Health profile 2015

Morocco

World Health Organization
Regional Office for the Eastern Mediterranean

WHO Library Cataloguing in Publication Data

World Health Organization. Regional Office for the Eastern Mediterranean

Morocco health profile 2015 / World Health Organization. Regional Office for the Eastern Mediterranean

p.

WHO-EM/HST/222/E

1. Health Status - Morocco 2. Delivery of Health Care - organization & administration 3. Communicable Disease Control 4. Chronic Disease 5. Health Promotion 6. Civil Defense - organization & administration 7. Public Health Surveillance I. Title II. Regional Office for the Eastern Mediterranean

(NLM Classification: WA 300)

Contents

Foreword

The Government of Morocco and WHO are working together to effectively improve the public health situation in the country with special emphasis on the five key regional priorities:

- health security and prevention and control of communicable diseases;
- noncommunicable diseases, mental health, violence and injuries, and nutrition;
- promoting health through the life-course;
- health systems strengthening; and
- preparedness, surveillance and response.

The strategic directions to address these priorities are broadly in line with WHO's 12th General Programme of Work, the Programme Budget 2016-2017 endorsed in May 2015 by the Sixty-eighth World Health Assembly and the five strategic areas of work endorsed by the WHO Regional Committee for the Eastern Mediterranean in 2012.

Reliable and timely health information is essential for policy development, proper health management, evidence-based decision-making, rational resource allocation and monitoring and evaluation of the public health situation. While the demand for health information is increasing in terms of quantity, quality and levels of disaggregation, the response to these needs has been hampered because of fragmentation and major gaps and weaknesses in national health information systems.

The strengthening of health information systems is a priority for WHO in the Region. Intensive work with Member States since 2012 has resulted in a clear framework for health information systems and 68 core indicators that focus on three main components: 1) monitoring health determinants and risks; 2) assessing health status, including morbidity and cause-specific mortality; and 3) assessing health system response. In order to successfully achieve this important goal, concerted and aligned action at national and international level are required to address the gaps and challenges in the health information systems of all countries. This will ensure the generation of more effective evidence to monitor improvement in the health situation, nationally, regionally and globally.

This comprehensive health profile is intended to serve as a tool to monitor progress in the health of the population. WHO's collaboration with its Member States will strengthen the national health information systems, and enable the generation of timely and reliable

evidence to assess the health situation and trends, and the health system response. Most important, it will provide the information needed by health policy and decision-makers.

Dr Ala Alwan

WHO Regional Director for the
Eastern Mediterranean

H.E. Dr El Houssaine Louardi

Minister of Health
Morocco

Introduction

The population of the country has increased by 28.0% in the past 25 years, reaching 34.6 million in 2015. It is estimated that 41.3% of the population lives in rural settings (2012); 17.6% is aged between 15 and 24 years (2015) and life expectancy at birth is 71 years (2012). The literacy rate for young people aged 15–24 years is 81.5%; the rate for all adults is 56.1% (2012) and for adult females 57.6% (2011).

The burden of disease (2012) attributable to communicable diseases is 17.8%; the corresponding figure for noncommunicable diseases is 75.3% and for injuries 6.9%. The share of out-of-pocket expenditure was 58.4% in 2013; the health workforce density in 2009 was 6.2 physicians and 8.9 nurses and midwives per 10 000 population.

The public health issues facing the country are presented in the following sections: communicable diseases, noncommunicable diseases, promoting health across the life course, health systems strengthening, and preparedness, surveillance and response. Each section focuses on the current situation, opportunities and challenges faced and the way forward. In addition, several trends in population dynamics and in selected health indicators are analysed to provide policy-makers with evidence and forecasts for planning.

Communicable diseases

HIV

Tuberculosis

Malaria

Neglected tropical diseases

Vaccine-preventable diseases

Communicable diseases

- The country has a national strategic plan (2012–2016) to fight HIV/AIDS.
- The Ministry of Health allocates an annual budget for the national tuberculosis programme to provide free health services to all tuberculosis patients and activities aimed at tuberculosis control in primary health care services.
- In 2014, a second dose of measles and rubella vaccines was introduced to the vaccine schedule.

HIV

The HIV/AIDS prevalence is 0.2% among adults aged 15–49 years (*1*). The population most affected is people who inject drugs, with an overall HIV prevalence of 14.0%, although 53.0% of people who inject drugs were using sterile injecting equipment; for female sex workers the figure is 3.0% and for men who have sex with men it is 3.0% (*2*). The estimated number of pregnant women living with HIV is less than 500 (*3*); antiretroviral therapy coverage to prevent mother-to-child transmission is 39.0% (*2*). Routine testing is administered on 100.0% of blood collected and the estimated antiretroviral therapy coverage is 30.0% (*2*).

The country has a national strategic plan for the fight against HIV/AIDS 2012–2016, which aims to achieve universal access to prevention, treatment, care and support for a goal of zero new infections, zero deaths and zero related discrimination. The prevalence remains low but the epidemic is growing among populations most at risk for HIV infection. In accordance with the post-2015 health and development agenda and targets, the commitment towards universal health coverage and the principle of human rights protection, the government has adopted the WHO global HIV/AIDS strategy for the health sector and the Joint United Nations Programme on HIV/AIDS new vision that is aimed at achieving the 90–90–90 targets[1] in 2020 and ending the epidemic in 2030. The national strategic plan has been reviewed, on the basis of the 2014 achievements, and all national targets have been revised in terms of HIV prevention and access to HIV counselling and testing, and to provide care and support for people living with HIV.

Tuberculosis

In 2013, the tuberculosis-related mortality rate was estimated at 8.6 per 100 000 population (*4*). A total of 29 896 detected tuberculosis cases were reported in 2013, of which 11 993

[1] These are: 90% of people living with HIV know their HIV status, 90% of people who know their HIV-positive status are accessing treatment and 90% of people on treatment have suppressed viral loads.

were new sputum smear-positive cases (*4*). The treatment success rate for new and relapsed cases registered in 2012 was 89.0%, while drug-resistant tuberculosis is estimated at 0.5% among new cases and 12.0% among previously treated cases (*4*).

The Ministry of Health allocates an annual budget for the national tuberculosis programme to provide free health services to all tuberculosis patients and activities aimed at tuberculosis control in primary health care services, as defined in the directly observed treatment, short-course (DOTS) strategy. In January 2012, an evaluation conducted by WHO found that the shortages in human resources severely affected the control of tuberculosis, limited the role of the regions in the management of tuberculosis, led to the low involvement of the private sector, and limited the involvement of other departments to act on the social determinants which had led to the spread of tuberculosis.

The achievements of the national tuberculosis programme are mainly derived from commitments made by the health sector. However, evidence has helped to build a consensus on the powerful influence of social and economic factors on tuberculosis incidence. Therefore, it is important to adopt a new, multisectoral, patient-centred approach engaging key partners from both governmental and nongovernmental sectors with a mandate to act on socioeconomic determinants of tuberculosis. This will identify new areas of action which, combined with the standard procedures, will permit more robust actions to reduce the incidence of tuberculosis.

Malaria

The country is considered low burden and low risk for malaria; the total number of confirmed cases increased from 73 in 2003 to 364 in 2012, 100% of which were imported (24.5% from Côte d'Ivoire and 23.9% from Equatorial Guinea) (*5*). In 2013, 76.9% of the confirmed cases were caused by *Plasmodium falciparum* and 23.1% by *P. vivax* (*5*).

In May 2010, the country was certified by WHO as malaria-free. In 2003, nearly all imported malaria cases detected originated from sub-Saharan African countries. In order to prevent the reintroduction of local malaria, a new strategy was developed in 2011 and is being implemented; this includes maintaining targeted interventions for vector control, strong surveillance and free-of-charge diagnosis and treatment of all malaria cases with quality antimalarial medicines provided by WHO.

The main priorities for the country are strong vigilance and disease surveillance and maintaining the availability of quality malaria diagnosis and effective treatment in all health facilities.

Neglected tropical diseases

The country was certified free of dracunculiasis in 2000, but is still endemic for cutaneous and visceral leishmaniasis and is under surveillance for blinding trachoma (*6*). In 2012, the number of reported cases of cutaneous leishmaniasis was 2877 and there were 113 cases of visceral leishmaniasis. In 2013, 38 cases of leprosy were reported (*6*).

Challenges include the poor socioeconomic conditions of the at-risk population in affected areas and their poor access to health services. Additionally, the risk of the re-emergence of blinding trachoma is not excluded where there are deteriorating hygiene conditions and a deterioration in the good habits previously acquired by the population. However, ongoing and integrated action related to sustainable development, as part of the National Human Development Initiative, and intersectoral action, afford opportunities for sustained success and for the programme to address neglected tropical diseases. Similarly, the establishment of a national research committee is an opportunity for the development of the leishmaniasis programme. Leprosy was eliminated as a public health problem in the country in 1991. The disease response still faces some challenges, including difficult access to care, especially in rural areas, socioeconomic factors, and stigma and discrimination (including the disability/poverty cycle).

It is planned to continue the epidemiological surveillance system and the study of the verification process for the elimination of trachoma in collaboration with WHO. To overcome challenges and solidify the vision of a country without leprosy in 2025, the leprosy control strategy focuses on: prevention of disabilities; early detection and treatment with multidrug therapy; audits of cases with grade 2 disability; chemoprophylaxis with a single dose of rifampicin; and communication and social mobilization.

Vaccine-preventable diseases

Immunization coverage among 1-year-olds improved between 1990 and 2013: for BCG from 96.0% to 99.0%, DTP3 from 81.0% to 99.0%, measles from 79.0% to 99.0% and polio type 3 from 81.0% to 99.0% (*7*). Neonatal tetanus coverage increased as well during the same period from 66.0% to 89.0% (*7*). In 2013, hepatitis B (HepB3) vaccine coverage among 1-year-olds was 99.0% (*7*).

In 2002, neonatal tetanus was eliminated. No cases of poliomyelitis have been reported since 1987 and no cases of diphtheria since 1991. In 2013, low incidence of measles was reported. Since *Haemophilus influenzae* type b vaccine was introduced in 2007, a decrease in meningitis has been recorded. All vaccinations are provided free of charge by the Ministry of Health; of the 13 vaccines provided, 12 are for children and one is for women of childbearing age. Pneumococcal conjugate vaccine and rotavirus vaccine was introduced in 2010. As part of the implementation of the national strategy for measles elimination

and control of rubella, a vaccination campaign was launched in 2013 which targeted 11 million people aged 9 months to 19 years. In 2014, a second dose of the measles and rubella vaccines was introduced to the vaccine schedule. In 2015, the inactivated polio vaccine was introduced.

Noncommunicable diseases

Noncommunicable diseases

Mental health and substance abuse

Violence and injury

Disabilities and rehabilitation

Nutrition

Noncommunicable diseases

- Noncommunicable diseases are emphasized as a priority in the national health strategy 2012–2016.
- The Ministry of Health mental health strategy is based on promoting mental health and preventing mental disorders through screening, early treatment, quality of care and human resources capacity-building.
- Mobile medical emergency and resuscitation services, including land and air transportation facilities, have been implemented.
- A national nutrition strategy has been developed in consultation with all stakeholders covering the entire life cycle.

Noncommunicable diseases

The burden of noncommunicable diseases is high, causing 75.3% of all deaths; cardiovascular diseases account for 33.6%, cancers 11.1%, respiratory diseases 4.5% and diabetes mellitus 11.9% (*8*). As a result, 23.0% of adults aged 30–70 years are expected to die from one of the four main noncommunicable diseases (*9*). More than 7.8% of adolescents (13–15 years of age; 10.3% of boys, 4.4% of girls) have ever smoked cigarettes, while 19.7% live in homes where others smoke in their presence (*10*). Per capita consumption of alcohol is 0.9 litres of pure alcohol (*11*). Prevalence of insufficient physical activity in adolescents (13–15 years) is 82.6% (boys 79.2%, girls 86.7%) (*12*). In adults over 18 years of age, raised blood pressure affects 32.4% (31.2% of males, 33.6% of females), while obesity affects 16.4% (10.5% of males, of 21.9% females) (*9*). Only 5 of the 11 essential medicines for treatment of noncommunicable diseases are available in the public health sector.[2]

Noncommunicable diseases are responsible for a high proportion of premature deaths and for causing others to live in poverty, requiring a concerted and coordinated policy response. In addition, as a consequence of the rise of noncommunicable diseases and inadequate attention given to prevention by controlling the major risk factors, which include smoking, unhealthy diet, physical inactivity and excessive alcohol consumption, the load placed on the health system in both social and economic terms is increasingly heavy. Noncommunicable diseases are emphasized as a priority in the national health strategy 2012–2016. There is a national strategy for the prevention and control of noncommunicable diseases for the years 2010–2019, and a noncommunicable diseases multisectoral action plan has been developed. The prevention and control of diabetes and hypertension, the early detection of breast cancer and cervical cancer and the prevention of liver cancer through hepatitis B

[2] WHO Regional Office for the Eastern Mediterranean, unpublished data, 2013.

immunization have received particular attention and are part of the essential health service package offered at a primary health care level. Mental health, smoking cessation and oral health services have also been integrated into primary health care. Equipment and drug supplies for primary health centres have been reviewed and adapted to meet the needs of patients with noncommunicable diseases. An annual budget is dedicated to the continuing education of health professionals in the field of noncommunicable diseases management. Furthermore, the Government has initiated a training programme in family practice, which may contribute to the strengthening of noncommunicable diseases prevention and control.

The Ministry of Health continues to collaborate with other sectors to develop a multisectoral approach to the prevention and control of noncommunicable diseases, an approach that has proven very effective at a comparatively low cost.

Mental health and substance abuse

Neuropsychiatric disorders are estimated to contribute 15.8% to the burden of disease (*13*) and the suicide rate is 5.3 per 100 000 per year (*14*). Substance use for cannabis is 4.2%, opiates 0.0%, cocaine 0.1%, and amphetamines 0.1%; estimated prevalence for substance use disorders among adult males (15 years and over) is 0.6% and among females is 0.2% (*15*).

The strategy of the Ministry of Health is based on promoting mental health and preventing mental disorders through screening, early treatment, quality of care, capacity-building of human resources and the implementation of an accreditation process as well as fighting the stigmatization of people with mental disorders. In the area of substance abuse, special importance is given to interventions aimed at preventing drug and substance abuse among young people, accessibility to and quality of care, enhancing risk reduction, strengthening sectoral partnerships with nongovernmental organizations and supporting evidence-based research.

Priority has been given to: finalizing a national law on mental health and protection of the rights of those with mental illness; development of the care package and research in child psychiatry; implementing standardized information systems for mental health and for drug abuse as well as a strategy for the harmful use of alcohol according to WHO recommendations; elaborating and developing a comprehensive strategy on health in prisons; and strengthening capacity-building programmes for primary health care professionals (general practitioners and nurses) and stakeholders on early interventions (brief interventions and motivational interviews) for drug users in health and prison settings.

Violence and injury

The proportion of deaths caused by injuries in 2012 was 6.9%; of this unintentional injuries accounted for 82.6% (the leading cause was road traffic injuries, 51.7%; 15.9% were as a result of drowning) and intentional injuries accounted for 17.4% (66.3% as a result of self-harm and 33.7% as a result of interpersonal violence) (*8*). In 2010, the estimated road traffic fatality rate was 18.0 per 100 000 population (*16*). For post-injury trauma care, there is a universal emergency access telephone number and more than 75.0% of the seriously injured are transferred by ambulance (*16*).

There is a need to address the current gaps in the injury data and vital registration systems, indicated in disparities between the information that is reported and what is estimated, through cross-validation with other data sources, including those of the Ministry of the Interior. In 2009, the Ministry of Health launched an action plan for institutionalizing support for integrated medical, psychological, social and medico-legal care in hospitals for the victims of violence against women and children, one of the priorities of the health sector strategy 2012–2016. In addition, to strengthen trauma care, the Ministry of Health has implemented a national plan for medical emergencies aiming to: improve hospital management of trauma care; strengthen training and supervision of medical and paramedical staff; develop coordination between public facilities and promote public–private partnership; and develop a regulatory framework for emergencies medicine. Mobile medical emergency and resuscitation services, including land and air transportation facilities, have been implemented.

Focus should be placed on the building of a specialized regional centre for trauma and orthopaedics that will coordinate management of care and treatment for all categories of trauma.

Disabilities and rehabilitation

The prevalence of disability is 4.1% (1 353 766 people), of which females make up 52.5% and 56.0% live in urban settings. Age-specific disability prevalence is highest in the 60+ age group (50.6%), and 10.9% in those under 15 years of age (*17*). The Convention on the Rights of Persons with Disabilities was signed in 2007 and ratified in 2009. The Inter-ministerial Technical Commission for the Welfare of Persons with Disabilities is a national coordination body, chaired by the Minister of Social Development, with representation from persons with disabilities. The 2011 Constitution includes articles on disability (Article 34). The overarching disability legislation is the Social Welfare Act for Disabled People (1992). A national disability strategy has existed since 2008. The Ministry of Health has established a service for rehabilitation and geriatrics, with the aim of providing services such as physical therapy, speech therapy and orthopaedic therapies to disabled people. Under the Ministry

of Health strategy (2011–2016), a national plan on health and disability 2015–2016 has been developed, based on the *WHO global disability action plan 2014–202: better health for all people with disability.* This affords an opportunity for strengthening disability-related action in the health sector within the broader multisectoral framework.

Nutrition

The prevalence of various conditions due to malnutrition in children under 5 years of age is summarized in the following indicators: 3.1% underweight, 2.3% wasting, 1.0% severe wasting and 14.9% stunting (*18*).

There has been a sharp decline in underweight children under 5 years old. Exclusive breastfeeding has experienced a small improvement, increasing from 15% to 27.8% between 2006 and 2011. The Ministry of Health, in consultation with all stakeholders, has developed a national nutrition strategy 2011–2019 which covers the entire life cycle. This strategy is based on four complementary domains which are to be strengthened: the nutrition component of health programmes; food safety and hygiene; integration of nutrition as a component in health education programmes and community actions; and the development of actions that support the strategy, especially communication, monitoring and evaluation and research.

Since 2012, the Ministry of Health has started to implement the strategy at national, regional and local level and to expand its activities to address the double burden of malnutrition.

Promoting health across the life course

Reproductive, maternal, newborn, child and adolescent health

Ageing and health

Gender, equity and human rights mainstreaming

Social determinants of health

Health and the environment

Promoting health across the life course

- The Ministry of Health has a strategy for 2012–2016, which stresses the reduction in maternal, newborn and child mortality as priority areas of intervention.
- Implementation of the health sector strategy includes improving access to quality elderly health care, strengthening the skills of health professionals in the field of geriatrics, and strengthening collaboration and partnership with other stakeholders.
- The Medical Assistance Scheme provides insurance cover for eight million of the poor and the implementation of a national action plan for equality is ongoing. A rights and equity lens is applied to national policies with the adoption of a human rights-based approach and implementation of the WHO framework.
- The Ministry of Health is addressing the social determinants of health by forming a national commission, developing a national strategy, applying the Urban HEART tool and partnering with the University of Morocco to strengthen scientific research on these factors.
- The government has endorsed the WHO regional health and the environment strategy and framework of action 2014–2019, and is initiating a national multi-stakeholder process to develop a strategic environmental health framework for action in 2015–2016.

Reproductive, maternal, newborn, child and adolescent health

In 2010, the maternal mortality ratio was 112 per 100 000 live births and the under-5 mortality rate was 36.3 deaths per 1000 live births (*19*). The proportion of women receiving antenatal care coverage (at least one visit) is 77.1% and the proportion receiving fewer than four visits is 55.3% (*19*)[3]. Unmet need for family planning is 10.9% and the contraceptive prevalence rate is 67.4% (*19*).

The leading causes of maternal mortality are still haemorrhage, eclampsia and sepsis. Neonatal mortality is partially due to the persistent inequities between communities and regions. To meet these challenges, the Ministry of Health has developed a strategy for 2012–2016, which stresses a reduction in maternal, newborn and child mortality as priority areas of intervention. In addition, to accelerate the achievement of Millennium Development

[3] United Nations estimates for the maternal mortality ratio show a decline between 1990 and 2013 from 310 to 120 per 100 000 live births (*20*) and for the under-5 mortality rate from 81 to 30 deaths per 1000 live births (*21*).

Goals 4 and 5, and to reduce inequities in access to health care, the Ministry of Health implemented new measures targeting priority areas in 2013–2015.

Focus should be given to: improving maternal health and achieving zero preventable maternal deaths; strengthening the political commitment to accelerate the reduction in preventable maternal mortality; strengthening delivery care in neonatology; the development of operational research; and sustaining family planning.

Ageing and health

Life expectancy at birth rose by 7 years between 1990 and 2012 (from 64 years to 71 years) (*22*). In 2010, the ageing population, over 60 years, was 7.2% (*23*).

The following interventions are part of the health sector strategy: improving access to quality elderly health care, strengthening health professionals' skills in the field of geriatrics, and strengthening collaboration and partnership with other stakeholders. In order to assess the health status of the elderly, a national survey on the health of senior citizens was scheduled in 2014–2015. Opportunities include the recognition of geriatrics as a specialty (Official Bulletin 2005), the two short-stay inpatient geriatric units under construction (Kenitra/Fez), and the geriatric psychiatry centre in Sale. Moreover, Article 34 of the 2011 Constitution underlines the development and implementation of policies for individuals and groups with special needs, including the elderly, and Law 65-00 on the code of basic medical coverage introduced the Mandatory Health Insurance scheme and the Medical Assistance Scheme. Challenges include the lack of a national health strategy for the elderly, a lack of basic training for geriatricians, and insufficient specialized human resources, health care centres and short-stay geriatric units.

The momentum created during the launch of the *World report on ageing and health* in October 2015 and the related global strategy and action plan should support the national strategy and national efforts. Capacity-building is also needed to strengthen the age-friendly services provided through the primary health care system.

Gender, equity and human rights mainstreaming

The country falls among the medium human development countries, ranking 92nd of 152 countries in terms of gender inequality *(24)*. Female adult (above 15 years of age) literacy is relatively low at 57.6% (2011) *(25)* and participation in the labour force is 43.0% *(24)*.

The 2011 Constitution emphasizes equal access of citizens to health care and several laws address basic medical coverage, the principles of solidarity, access to health care services and health equality, equitable distribution of health resources, and the adoption of a gender approach to health services. Commitment to reducing health disparities is seen in the

establishment of the Medical Assistance Scheme, providing insurance coverage for eight million of the poor, and the implementation of a national action plan for equality. The Ministry of Health also identified health care-related bottlenecks and is to adopt a strategy and an action plan for health sector reform in pursuit of progressive realization of the right to health and universal health coverage. A rights and equity lens is applied to national policies with the adoption of a human rights-based approach and implementation of the WHO framework. Besides existing demographic disparities, challenges include the high cost of medicines and the ongoing decentralization and reform processes.

There is a need to establish accountability mechanisms, review policies and legislation to adapt gender-sensitive and human rights-based approaches, improve the health information system in terms of gender- and equity-based disaggregation, and follow up on ongoing efforts on equality analysis and interpretation.

Social determinants of health

The *Human development report 2014* ranked the country 129 out of 187 countries across the world on the Human Development Index (*24*). The proportion of the population at poverty level was 8.9% in 2007 (*26*). The urban population increased between 1990 and 2012 from 48.4% to 58.7%, while access of the rural population to improved water sources increased from 53.3% to 63.6% (*26*). In 2010, 47.9% of the total population was in the 0–24 years age group (*23*). The adult literacy rate in 2012 was 56.1% (*27*). Unemployment was 9.0%; for youth (15–24 years) the corresponding figure was 17.4% (*26*).

Substantial efforts have been made towards improving health status. The Ministry of Health has addressed the social determinants of health by forming a national commission, developing a national strategy, applying the Urban Health Equity Assessment and Response Tool (Urban HEART) and partnering with the University of Morocco to strengthen scientific research around these factors. Collaboration with WHO is ongoing to review existing health policies, strategies and plans for better integration of social determinants, gender, equity and human rights aspects.

There is a need to continue advocating for the integration of social determinants in the plans of the health sector and other sectors to sustain and scale up actions and to mobilize the required resources. More could also be done in regard to the integration of the efforts of non-health actors in health policies and the coordination of public policies to address health inequalities.

Health and the environment

It is estimated that 32 000 people annually die as a result of environmental factors and the proportion of disability-adjusted life years attributable to these factors is estimated at 18.0% (*28*). Access to improved sanitation facilities is 75.0% while access to improved drinking-water is 84.0% (*22*): an estimated 1000 deaths were attributed to inadequate water, sanitation and hygiene in 2012 (*29*). It is estimated that 2.8% of the population uses solid fuels (biomass for cooking, heating and other usages) (*30*), resulting in an estimated 500 deaths per year as a result of indoor air pollution (*31*).

Evidence collected on outdoor air pollution shows levels of particulate matter above national standards, with a consequent burden on the health of the population. To control health risks related to the environment, the Ministry of Health adopted five health programmes: environmental health, sanitary control of water and sanitation, vector control, food hygiene and intersectoral action along with other environmental health-related matters. These programmes have been incorporated in the national health strategy. The National Charter for the Environment and Sustainable Development states that "Everyone has the right to live in a healthy environment that ensures safety, health, economic growth, and social progress, where natural and cultural heritage and quality of life are preserved." In addition, the government considers environmental degradation and climate change among its national health priorities. The Ministry of Health has a plan for specific areas of environmental health, particularly air pollution, climate change, food safety and integrated vector management. The government has been working on strengthening national capacity in environmental health risk assessment and water sanitation and developing water safety plans. This is in line with the WHO regional strategy on health and the environment 2014–2019, which was endorsed by the government in late 2013 and is to be adopted through a national multi-stakeholder process in 2015–2016. The next step is to initiate a national multi-stakeholder process to develop a strategic environmental health framework for action in 2015–2016.

Health systems

National health policies, strategies and plans

Integrated people-centred health services

Access to medicines and health technologies

Health systems, information and evidence

Health systems

- A new health sector strategy for 2012–2016 has been developed. This places greater importance on social determinants of health and focuses on three main components: addressing social determinants of health, universal health coverage and governance in the health sector.
- The pharmaceutical sector is the second largest in Africa. Local production covers almost two-thirds of domestic demand and is able to export a proportion of its production, particularly to neighbouring African nations.
- Strengthening the national health information system is a priority for the Ministry of Health during 2012–2016.

National health policies, strategies and plans

The country's national health planning cycle is addressed in the Stratégie sectorielle de santé 2012–2016. Total per capita expenditure on health at the international exchange rate increased between 2005 and 2013 from US$ 99.9 to US$ 189.2, and general government expenditure on health increased over the same period from US$ 28.4 to US$ 64.2 (*32*). General government expenditure on health as a proportion of total expenditure on health also increased in the same period from 28.4% to 33.9%; total expenditure on health as a proportion of gross domestic product increased during the same period from 5.1% to 6.0% (*32*). In addition, the health financing system is characterized by the share of out-of-pocket spending in 2013 at 58.4%, a decrease from 2005 when it was 59.7% (*32*). Total expenditure on health from external sources has remained constant from 2005 to 2013 at 0.8% (*32*).

As a result of the constitutional referendum of July 2011, which included the right to health care as a right for all citizens (Article 31), a new health sector strategy for 2012–2016 was developed which places greater importance on social determinants of health and focuses on three main components: addressing social determinants of health, universal health coverage and governance in the health sector. In this context, the following points should be noted: the enactment in 2011 of Law 34-09 on the organization of the health system, which provides for the implementation of the law as an indispensable tool for regional distribution of health resources and whose regulations are being finalized, and the organization of the second National Health Conference (July 2013, Marrakech), which outlined the reform of the health system, taking into account the shortcomings of the current system and citizens' expectations expressed in the Intidarat programme which was launched in April 2012. The government is committed to moving towards universal health care. It has managed to increase its total spending on health; the high share of out-of-pocket payment, however, remains a major challenge. More than half of the population is covered by two main

insurance schemes: the Mandatory Health Insurance scheme and the Medical Assistance Scheme. The Mandatory Health Insurance scheme is currently managed by two institutions: the National Fund for Social Welfare Organizations and the National Social Security Fund, which provide coverage to public sector and formal private sector employees, respectively.

Covering the informal sector is a major challenge, but the introduction of the Medical Assistance Scheme is a step forward in addressing this issue. In addition, establishing efficient purchasing and provider payment arrangements are still required to enhance performance and sustainability.

Integrated people-centred health services

Heath service delivery data show that there were 0.03 mental hospitals per 100 000 population in 2011 (*33*) and 11.0 hospital beds per 10 000 population in 2009 (*34*). Human resources for health increased between 2004 and 2009 from 5.2 to 6.2 physicians per 10 000 population; nurses and midwives increased from 7.8 to 8.9 per 10 000 population; dentists decreased from 1.0 to 0.8 per 10 000 population, pharmacists increased from 2.4 to 2.7 per 10 000 population (*35*) and there were 0.9 psychiatrists per 100 000 population working in the mental health sector in 2011 (*36*).

Geographical accessibility is poor, with 11.0% of the population living more than 10 km from a primary health care facility; quality of care in public health facilities is also poor. There are gaps in human resources confounded by maldistribution, weak motivation to work in remote settings and widespread dual practice, all contributing to lower performance for services as well as in the health information system, including civil registration and vital statistics. The challenges faced in service provision include extending basic medical coverage to the informal sector through the establishment of prepayment schemes, expanding the production and distribution of workforce cadres, leveraging an incentive system to attract and retain health workers in remote areas, and addressing the problem of an ageing health workforce.

Priority actions include the reinforcement of the potential contribution of the private health sector towards public health and regulations to ensure quality and prevent illicit practices, along with developing a balanced, motivated, well distributed and well-managed health workforce with an appropriate skills mix. There is a need to: adopt workable family practice models for the delivery of primary care services; reinforce health information systems, including civil registration and the monitoring of risk factors, morbidity and health system performance; and improve access to essential technologies and medicines and their rational use.

Access to medicines and health technologies

The pharmaceutical sector is the second largest in Africa. Local production covers almost two thirds of domestic demand and is even able to export a percentage of its production, particularly to neighbouring African nations. The government has entered into a new, integrated and participatory approach to promote transparency, ethics and good governance in the sector, regulating and managing the development of a national pharmaceutical policy. The policy focuses on access to quality essential medicines at affordable prices (establishing a new system of pricing) and an uninterrupted supply chain (by strengthening the public/private partnership for the distribution and storage of drugs). The new regulation for drug pricing has highlighted the balance between competing interests, accessibility of the population to medicines (especially generic drugs), efficiency of the health system, development of the pharmaceutical market, and innovation in research and development. The success of this project remains dependent on the implementation of accompanying measures, including health insurance and reimbursement of prescriptions by insurers. The two main schemes for basic medical coverage, the Medical Assistance Scheme and the Mandatory Health Insurance scheme, have helped achieve coverage of almost two-thirds of the population and have the potential to attain universal health coverage.

The government is committed to developing a national medicines policy in order to increase access to quality medicines at affordable prices. Political commitment to moving towards universal health coverage and momentum for reforming the health system to fulfil the right to health care are needed.

Health systems, information and evidence

Strengthening the national health information system is a priority for the Ministry of Health during 2012–2016. The information on causes of death, a subsystem managed by the Ministry of Health, is of the highest importance because of the nature of the data it generates. However, the WHO rapid assessment tool showed that the system was weak and suffering from several shortcomings, with only 25–30% of deaths reported to the Ministry of Health. This includes: inadequate reporting of cause of death (55–60% according to the Ministry of the Interior); death certificates not compliant with WHO standards; and poor quality of reporting cause of death in accordance with the International Classification of Diseases (ICD-10) (only 30% according to the ICD-10 database).

In order to strengthen the health information system, it is expected that in the next year the following actions will be taken: standardization of the death certificate, enhancing the skills of physicians in reporting cause of death in line with ICD-10 and improving coordination with other partners involved in the reporting of the civil registration system (Ministry of

the Interior and High Commission for Planning). In addition, and given the importance of the information system for health programmes, particularly for family planning, maternal and child health, the Department of Planning and Finances revised and computerized its system during 2012–2013 to be ready for the next biennium. The implementation of this new system at regional level is planned to end in 2015. All users at regional, provincial and local levels will be trained before starting to use the new information system. Furthermore, the Ministry of Health has recently started an ambitious project in partnership with the World Bank to upgrade the national health information system. The main objective of this project is to provide a detailed analysis of the current system and to propose a master plan for its development and computerization.

Preparedness, surveillance and response

Alert and response capacities

Epidemic and pandemic-prone diseases

Emergency risk and crisis management

Food safety

Poliomyelitis eradication

Outbreak and crisis response

Preparedness, surveillance and response

- The country has a fairly good health infrastructure for surveillance and monitoring of public health.
- A national management strategy for medical emergencies and health disaster risk has been adopted.
- The routine immunization system is efficient and polio immunization coverage is high.

Alert and response capacities

The government declared that it had met the June 2014 deadline in respect of its International Health Regulations (IHR) 2005 obligations. However, the country will continue to work on the development and maintenance of IHR public health capacities beyond 2016.

Almost all the requirements have been met, particularly those related to legislation, surveillance, preparedness, response, risk communication, requirements at points of entry, and IHR-related radiology and nuclear hazards. Implementation is ongoing in the areas of laboratory, coordination and IHR risk communication, and IHR-related zoonotic, food safety and chemical hazards. Self-reported scores for 2013 ranged from 83.0% for "laboratory" to 100% for the majority of areas. The existing agreements with European and other neighbouring African countries have helped in meeting some of the requirements, particularly those related to cross-border surveillance and response, conducting joint risk assessment on potential hazards, and updating the national preparedness and response plans accordingly.

The analysis conducted on required capabilities in June 2013 by a multisectoral and multidisciplinary national team, based on the IHR monitoring questionnaire, showed that 97.0% of these capabilities are present. Areas that require further improvement are: capacity-building at points of entry, upgrading laboratory services, counter-measures against chemical accidents, a surveillance system and a permanent coordination mechanism in the event of an epidemic or pandemic.

Epidemic and pandemic-prone diseases

Although the country has a fairly good health infrastructure for surveillance and monitoring of public health, the verticality and fragmented organization of the system often compromise its performance. The country remains vulnerable to zoonotic infections and though no major outbreak from infectious disease has been reported in the recent past, the geographical location and the use of the country's vast road and marine infrastructure by illegal African migrant populations as a transit point to Europe means the country is at risk of international spread of diseases that originate outside the country. The absence of a more inclusive, multisectoral and cross-disciplinary public health emergency preparedness plan for epidemics and pandemics, and an unclear policy and institutional framework for the planning, organization and operationalization of a public health emergency preparedness and response plan, remain major limitations. Although the foundational elements of the laboratory infrastructure are in place, the functional capacity of the network suffers owing to the verticality of the sector.

To move forward the country needs to establish a more responsive and integrated disease surveillance system with a real-time analysis of early warning data and a more proactive system for curbing the threat from antimicrobial resistance embedded in the new national infection control programme. Additionally, a more evidence-informed preventive strategy for the control of endemic diseases should be considered as part of a coherent and responsive public health system that integrates both epidemiological and laboratory surveillance for common public health problems.

Emergency risk and crisis management

The country is susceptible to both natural and man-made disasters that cause significant loss of life, livelihoods and infrastructure, reversing development gains. The annual loss attributable to natural disasters (based on data from 1994–2013) was on average 31.6 deaths, or 0.11 per 100 000 inhabitants, losses in purchasing power parity were US$ 196.4 million and losses to gross domestic product amounted to 0.13% (*37*).

In 2005, the Ministry of Health adopted a national management strategy for medical emergencies and health disaster risk. In line with the approach adopted internationally, it includes all aspects of prevention, mitigation, preparedness, rehabilitation and reconstruction. For the implementation of the component of the national strategy dealing with health risks associated with disasters, the Ministry of Health has developed measures to mitigate the maximum health consequences directly or indirectly caused by disasters or major emergencies. The actions carried out by the Ministry of Health since 1999 mark the transition from a reactive approach to a proactive approach. The country is currently

reviewing its national plan for emergency preparedness and response. It will be extremely important to reflect the all-hazard multisectoral approach in this process.

There is a need to conduct a full-scale disaster risk assessment to build an evidence base in support of planning and also for systematic capacity-development of the health workforce.

Food safety

The National Office for the Safety of Food Products was established in 2010. It is expected that this reorganization will contribute towards improving food safety in the country. In 2011, the Ministry of Health developed a strategy on food safety, with the following areas for intervention: strengthening the disease surveillance system for foodborne disease; updating legislation, regulations and standards for food safety; monitoring the safety of food on the market; collaborating with national and international partners; and strengthening the communication system on food safety risk analysis.

The government has a national strategy in place that covers resilience and preparedness for major epidemics and pandemics. All outbreaks are detected and responded to in a timely manner. In addition, a national epidemic and pandemic preparedness and response plan and a national antimicrobial resistance and infection prevention and control action plan are being developed. An integrated disease surveillance system, including early warning systems, is in the process of being established.

Efforts should be made to enhance the integration of the surveillance of foodborne disease with the existing disease surveillance system.

Poliomyelitis eradication

Since 1988, the government has taken great strides for the control of infectious diseases in general, and particularly those which are vaccine-preventable. The last confirmed polio case reported was in November 1988.

The routine immunization system is efficient. Vaccination coverage with the third oral polio vaccine dose (at age 4 months) was 95.0%, 97.0% and 98.0% in 2011, 2012 and 2013, respectively (*38*). The immunity profile of the population is expected to be high.

The government needs to improve the sensitivity of the surveillance system and test the appropriateness of its preparedness and response plan in field conditions.

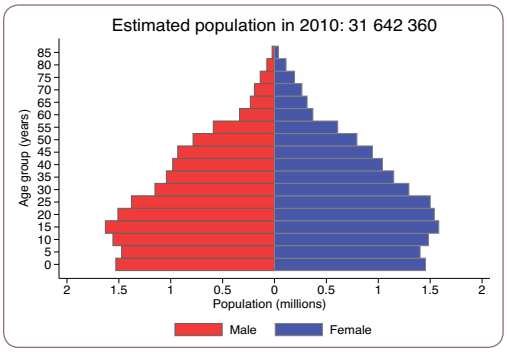
Outbreak and crisis response

In late 2014, the government began scaling-up its preparedness for Ebola virus disease by assessing and measuring their level of preparedness and their readiness for using the WHO assessment checklist and, accordingly, identifying critical gaps for improvement.

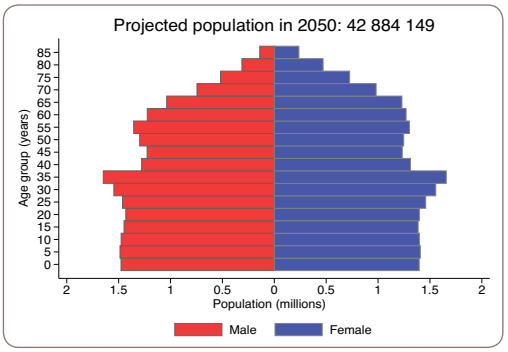
Based on the results of the evaluation of the preparedness, surveillance and response for Ebola virus disease, the Ministry of Health is intending to develop a multisectoral action plan for public health emergencies.

Demographic profile

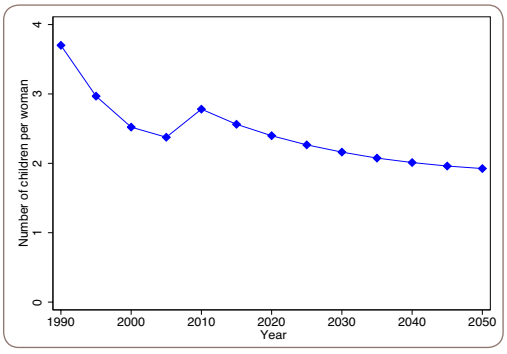
Population pyramid 2010



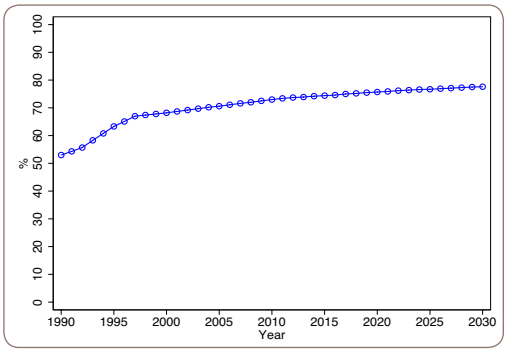
Population pyramid 2050



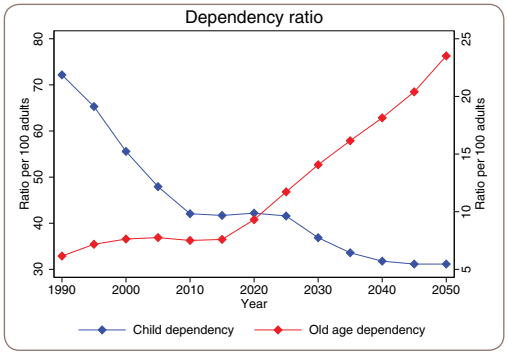
Total fertility rate



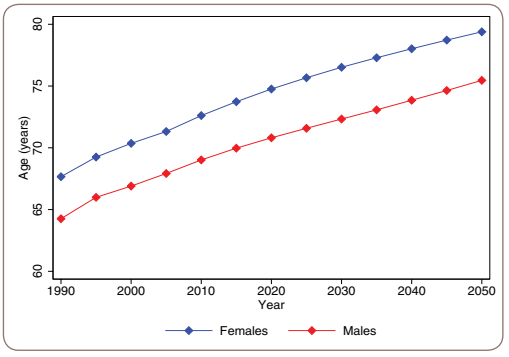
Need for family planning satisfied



Dependency ratio



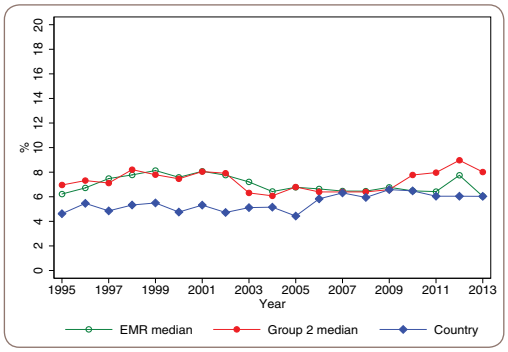
Life expectancy at birth



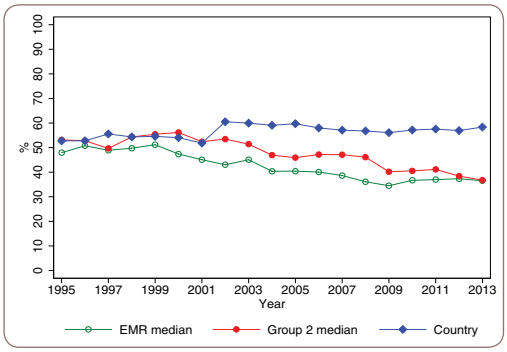
Source for all graphs: *(23)*

Analysis of selected indicators

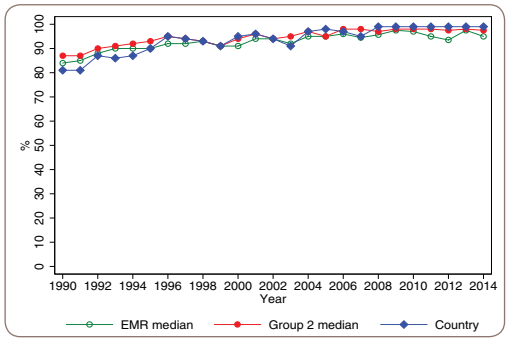
General government expenditure on health as % of general government expenditure (*32*)



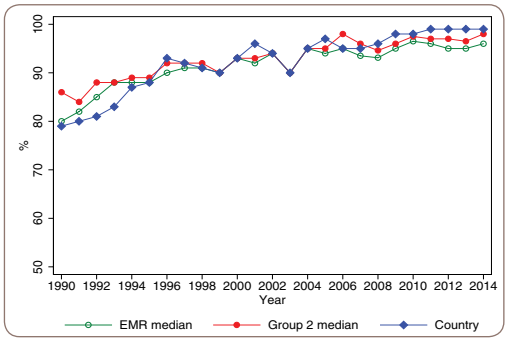
Out-of-pocket expenditure as % of total health expenditure (*32*)



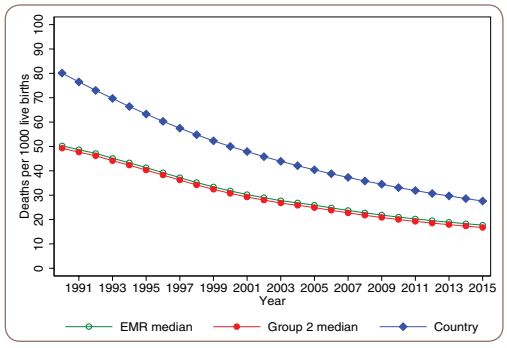
DPT3/pentavalent coverage among children under 1 year of age (%) (*7*)



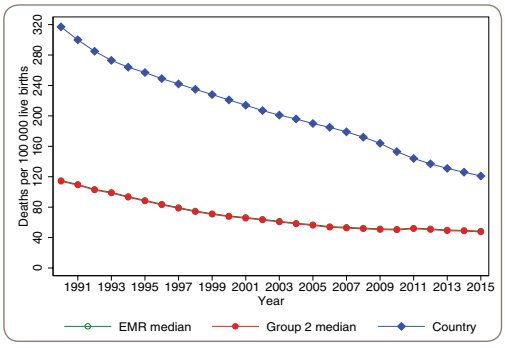
Measles immunization coverage (%) (*7*)



Under-5 mortality (per 1000 live births) (*21*)



Maternal mortality ratio (per 100 000 live births) (*20*)



References

1. Global health observatory data repository: Prevalence of HIV. Geneva: World Health Organization; 2015 (http://apps.who.int/gho/data/node.main.562?lang=en, accessed 7 April 2015).
2. UNAIDS Middle East and North Africa regional report on AIDS 2011. Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS); 2011 (http://www.unaids.org/sites/default/files/media_asset/JC2257_UNAIDS-MENA-report-2011_en_1.pdf, accessed 3 February 2015).
3. The gap report. Geneva: Joint United Nations Programme on HIV/AIDS; 2014 (http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/documents/unaidspublication/2014/UNAIDS_Gap_report_en.pdf, accessed 7 April 2015).
4. WHO global tuberculosis database 2014. Geneva: World Health Organization; 2014 (http://www.who.int/tb/country/data/profiles/en/, accessed 25 March 2015).
5. Malaria in the Eastern Mediterranean Region 2013. Cairo: World Health Organization Regional Office for the Eastern Mediterranean; 2014 (http://applications.emro.who.int/dsaf/emropub_2014_EN_1778.pdf?ua=1, accessed 2 April 2015).
6. Global health observatory data repository: Neglected tropical diseases. Geneva: World Health Organization; 2015 (http://apps.who.int/gho/data/node.main.A1629?lang=en, accessed 7 April 2015).
7. Global health observatory data repository: Immunization. Geneva: World Health Organization; 2015 (http://apps.who.int/gho/data/node.main.A824?lang=en, accessed 8 April 2015).
8. Global health estimates 2014 summary tables: Estimated deaths by cause, sex and WHO Member State 2012. Geneva: World Health Organization; 2014 (http://www.who.int/healthinfo/global_burden_disease/estimates/en/index1.html, accessed 12 October 2014).
9. Noncommunicable diseases country profiles. Geneva: World Health Organization; 2014 (http://www.who.int/nmh/countries/en/, accessed 12 October 2014).
10. Global youth tobacco survey 2010. Cairo: World Health Organization Regional Office for the Eastern Mediterranean; 2012 (http://www.emro.who.int/images/stories/tfi/documents/GYTS_FS_MOR_2010.pdf?ua=1, accessed 12 October 2014).
11. Global status report on alcohol and health 2014. Geneva: World Health Organization; 2014 (http://www.who.int/substance_abuse/publications/global_alcohol_report/en/, accessed 12 October 2014).

12. Global school-based student health survey. Geneva: World Health Organization; 2010 (http://www.who.int/chp/gshs/factsheets/en/, accessed 12 October 2014).

13. Mental health atlas: 2011 country profiles. Geneva: World Health Organization; 2011 (http://www.who.int/mental_health/evidence/atlas/profiles/en/, accessed 1 April 2015).

14. Preventing suicide: A global imperative. Geneva: World Health Organization; 2014 (http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/, accessed 12 October 2014).

15. Atlas: Substance use in the Eastern Mediterranean Region 2012. Cairo: World Health Organization Regional Office for the Eastern Mediterranean; 2013 (EMRO Technical Publications Series 42) (http://applications.emro.who.int/dsaf/emropub_2013_1607.pdf, accessed 12 October 2014).

16. Global status report on road safety 2013: supporting a decade of action. Geneva: World Health Organization; 2013 (http://www.who.int/violence_injury_prevention/road_safety_status/2013/en/, accessed 12 October 2014).

17. Présentation des premiers résultats du RGPH 2014 (http://www.hcp.ma/Presentation-des-premiers-resultats-du-RGPH-2014_a1605.html, accessed 1 February 2016).

18. UNICEF-WHO-The World Bank. 2013 Joint child malnutrition estimates: levels and trends, 2014 revision. Geneva: World Health Organization; 2014 (http://www.who.int/nutgrowthdb/estimates2013/en/, accessed 31 March 2014).

19. Principaux résultats: Enquête Nationale Démographique à Passages Répétés 2009–2010. Rabat: Haut Commissariat Au Plan, 2011 (http://www.hcp.ma/Etude-Nationale-Demographique-a-Passages-Repetes-2009-2010_a749.html, accessed 31 January 2016).

20. Trends in maternal mortality: 1990 to 2015. Estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division. Geneva: World Health Organization; 2015 (http://www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2015/en/, accessed 11 January 2016).

21. Levels and trends in child mortality. Report 2015. Estimates developed by the UN Inter-agency Group for Child Mortality Estimation. New York: United Nations Children's Fund; 2015 (http://www.who.int/maternal_child_adolescent/documents/levels_trends_child_mortality_2015/en/, accessed 11 January 2016).

22. World health statistics 2014. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1, accessed 12 October 2014).

23. World population prospects: the 2012 revision (DVD edition). New York: United Nations, Department of Economic and Social Affairs, Population Division; 2013.

24. Human development report 2014. New York: United Nations Development Programme; 2014 (http://hdr.undp.org/sites/default/files/hdr14-report-en-1.pdf, accessed September 2014).

25. UNESCO Institute for Statistics: data centre [online database] (http://data.uis.unesco.org/, accessed 30 April 2015).

26. World development indicators. Washington DC: World Bank Group, 2014 (http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators, accessed 12 October 2014).

27. Global health observatory data repository: Indicator and measurement registry: Literacy rate among adults aged ≥ 15 years (%). Geneva: World Health Organization; 2015 (http://apps.who.int/gho/indicatorregistry/App_Main/view_indicator.aspx?iid=77, accessed 7 April 2015).

28. Global health observatory data repository: Deaths attributable to the environment: data by country. Geneva: World Health Organization; 2015 (http://apps.who.int/gho/data/view.main.35600, accessed 7 April 2015).

29. Global health observatory data repository: Inadequate water, sanitation and hygiene in low- and middle-income countries. Geneva: World Health Organization; 2015 (http://apps.who.int/gho/data/view.main.INADEQUATEWSHv?lang=en, accessed 7 April 2015).

30. Global health observatory data repository: Population using solid fuels (estimates): data by country. Geneva: World Health Organization; 2015 (http://apps.who.int/gho/data/node.main.135, accessed 7 April 2015).

31. Country profiles of environmental burden of disease. Geneva: World Health Organization; 2009 (http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/, accessed 12 October 2014).

32. Global health expenditure database: Table of key indicators, sources and methods by country and indicators. Geneva: World Health Organization; 2015 (http://apps.who.int/nha/database/Key_Indicators_by_Country/Index/en, accessed 21 April 2015).

33. Global health observatory data repository: Mental health: Facilities: data by country; Geneva: World Health Organization; 2015 (http://apps.who.int/gho/data/node.main.MHFAC?lang=en, accessed23 April 2015).

34. Global health observatory data repository: Essential health technologies: data by country. Geneva: World Health Organization; 2015 (http://apps.who.int/gho/data/view.main.1860, accessed 23 April 2015).

35. Global health observatory data repository: Health workforce: aggregated data: density per 1000: data by country. Geneva: World Health Organization; 2015 (http://apps.who.int/gho/data/view.main.92100, accessed 23 April 2015).

36. Global health observatory data repository: Mental health: Human resources: data by country; Geneva: World Health Organization; 2015 (http://apps.who.int/gho/data/node.main.MHHR?lang=en, accessed 23 April 2015)

37. Kreft S, Eckstein D. Global, climate risk index 2015. Bonn: Germanwatch; 2015 (https://germanwatch.org/de/download/10333.pdf, accessed 7/2/2016).

38. Acute flaccid paralysis (AFP) cases by week of onset. Cairo: WHO Regional Office for the Eastern Mediterranean; 2015 (AFP surveillance Number 853, Week 06, ending 8 February 2015) (http://www.emro.who.int/images/stories/polio/documents/Polio_Fax_issues_2015/Week_06-15.pdf?ua=1, accessed 23 March 2015).

WHO-EM/HST/222/E