Morocco

Morocco (population 32.21 million people) is a country in Northern Africa that covers an area of 446,550 square kilometres. Its boundaries border the North Atlantic Ocean and the Mediterranean Sea, between Algeria and Western Sahara. The capital of Morocco is Rabat.

According to the United Nations human development index (HDI), Morocco is ranked 125/177 countries worldwide (value 0.620)[1] and 6/45 African countries for which an index is available. This places Morocco in the group of countries with medium human development.

PALLIATIVE CARE SERVICE PROVISION

Current services

The Moroccan Society of Management of Pain and Palliative Care was created within the National Institute of Oncology in Rabat in 1995. This designated centre provides the only palliative care service in Morocco; a 10 bed hospital inpatient unit and an outpatient clinic (Table 1).

Table 1 Palliative care provision in Morocco, 2004

Adult Services								
Morocco	*Freestanding unit*	*Hospital unit*	*Hospital support team*		*Home care*	*Day care*	*Clinic/ Drop-in centre*	*Grand Total*
Moroccan Society of Management of Pain and Palliative Care, Rabat		1					1	2
Total services		1					1	2

The Moroccan Society of Management of Pain and Palliative Care

The majority of patients seen at the centre are those with metastatic cancer pain. Occasionally the centre attends to those living with HIV and suffering from chronic non-cancer pain. Up to 50,000 new cases of cancer are registered each year in Morocco yet treatment reaches only 10,000 of those, leaving many with no treatment and significant pain.[2]

The organisation manages a biennial conference for up to 400 participants to expand interest in palliative care. Since April 2003 the need to manage pain has been endorsed by health authorities as a national priority. The Moroccan Society of Management of Pain and Palliative Care in Rabat is the first National Centre of Pain

and Palliative Care in Morocco and is due to be formally inaugurated in early 2006. The aim of the Centre will be threefold: care, training and research in the field of pain.

Reimbursement and funding for services

The Global Fund approved USD 9,238,754 on 29 January 2003 to be disbursed by the Ministry of Health of Morocco in Round 1 of a project aimed at support and implementation of the national strategic plan to fight HIV/AIDS. The proposal targets vulnerable at-risk groups and implements a social communication program aimed at young people, women and the general population. It addresses provisions of diagnosis, support and treatment for people living with HIV/AIDS but does not mention palliative care.

The National Centre of Pain and Palliative Care at the National Institute of Oncology in Rabat submitted a proposal to the Paris-based non-governmental organization Douleurs Sans Frontieres (DSF) to fund a broad ranging strategy to relieve pain associated with varied conditions including AIDS and cancer. An amount of 146,377 Euros was requested for a 2 year project from January 2004 to December 2005.

The objectives of the proposal are designed to assist the centre in its fight against pain by developing a day clinic, a mobile unit and guidelines for the treatment of pain. They also include the creation of a resource centre, training of pain specialists and the inclusion of pain control in medical and paramedical training. Significantly, the proposal prioritises palliative care for patients living with a life limiting condition, notably AIDS and cancer. At April 2005 DSF funds a training of trainers curriculum at the centre.

The Ministry of Health provided USD1 million for the construction of the National Centre of Pain and Palliative Care.

Opioid availability and consumption

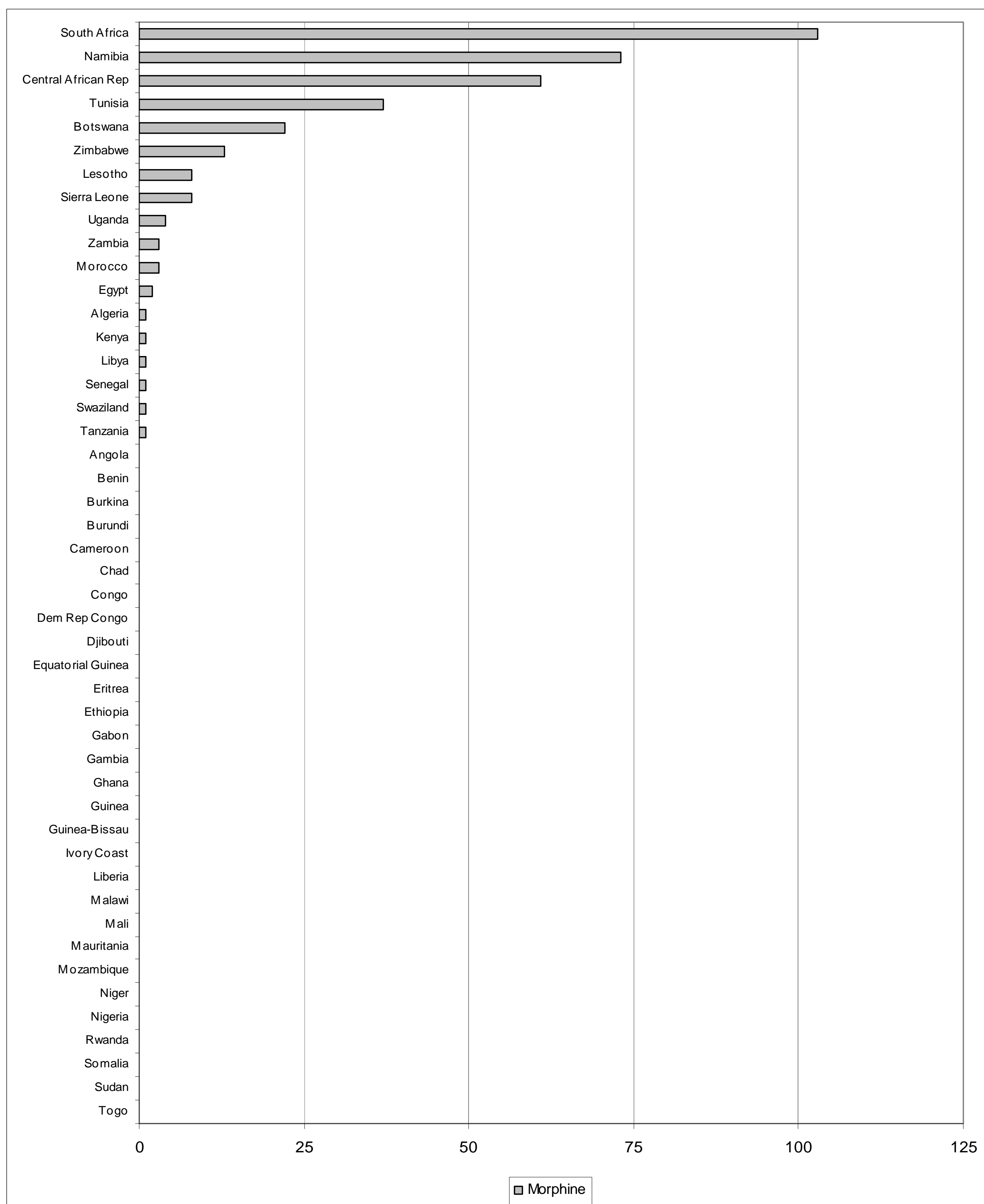
Mati Nejmi, founder of the Moroccan Society of Management of Pain and Palliative comments:

> Morphine consumption is increasing each year and is a thousand per cent more important now than in1995. Few Moroccan doctors prescribe morphine because of barriers of ignorance and fear of side effects. But things are changing now, slowly but surely.[3]

The International Narcotics Control Board[4] has published the following figures for the consumption of narcotic drugs in Morocco: codeine 519kg; morphine 4kg; pholcodine 119kg; dextropropoxyphene 943kg; ethylmorphine 16kg.

For the years 2000-2002, the average defined daily dose consumption of morphine for statistical purposes (S-DDD)[5] in Morocco was 3. This compares with other African countries as follows: Swaziland 1; Egypt 2; Uganda 4; Zimbabwe 13; Namibia 73; South Africa 103. Twenty nine countries reported no morphine consumption during 2000-2002 (Table 2).

Table 2 Average daily consumption of defined daily doses (for statistical purposes) of morphine per million inhabitants, 2000-2002: countries of Africa



Source: International Narcotics Control Board *Narcotic Drugs: Estimated World Requirements for 2004. Statistics for 2002*. New York: United Nations, 2004.

National and professional organisations

Douleurs Sans Frontières (DSF)

The French non-governmental organisation Douleurs Sans Frontières is based in Paris and has 7 projects around the world. Mati Nejmi is the Director of their research programme in Morocco. The organisation currently supports a training of trainers programme at the National Institute of Oncology in Rabat.

There is no national cancer programme in Morocco nor is there a national palliative care Association.

Palliative care coverage

Up to 50,000 new cases of cancer are registered each year in Morocco. Approximately 10,000 of these receive some form of treatment although few receive palliative care. The Moroccan Society of Management of Pain and Palliative Care in Rabat provides the only palliative care in Morocco. Since opening the centre, 750 patients have been treated each year for post-operative pain, 800 patients are hospitalised each year for cancer pain, and more than 4,500 patients have attended pain consultations. [6]

Education and training

Initial palliative care training and education in Morocco has been undertaken by the Moroccan Society of Management of Pain and Palliative Care located in Rabat. In 1999 the 3rd Euro-Maghrêbin conference on Pain and Palliative Care was held in Marrakech for between 300-400 health professionals. This initiative is repeated every two years. This organisation runs a training of trainers programme to disseminate palliative care skills around the country. Since 2003 a total of 40 Moroccan doctors have participated in this course. Nurses are also trained in palliative care by the organisation.

In 2004, the 4th Europe-Maghreb conference was held in Tabarka, Tunisia and adopted the theme *Pain and Supportive Care: Current Advances.* (The Maghreb is a region that includes Algeria, Morocco, and Tunisia). Significantly, nurse educator Françoise Porchet and three European colleagues were invited to provide a full day's training. They report:

> This opportunity allowed us to provide our nursing colleagues in the Maghreb with up-to-date knowledge on palliative care according to our individual specialties, while enabling them to acquire the knowledge through a process of exchange and constructive learning. It is very gratifying to note that the spirit of palliative care can transcend borders, cultures and languages. It is also important to realise all the possibilities that can arise from a training initiative put together between colleagues from three European countries and the extent to which this is a unifying event.[7]

Palliative care workforce capacity

The Moroccan Society of Management of Pain and Palliative Care has a team of 5 doctors and 15 nurses.

HISTORY AND DEVELOPMENT OF PALLIATIVE CARE

Narrative history of palliative care

Building on the establishment of the National Institute of Oncology in Rabat in 1985, the Moroccan Society of Management of Pain and Palliative Care was created a decade later. A designated 10-bed centre for the management of pain and palliative care was established in 1995 and formalised as a society in 1996. So began morphine use for cancer pain, post-operative pain and palliative care.

Hospice success stories

No data available.

Life/oral histories

Mati Nejmi:

> My first interest in the field of pain began when I was designated to be the Head of Department of Anaesthesiology and Care at the National Institute of Oncology in Rabat. I was suddenly affected by the severe pain that the majority of them have. I asked a French friend of mine in Paris to come to Morocco and make a conference of how to manage their patients. The first survey was done at the end of 1994 and morphine use started in March 1995. I founded the Moroccan Society of Study of Pain in July 1996. Managing pain is now a national priority since April 2003. The Ministry of Health gave us 1 million dollars for building a new National Centre of Pain and Palliative Care to have more capacity to treat cancer pain but also HIV patients with pain and chronic pain in general.[8]

PUBLIC HEALTH CONTEXT

Population

Morocco's population of around 32.21 million people is made up of the following ethnic groups: Arab-Berber 99.1%, other 0.7%, Jewish 0.2%.

Religious groups include: Muslim 98.7%, Christian 1.1%, Jewish 0.2%.[9]

Epidemiology

In Morocco, the WHO World Health Report (2004) indicates an adult mortality[10] rate per 1000 population of 160 for males and 104 for females. Life expectancy for males is 68.8; for females 72.8. Healthy life expectancy is 59.5 for males; 60.9 for females.[11]

HIV/AIDS is a huge burden for sub-Saharan Africa. Throughout the region in 2003, an estimated 23-27 million people were thought to be living with the disease which also caused up to 2.5 million deaths. This represents a huge loss and impacts significantly on health systems and social and family structures.

Morocco has been affected by the HIV/AIDS epidemic in Northern Africa. Estimates suggest that in Morocco, between 5 and 30,000 people were living with HIV/AIDS at the end of 2003. There are no figures available for adults and children who are thought to have died from the disease (Table 3).

Table 3 Morocco HIV and AIDS estimates, end 2003

Adults (15-49) HIV prevalence rate.	0.1% (Range 0.0%-0.2%).
Adults (15-49) living with HIV.	15,000 (Range 5,000-30,000)
Adults and children (0-49) living with HIV	15,000 (Range 5,000-30,000).
Women (15-49) living with HIV.	No Figures Available.
AIDS deaths (adults and children) in 2003.	No Figures Available.

Source: 2004 Report of the global AIDS epidemic

UNAIDS reports:

> Morocco's HIV prevalence rate remains at a relatively low level. However, the National AIDS Control Programme estimates that the number of persons living with HIV has now reached approximately 15,000. While HIV prevalence remains less than 1%, even in the most affected areas of the country, an increase of AIDS cases and HIV prevalence has been observed in some provinces. The National AIDS Control Programme (NACP) has recently completed the various phases of a National Strategic Plan (NSP) with the main conclusions highlighting: a) increase from 4 to 5 regions infected; b) existence of behavioural, social and economic factors of vulnerability; c) impact of AIDS on certain sectors; and d) confirmation of the relatively high prevalence of STIs in the country. The NSP has also led to the identification of the national programme's strengths and weaknesses. As a result of this process, a plan of action was formulated for 2002–2004 with the guiding principle of undertaking essential activities focused on the most vulnerable groups in the most affected areas. Simultaneously, the NACP will strengthen multisectoral coordination to ensure national coverage of prevention efforts.[12]

Health care system

In 2001, the total per capita expenditure on health care was Intl $199 (5.1% of GDP).[13] Among the countries of Africa, this figure falls within a spending range of Intl $652 in South Africa (8.6% of GDP) and Intl $12 in the Democratic Republic of Congo (3.5% of GDP). At 2.0% the smallest spending as a percentage of GDP is in Equatorial Guinea (Tables 4 and 5).

Tables 4 and 5 Total health expenditure (Intl $) per capita and as a percentage of GDP: countries of Africa, 2001

The WHO overall health system performance score places Morocco 29/191 countries. This composite measure of overall health system attainment[14] is based on a country's

Table 4
Health expenditure (Intl $) per capita: Africa

Country	Per capita
South Africa	652
Tunisia	463
Botswana	381
Namibia	342
Libya	239
Morocco	199
Gabon	197
Algeria	169
Swaziland	167
Egypt	153
Zimbabwe	142
Côte d'Ivoire	127
Liberia	127
Kenya	114
Equatorial Guinea	106
Lesotho	101
Djibouti	90
Gambia	78
Angola	70
Senegal	63
Guinea	61
Ghana	60
Central African Republic	58
Uganda	57
Zambia	52
Mozambique	47
Mauritania	45
Togo	45
Rwanda	44
Cameroon	42
Sudan	39
Malawi	39
Benin	39
Guinea-Bissau	37
Eritrea	36
Nigeria	31
Mali	30
Burkina Faso	27
Sierra Leone	26
Utd Rep of Tanzania	26
Congo	22
Niger	22
Burundi	19
Chad	17
Ethiopia	14
Dem Rep of the Congo	12
Somalia	

Source WHO World Health Report 2004

Table 5
Health expenditure (Intl $) as a percentage of GDP: Africa

Country	%GPD
South Africa	8.6
Kenya	7.8
Malawi	7.8
Namibia	7.0
Djibouti	7.0
Botswana	6.6
Tunisia	6.4
Gambia	6.4
Zimbabwe	6.2
Côte d'Ivoire	6.2
Mozambique	5.9
Uganda	5.9
Guinea-Bissau	5.9
Zambia	5.7
Eritrea	5.7
Lesotho	5.5
Rwanda	5.5
Morocco	5.1
Senegal	4.8
Ghana	4.7
Sudan	4.5
Central African Republic	4.5
Utd Rep of Tanzania	4.4
Angola	4.4
Benin	4.4
Mali	4.3
Sierra Leone	4.3
Liberia	4.3
Algeria	4.1
Egypt	3.9
Niger	3.7
Ethiopia	3.6
Mauritania	3.6
Burundi	3.6
Gabon	3.6
Guinea	3.5
Dem Rep of the Congo	3.5
Nigeria	3.4
Cameroon	3.3
Swaziland	3.3
Burkina Faso	3.0
Libya	2.9
Togo	2.8
Chad	2.6
Somalia	2.6
Congo	2.1
Equatorial Guinea	2.0

goals relating to health, responsiveness, and fairness in financing. The measure varies widely across countries and is highly correlated with general levels of human development as captured in the human development index.

Political economy

A manifesto of the Istiqlal (Independence) Party in 1944 was one of the earliest public demands for independence.

Gradual political reforms in the 1990s resulted in the establishment of a bicameral legislature in 1997. Parliamentary elections were held for the second time in September 2002 and municipal elections were held in September 2003. Morocco faces the problems typical of developing countries - restraining government spending, reducing constraints on private activity and foreign trade, and achieving sustainable economic growth. Despite structural adjustment programs supported by the IMF, the World Bank, and the Paris Club, the dirham is only fully convertible for current account transactions. Reforms of the financial sector are being contemplated. Droughts depressed activity in the key agricultural sector and contributed to a stagnant economy in 2002. Morocco reported large foreign exchange inflows from the sale of a mobile telephone license, and partial privatization of the state-owned telecommunications company and the state tobacco company. Favourable rainfall in 2003 led to a growth of 6%. Formidable long-term challenges include: preparing the economy for freer trade with the EU and US, improving education, and attracting foreign investment to boost living standards and job prospects for Morocco's youth[15]

The Moroccan economy is becoming increasingly diversified. Morocco has the largest phosphate reserves in the world. Other mineral resources include copper, fluorine, lead, barite, iron, and anthracite. It has a diverse agricultural (including fishing) sector, a large tourist industry, a growing manufacturing sector (especially clothing), and considerable inflows of funds from Moroccans working abroad. The export of phosphates and its derivatives account for more than a quarter of Moroccan exports. Morocco is increasing production of phosphoric acid and fertilizers. About one-third of the Moroccan manufacturing sector is related to phosphates and one-third to agriculture with virtually all of the remaining third divided between textiles, clothing, and metalworking. The clothing sector, in particular, has shown consistently strong growth over the last few years as foreign companies established large-scale operations geared toward exporting garments to Europe. Agriculture plays a leading role in the Moroccan economy, generating between 15 and 20% of GDP (depending on the harvest) and employing about 40% of the work force. Morocco is a net exporter of fruits and vegetables, and a net importer of cereals; over 90% of agriculture is rain-fed. Fishing is also important to Morocco, employing more than 100,000 people, including the canning and packing industries.[16]

GDP per capita is Intl $3887. This falls within the range of $8,272 (Libya) and $346 (Democratic Republic of the Congo) in the countries of Africa (Table 6).

Table 6 GDP per capita (Intl $): countries of Africa, 2001

Country	GDP per capita (Int $)
Libya	8272
South Africa	7538
Tunisia	7183
Botswana	5747
Gabon	5514
Equatorial Guinea	5239
Swaziland	5029
Namibia	4918
Algeria	4104
Egypt	3901
Morocco	3887
Liberia	2965
Zimbabwe	2271
Côte d'Ivoire	2045
Congo	1936
Lesotho	1844
Guinea	1752
Togo	1608
Angola	1578
Kenya	1452
Senegal	1323
Central African Republic	1289
Djibouti	1288
Ghana	1272
Cameroon	1269
Mauritania	1257
Gambia	1214
Sudan	1112
Uganda	964
Nigeria	915
Zambia	906
Benin	888
Burkina Faso	886
Mozambique	805
Rwanda	799
Mali	700
Chad	656
Guinea-Bissau	630
Eritrea	629
Sierra Leone	606
Niger	604
Utd Rep of Tanzania	599
Burundi	529
Malawi	501
Ethiopia	382
Dem Rep of the Congo	346
Somalia	

Source WHO

ETHICAL ISSUES

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[2] Personal communication: Mati Nejmi – 5 April 2005.

[3] Personal communication: Mati Nejmi – 5 April 2005.

[4] International Narcotics Control Board (2004) *Narcotic Drugs: estimated world requirements for 2004. Statistics for 2002.* New York: United Nations, 2004.

[5] 'The term *defined daily doses for statistical purposes* (S-DDD) replaces the term *defined daily doses* previously used by the Board. The S-DDDs are technical units of measurement for the purposes of statistical analysis and are not recommended prescription doses. Certain narcotic drugs may be used in certain countries for different treatments or in accordance with different medical practices, and therefore a different daily dose could be more appropriate.' International Narcotics Control Board. *Narcotic Drugs: estimated world requirements for 2004. Statistics for 2002.*

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[8] Personal communication: Mati Nejmi – 19 April 2005.

[9] See: http://www.cia.gov/cia/publications/factbook/geos/mo.html

[10] This refers to adult mortality risk, which is defined as the probability of dying between 15 and 59 years.

[11] See: WHO statistics for Morocco at: http://www.who.int/countries/mar/en/

[12] http://www.unaids.org/en/geographical+area/by+country/morocco.asp

[13] Total health expenditure per capita is the per capita amount of the sum of Public Health Expenditure (PHE) and Private Expenditure on Health (PvtHE). The international dollar is a common currency unit that takes into account differences in the relative purchasing power of various currencies. Figures expressed in international dollars are calculated using purchasing power parities (PPP), which are rates of currency conversion constructed to account for differences in price level between countries.

http://www3.who.int/whosis/country/compare.cfm?country=s&indicator=strPcTotEOHinIntD2000&language=english

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