access to these services.

Health promotion has gained impetus during the past few years. There are numerous health education and health promotion programmes, aimed to improve health-related behaviour. The major activities have focused on risk factors associated with the more common chronic diseases, such as cardiovascular disease and cancer. Other programmes performed in family health centres or community centres deal with subjects as nutrition, accident prevention, physical activity etc.[9] Recently a national programme of screening for breast cancer among women aged over 50 was started. There are no specific programmes for family planning, although information is given at the mother- and child centres.

Quality of care has recently become an important issue in Israel. In 1992 the government established the Centre for Quality and Excellence to support quality improvement efforts in the business and human services sector, in particular the health and education system. At the same time the JDC-Brookdale Institute (Jerusalem) initiated and developed together with organizations in the United States a Quality Management Programme for Health Care Organizations in the Middle East and North Africa. Today 22 health care organizations in five countries participate in this programme.[20]

Problems and recent developments

The most important recent change in the Israeli health system is the introduction of the National Health Insurance Law and the planned reforms in the organisation of the health care system which came along with it. These were the answer to growing dissatisfaction by both consumers and providers with the existing system.[21] According to the State Commission of Inquiry into the Israeli Health System (the Netanyahu Commission), which reported to the government in 1990, the major problems of the system stemmed from lack of clarity regarding the rights of citizens to health care, lack of a clear allocation of responsibility and accountability among government, sickness funds, and providers, and the undue centralisation of the system.[22] There were striking differences in the geographic distribution of health personnel, and the network of primary care facilities was poorly integrated with the hospital system.[23] The reforms seek to improve the efficiency, quality and responsiveness of the system.

Under the National Health Insurance Law consumers have complete freedom of choice and movement between sickness funds, and the funds are obliged to accept any resident of Israel, regardless of age, physical or mental condition. In this way the funds are stimulated to improve their services in order to keep their market share. Other recommendations concern changing hospitals into autonomous units, forcing them to become more competitive, the withdrawal of the government from health care provision and the reorganizing the Ministry of Health. However, these recommendations have not yet been implemented.[10,11] An Amendment to the Law was recently proposed by the government including two major changes: 1) each sickness fund will determine its basket of services and 2) a 'flat fee' will be charged by each fund. The Amendment also includes transfer of all preventive medicine to the sickness fund.

At the moment there is wide variation in the performance of preventive activities in primary care. Although the majority of the primary care physicians perform preventive screening and health education activities during routine examination, a minority perform these activities for specially-invited groups. Also some of the preventive activities they do perform (e.g. cholesterol screening) are not proven to be of value for the general population,[24] so there is still room for improvement in this field.

References

1. Roemer MI. National Health Systems of the World. Volume I. The countries. New York/Oxford. Oxford University Press.
2. Boerma WGW, Jong FAJM de, Mulder PH. Health care and general practice across Europe. Utrecht: NIVEL, Netherlands Institute of Primary Health Care/ NHG, Dutch College of General Practitioners 1993.
3. CIA. The World Factbook page on Israel. Website: www.odcj.gov/cia/publications/ nsolo/wv6-all.htm.
4. Meyer H. Out of Israel. Hospitals and Health Networks 1997; April 5:62-68.
5. The World Bank. World Development Indicators 1997. Washington: The World Bank 1997.
6. UNICEF. Israel Statistics. Website: www.unicef.org/statis.
7. Census of the Institute of Social security, May 1997.
8. Central Bureau of Statistics. Statistical Abstract of Israel 1996.
9. WHO. Highlights on health in Israel. WHO Regional Office for Europe 1996.
10. Ellencweig AY, Chinitz DP. Israel's health system reform. The role of management in ensuring access and improving health status. Eur J Publ Health 1993:3:85-91.
11. Chinitz DP. Reforming the Israeli health care market. Soc Sci Med 1994;39:1447-57.
12. State of Israel/Ministry of Health. Health in Israel. Selected Data. Jerusalem: Ministry of Health, Health Information and Computer Services 1996.
13. Anderson GF, Antebi S. A surplus of physicians in Israel: any lessons for the United States and other industrialized countries? Health Policy 1991;17:77-86.
14. Gross R, Benbassat J, Nirel N, Cohen M. Quality of care in decentralized primary care clinics: a conceptual framework. International Journal of Health Planning and Management 1992;7:271-286.

15. Weingarten MA, Lederer J. The development of family medicine in Israel. International family medicine 1995;27:599-604.
16. Eidelman AI. Care of critically ill newborns. The journal of legal medicine 1994;16:247-61.
17. Goldblum N, Gerichter CB, Tulchinsky TH, Melnick JL. Poliomyelitis control in Israel, the West Bank and Gaza Strip: changing strategies with the goal of eradication in an endemic area. Bulletin of the World health Organisation 1994:74:783-96.
18. State of Israel/Ministry of Health. National health policy: targets for the year 2000. Ministry of Health, 1989.
19. WHO. National Healthy Cities Networks in Europe. WHO, Regional office for Europe 1994.
20. Habib J, Rahad M, Aboulafia M, Greenberg D. Quality management for health care in the Middle east and North Africa: professional cooperation as part of the peace process. Journal of quality improvement 1997;23:65-68.
21. Shmueli A. Israelis evaluate their health care system. Isr J Med Sci 1996;32:555-61.
22. Chernichovsky D, Chinitz D. The political economy of health system reform in Israel. Health Economics 1995;4:127-141.
23. Shuval JT. Health in Israel: patterns of equality and inequality. Soc sci Med 1990; 31:291-303.
24. Tabenkin H, Yaphe Y, Gross R. Preventive medicine in primary care in Israel: findings from a national survey. Public health Rev 1996;24:19-35.

Acknowledgement

The authors thank the following persons for supplying additional information and reviewing the draft of the report on Israel:
Revital Gross, JDC Brookdale Institute, Jerusalem,
Dan Michaeli, Ministry of Health, Givatayim.

JORDAN

F. El Fakiri

The country

The Hashemite Kingdom of Jordan is a small country located in the Middle-East about 50 miles from the eastern border of the Mediterranean Sea with a population of about 4.4 million. An estimated 1.5 million people live in the largest city Amman, and about 50% of the remaining population live in other urban areas. The remaining 20% of the population lives in rural areas. Jordan has limited arable land and chronic water shortages. The recent worldwide recession and Gulf war affected Jordan's economy adversely by causing a major decline in income, high inflation, and an increase in unemployment and poverty. Administratively, the country is divided into twelve governorates.

Statistical key figures, 1996[1]

Population		*Natality, mortality and health*	
population in mln	4.4	crude birth rate (per 1,000)	32
people per sq.km	47	total fertility rate	4.6
% annual growth	3.5	contraceptive prevalence rate	35
% urban	79	crude death rate (per 1,000)	5
% under 15	41	infant mortality rate	32
% 60 and above	4	under-5 mortality rate	34
		maternal mortality ratio	40
Development		(per 100,000 births)	
illiteracy rate men	9	% DPT immunised at age 1	100
illiteracy rate women	19	% polio immunised at age 1	100
GNP per capita in $	1,600	% measles immunised at age 1	98
% access to safe water	98	life expectancy men	66
% access to sanitation	65	life expectancy women	70

Structure and financing of health care

Jordan's health system is a complex amalgam of two major public programmes managed by the Ministry of Health (MOH) and the Royal Medical Services (RMS), some smaller public programmes, a large and growing private sector, and several non-governmental organisations (NGOs), including the largest one, the UNRWA, which provides care to Palestinian refugees.[2]

The MOH is responsible for the separate Civil Insurance Programme for civil servants and their dependants as well as the usual public health activities and health system regulatory functions. The MOH provides coverage for the poor and disabled and is also the social safety net for those without coverage. The RMS manages a health

insurance programme which is the second largest public programme in terms of expenditures (after the MOH), but the largest in terms of the number of individuals covered. Over 80% of MOH expenditure and about 86% of the expenditure of the RMS are financed through the government budget.[2]

The organisation of the health service is characterised by a strong private sector both at the hospital and at the primary care level. The private sector plays an important role in terms of both the financing and delivery of services. The government and private sectors are completely separate so that all health personnel must decide in which sector they will work. Some data is available concerning the number of personnel in the private sector but little is known about its organisation and pattern of work.

Each governorate in Jordan has a general health directorate responsible for the organisation and delivery of health services. The larger ones are being divided into districts with corresponding health directorates.[3]

Jordan's population is formally covered through various public (68%) and private insurance programmes (12%), while 20% has no formal coverage.[2] People are eligible for more than one programme and at the same time, if they have public coverage they may purchase private sector services through out-of-pocket payments. The UNRWA provides coverage to some 400,000 Palestinian refugees and is financed through foreign donor contributions.

Jordan spends an estimated 7.9% of its gross domestic product (GDP) on health care. Whether measured in per capita US dollar terms or as a share of GDP, this is high compared to countries of comparable income levels. Private spending accounted for 53% of total health expenditure. In 1994, 36% of all health spending consisted of inpatient hospital care. Ambulatory care and pharmaceuticals accounted for 27% each, and other health expenditure accounted for 10%.[2]

The following table provides information about health personnel and institutions (1996).[1]

hospitals	74		
hospital beds	7,891	hospital beds per 1,000 population	1.8
outpatient clinics	3,152		
physicians	7,320	physicians per 1,000 population	1.7
registered nurses	4,875	nurses per 1,000 population	1.1

Of the 74 hospitals, 22 are MOH hospitals and 9 RMS hospitals, the Jordan University Hospital, and 42 private hospitals.

Jordan has no shortage of physicians but there is a shortage of nurses and midwives, especially in primary care where only 6% of the qualified nurses and 14% of assistant nurses are working.[3] In order to overcome the shortage of midwives (only 0.2 per

1,000), some midwifery training has been incorporated into the curriculum of the practical nurses and training programmes were started for traditional birth attendants.[4]

Organisation of primary health care

Primary health care

Primary health care services are mainly delivered through MOH. Primary care is provided by a network of health - and Mother and Child Health (MCH) centres. There are three types of health centres (comprehensive, primary and peripheral health centres) which cover a widely varying population. Comprehensive health centres provide specialist services in three main specialties (pediatrics, gynaecology & obstetrics, and internal medicine), general practice (GP) clinic, MCH services, dental clinic, X-ray and laboratory facilities, as well as public health department. Primary centres provide GP curative services, MCH services, dental clinic, and public health services. Peripheral centres have permanent nursing services but are visited by a doctor according to a special programme.

Both in urban and rural areas the MOH has emphasised the provision of primary care by increasing the number of health centres and by upgrading their functions. The MOH runs a very extensive primary care system for basically all individuals, composed of 323 primary care centres, 307 MCH centres, 274 peripheral centres, 188 dental clinics, 41 comprehensive centres and 11 chest diseases centres.[1]

Mother and child care

In 1994, 90% of all births were assisted by trained health personnel and over 85% of the pregnant women received antenatal care.

Most family planning services are provided by the MOH through MCH centers and since three years also through hospitals. The MOH supplies NGOs, Jordan University, and RMS with the necessary devices to deliver these services.[1]

Immunisation programme

The Expanded Programme of Immunisation which started in 1979 in Jordan aimed to ensure that all children up to the age of 6 years were vaccinated.[3] The programme is carried out at health centres, MCH centres and in a few village clinics and has succeeded in increasing the vaccine coverage of DPT, measles and poliomyelitis. Because tetanus toxoid immunisation in young girls was also very low, the Tetanus Immunisation Programme started in 1982 with particular emphasis on the 15-45 age group. The results of measles and tetanus immunisation were particularly satisfactory. In 1988 the coverage of tetanus toxoid vaccine was 54%. The BCG vaccination is given at 6 years of age with coverage of 94%.

Health policies

Health for all by the year 2000 has been the policy of the Jordanian health system. The Jordanian Public Health Act (1971) recognises that health is the right of every citizen and the MOH has full responsibility for all health matters.[3] According to the International Drinking Water and Sanitation Decade concerning provision of safe water and adequate sanitation by the year 1990, Jordan has almost succeeded with regard to provision of safe water (98% of the population has access to drinking water) but much remains to be done in the case of sewage disposal.[3]

Furthermore, the MOH recognises that maternal and child health services remain the most important part of the service in the future. Through a national population strategy approved by parliament in March 1996, Jordan set the objectives of reducing the high population growth, and high level of maternal deaths, and increasing family planning services and the use of contraceptive methods.[2] The need to continue and further improve the uptake of immunisation is also an important focus of government policy.

Compared with other countries in the region at similar levels of income, the infant and child mortality indicators in Jordan are generally favourable. Major efforts have been made to ensure that all Jordanian women and children have access to health care services. Improved education levels, especially among women, vaccination of children, improved health care services and the nutritional status of the population are important factors which have had a positive impact on Jordanian health, particularly among children.

Problems and recent developments

The Jordanian health system performs relatively well in terms of overall access and outcomes, but it is expensive and inefficient and its resources are not equally distributed over all governorates.[2,5] Although the number of people covered has increased, as mentioned above, an estimated 20% of the population lacks formal coverage. The private sector accounts for over 30% of service delivery capacity and over half of all health spending, but the government has inadequate information on the spending capacity and utilisation of this sector.

In addition, Jordan has significant inefficiencies in the service delivery system.[2] There is excess overall capacity as evidenced by a hospital occupancy rate of 63%. The large number of referrals to hospitals and the over-utilisation of hospital outpatient facilities relative to primary care clinics are indicative of an ineffective referral system as well as potential quality problems at the clinic level.[2]

Although progress has been made in reducing maternal and infant mortality rates at the national level, this is not the case among all governorates. Maternal and childhood diseases are still significant causes of mortality and disability.

Finally, there are inefficiencies in terms of overall management, procurement, storage, distribution, pricing policies and the rational use of pharmaceuticals, which account for

over one-fourth of health spending and 2% of GDP.[2]

References

1. Ministry of Health, Amman, Jordan, 1997.
2. Hashemite Kingdom of Jordan; Health Sector Study: a World Bank Country Study. The World Bank, Washington, D.C. 1997.
3. Stephen, WJ. Primary Health Care in the Arab World. Somerset House, UK; 1992.
4. Adams, CJ. Midwifery in Jordan. Journal of Nurse-Midwifery. Vol 39, No.3, May/June 1994, p.161-165.
5. Waki'a Attifl Al-arabi, Attakrir Al-Ihsai Assanawi (La réalité de l'enfant Arabe, Rapport Annuaire de Statistiques). Al Majlis Al Arabi Littofoula wa Tanmiya; Markaz Attawthik wa Al-maaloumate, 1995.

Acknowledgment

The authors thank the Jordanian Ministry of Health and Health Care for supplying additional information and reviewing the draft of the report on Jordan.

LEBANON

F. El Fakiri

The country

The Lebanon is a small country with a young population, of which one-third is aged under 15. It is situated on the eastern shore of the Mediterranean Sea. Administratively, the country is divided into six mohafazats (regions) and 24 cazas (departments). Most of the population lives in urban areas. The Lebanon has undergone profound economic, political and social change as a result of the 15-year civil war.

Statistical key figures, 1995[1-3]

Population		*Natality, mortality and health*	
population in mln	4.0	crude birth rate (per 1,000)	26
population per sq.km	391	total fertility rate	2.5
% annual growth	1.9	contraceptive prevalence rate	61
% urban	87	crude death rate (per 1,000)	8
% under 15	33	infant mortality rate	28
% 60 and above	8	under-5 mortality rate	40
		maternal mortality ratio	
Development		(per 100,000 births)	300
illiteracy men	5	% DPT immunised at age 1	94
illiteracy women	10	% polio immunised at age 1	95
GNP per capita in $	2,660	% measles immunised at age 1	82
% access to safe water	94	life expectancy men	68
% access to sanitation	63	life expectancy women	72

Structure and financing of health care

The Lebanese health system has both a public and a private sector, and places the main emphasis on curative care. During the civil war the role of the government was almost non-existent, which increased the trend towards private health care. In addition, the main priorities were the emergency services, treating the injured and disabled, and helping refugees.[4,5]

There is general access to health care, part of which is paid for by compulsory social security for certain categories of workers. There are three social security funds covering 40% of the population: the National Social Security Fund, the Co-operative of Civil Servants, and the Internal Security Forces and Customs Officials Fund. Twelve percent of the population is covered by private insurance, and health care is also provided by the Ministry of Public Health.[6] The National Social Security Fund, for example, includes retirement pensions, employment risks, sickness and maternity. Private insurance, which began in 1984, does not cover chronic illness, dental care, or

people aged 64 and over. Finally, there are a number of non-governmental organisations (NGOs) of a religious, political or humanitarian nature which have set up their own health facilities. These institutions are mainly financed by the NGOs and international organisations.

The Lebanese health system is very much dominated by the private sector. Most of the hospital beds are private, though the health ministry helps to pay for these, and they account for 80% of its budget. After the war, nearly half the population had no social security cover, and the government was forced to rent beds from private hospitals.[4]

Total health spending currently accounts for 5.3% of gross domestic product (GDP).

The numbers of hospitals and health professionals are as follows (1996):[1-3]

hospitals	155		
beds	na	beds per 1,000 population	1.7
physicians	8,000	physicians per 1,000 population	2.0
nurses	3,453	nurses per 1,000 population	1.0

Conversely to what happens in many other countries, the Lebanon has a large number of physicians (one per 500 inhabitants), but not enough paramedical staff of all kinds, such as nurses, midwives and medical assistants. Also, the majority of doctors are located in the capital and the large towns, and most of them are specialists; only 20% are general practitioners.[4,6]

Organisation of primary health care

Primary health care

Primary health care is mainly provided in private medical practices, though 8% is provided by hospital outpatient consultations and 10% by health centres, most of which were set up during the war.[3] Most health centres are run by non-profit NGOs; there are a few public-sector health centres and dispensaries, but these treat only small numbers of people. Non-profit NGOs play a strategically important part in the provision of health care. During the war, they enabled immunisation and other programmes to continue, and since the war they have often been the only source of care available to the poor. NGO health centres are sometimes very large and well equipped, with many staff and a number of specialists. Others are much more modest, located in rented apartments and offering only essential services. Some are inefficient; others offer a better service than the average private practitioner, at a more affordable price to the patient.[3]

The role of health centres in the Lebanon has been limited to carrying out a small number of programmes supported by UNICEF in areas such as essential medicines, vaccinations, breast-feeding, and diarrhoea prevention.

Mother and child care

There are only four or five mother and child health centres, and these do not cover the whole of the Lebanon. They are supported by the United Nation Development Program (UNDP) and a local association, Planification Familiale.[3]

In 1996, 79% of pregnant women consulted a health professional during their pregnancy; this is a high figure compared to other Arab countries. In the same year, 88% of births took place with the help of health personnel.[1]

Immunisation programme

There is a highly satisfactory rate of coverage for some infectious diseases: 95% for mumps, rubella, whooping cough and diphtheria, and 82% for measles. This may be the result of a national vaccination programme supported by UNICEF, the network of dispensaries located throughout the Lebanon, and the institutional support provided by an epidemiological surveillance unit at the health ministry.[3] The country's vaccination programme does not cover tuberculosis, except for high-risk groups. However, according to a medical report, the number of new TB cases has increased over recent years, particularly among young people.[4]

Health policy

The health ministry is responsible for planning and implementing the country's health policy. As a result of studies which it carried out with assistance from the World Bank and the World Health Organisation, and of other countries' experiences, the ministry decided that it was essential to establish a strategy to be adopted by the senior decision-making authorities.[3] This programme is intended to provide health promotion, prevention, health care and rehabilitation to all citizens, including those who are most at risk such as women, children, the old and the poor. The ministry therefore adopted a plan of reform with the following main objectives:[3]

1. to improve the promotion and prevention services;
2. to rationalise health care services;
3. to reform the system of finance;
4. to define a new and more appropriate role for the health ministry.

These reforms are based on a realistic analysis of the prospects of success, and on a process of concentration with a view to achieving consensus on the new health system to which the Lebanon aspires. The health ministry believes that radical reform of the health system is inevitable. This will be implemented gradually with the contribution and commitment of the parties involved.

Problems and recent developments

Despite the success of the vaccination and prevention campaigns, the infectious diseases common to poor countries are still a significant cause of infant mortality in the Lebanon. At the same time, chronic diseases which were once regarded as being the preserve of the rich have reached alarming proportions: research has shown that over half of all adults are obese, 13% are diabetics, and 26% suffer from high blood pressure.[3] Also, the ministry has little control over what happens in the ambulatory sector, and still spends only 4% of its budget on ambulatory programmes and activities. An insignificant amount is spent on primary health care programmes compared to the cost of hospital care.

In 1994, the ministry used the process of obtaining a World Bank loan as an opportunity to begin the process of reform.[3] There were two objectives: to change the priorities in terms of the health care available, and to make the financial structure simpler. In order to do this, the ministry had to take more of a lead and improve its bargaining power. In 1995-1996, as part of the World Bank project, the ministry began negotiating contracts with health centres operated by non-profit NGOs.[3] In exchange for logistical support (medicines, training, equipment etc.), the NGOs agreed to supply a given population with a minimum package of services agreed with the ministry. The NGOs must also agree to introduce structured quality control systems. The ministry expects these contractual arrangements to make the system three times as effective. Training sessions have also been held to enable health centre directors to run their centres in accordance with the principles of primary health care.

References

1. Annual Report of the Regional Director: Country Statistical Profiles, WHO, 1996.
2. The World Bank. World Development Indicators 1997, Washington: the World Bank 1997.
3. Ministry of Health, Beirut, 1997.
4. Abyad A. Family Medicine in the Middle East: Reflections on the Experiences of Several Countries. Journal of the American Board of Family Practice, Vol.9, 1996, no.4, p.289-297.
5. Musharafieh R and Bu-Haka R. Development of Emergency Medicine in Lebanon. Ann Emerg Med, Vol. 28, July 1996 p.82-86.
6. Mekhael E. L'éducation pour la Santé au Liban: Etat des lieux et perspectives. Promotion & Education, Vol.IV, 1997, no.1, p.27-31.
7. Minister Frangieh's Reform Plan, 1997.

Acknowledgement

The authors thank the following persons for supplying additional information and reviewing the draft of the report on Lebanon:
Peggy Hanna, Ministry of Health, Beirut,
Elie Mekhael, Lebanese University, Beirut.

MALTA

S.J. Grielen

The country

Malta consists of three small islands and is situated in the middle of the Mediterranean sea. In Malta there is no clear distinction between urban and rural areas. The various ethnic divisions that can be distinguished are Arab, Sicilian, Norman, Spanish, Italian and English. Because of its central position in the Mediterranean, Malta became an important trading post and meeting place for various cultures. The diverse cultural heritage of Malta is the relic of the different nations that occupied and administered the island. Malta gained independence from the United Kingdom in 1964 and is now a parliamentary democracy. It produces only 20% of its food needs and the economy is therefore highly dependent on foreign trade and services. Manufacturing and tourism are the largest contributors to the economy.[1-3]

Statistical key figures, 1996[3-7]

Population		*Natality, mortality and health*	
population in mln	0.4	crude birth rate (per 1,000)	15
people per sq.km	1,178	total fertility rate	2.2
% annual growth	1.0	contraceptive prevalence rate	na
% urban	na	crude death rate (per 1,000)	7
% under 15	22	infant mortality rate	7
% 65 and above	11	under-5 mortality rate	12
		maternal mortality ratio	
Development		(per 100,000 births)	0
illiteracy rate men	14	% DPT immunised at age 1 (1997)	85
illiteracy rate women	18	% polio immunised at age 1 (1997)	90
GNP per capita in $	7,970	% measles immunised at age 2	50
% access to safe water	100	life expectancy men	76
% access to sanitation	100	life expectancy women	81

Structure and financing of health care

The Ministry of Health (MOH) is responsible for the health services. Within the ministry functions a Health Division, consisting of eight departments. These departments include among others public health, health promotion, primary health care and health policy and planning. The Maltese government provides free national health services for all inhabitants. This includes primary health care as well as secondary and tertiary care. Parallel to the government system functions a private system, with private general practitioners (GPs), specialists and hospitals. Only the most complicated procedures or protracted diseases cannot be covered by the private sector. This sector is

of a considerable proportion and continues to grow. Private doctors are paid through direct out-of-pocket payments or via individual private insurance.[2]

The public health services are funded from general taxation and there is no obligatory health insurance. All workers and employers pay National Insurance contributions (approximately 1/12 of wage) on a weekly basis. This money, however, is meant for financing welfare services in general and not for health services in particular. Persons with a low income are 'means tested' by the Department of Social Security. If they qualify for assistance, they receive a card which entitles them to free pharmaceuticals. A person who suffers from one of a specified list of chronic diseases (e.g. rheumatoid arthritis or hypertension), is also entitled to free treatment, irrespective of financial ability to pay. A private health insurance can be purchased on a voluntary basis. Health insurance can also be offered by an employer as an employment benefit. Both the private health insurance and the health insurance offered by the employer are still uncommon at Malta, although both are becoming more prevalent.

The proportion of government expenditure budgeted for health services was 10.2% in 1995, which is a comparatively high percentage. National health expenditure is even higher, as the percentage mentioned above does not include the household or employer payments to health insurance or the out-of-pocket fees paid by the population. It is estimated that approximately $21.7 per capita is spent on primary health care (excluding the specialist clinics within this service) and $68 per capita on pharmaceuticals.[2]

The most recent figures on health institutions and personnel are given below (1997).[7]

hospitals	8		
hospital beds	2,112	beds per 1,000 population (1995)	5.4
physicians	890	physicians per 1,000 population (1995)	2.4
nurses	na	nurses per 1,000 population	na

Organisation of primary care

Primary health care

Within the Ministry of Health, the Department of Primary Health Care is responsible for the provision of general practitioner and other community care services to the public. Also the immunisation services and School Health Service fall within its jurisdiction. The government delivers primary health care mainly through eight health centres. The general rule is that patients visit the health centre that serves their locality of residence. At the health centre a GP service is provided 24 hours a day, 7 days a week. Between 8.00 p.m. and 8.00 a.m. the health centre is only open for emergencies. The GPs also make home visits.

Distributed over all three islands are also 57 District Dispensaries, where clinics are held at a regular basis by GPs and nurses. This service provides basic medical and nursing services as well as a postal system for the distribution of routine monthly medical prescriptions. The Malta Memorial District Nursing Association (MMDNA) offers community nursing. The services of the community nursing include -besides general nursing care- giving injections, visits to diabetics and catheterisation and are mainly given by nurses and home helpers to those are wholly or partially housebound, elderly and disabled.[2,8,10]

Besides the GP and nursing services, various specialised services are offered within the primary care setting, such as speech therapy, chiropody, ophthalmic clinics and physiotherapy. Some specialists, such as paediatricians and the gynaecologists, offer their services via the health centres. In 1996 a 'Medical Consultant Clinic' was introduced in five of the eight health centres now expanded to cover primary health care. This is a specialist clinic in General Medicine and is designed to improve the access to specialist and also to relieve the pressure on the outpatient department of Malta's principal hospital. Alongside the public health system, there is a thriving private sector. More people tend to refer to private practitioners for the more serious problems and tend to use health centre services for episodic care. There are approximately 180 full-time private family doctors and about 300 doctors working part time.[2]

Mother and child care

Domiciliary midwifery services are provided by the MMDNA on a contract basis. The midwives also make postnatal visits. The health centres provide extensive preventive services for both mother and child such as Well Baby clinics and Well Woman clinics. There are also antenatal and postnatal clinics at the health centre. One specialised, hospital-based preventive activity that takes place is thyroid function screening for neonates. By law, women are entitled to 13 weeks of fully-paid maternity leave. It is also possible to take a year of unpaid maternity leave. Both male and female government employees are entitled to three years of unpaid parental leave.

The School Health Service at Malta is designed especially for school age children. Its main aim is monitoring the health of school children with the emphasis on the prevention and early detection of diseases and other physical defects. For this purpose routine medical examinations of new entrants, as well as regular scheduled assessments of older pupils, are carried out. If necessary, children are referred to specialists. The School Dental Clinic provides a complete dental service, ranging from routine check ups to emergency treatment, to children under 16 years. All school children receive one annual dental check within the school.[2,8,10]

Immunisation programme

Free immunisation programmes are run on a national scale, co-ordinated by the Department of Primary Health Care. In 1995 the immunisation schedule was revised in line with WHO recommendations. Mumps was reintroduced in the national immunisation scheme in 1994. Several vaccinations are given at school age, e.g. the MMR vaccine (mumps, measles, rubella), the BCG vaccination and -since 1997- hepatitis B. About 93% of the children are reached via the BCG vaccination. The coverage rate for the MMR vaccine is rather low (5o% at age 2), and the government is therefore attempting to improve this rate. At the moment 90% of the children are immunised against measles at age 11-12. The mass screening of tuberculosis is also done at the School Medical Service. The coverage rates for DPT (three doses at age 3) and pertussis are high: 92% and 84% respectively. In 1996 vaccination against Haemophilus Influenzae B was introduced into the vaccination schedule and is now available to all children under age 1 at the health centres. Recorded coverage rates are about 80%. There is also a annual vaccination campaign against influenza, carried out in the last quarter of the year. The programme thus covers a wide range of illnesses: diphtheria, polio, tetanus, pertussis, Haemophilus Influenzae B, measles, mumps, rubella, tuberculosis and hepatitis B. Travel vaccinations are also provided.[2,9]

Health policies

Malta is a WHO member, and in the early 1980s the Maltese Government committed itself publicly to the objectives of "Health for All" by the year 2000. At that time a Health for All committee was established to monitor and evaluate progress towards the goal and to make recommendations for action. Major improvements have included the provision of safe water and sanitation facilities to the whole population, the eradication of infectious diseases as a major cause of morbidity and mortality, and the introduction of a free, comprehensive national health service.[11]

Today, health care still has a high priority on the national agenda. This is also apparent in spending: a comparatively high percentage of government spending goes to health care. The standard of Maltese health care has become much higher during the last fifty years and this is also reflected in the declining mortality figures. An important element in the health policy of Malta are the health promotion activities, coordinated by the Department of Health Promotion, that works closely together with the Department of Primary Health Care, the Department of Education and the mass media. Prevention programmes on a national scale exist and extensive preventive services within the primary care setting are available. Early in 1996, a glaucoma screening programme was introduced in six of the eight health centres. Its primary aim is prevention, intended for all inhabitants over age 45 and those over 35 with a higher risk for glaucoma. Weight Reducing and Smoking Education clinics are also carried out in health centres and work places (smoking cessation).[2,8]

Problems and recent developments

The government health system is based on the former Eastern European Polyclinic System and does not have patient registration. The services are regarded as over-loaded and not well managed. Changes in Maltese society have led to an increase in patient demands and expectations regarding health care. All together, these factors have contributed to a growth in the private health care sector. Furthermore, there is a manpower shortage in health care sector. Better working conditions in the private sector lead to a high rate of staff turnover in the government sector. More staff are therefore needed in practically every profession in health care, especially in the nursing profession.[2,10]

In 1996 changes in the prescription of free pharmaceuticals were introduced. Writing prescriptions for free pharmaceuticals is a substantial proportion of the work of doctors in health centres. In order to decrease their workload, a system for the issuing of three-monthly prescriptions was developed. This resulted in the expected reduction of workload within health centres but the full benefit of this reform was hindered by the shortfall in the number of doctors. The School Health Service is currently in a process of reform and expansion. The aim of the reform is to have a more comprehensive system which will provide continuing care for all school children extending from birth to the end of their school life. Emphasis is not only placed on health, but also on health promotion. Children should also be observed for physical, psychological, social, behavioural and educational problems. Part of this reform process is the introduction of new Child Health Records. These records cover the health of children from birth till the age of 16 and are being used both in the School Health Service and in the Well Baby Clinics. The aim of the new record is to achieve a continuous record of the child's health and to standardize the examinations carried out.

A last development to be mentioned concerns health care management. The Department of Primary Health Care has tried to promote the introduction of unit management, i.e. the devolution of management responsibility to the individual health centre with the central department adopting a role of monitoring and control.[2,8-10]

References

1. Savona-Ventura C. The influence of the Roman catholic Church on Midwifery Practice in Malta. Medical History 1995;39:18-34.
2. Sciortino P. The health care system in Malta, unpublished manuscript 1997.
3. CIA. The World factbook page on Malta. Website: www.odcj.gov/cia/publications/nsolo/wv6-all.htm.
4. UNICEF. Malta Statistics. Website: www.unicef.org/statis.
5. The World Bank. World Development Indicators 1997. Washington: The World Bank 1997.
6. Central Office of Statistics (COS) Malta. Demographic review of the Maltese islands 1995.
7. Department of Health Information, Malta, 1998.
8. Department of Primary Health Care. Departmental report PHC 1994.

9. Department of Primary Health Care. Departmental report PHC 1995.
10. Department of Primary Health Care. Departmental report PHC 1996.
11. World Health Organisation. Evaluation of the strategy for health for all by the year 2000, Malta. Copenhagen: WHO, Regional Office for Europe 1986.

Acknowledgement

The authors thank the following persons for supplying additional information and reviewing the draft of the report on Malta:
Philip Sciortino, general practitioner, Haz-zebbug,
Ray Busuttil, Ministry of Health, Floriana.

MOROCCO

F. El Fakiri

The country

Morocco is situated in the north-west Africa between the Mediterranean Sea and the Atlantic, bordering Algeria to the east, and Mauritania and Mali to the south. Throughout the history of Morocco its geographical position has given it considerable strategic, economic and political importance. The population of Morocco is a young one, with nearly 40% aged under 15. Most people live in the fertile and relatively well-watered regions of the country: the hills and the Atlantic coastal plain. Administratively, Morocco is divided into 49 provinces or prefectures.

Statistical key figures, 1994-1995[1,2]

Population		*Natality, mortality and health*	
population in mln	26,6	crude birth rate (per 1,000)	27
population per sq.km	60	total fertility rate	3.4
% annual growth	2.1	contraceptive prevalence rate	50
% urban	49	crude death rate (per 1,000)	7
% under 15	39	infant mortality rate	57
% 60 and above	6	under-5 mortality rate	76
		maternal mortality ratio	
Development		(per 100,000 births)	332
illiteracy men	43	% DPT immunised at age 1	79
illiteracy women	69	% polio immunised at age 1	79
GNP per capita in $	1,110	% measles immunised at age 1	92
% access to safe water	59	life expectancy men	64
% access to sanitation	63	life expectancy women	68

Structure and financing of health care

The national health system is divided into three sectors: public (including the services operated by the Ministry of Health (MOH) and the armed forces), semi-public (the facilities operated by the National Social Security Fund and those which are mutually owned), and the private sector.[2] Responsibility for implementing government health policy lies with the MOH. The ministry provides health prevention and promotion and curative care in two ways: through the basic health care system and the hospital system.

Morocco spends around 4% of its gross domestic product (GDP) on health. The public sector accounts for 37% of total spending, with the state paying 30%, local authorities 4% and international non-governmental organisations (NGOs) the remaining 3%. The private sector represents 63% of expenditure, of which 50% is paid for out-of-pocket

by patients, and 13% by voluntary health insurance.[3]

The numbers of hospitals and health personnel are given below (1995)[1,4]

hospitals	98		
beds	25,974	beds per 1,000 population*	1.7
physicians	8,945	physicians per 1,000 population	0.3
nurses	4,959	nurses per 1,000 population	1.0

* public sector only

There are 98 hospitals, of which the largest numbers are in the north-west (28.6%) and the central region (21.4%). Fifty-five percent of general and specialist doctors work in the public sector, with nearly 70% concentrated in two regions: the north-west (39%) and the centre of the country (31%). Eighty-three percent of specialists in the public sector are also concentrated in these two regions.[3]

Organisation of primary health care

Primary health care

The primary health care system consists of dispensaries and urban and rural primary health care centres, known collectively as basic health care establishments. These are responsible for implementing health programmes, prevention campaigns and primary health care, including maternity services. There were 1,724 of these centres in 1994.[1] Although there are a large number of them in rural areas, there are great disparities between different regions of Morocco; for example 22.1% are located in the central region, and only 5.9% in the south, while some areas are not covered at all.[3,6] In order to reduce these differences, rural health care has been divided into three systems: fixed, mobile, and participative.[3] The fixed system is based on rural health districts with a single health centre and a number of dispensaries of various kinds. There are four kinds of basic health care establishment in the countryside: basic rural dispensaries, rural dispensaries, rural health centres and rural hospitals. Dispensaries form the main point of contact with the local population.

In the 1980s, the ministry began operating mobile services which provided health care in people's homes, or at certain contact points. A home health care service, for example, might involve a nurse travelling around on a moped, providing preventive health care, early detection of illness, and family planning services. Some areas which are particularly inaccessible use participative health care, based on trained "resource people" such as traditional midwives. The health provision in towns and cities is fairly good, and mostly fixed rather than mobile. But even in towns, and particularly in poor areas, teams of nurses travel from door to door providing help with preventive medicine and family planning.[3]

Mother and child care

Only 45% of pregnant women consult a medical professional (a doctor, nurse or midwife), and only 12% do so four times. Sixty-three percent of births take place at home.[5] Traditional midwives and untrained people still play an important part in helping women to have their babies; they are involved in 60% of births.

The standard of antenatal care has improved over recent years, but the pregnancy and childbirth monitoring programme has still failed to reach women in rural areas. Only 28% of pregnant women living in the country receive an antenatal consultation, and only 19% give birth in some kind of health facility.[5]

A pregnant woman should also receive two injections of tetanus vaccine, or one if she has already been vaccinated during a previous pregnancy. Some 60% of births in Morocco are protected against tetanus.[5] Breast-feeding is almost universal in Morocco. The use of wet nurses, which is strongly advised against, is relatively widespread and involves nearly 30% of children aged 0-3 months.[5]

Family planning in Morocco aims to encourage the use of modern methods of contraception, and the pill in particular. The main sources of these methods are health centres, and more especially dispensaries. Mobile teams and home visits play a less important role in this area than in the past; they decreased from 11% in 1992 to 5% in 1995. The role of the private sector is also limited, despite the programme of social marketing of pills and condoms.[5]

Diarrhoeal diseases are still a major problem among children under 5, of whom 18,650 died in 1991, accounting for 26.7% of infant and juvenile mortality.[7] The MOH encourages the use of oral rehydration therapy in its anti-diarrhoeal diseases campaign. Since 1990, this programme has focused on enabling health facilities to deal with these diseases effectively.[7]

Immunisation programme

In Morocco as a whole, 85% of children aged 12-23 months are protected against the six main childhood diseases, and 75% have been vaccinated by the time they are 1 year old.[5] Ninety-six percent have received a BCG vaccination by the age of one.

Thanks to the country's expanded vaccination programme, there has been a significant increase in vaccination coverage from 70% in 1987 to around 90% in 1995. However, there are still differences in the rate of completed vaccination between rural and urban areas, and between the different economic regions of Morocco.[5,7]

Health policies

Like all WHO member states, Morocco has officially adopted the objective of "Health for all by the year 2000". The objectives of the country's health policy include reducing morbidity and mortality, particularly among children; increasing access to preventive and curative medicine; and improving the quality of health services. This policy has

made progress in a variety of areas. Life expectancy at birth rose from 47 to 65.8 years between 1960 and 1992, and there has been a decrease in the incidence of infectious childhood and other diseases such as malaria, bilharzia, leprosy and trachoma.[3] There has also been progress in developing the health infrastructure, and equipping and training doctors and health personnel.

The vaccination of young children against the six main childhood diseases (tuberculosis, diphtheria, tetanus, whooping cough, polio and measles) is one of the main focuses of the action being taken on child health. Since 1987, the MOH has been organising annual vaccination campaigns known as "Maghreb Vaccination Days".[5]

Problems and recent developments

Although life expectancy at birth has shown a very satisfactory improvement, the rates of maternal, neonatal, infant and juvenile mortality are still unacceptable. The national health system still has shortcomings in terms of finance and the coverage it provides. Rural areas and some poorer regions are short of infrastructure, equipment, and medical staff. Another problem is excessive specialisation, which tips the balance in favour of tertiary care and concentrates too much on the provision of health care in urban areas. Also, not all the public health care facilities are efficient, and in many cases their buildings and equipment are outdated.[3,6] The mentioned problems which largely caused by insufficient financing of the health system, may get worse with population growth.

Over the next few years, the Moroccan health system will face a number of problems: expanding health care to cover the whole country, improving access to care, particularly for poor people, making health services more effective, and finally generating and mobilising the necessary financial resources.

References

1. Ministère de la Santé Publique. La santé en chiffres 1994. Rabat X, 1996.
2. The World Bank. World Development Indicators 1997. Washington: The World Bank 1997.
3. Greeft Alami A et al. La santé au Maroc; Stratégie de développement. Ministère de la Santé Publique, Royaume du Maroc, 1993.
4. Annuaire statistique du Maroc. Ministère du Plan, de la Formation des Cadres et de la Formation Professionnelle. Direction de la Statistique; Rabat, 1996.
5. Azelmat M, Ayad M, and Housni E. Enquête de Panel sur la Population et la Santé (EPPS) 1995. Ministère de la Santé Publique, Rabat, Morocco, and macro International Inc. Calverton, Maryland USA, 1996.

6. Darkaoui N, and Laabid A. Les services de santé de base: analyse du fonctionnement. Institut National d'Administration Sanitaire, rapport n° 5., Ministère de la Santé Publique, 1995.
7. Archane MI. le système des soins au Maroc, Bull. Acad. Natle. Méd. 178, no. 4, 653-669, 1994.

Acknowledgement

The authors thank the following person for supplying additional information for the report on Morocco:
Nada Darkaoui, Ministry of Health, Rabat.

THE PALESTINIAN AUTHORITY

M.G. Weide

The country

The Palestinian Authority contains the Gaza Strip and the West Bank. The Gaza Strip is a small strip of land (360 sq km) located between Israel and Egypt, bordering the Mediterranean Sea. The West Bank lies west of Jordan and has an area of 5,860 sq km. Since 1967 these regions were occupied by Israel, but in 1994 they have been placed under the self-government of the Palestinian Authority for a period not exceeding five years. Permanent status is to be determined by further negotiations. There are about 226 Israeli settlements and civilian land use sites in these regions. Apart from the Jewish settlers, the population is almost completely Palestinian Arab.[1] The population density in these regions is among the highest in the world.

Statistical key figures, 1995-1996[2-7]

Population		*Natality, mortality and health*	
population in mln	2.3	crude birth rate (per 1,000)	45
people per sq.km	2,400	total fertility rate	6.2
% annual growth	3.9	contraceptive prevalence rate	45
% urban	na	crude death rate (per 1,000)	6
% under 15	48	infant mortality rate	25
% 60 and above	5	under-5 mortality rate	28
		maternal mortality ration	
Development		(per 100,000 births)	70/80
illiteracy rate men	8	% DPT immunised at age 1	96
illiteracy rate women	23	% polio immunised at age 1	96
GNP per capita in $	1,700	% measles immunised at age 1	95
% access to safe water	84	life expectancy men	70
% access to sanitation	31	life expectancy women	73

Structure and financing of health care

The Palestinian health care system is a complex mix of different service providers operating at both primary and secondary levels. The Palestinian Ministry of Health supervises the health sector. Services are provided by four main sectors: the Palestinian Authority, UNRWA, non-governmental organisations (NGOs) and the private sector. Prior to the establishment of the Palestinian Authority, the Civil Administration managed a number of health clinics and hospitals which provided services for the Palestinian population. Responsibility for these services was taken over by the Palestinian Ministry of Health in 1994. UNRWA services are provided to about 200,000 refugees in the West Bank and more than half a million in the Gaza Strip, and concern

almost exclusively primary health care services. NGOs and the private sector operate different primary and secondary services.[7,8]

Antenatal care, vaccinations and treatment for children under 3 years of age are provided free of charge to all people regardless of insurance status. Services provided by the government are free to those enroled in the government health insurance scheme.[7] Insurance coverage has been provided for all government employees.[5] Those without insurance can see a general practitioner on payment of a $3 fee or a specialist for $6.50, and must pay a charge for dressing changes, tests or medication. Those with health insurance pay a small co-payment for each item of medication.[7] In a survey held in the Gaza Strip and West Bank in 1996 about 62% of the people reported to have some sort of health insurance: 77% in the Gaza Strip and 55% in the West Bank. Of these 39% had government and 19% UNRWA insurance.[6] The rest are included in private insurance schemes and in social security.[5] All UNRWA services including drugs are free of charge for refugees. Mother and child health services provided by UNRWA are also free for non-refugees. NGO services are provided on payment of a nominal fee, which may be waived in cases of financial hardship.[7]

The most recent figures on hospitals and health personnel are given below (1997).[9]

	government	UNRWA	NGO
hospitals	15	1	16
hospital beds	1,813	43	710
physicians	1,004	109	579
nurses	2,092	360	971

Hospital beds are relatively few in number (1.1 per 1,000), and their geographical distribution is uneven. Also the number of physicians (0.7 per 1,000) and nurses (1.5 per 1,000) is rather low.

Organisation primary health care

Primary health care

Primary health care services are provided by the government, UNRWA (to the refugee population) and NGOs, mainly through health clinics. The number of clinics per sector are stated below (1998).[9]

	government	UNRWA	NGO's	private
West Bank	329	24	99	17
Gaza Strip	33	16	52	4

Furthermore, the government operates 74 village health rooms in the West Bank, while UNRWA operates twelve part-time health posts in the West Bank and one in the Gaza Strip. Most government PHC clinics are staffed by a part-time general practitioner with nursing and ancillary staff, and provide curative as well as preventive services. Most doctors working in government clinics rotate among clinics, so the curative services they provide are usually only available two days a week. UNRWA health clinics provide a full range of preventive, curative and community health care services. Health posts provide the same services but only one day a week. All UNRWA health centres and health posts provide special clinics for diabetes and hypertension, while all health centres in Gaza and half of those in the West Bank provide dental services. Also, laboratory testing is provided in the majority of these health centres. NGO clinics provide curative and preventive service, varying significantly between different parent organisation. These clinics have the highest numbers of doctors (general and specialist) per clinic of all providers, except those in the private sector. NGO services have declined in the past few years. Many doctors who are working in government, UNRWA or NGO clinics or hospitals, work part time in private practice, in small individual clinics or community health centres.[7]

Mother and child care

About 89% of the children are born in a health institution, mostly in government hospitals (45%), to a lesser extent in private hospitals (23%), doctor clinics (11%), health/mother and child centres (8%) and UNRWA hospitals (4%). Over 80% of the pregnant women receive some antenatal care, mostly from specialized doctors. This proportion is somewhat higher in cities (85%) than in camps (81%) and villages (76%).[6] In the governmental, UNRWA and NGO health clinics nurses and midwives provide a range of preventive services including antenatal care, well baby clinics and vaccination programmes. About one-third of the women who had given birth in the past five years had received a tetanus toxoid injection. Breast-feeding is highly prevalent as a practice in the Palestinian Territory: 96% of the children are breast-fed.[6,7]

Immunisation programme

Immunisation coverage of children against DPT and polio is high. In 1996, the percentage of children immunised against DPT and polio under 2 completing three doses

was 97% and 96% respectively. For children under five these percentages were 85% and 84% respectively. The percentages of children completing MMR (mumps, measles, rubella) were somewhat lower (85% of the children under 2 and 71% of the children under 5).[6] The immunisation programme also includes three doses of hepatitis B vaccine.

Vaccinations are given through clinics, village health rooms, mobile services or, in villages that do not have on-site health services, by visiting vaccination teams. For polio the immunisation programme includes a combination of oral polio vaccine (OPV) and inactivated polio vaccine (IPV).[10]

Health policies

In 1994 the National Health Plan was developed in consultation with Palestinian health professionals. According to this plan, comprehensive health centres in populated areas will provide an extensive range of services including specialist doctors, laboratory and x-ray facilities. Health centres and clinics will provide a smaller range of services in less populated areas, and health posts in very small rural communities, staffed by a nurse and visiting doctor, will provide preventive services and first aid. At the moment new and upgraded clinics are being developed in line with this primary health care delivery system.[7]

Problems and recent developments

The Palestinian Authority has to deal with many problems. A major problem is the water supply. Water is very scarce, and the quality of the water has deteriorated substantially in the past decade. In many places there is no adequate sewage removal and treatment; the refugee camps are largely dependant on open sewers.[11-13] Diarrhoea is still a common health problem, especially among refugee children in the Gaza Strip.[5] Furthermore, health services are still insufficient and inadequate. A study prepared by an UNCTAD consulent in 1994 reports that hospitals were inadequately staffed, stocked and administered, and sometimes lack essential services, while the costs of hospital services had become very high.[14] Also primary health care in some rural areas was seriously deficient.[14] Moreover, health facilities are not distributed evenly among geographical regions, rural areas being underserved.[5] Finally, more than a third of the inhabitants of these regions are not covered by any insurance.[5,6]

It is anticipated that UNRWA and MOH services will combine to create one large public sector. However, unification of the two systems will face many difficulties given the different services provided by these sectors and the different financial arrangements for each sector. Technical assistance programmes for the MOH are working on the details of these policy changes.[7]

References

1. CIA. The World Factbook pages on West Bank and Gaza Strip. Website: www.odcj.gov/cia/publications/nsolo/wv6-all.htm.
2. The World Bank. World Development Indicators 1997. Washington: The World Bank 1997.
3. UNICEF. Statistics. Website: www.unicef.org/statis.
4. WHO. Country statistical profiles. Annual Report of the Regional Director. 1996
5. Sustainable Human Development Project. Palestine 1-st Human Development Profile 1996-1997. Health indicators.
6. Palestinian Central Bureau of Statistics. The health survey in the West Bank and Gaza Strip: main findings. Palestine: Ramallah 1997.
7. Palestine Economic Policy and Research Institute. Health in Palestine. 1997
8. Ministry of Health, Health Research & Planning Directorate, statistics and Information Department. The status of health in Palestine. Annual report 1996 Palestine.
9. Ministry of Health. May 1998.
10. Tulchinsky T, Abed Y, Handsher R, Toubassi N, Acker C, Melnick J. Succesful control of poliomyelitis by a combined OPV/IPV polio vaccine programme in the West Bank and Gaza, 1978-93. Isr J Med Csi 1994:30:489-94.
11. The World Bank. Emergency assistance programme for the occupied territories. Washington D.C: The World Bank 1994.
12. Bellisari A. Public health and the water crisis in the occupied Palestinian territories. Journal of Palestine Studies 1994;23:52-63.
13. Schnitzer JJ, Roy SM. Health services in Gaza under the autonomy plan. The Lancet 1994;343:1614-7.
14. United Nations. Health conditions and services in the West Bank and Gaza Strip. United Nations, UNCTAD/ECDC/SEU 1994.

Acknowledgement

The authors thank the following persons for supplying additional information for the report on the Palestinian Authority:
Michiel Rentenaar, Dutch Embassy, Ramallah,
Yehia Abed, Ministry of Health, Gaza,

and for reviewing the draft of the report:
Yehia Abed, Ministry of Health, Gaza.

SYRIA

F. El Fakiri

The country

The Syrian Arab Republic borders on a number of countries: Turkey to the north, Iraq to the east, Jordan to the south, and Israel, the Palestinian Authority and Lebanon to the west. The west of the country adjoins the Mediterranean. Administratively, Syria is divided into 14 muhafazats, 54 districts and 161 sub-districts. Just over half the population lives in towns and cities. The country became independent in 1946, and the revolution of 1963 brought the Ba'ath party to power. In 1970, Syria's current president, General Assad, came to power and began the "rectification movement".

Statistical key figures, 1995[1-2]

Population		*Natality, mortality and health*	
population in mln	14,1	crude birth rate (per 1,000)	39
population per sq.km	77	total fertility rate	4.8
% annual growth	3.2	contraceptive prevalence rate	40
% urban	53	crude death rate (per 1,000)	5
% under 15	na	infant mortality rate	32
% 60 and above	4	under-5 mortality rate	40
		maternal mortality ratio	
Development		(per 100,000 births)	179
illiteracy men	14	% DPT immunised at age 1	100
illiteracy women	44	% polio immunised at age 1	96
GNP per capita in $	1,120	% measles immunised at age 1	95
% access to safe water	87	life expectancy men	67
% access to sanitation	78	life expectancy women	68

Structure and financing of health care

Health services in Syria are provided by both the public and the private sector. The public sector comprises the Ministries of Health and Higher Education, the military health services directorate, and workers' hospitals.[3] Apart from its role of providing health care to the population, the Ministry of Health (MOH) is responsible for training specialist medical personnel. The hospitals run by the Ministry of Higher Education also have this dual role of providing curative care and training medical staff.

Private-sector services are available in all regions of the country in the form of private doctors' practices and clinics. The level and quality of service they provide varies, and there are no precise figures on this sector. However, in terms of prices and quality of service, it is regulated by the Syndicat des Médecins and the MOH.[3]

Medical insurance was introduced during the 1980s. All citizens, and particularly those with lower incomes, receive free health care from the government. Public-sector workers, and sometimes their families as well, are covered by their trade unions. The government offers the following free medical care: emergency services, treatment of infectious and transmissible diseases, all care for children aged up to 5 (including milk and vaccinations), and pre- and postnatal care for mothers.[4]

The numbers of hospitals and health personnel are given below (1995):[2,5]

hospitals	294		
beds	17,623	beds per 1,000 population	1.3
physicians	15,391	physicians per 1,000 population	1.1
nurses	23,151	nurses per 1,000 population	1.7

At least 90% of doctors work only part time in the public sector and spend most of their time in the private sector.[4] All doctors are required to work in a public or private rural health centre for two years after qualifying. It is also worth noting that patients tend not to use nurses and midwives, and will sometimes refuse to see them.[4]

Since 1987, each governorate has had at least one mother and child health training centre. These are responsible for training midwives, and also for supervising and training traditional midwives.[4]

Organisation of primary health care

Primary health care

Primary health care services are organised at three levels: centrally (the primary health care directorate) comprising twelve departments and more than 27 health programmes; intermediate (the primary health care department, consisting of five subdivisions responsible for managing and co-ordinating health programmes); and locally, in the form of 955 specialist, regional and other health centres.[6] This represented about one primary health care centre per 15,000 inhabitants in 1996. The centres are located in both urban and rural areas, but there are still inequalities between the different governorates.[7] In theory, the centres offer the full range of preventive and curative services, opening between 8 a.m. and 2 p.m. and consisting of one or two doctors, a dentist, two or three nurses, a pharmacist and a laboratory assistant.[4] In addition, primary health care services are offered by the private sector, which actually plays a larger role than the public sector. Most emergency services are provided either by the private sector or by the accident and emergency department of the patient's nearest state hospital. However, the limited numbers of public hospitals and resources available to them, combined with the fact that private hospitals refuse to provide these services all the time, make it almost impossible to offer emergency services.[4]

Mother and child care

Ninety percent of Syrian women consult a medical professional during pregnancy, and 83% give birth in sanitary conditions. In 1996, 78% of women and girls had been vaccinated against tetanus.[2] However, it is not clear what the situation in rural areas is like. Antenatal and postnatal care are offered by both the public and private sectors, but the latter appears to play a more important role, particularly in family planning.[4] According to some sources, only 15% of mothers receive government services in this area; some use private doctors, and others do not see medical personnel at all.[4]

Immunisation programme

The aim of the national vaccination programme is to achieve national and international targets which involve eradicating or reducing the incidence of infectious diseases. A vaccination rate of at least 80% is regarded as necessary.[8] Syria has made significant progress in this area, with a 96% vaccination rate for the majority of infant diseases (polio, measles, diphtheria, tetanus and whooping cough). All Syrian children had been vaccinated against tuberculosis in 1996, and 82% had been immunised against Hepatitis B.[2] Vaccinations are carried out in primary schools and health centres, and by mobile teams.[4]

Health policy

The objective of Syria's national health policy, as expressed in a variety of statutes and government resolutions, is to achieve an acceptable level of health for the entire population.[3,9] The government assumes full responsibility for health, and is a provider of these services. National policy has made preventive care a priority, and the government has been supporting it for the past ten years. This has involved the creation of infrastructure in which the main emphasis is on primary care. Training and education centres have been set up to ensure that health personnel in this sector have the necessary skills. However, the amount spent on these services has so far been limited compared to secondary and tertiary care.[6] In addition to receiving increasing financial assistance from the government, this sector has also been provided with assistance from non-governmental organisations (NGOs) in the form of health promotion training and other services.[6]

The government's strategy involves increasing the number of health centres to one per 2,000 or 3,000 inhabitants, with the emphasis on preventive services for mothers and children. It also aims to extend health programmes into all areas, such as the care of the elderly, anti-smoking campaigns and health education.[6]

The government has also carried out a highly successful "healthy villages" project in poor rural areas, involving the participation of the local community.[6]

Problems and recent developments

The main problems facing Syria's national health service are the shortage of money and human resources, and the lack of proper links between the training and the needs of society, particularly in terms of encouraging people to join medical professions which the government believes need expanding.[6] Other problems include the fact that service quality is not properly monitored, the fact that so many staff work in both the private and public sectors, to the detriment of the latter, and the difficulty of bringing the administration process under one roof.[9]

References

1. The World Bank, World Development Indicators 1997, Washington: The World Bank 1997.
2. WHO, Country Statistical Profiles. Annual Report of the Regional Director, 1996.
3. Salloum W. Les services de santé et les systèmes de protection sociale en Republique Arabe Syrienne. 'Médecins et protection sociale dans le Monde Arabe' by B Curmi et S Chiffoleau. Les Cahiers du CERMOC no.5, 1993.
4. Stephen WJ. Primary Health Care in the Arab World. Somerset House, UK; 1992.
5. Statistical Yearbook of Syria.
6. Ministry of Health, Damascus, 1997.
7. Waki'a Attifl Al-arabi, Attakrir Al-Ihsai Assanawi (The reality of the Arab child, Annual Statistical Report). Al Majlis Al Arabi Littofoula wa Tanmiya; Markaz Attawthik wa Al-maaloumate, 1995.
8. A-Rriayya a-ssihhiya al-awaliyya (Primary Health Care), Syria, 1993.
9. Baath M. "A propos de la 'question de la santé en Syrie'. Médecins et protection sociale dans le Monde Arabe' by B. Curmi and S. Chiffoleau. Les Cahiers du CERMOC no.5, 1993.

Acknowledgement

The authors thank the following person for supplying additional information and reviewing the draft of the report on Syria:
Samir El Jerf, Ministry of Health, Damascus.

TUNISIA

F. El Fakiri

The country

Tunisia is located in the eastern part of the Maghreb. It has a young population and a high birth-rate; in addition, the number of people 60 and above rose from 5.5% in 1966 to 8.3% in 1994. The population is concentrated in the coastal regions, and in particular Tunis and the eastern central area. Sixty-one percent of Tunisians lived in urban regions in 1994, and this figure is continuing to grow.

Statistical key figures, 1996[1-3]

Population		*Natality, mortality and health*	
population in mln	9	crude birth rate (per 1,000, 1995)	23
people per sq.km	58	total fertility rate (1994)	2.9
% annual growth (1995)	1.7	contraceptive prevalence rate	60
% urban	61	crude death rate (per 1,000)	5
% under 15	35	infant mortality rate	31
% 60 and above	8	under-5 mortality rate	38
		maternal mortality ratio (1994)	
Development		(per 100,000 births)	69
illiteracy rate men	21	% DPT immunised at age 1	90
illiteracy rate women	45	% polio immunised at age 1 (1995)	92
GNP per capita in $	1,820	% measles immunised at age 1	91
% access to safe water	86	life expectancy men (1995)	70
% access to sanitation	72	life expectancy women (1995)	73

Structure and financing of health care

The Tunisian health system has three components: a public, a semi-public and a private sector. The public sector provides the majority of curative and preventive services in the country, and has sole responsibility for the training of medical and paramedical personnel. It consists of three levels: primary (a network of basic health centres and local hospitals), secondary (regional hospitals) and tertiary (university hospitals).

There is widespread access to health care, mainly in the following ways:[4]

- schemes providing care either free, or by paying for a card giving a discount in the health and hospital facilities run by the Ministry of Public Health, Assistance Médicale Gratuite, the CNSS (Caisse Nationale de Sécurité Sociale), the health care carnet system operated by CNRPS (Caisse Nationale de Retraite et de Prévoyance Sociale) and other statutory schemes for members of the army and the internal security forces, health personnel, the handicapped and others;

- direct provision of care by public institutions: health centres operated by the army and internal security forces, CNSS polyclinics, and medical services provided by certain public companies;
- reimbursement of health care costs paid by the insured (the reimbursement schemes operated by the CNRPS, group insurance policies and mutual funds).

Health spending amounted to 6.2% of gross national product (GNP) in 1995, which was above the 5% laid down by the WHO but below that of the developed countries. Health expenditure is financed from three main sources: the state, social security funds, and households. The state used to be the main source of finance, but its contribution has gradually decreased from 51% in 1980 to 34% in 1995. Households, whose spending is mainly on the private health sector, contribute 51% either directly or via insurance companies or mutual funds, while social security funds provided 15% of total spending.[4]

The number of hospitals and medical staff in Tunisia is as follows (1996):[1,4]

hospitals*	159		
beds*	15,858	beds per 1,000 population	1.8
physicians (1995)	5,965	physicians per 1,000 population	0.7
nurses	25,470	nurses per 1,000 population	2.8

* public sector only

Public hospitals provide 87% of the total beds, and employ 64% of doctors and 90% of paramedical staff. Bed occupancy is approximately 45% in district hospitals, 60% in regional hospitals, and over 80% in university hospitals, which are concentrated mainly in Tunis and to a lesser extent in Sousse and Sfax.

Organisation of primary health care

Primary health care

There were 1,841 basic health care centres in late 1996, which is about one per 4,500 inhabitants.[3] In 1995, there were 870 midwives, 1,250 general practitioners and 4,800 nurses providing reproductive health services in these centres.[4]

Maternal and child care

In 1995, 79% of pregnant women were monitored by qualified personnel, and 81% of births took place in an assisted environment (the figure was 93% in urban areas and 65% in rural districts).[3,4] In 1996, 90% of babies were protected against neonatal tetanus, either because their mothers were among the 79% who had been vaccinated, or because they were born in a sanitary environment. Overall, 94% of children are

breast-fed, regardless of whether they live in urban or rural areas.

Immunisation programme

The government places particular emphasis on child health, and in particular the national vaccination programme. In 1996, nearly all Tunisian children had been vaccinated against tuberculosis, and in 1995 around 92% of children aged 1 had been immunised against polio.[4]

Health policy

Tunisia has adopted the objective of health for all by the year 2000, and all the resolutions of the Alma Ata declaration; this was reflected in the creation of a Basic Health Care Directorate in 1981. The right to health is considered as a fundamental one for all Tunisians.

The Ministry of Public Health's priorities include bringing the health service closer to the public, setting up basic health care centres in the poorest areas, the transfer of medical technology, promoting research and development, making rational use of medicines, and ensuring the optimum allocation of resources and an even geographical distribution of personnel and equipment.[4]

A number of actions have been undertaken with a view to adapting the country's health system to favour poorer regions and to improve basic health care. These include: [4]

1. the creation of a national solidarity fund, to provide finance to improve all aspects of health provision in the poorest regions, including primary health care;
2. vaccinating all children under 2 against hepatitis B, in addition to the six diseases covered by the expanded immunisation programme;
3. a continued effort to reallocate resources towards primary health care. In this respect, the interior of the country has been declared a priority region as far as the allocation of personnel is concerned. Staff working in this region receive substantial additional benefits, such as higher pay and the ability to work privately in addition to their main work.

In addition, investment programmes have been drawn up and implemented in the poorer regions and primary facilities. For example, the Santé Population project, which is partly funded by a World Bank loan, has enabled the system of primary health clinics to be renovated and re-equipped and most personnel working in this area to be given additional training.[4]

Problems and recent developments

Tunisia has made varying degrees of progress in a number of areas, such as improving vaccination rates and reducing mortality and morbidity. But there are still some problems, such as the geographical distribution of hospitals and medical

personnel; there are not enough in the south and west of the country. General practitioners are well distributed throughout the country, but specialists are concentrated in Tunis, Sfax, Sousse and Monastir.[4] Although Tunisia has brought most childhood infectious diseases under control by vaccination, the benign form of diarrhoea and acute respiratory infections are still common.

The main constraints the country is facing are financial and organisational ones.[4] For example, the cost of vaccinations is increasing, and some of the government's objectives, such as eliminating measles, have become significantly more expensive. From an organisational point of view, despite political and regulatory attempts to decentralise the decision-making process and the management of health programmes, the health system is still relatively centralised.[4]

If Tunisia is to mobilise the necessary financial resources in the health sector and ensure that they are used effectively, it needs to deal with the following problems:

- the fact that it is not known how many people are covered by the Assistance Médicale Gratuite system, since there is no precise definition of poverty and the procedures for issuing health cards are complex;
- the waste of resources caused by the fact that there are a number of health insurance schemes covering the same risks;
- the rates charged in the public sector are still below the real cost of providing the care.

References

1. Ministry of Health, Tunisia, 1997.
2. The World Bank, World Development Indicators 1997, Washington: the World Bank 1997.
3. WHO, Country Statistical Profiles. Annual Report of the Regional Director, 1996.
4. Ministère de la Santé Publique, Troisième évaluation de la mise en oeuvre de la stratégie de la santé pour tous d'ici l'an 2000, Rapport de la Tunisie, 1997.

Acknowledgement

The authors thank the following persons for supplying additional information for the report on Tunisia:
Hayet Daadouche, European Commission, Tunis,
Noureddine Achour, Ministry of Health, Tunis,
Moncef Sidhom, Ministry of Health, Tunis,

and for reviewing the draft of the report:
Noureddine Achour, Ministry of Health, Tunis.

TURKEY

I. Kulu Glasgow

The country

Turkey, with its population of 60 million, is one of the most populous countries in Europe.[1,2] It covers a surface of 774,815 sq.km with land both in Asia and Europe. It is a republic with 79 provinces. About 98% of the population is Muslim. The country is not only characterised by a highly heterogenous social and cultural structure, but also significant differences exist between regions in terms of socio-economic development. While the western region is the most developed and industrialised, the eastern and the south-eastern regions are the least developed and agrarian parts of the country.

The country is governed via the parliamentary system. The head of state is the president, while the prime minister leads the government. The military has intervened the political system in 1960, 1971 and 1980 following political unrest in the country. Turkey established a customs union with the European Economic Community in 1995, and aims to achieve full membership in the future.

Statistical key figures, 1995[2-4]

Population		*Natality, mortality and health*	
population in mln	261,8	crude birth rate (per 1,000)	23
people per sq.km	79	total fertility rate	2.7
% annual growth	2.1	contraceptive prevalence rate	63
% urban (1994)	70	crude death rate (per 1,000)	7
% under 15 (1994)	33	infant mortality rate	48
% 65 and above	4.5	under-5 mortality rate	63
		maternal mortality ratio	
Development		(per 100,000 births)	183
illiteracy rate men	8	% DPT immunised at age 1	86
illiteracy rate women	28	% polio immunised at age 1	77
GNP per capita in $	2,780	% measles immunised at age 1	75
% access to safe water	92	life expectancy men	66
% access to sanitation	94	life expectancy women	71

Structure and financing of health care

The structure and the financing of the Turkish health sector is complex with a large number of public, semi-public and private institutions engaged in the financing and delivery of health services. The Ministry of Health (MOH) assumes a regulatory and policy-making function, but also provides preventive services and in- and outpatient curative care through a national network of institutions (hospitals, clinics, dispensaries, health centres).[6,7]

The public sector dominates the supply of services. Ninety-five per cent of the hospital beds, and all preventive health care institutions are owned by the public sector. Similarly, 76% of specialists and 96% of general practitioners are employed by the public sector.[5] Public-sector services are not limited to those of the MOH. Medical schools, through their university hospitals, cover a substantial part of the supply of health services. The Social Insurance Organisation (SSK) not only operates its own hospitals, but also purchases services for its members from other public and private providers. The Ministry of Defence (MOD) has a large network of services and covers the health needs of its members, active and retired, and their dependants. Other ministries (Education, Youth and Sports), public organizations (Post and Telecommunications, Railways), and State Economic Enterprises operate their own hospitals. In addition to the very active private sector, there are many non-profit organisations and hospitals providing care for religious groups and foreign communities. In spite of all the different agents which provide health care services, the MOH is responsible for the implementation of the country's health policy and, together with State Planning Organisation, its formulation. Private-sector employment is very high for medical-specialists, dentists, and pharmacists. Secondary level services are accessible without any referral system. The majority of specialists work both at hospitals and after work hours in their private practices.[8] Almost all university hospitals and the majority of general hospitals provide emergency care.

By 1993, 60% of the population was covered by some form of health insurance.[5] The insured benefit wholly or partially from free treatment services. In general, there are three large organizations providing this service. The largest is the Social Insurance Organisation (SSK), which functions both as an insurer and as a health care provider, and provides health insurance to 36% of the population. The SSK specifically targets commercial and industrial workers. It maintains contracts with private or public institutions, for outpatient or for inpatient care in areas where it does not operate its own hospital. The second largest organization is the government employees' retirement fund which receives funds both from civil servants and the government. The fund provides short- and long-term insurance benefits to active and retired civil servants and their dependants. The third, BAĞ-KUR, provides health insurance to merchants, artisans, farmers, and self-employed professionals.[7,8] In addition to these three institutions, private organizations, banks, insurance companies, chambers of commerce, and private funds also provide health services for their members. Recently, private insurance companies also operate in the market.
An additional 3,7 million people were insured by the state at the beginning of 1995 under the so-called 'green-card' application[5] which entitles those without any form of health insurance to free medical care.

In 1995 total health expenditures comprised about 4% of the gross domestic product (GDP).[2,5] The MOH accounted for 28% of total health expenditures, social insurance organizations about 36%, and personal health expenditures estimated at around one-third.[7] The share of public expenditures is estimated to have increased to 65% in 1994.[5] Three main sources fund the system: taxation/general budget (43%), insurance premiums (25%), and out-of-pocket payments (33%).[7,10]
The most recent figures on health institutions and personnel are given below.

Institutions providing health care by number of hospitals and beds, 1994[5]

	number of hospitals	number of beds
MOH	666	77,753
MOD	42	15,900
SSK	115	25,196
State Economic Enterprises	11	2,099
other ministries	2	680
medical Universities	29	19,852
municipalities	5	1,160
foreign hospitals	6	560
minorities	5	934
associations	10	741
private	133	5,690
total	1024	150,565

Human resources, 1994[5,9,12]

	total	health care provider/ 1,000 population
specialists	27,564	0.5
general practitioners	38,268	0.6
nurses	56,280	0.9
midwives	35,604	0.6
health-technicians	30,811	0.5

(1994 mid-year population: 61,183,000)

Organisation of primary health care

Primary health care

At the central level, the MOH is responsible for primary health care (PHC). Responsibility for delivering services and implementing specific primary health care programmes is shared by various General Directorates (Primary Health Care, Mother and Child Health and Family Planning, Health Training) and by various Departments (Tuberculosis Control, Malaria Control, Cancer Control).[7,8] The MOH also operates schools for educating nurses, midwives, and health technicians. However, it has no authority over medical universities which also operate academic hospitals that cover an increasing share of the country's medical care.[6]

Turkey enacted a law in 1961 known as 'socialisation' of health care services that aimed at free provision of easy and equally accessible PHC services to the entire population. The socialisation programme aimed to provide both preventive and curative PHC services at the village level. The existing network of primary health care system works on a health team basis. The most basic element of the health service is the *health house* (sağlık evi) which serves a population of 2,500-3,000 and is staffed by a midwife. Each health house is connected to a regional *health centre* (sağlık ocağı). There are three types of health centres: the village health centre which serves a population of 5,000-10,000, town health centres serving a population of 10,000-30,000, and city health centres serving a population of more than 25,000 in cities.[7] The personnel of a standard health centre consists of a general practitioner (GP), a public health nurse, a health technician, midwives, a medical secretary, and a driver.[10-11] Every household has to be registered with the health centre in their district and is assigned to the GP in the health centre. The services are provided free to the population. In the case of a visit to a private GP, patients have to pay from their own pockets. The main functions of health centres are the prevention and treatment of communicable diseases, immunisation, mother and child health care, including family planning, public health education, environmental health, patient care and the collection of data concerning health.

By the end of 1995, there were 4,927 health centres and 11,888 health houses in the country.[12] There are a sufficient number of health centres in rural areas, but an insufficient number of health centres serving to large towns or cities.[8] In addition, tuberculosis dispensaries also offer preventive PHC services. In the case of treatment oriented health services, in theory patients are to be referred along a hierarchial chain: regional health centre, town hospital, and provincial state hospital.[7] The number of patients who are officially referred from health centres to hospital outpatient clinics are almost negligible, however.[8] Almost all patients make their own way to outpatient clinics without the advice of a general practitioner.[8]

Mother and child care

The General Directorate of Mother and Child Care and Family Planning (MCHFP) within the MOH is the main body organising and delivering these services. Due to the lack of adequate co-ordination, the establishment of family planning units in all health centres and hospitals has not been achieved. At the primary level, 228 MCHFP centres/units (connected to health centres/houses), and 113 Family Planning Clinics in maternity hospitals and state hospitals provide services.[7]

Under MOH regulations, at the primary level pregnant women are followed up by midwives and nurses, either at their homes, at health centres or at MCHFP centres. According to the required scheme, the first antenatal visit should take place before the third month of the pregnancy.[8] Health institutions should provide three visits up to the 28th week with subsequent visits in the 32nd, 36th and 39th weeks. During pregnancy, women should be given two doses of tetanus toxoid vaccination to prevent neonatal tetanus and resulting mortality. If a woman has been vaccinated during a previous pregnancy, then she might be given one dose only. Efforts are ongoing for expanded use of this vaccine. In 1993, 63% of all women received at least one antenatal visit, and in 42% of the deliveries the mother was given a tetanus injection.[4]

Women are encouraged to give birth in a hospital and/or with the assistance of a health personnel with the aim of reducing high maternal and perinatal mortality. A great majority of home deliveries take place under unsanitary conditions. The type of assistance a woman receives during the birth of a child depends to a great extend on the place of delivery. Deliveries that take place at home are much less likely to be assisted by a midwife or a doctor. In 1993, 60% of all births took place at a health facility, with significant regional differences. In the rural areas and in the eastern part of the country, between one-fifth to one-fourth of deliveries still take place with the assistance of elderly local women who are called 'traditional midwives', without the assistance of any trained health personnel.[4]

Breast-feeding of children is almost universal. A joint statement of UNICEF and WHO known as the 'ten-steps to successful breast-feeding' which promotes and supports breast-feeding was initiated in 1989 within the context of the 'Baby Friendly Hospitals Initiative'. These rules are still implemented in university hospitals, and MOH and SSK hospitals.[8,13]

In rural areas, modern sanitation facilities are not widely available, and in general, season-dependent diarrhoeal diseases are the leading cause of morbidity and mortality among children. In 1986, the National Control of Diarrhoeal Diseases was launched by the MOH. The main objective of the programme is the prevention of deaths from diarrhoeal diseases by preventing dehydration. Oral rehydration therapy which is considered to be not only one of the most effective but also least expensive methods, is promoted. MOH organises training seminars for health providers, and oral rehydration therapy is practised widely in health centres, MCHFP units, and outpatient

department of hospitals.

Acute respiratory infection (ARI) is the most prevalent disease among infants and children under age 5, especially in winter months, and contributes significantly to child mortality. In 1986, the Control of Acute Respiratory Infections Programme (CARI) was launched as a pilot project in a single province of Central Anatolia. By 1993, the programme was being implemented in 33 'high risk' provinces. The programme covers 34% of the total population. The main activities of the programme are collecting baseline information about the knowledge and attitude of mothers and health care personnel of ARI, the training of medical personnel in primary health care units on ARI, and training other health personnel in diagnosing ARI and in rules of treatment.[4,8]

Immunisation programme

In 1985, an immunisation campaign according to the criteria of UNICEF and WHO guidelines was initiated. Its objective was that all children under 5 would be fully vaccinated with three doses of DPT, three doses of oral Polio vaccine, and one dose of measles vaccine before reaching 12 months of age. In 1987, the immunisation programme had been integrated into the routine services of primary health care services. In places without a health unit, vaccination is provided through mobile teams. Zero age group BCG vaccination has also been integrated into the routine health services in 1990. In 1993, 89% of children below 2 years were immunized against BCG.[4] Although morbidity and mortality caused by these diseases have been significantly decreased as a result of this programme,[7] immunisation coverage under age 5 is still not considered to be at the desired level.[8] As a result of high drop-out rates, coverage among rural children is lower for the third dose of DPT-oral polio vaccine. Similarly, measles and BCG vaccine coverage rates are also lower for rural children. Overall, nearly three-quarters of urban children are fully vaccinated compared to only about half of rural children, with coverage among children in the eastern region the lowest.[4]

Health policies

Turkey has implemented an anti-natalist population policy for more than three decades. Within this context, mother and child health care and family planning activities are given priority status in health policies. Most health indicators are considered unsatisfactory given the socio-economic development level of the country. The most common causes of mortality are preventable or controllable diseases.[5,10] In addition to policies targeted at reducing high infant and child mortality rates, which is one of the most significant health problems, a high maternal mortality ratio, a large proportion of women of reproductive age and children in the total population, a high demand for contraceptive methods, frequent birth intervals, too-young and too-late maternal age at birth, and an uneven distribution of prenatal and postnatal care have

been the focus of health policies. Several programmes are being implemented with specific emphasis on high risk 'development priority areas'(First Health Project initiated in 1990 in eight, Second Health project initiated in 1994 in twenty-three 'high-risk provinces'). There are some local projects focusing on other vulnerable sections of the population such as squatter housing districts in metropolitan areas and rural settlements. These programmes relate to diarrhoeal diseases, ARI, and the promotion of breast-feeding and growth monitoring (see above), nutrition, antenatal and delivery care, safe motherhood, information, education, and communication programmes for mother and child health and family planning activities. Furthermore, several campaigns have been organised in the last decade targeting tuberculosis, malaria and venereal diseases.[5,11]

Problems and recent developments

The most important problem in the delivery of health services in Turkey is considered to be the lack of a long-term national health policy.[7,10] Such factors as political instability and frequent government changes, a lack of adequate qualified personnel, and of an institution to provide scientific information for policy development in all aspects of health care, mean that attempts to solve the health problems of the country remain unstable. This, in turn, leads to inefficiencies in the organisation, administration, and delivery of services.[7,10]

Although the MOH is the responsible body at the central level, the autonomy of the various institutions providing health services makes it difficult to ensure an effective co-ordination and delivery of services as well as leading to inefficient utilisation of resources.[5,7,10] There is an unbalanced distribution of health personnel and health services due to the lack of a plan, and due to the arbitrary appointments of the health personnel.[7] Unequal access to health services due to a lack of any kind of insurance scheme (40% of the population) remains a problem. Working in PHC has a low status with low education and a lack of post-training opportunities, which in turn demotivates the personnel. Although family practice has been recognised as a medical specialty since 1985, and 250 family practice specialists have been educated since then, concrete measures to legalise their status have not been initiated by policy-makers and they are instead employed in unrelated fields due to the lack of an appropriate structure.[14]

The 'socialisation' programme which initially gave emphasis to the delivery of PHC services to the rural population fails to meet current demand due to the rapidly urbanising population. There is a lack of a network of PHC services to meet the needs of the population in big cities, especially in slum areas around big cities. As the programme to a large extent focuses on mother and child health care, it is also unable to meet the health needs of a gradually aging population. Lack of an efficient referral system starting from the primary level and extending to all other levels, and the lack of

trust in GPs by patients leads to significant problems: demand is unnecessarily directed to the secondary level services, there is an excess crowding of patients in big cities and especially in big hospitals, increasing unit-costs etc.[5,7,10,15]

A health reform (known as the 'master plan study') was formulated in 1990, commissioned by the State Planning Organisation. The plan aimed at improving the health status of the population through increased efficiency and equity of the health care system, and identified specific health status targets for the year 2000 within the context of WHO's Health for All ideology. The reform programme consists of reforms in the following main areas: financing (bringing the portion of the population not covered for health insurance under the new health insurance system), service delivery, administration/management, human resources, the establishment of a national Health Academy, and the foundation of a management information system.[7,10] The core of the service provision reform is based on the philosophy of PHC. It aims at strengthening PHC services by introducing the 'family doctor' system where the family doctors, chosen by patients, act as gatekeepers to the secondary line services. Family doctors basically will be responsible for basic level treatment services, follow-up of patients at home or as outpatients after second or third level treatment services, preventive health measures, laboratory services, periodic examinations, and first aid and emergency services. The plan proposes the retainment of current health houses and health centres, and the establishment of Public Health Centres in cities within which several institutions such as regional health centres, MCHFP centres, anti-tuberculosis dispensaries will be unified.

In order to implement these comprehensive reforms consistently and free from politics, a long term National Health Policy was formulated in 1993.[7,16] This policy, however, has not yet been implemented due to political instability in the country and a lack of consensus over its interpretation and application[14] as well as inadequate financing and health personnel, and a lack of up-to-date technology to implement the plan.[7] However, the seventh five-year development plan setting goals for 1996-2000 still aims at the introduction of the 'family doctor' system.[5]

References

1. State Institute of Statistics. 1990 Census of Population: Social and Economic Characteristics of Population, 1993.
2. The World Bank. World Development Indicators 1997, Washington: the World Bank 1997.
3. State Institute of Statistics and Unicef. Turkey Multiple Indicator Cluster Survey, Preliminary Report, 1995.
4. Biliker MA, Haznedaroğlu D, and Emiroğlu N. Maternal and Child Health, in: Ministry of Health and Hacettepe University institute of Population Studies, Demographic and Health Survey: Ankara, 1994.
5. Devlet Planlama Teşkilatı, Yedinci Beş Yıllık Kalkınma Planı. Ankara, 1995.
6. Toros A and Öztek Z (eds.). Health Services Utilization in Turkey, Ministry of Health, Health

Project General Coordination Unit, Ankara, 1995.
7. Özcan C. Organization, Administration, and Service Models of Health Services in Turkey, in: A. Toros (ed.) Population Issues in Turkey: Policy Priorities, Hacettepe University institute of Population Studies, Ankara, 1993.
8. Bertan M. The Health and Population of Turkey, in: A. Toros (ed.) Population Issues in Turkey: Policy Priorities, Hacettepe University institute of Population Studies, Ankara, 1993.
9. State Institute of Statistics, Health Statistics.
10. OECD. The Reform of Health Care Systems, Health Policy Studies No.5, Paris, 1994.
11. Hancıoğlu A. Introduction, in: Ministry of Health and Hacettepe University institute of Population Studies,, Demographic and Health Survey, Ankara, 1994.
12. Sağlık Bakanlığı TC. Sağlık İstatistikleri, 1995, Ankara, 1996.
13. Tunçbilek E. Infant Feeding, Maternal and Childhood Nutrition, in: Ministry of Health and Hacettepe University institute of Population Studies,, Demographic and Health Survey, Ankara, 1994.
14. Gõrpelioğlu S, Korkut F and Aytekin F. Family Practice in Turkey, Family Practice, 1995:12(3), pp: 339-340.
15. Price Waterhouse and State Planning Organization. Health sector masterplan study, Report on current Situation, State Planning Organization, Ankara, 1990.
16. Sağlık Bakanlığı. Ulusal Sağlık Politikasi, Ankara, 1993.

Acknowledgement

The authors thank the following persons for supplying additional information:
Mehmet Siddik Ensari, State Institute of Statistics, Ankara,
Haceteppe University, Institute of Population Studies, Ankara,

and for reviewing the draft of the report on Turkey:
Niyazi Çakmak, Ministry of Health, Ankara.

APPENDIX: Definitions statistical key figures[1]

% annual growth	-	calculated as the exponentional change for the period between 1980 en 1995/1996
% urban	-	percentage of a country's total population residing in urban areas
illiteracy rate	-	proportion of adults aged 15 and above who cannot, with understanding, read and write a short, simple statement on their everyday life
% access to safe water	-	share of the population with reasonable access to an adequate amount of safe water
% access to sanitation	-	share of the population with at least adequate excreta disposal facilities that can effectively prevent human, animal, and insect contact with excreta.
crude birth/death rate	-	number of births/deaths occurring during the year per 1,000 midyear population; age structure of the population has not been taken into account
total fertility rate	-	number of children born per woman entering the childbearing age, if subject to prevailing fertility rates
contraceptive prevalence rate	-	average percentage of women aged 15-49 currently using contraceptives
infant mortality rate	-	number of deaths of infants under 1 year of age per 1,000 live births
under-5 mortality rate	-	number of deaths of children under 5 year of age per 1,000 live births
maternal mortality ratio	-	number of deaths to women during pregnancy and childbirth per 100,000 live births in the same year
life expectancy	-	average number of years a newborn will live based on prevailing mortality rates
na	-	not available

1. The World Bank. World Development Indicators 1997, Washington: the World Bank 1997.