OIC HEALTH REPORT 2011

STATISTICAL ECONOMIC AND SOCIAL RESEARCH AND TRAINING CENTRE FOR ISLAMIC COUNTRIES (SESRIC)

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ORGANISATION OF ISLAMIC COOPERATION
STATISTICAL ECONOMIC AND SOCIAL RESEARCH AND
TRAINING CENTRE FOR ISLAMIC COUNTRIES (SESRIC)

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Acronyms

AFR	Adolescent Fertility Rate
AMR	Adult Mortality Rate
ANCC	Antenatal Care Coverage
CDC	Center for Disease Control and Prevention
COMSTECH	The Standing Committee for …
DAH	Development Assistance for Health
DTP	Diphtheria-Tetanus-Pertussis
EAP	East Asia and Pacific
ECA	Europe and Central Asia
FCTC	Framework Convention on Tobacco Control
FP	Focal Point
GDP	Gross Domestic Product
HepB	Hepatitis Type B
Hib	Haemophilus influenza type b
HNP	Health, Nutrition and Population
ICCI	Islamic Chamber of Commerce and Industry
ICFM	Islamic Council of Foreign Ministers
ICHM	Islamic Conference of Health Ministers
ICT	Information and Communication Technology
IDB	Islamic Development Bank
IEG	Independent Evaluation Group
IHR	International Health Regulations
IMR	Infant Mortality Rate
ISESCO	Islamic Educational, Scientific and Cultural Organization
JMP	Joint Monitoring Program
LAC	Latin America and the Caribbean
LBW	Low Birth-weight Newborns
LEB	Life Expectancy at Birth

MDGs	Millennium Development Goals
MENA	Middle East and North Africa
MMR	Maternal Mortality Rate
MoU	Memorandum of Understanding
NCM	National Coordinating Mechanism
OIC	Organization of Islamic Cooperation
PHI	Private Health Insurance
PSM	Procurement and Supply Chain Management
RBM	Roll Back Malaria Partnership
SA	South Asia
SSA	Sub-Saharan Africa
TCU	Tobacco Control Unit
U5MR	Under 5 Mortality Rate
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UNFPA	The United Nations Population Fund
UNICEF	The United Nations Children's Fund
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene
WB	World Bank
WHO	World Health Organization

Foreword

The state of health and well-being of people in a country reflects the level of the socio-economic development of that country. On the other hand, healthy people have important contributions to economic progress since they live longer and are more productive. The basic principle of public health is that all people should have the right to reach health services. Health equity, as understood in public health literature and practice, is when everyone has the opportunity to "attain their full health potential" and no one is "disadvantaged" from achieving this potential because of their social position or other socially determined circumstances.

The issue of health and development of modern and sustainable health systems has recently gained greater importance and attention in many developing countries as a major driver of socio-economic progress where more resources have been invested in this sector than ever being before. Today, people are healthier, wealthier and live longer than 30 years ago. However, while the progress achieved over the years in health sector has remained highly concentrated in the developed countries, many developing and least-developed countries are still seriously lagging behind. This is particularly true in the regions of South Asia and Sub-Saharan Africa where health care coverage and health services remained significantly poor in many countries including most of OIC Member Countries in these regions.

Progress in achieving universal health care coverage remained highly uneven in OIC Member Countries. In many of them, health care system is seriously suffering from various problems and challenges related to ensuring adequate financing resources and infrastructure, workforce and international health regulations. This state of affairs necessitates more commitment and efforts by the governments to consider this important sector at a higher level on their national development agendas. There is also an urgent need for strengthening and enhancing cooperation and collaboration in various health issues at both regional and international level. OIC Member countries should develop the necessary health infrastructure and workforce to meet the current and future demands for health care services of their rapidly increasing populations.

The OIC health Report 2011 provides an overall assessment of the current state of health situation and health care coverage in OIC Member countries. It provides a detailed analysis of the trends on major health indicators in the OIC Member Countries at the average OIC group level as well as at the individual country and OIC sub-regional levels. The Report also highlights some health related issues in these countries such as health expenditures, the using of Information and Communication Technology (ICT) in health sector "e-Health" and the OIC cooperation efforts and initiatives in the domain of health. The Report ends in the last section with a set of broad policy recommendations related, in particular, to health financing, preparing health workforce, improving health services infrastructures, health reforms and complying with international health regulations.

Dr. Savaş Alpay

Director General

SESRIC

1 Introduction

Health, the ethical principle of equity, is one of the most important bases for the well-being of humanity. It is central to human happiness and well-being. Moreover, it has important contributions to economic progress as well since healthy people live longer and are more productive. Many factors influence health status and a country's ability to provide quality health services for its people. For example: investments in roads can improve access to health services; inflation targets can constrain health spending; and civil service reform can create opportunities - or limits - to hiring more health workers. Ministries of health are the main responsible, but so are other government departments, donor organizations, civil society groups and communities themselves.

Over the recent decades, the issue of health has gained great importance as a major driver of socio-economic progress around the globe, with more resources than ever being invested in this sector. Looking broadly, people are healthier, wealthier and live longer today than 30 years ago. According to the 2008 issue of the World Health Report, if children were still dying at 1978 rates, there would have been 16.2 million deaths globally in 2006 (where the actual figure was 9.5 million). This difference of 6.7 million means that 18,329 children's lives were saved every day. However, and especially when considering children, the issue of health should gain much more attention.

Mirroring the overall trends in child survival, global trends in life expectancy at birth showed a rise of almost four years between 1990 and 2009. The most impressive relative gains were recorded in a number of low-income countries in Asia (including India), Latin

America and northern Africa. These countries increased life expectancy at birth by 12 years during the last 30 years. Chapter 2 of this report is dedicated to analyse in depth the current status of health care coverage and its outcomes in the OIC member countries.

Health Expenditure is an important indicator that shows how much a country cares for health development, and accordingly, how much of health resources are allocated per person of population of that country. A country's performance with respect to expenditure on health can easily be traced through expectations regarding life expectancy at birth which is an interesting indicator that can be considered as the mirror reflection of health expenditure on the population. Infant mortality rate is another indicator that is highly connected to expenditure on health. Access to improved drinking water sources and sanitation are also important health issues highly connected to expenditure on health. All these factors are among the major determinants of poor health, especially the infectious diseases. Today, according to World health Organization (WHO), almost one billion people do not have access to clean water and more than three billion people lack access to sanitation facilities, noting that the total can reach 4.5 billion during the next 20 years. Chapter 3 of this report contains a detailed analysis of these major obstacles in the development of an efficient and effective health care system in OIC member countries.

The 21st century can be named as the age of technology. Every part of life involves technology in itself. Indeed, the most important development is in Information and Communication Technology (ICT). It has great impact on working sphere and facility services in terms of making life more efficient. It is used in health sector as well. ICT establishes faster communication within health personnel as well as between personnel and patients. It also provides easy access to health care services. Using ICT in health sector is commonly named as "e-health". Improving the e-health system in countries would facilitate the services provided to people and mean caring more about people. However, there is a long way to go especially for the low income developing countries, including many OIC member countries, to reap the health benefits of ICT.

A basic principle of public health is that all people should have the right to reach health services. Health is one of the human rights recognized by international laws. Health equity, then, as understood in public health literature and practice, is when everyone has the opportunity to "attain their full health potential" and no one is "disadvantaged" from achieving this potential because of their social position or other socially determined circumstance. Unfortunately, differences in the incidence and prevalence of health conditions and health status between groups cause health disparities. The incidence mostly depends on socio-economic conditions of a country and a person. People living in many countries especially in South Asia and Sub-Saharan Africa region, are still suffering from poor health care services mainly due to the lack of adequate and sustainable financial resource, poor health infrastructure, insufficient trained health workforce and slow progress on health reforms. The nature and magnitude of these key challenges require a greater commitment from the governments to put health sector higher on the national development

agendas and build health infrastructure and train workforce to meet the current and future demands for the health services. In addition, there is also need to emphasize the compliance with international health regulations to ensure safe and secure health care services for people. Health sector is an important constituent of OIC Ten Year Program of Action. In this program, OIC General Secretariat has been mandated to collaborate with national, regional and international health organizations and development agencies to promote the health care coverage and eradication of diseases and epidemics in the OIC member countries. Chapter 4 of this report highlights the history of OIC advocacy and cooperation for heath sector and its current and planned activities to pave the way for universal health coverage in OIC member countries. Lastly, Chapter 5 provides some policy recommendations to overcome these major challenges and achieve universal health care coverage in OIC member countries.

2 Status of Public Health and Trends in OIC Countries

2.1 Maternal and Newborn Health

According to the UNICEF estimates (2009), around half a million maternal and about four million newborn deaths are mainly caused by the lack of quality antenatal health care, safe and clean delivery and post-natal care for mother and infant. Most of these deaths are preventable by ensuring proper care and counseling before and after pregnancy, at the time of delivery and after child birth. In this section, major issues related with maternity and new born health will be discussed in detail with a special reference to the performance of OIC member countries in this regard.

2.1.1 Antenatal Care

Antenatal care and counselling is the entry point to the formal health care system and provides a solid base to monitor and improve the mother-baby health by identifying and preventing/controlling antenatal complications at the earliest stage. The antenatal health care package includes recording medical history, assessment of individual needs, advice and guidance on pregnancy and delivery, screening tests, education on self-care during pregnancy, identification of conditions detrimental to health during pregnancy, first-line management and referral if necessary (WHO, 2010).

To assess the situation of access and utilization of health care services at the antenatal level, the World Health Organization (WHO) developed an indicator called Antenatal Care Coverage (ANCC). This indicator measures the proportion of total pregnant woman aged

15-49 who visited a skilled health professional for reasons related to pregnancy. For the quality and effectiveness of ANCC, number of visits and their timing are also considered very important. In this regard, WHO recommends at least four antenatal visits for uncomplicated pregnancies and advises first visit at a very early stage of pregnancy followed by the second from 24-28th weeks, the third at 32nd weeks and the fourth around 36th week.

Both in terms of one and four antenatal visits, OIC antenatal care coverage rate remained below the world average

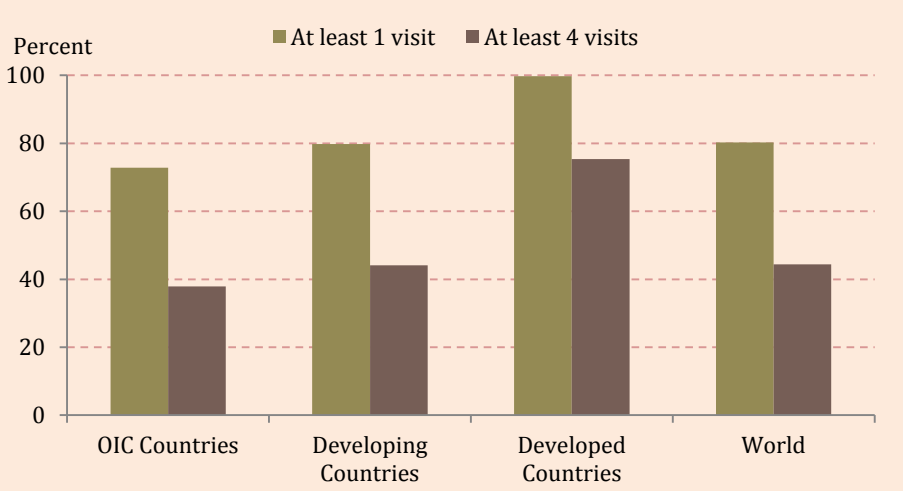
Over the years, a lot of progress has been made in provision of antenatal care services and today around 80 percent of total pregnant women worldwide receive antenatal checks up from a qualified health professional at least once during the pregnancy (Figure 2.1). However, during 2000-2010, across the globe less than half of total pregnant women (i.e. 44 percent) actually benefited from four antenatal checks up, as recommended by the WHO and the UNICEF. Comparatively, situation remained better in developing countries where 80 percent of total pregnant women visited a health professional at least once and 44 percent managed to visit four times. There are various socio-economic, cultural, political and geographical factors that are responsible for the overall low coverage of recommended four antenatal visits across the globe especially in the low income developing countries. Some of these factors will be overviewed in the case of OIC member countries in Section 3.

The provision of relevant and quality ANCC is a major concern in the OIC member countries. During the period 2000-2010, ANCC rates in OIC countries remained lower than those for developing countries. Around 73 percent of total pregnant women in the OIC member countries benefited from antenatal care services at least once during the pregnancy whereas 38 percent of total pregnant women benefited from recommended four antenatal checks up. In both cases, the OIC average remained below the average of the developing countries and world during the period under consideration.

Figure 2.1: Antenatal Care Coverage, 2000-2010

ANN Coverage remained comparatively low in OIC countries.

Source: Table A.1 in the Statistical Appendix



The OIC regional groups present a mix picture of antenatal care coverage. In general, member countries in East Asia & Pacific (EAP), Europe & Central Asia (ECA) and Middle East & North Africa (MENA) region registered ANC C rate, both for one and four visits, higher than OIC averages while the averages of South Asia (SA) and Sub-Saharan Africa

(SSA) regions remained below the OIC average. As shown in Figure 2.2, for the WHO recommended four antenatal visits, OIC regional group averages range from a low of 15 percent in SA to a high of 76 percent in EAP; while 63 percent of the total pregnant women in ECA, 51 percent in MENA and 30 percent in SSA region received recommended antenatal checks up during the period 2000-2010. On the other hand, with respect to the proportion of total pregnant women who used ANC at least once, OIC regional group averages range from a low of 54 percent in SA to a high of 94 percent in ECA region. Among other regions, 91 percent of total pregnant women in EAP, 91 percent in Latin America & Caribbean (LAC), 82 percent in MENA, and 69 percent of total pregnant women in SSA region were attended at least once for an antenatal check up.

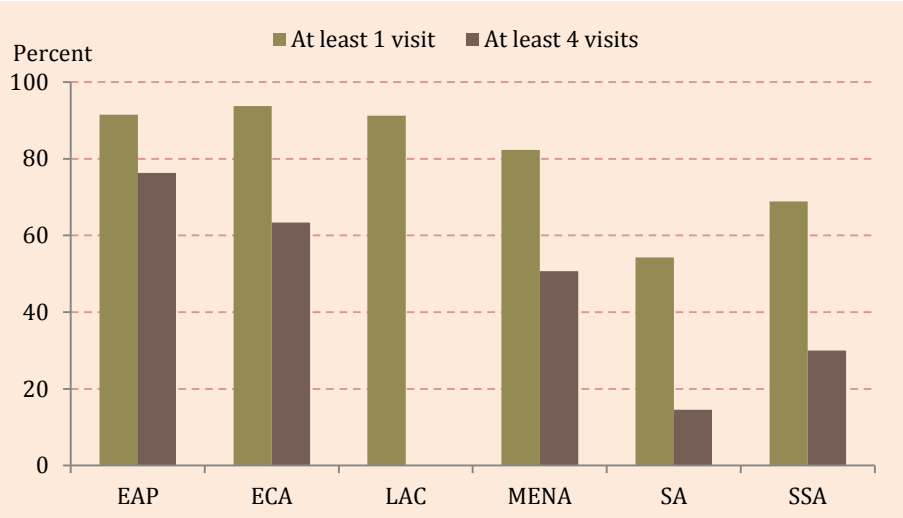


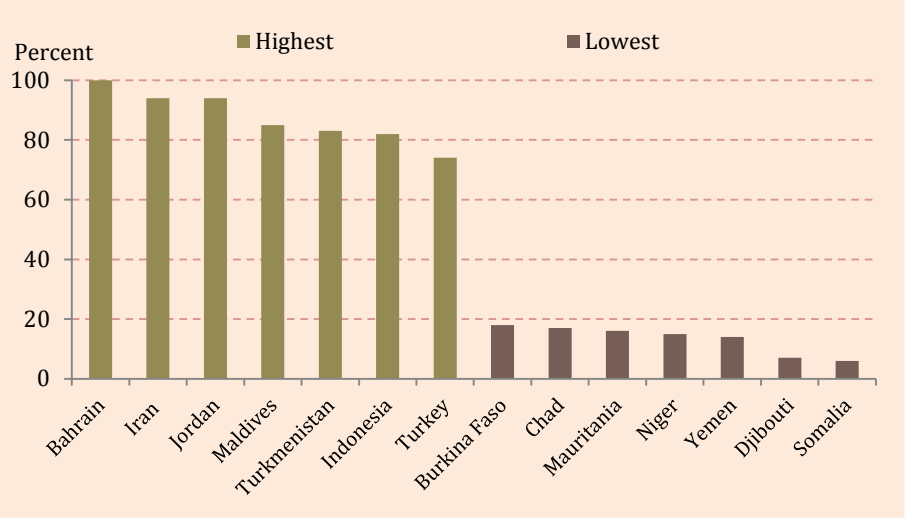
Figure 2.2: Antenatal Care Coverage in OIC Regions

ANCC remained comparatively very low in SA and SSA regions.

Source: Table A.1 in the Statistical Appendix

At the individual country level, more than two thirds (67 percent to 100 percent) of total pregnant women visited a health clinic four times for antenatal checks up in ten member countries. Out of these ten countries, Bahrain, Iran and Jordan remained at the top with ANC coverage rate of over 90 percent (Figure 2.3). Among others, seven member countries registered ANC coverage rate of 50 percent to 66 percent. Six out of these seven countries are from Sub-Saharan Africa, namely: Gabon (63 percent), Benin (61 percent), Cameroon (60 percent), Sierra Leon (56 percent), Mozambique (53 percent) and Guinea (50 percent). On the other hand, 18 member countries registered ANC coverage rate of less than 50 percent. Out of these 18 members, ANC coverage remained less than 20 percent in seven countries (see annex Table A.1). The situation remained worse in Djibouti and Somalia, where even less than 10 percent of total pregnant women actually benefitted from WHO recommended four antenatal visits during the period under consideration (Figure 2.3).

Figure 2.3: Antenatal Care Coverage (at least 4 visits) in OIC Member Countries



Source: Table A.1 in the Statistical Appendix

2.1.2 Births Attended by Skilled Health Personnel

Skilled health care and assistance at the time of delivery are very critical for the healthy survival of both mother and baby. According to the WHO estimates (Countdown Report, 2010), lack of proper health care during pregnancy and child birth is the major cause for about 2 million maternal and newborn deaths every year. Most of these deaths could be prevented by ensuring assistance of skilled health personnel - a doctor, nurse or midwife- during the birth. In this regard, pregnant women should be educated, encouraged and facilitated by the authorities to give birth in the presence of skilled health personnel; and attendants should be given an enabling and supportive environment by providing necessary training, essential drug supplies and medical equipment (UNFPA, 2002).

In OIC countries, 44% of total births are still taking place without receiving any assistance and care from skilled health personnel compared to 34% in the world

In the last two decades, global community has exerted great efforts to increase the proportion of total deliveries attended by the skilled personnel. These noble efforts have actually paid off, and, as shown in Figure 2.4, in 2000-2010 about 66 percent of total pregnant women were attended by skilled health personnel during the child birth compared to 62 percent in 1990-1999. Meanwhile, in the developed countries almost all (99 percent) of women received assistance from a skilled health worker while giving birth. The situation has improved in the developing countries as well and about 64 percent of total deliveries were assisted by the skilled health personnel in 2000-2010 compared to 59 percent in 1990-1999. During the period under consideration, coverage of skilled attendants at birth has witnessed an improvement of four and five percentage points in the world average and the average of the developing countries, respectively.

OIC member countries also registered an increase in the proportion of total births attended by skilled personnel from 45 percent in 1990-1999 to 56 percent in 2000-2010, corresponding to an increase of 11 percentage points which remained quite higher than that for world (4 percentage points) and developing countries (5 percentage points). However, despite this positive trend, OIC averages remained well below the world, developed, and developing countries averages during the period under consideration.

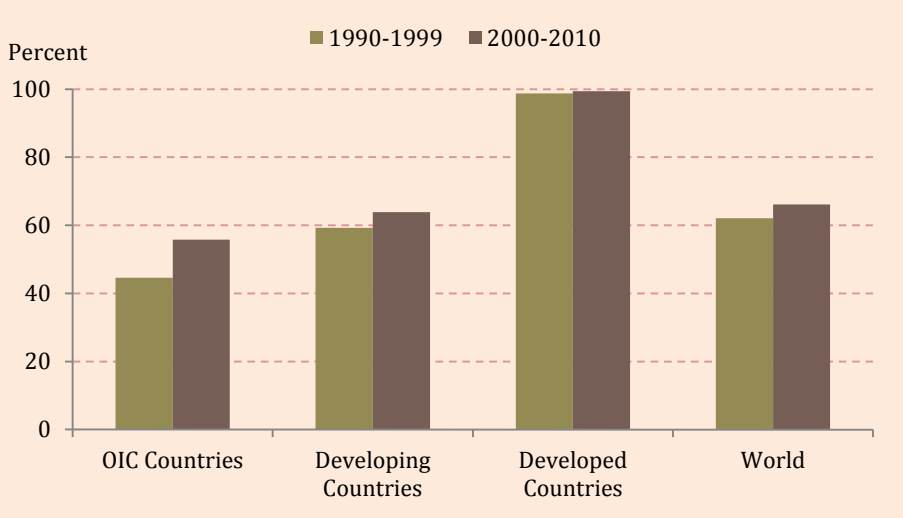


Figure 2.4: Births Attended by Skilled Personnel

OIC countries are still lagging behind.

Source: Table A.1 in the Statistical Appendix

Since 1990s, the coverage of skilled personnel attendance at the time of delivery has improved in all OIC regional groups except in LAC where the coverage rate has slightly declined during 2000-2010 compared to 1990-1999 level. In general, member countries in EAP, ECA, LAC and MENA region registered quite higher or similar coverage rates of births attended by skilled health personnel compared to the OIC, developing countries and world averages.

There are great disparities among the OIC regions and in 2000-2010 the share of total births attended by skilled health personnel ranged from a low of 28 percent in SA to a high of 94 percent in ECA while, 86 percent of total births in LAC, 82 percent in MENA, 76 percent in EAP, and 45 percent in SSA region were attended by skilled health personnel. During the period under consideration, the presence of skilled health personnel at the time of delivery has improved significantly in EAP (an increase of 29 percentage points) followed by MENA (an increase of 23 percentage points) and SA (an increase of 11 percentage points). However, despite significant improvement throughout the OIC region, situation remained quite alarming in member countries located in SA and SSA regions where majority of the births (72 percent and 55 percent respectively) are still taking place without any skilled health care

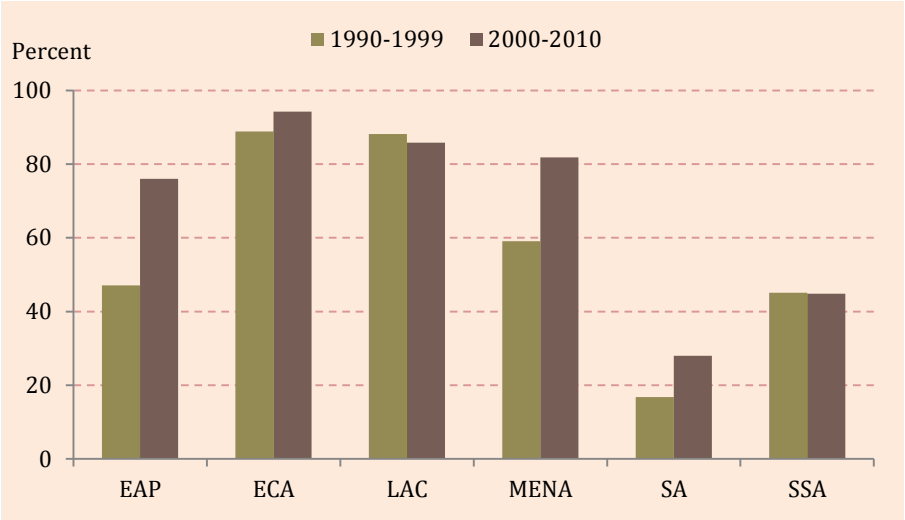


Figure 2.5: Births Attended by Skilled Personnel in OIC Regional Groups

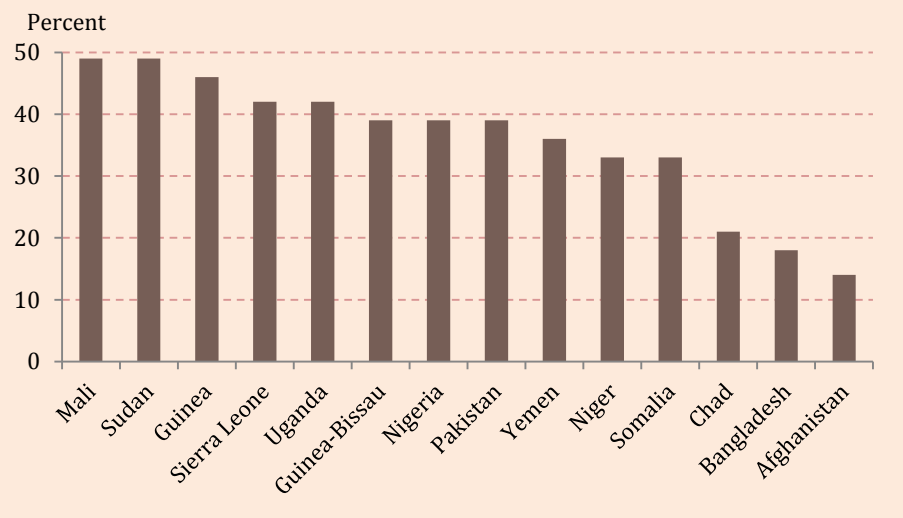
Situation in SA and SSA regions remained alarmingly poor.

Source: Table A.1 in the Statistical

and assistance at the time of delivery.

At the individual country level, majority of OIC members managed to improve the coverage of skilled health attendants at the time of delivery during the period 1990-2010. According to the latest estimates, in 24 member countries more than 90 percent deliveries were assisted by skilled health personnel in 2000-2010. In 11 of these countries (Brunei, Kazakhstan, Kuwait, Libya, Malaysia, Oman, Qatar, Saudi Arabia, Turkmenistan, UAE and Uzbekistan) all births (100 percent) were attended by a skilled health worker. On the bottom side, less than 50 percent of total pregnant women received skilled health care during birth in 14 member countries (see annex Table A.1). In three of these 14 countries (Afghanistan, Bangladesh and Chad), less than 30 percent of total births were attended by a skilled health worker during 2000-2010 (Figure 2.6).

Figure 2.6: OIC Members with Less than 50 percent Births Attended by Skilled Personnel



Source: Table A.1 in the Statistical Appendix

2.1.3 Low Birth-weight Newborns

About 31% of world total low birth weight newborns are recorded in OIC countries

According to the WHO, babies born with a weight of less than 2,500 grams (5.5 pounds) are classified as low birth weight newborns. It is an important indicator of infant health and life expectancy due to its strong relationship with poor child health and child mortality. It has been found that infants weighing less than 2500 grams are 20 times more likely to die than the heavier babies. While, on the other hand, those who manage to survive are always at a greater risk of having developmental disabilities (UNICEF, 2004 & 2009). Usually, low birth weight is primarily caused by foetal growth retardation[1] and/or pre-term birth[2]. In addition, some factors related particularly to the status of mother such as socio-economic position, size, age, number of previous births, nutritional status, and smoking/drinking habits are also considered to be very influential for the baby's birth weight (UNICEF, 2009).

The latest estimates of the WHO (WHS, 2010) show that globally about 13.9 percent of total births were weighed less than the threshold of 25 00 grams in 2000-2009 (Figure 2.7). About

[1] As a result of intrauterine growth restriction baby born too small for gestational age.

[2] Baby born at less than 37 weeks.

97 percent of these low birth weight babies were born in developing countries, which accounted for about 94 percent of world total births in 2000-2009. Only 5.3 percent of total births in developed countries were registered as low birth weight while in developing countries; about 14.7 percent of total births were registered as low birth weight. The prevalence of low birth weight newborns in OIC member countries remained higher than the world and developed countries averages. In 2000-2009, about 14.3 percent of total births in member countries were registered as low birth weight. During this period, OIC member countries accounted for around 29 percent of world and 31 percent of developing countries total births whereas around 31 percent of world and 32 percent of developing countries total underweight babies were born in the OIC member countries.

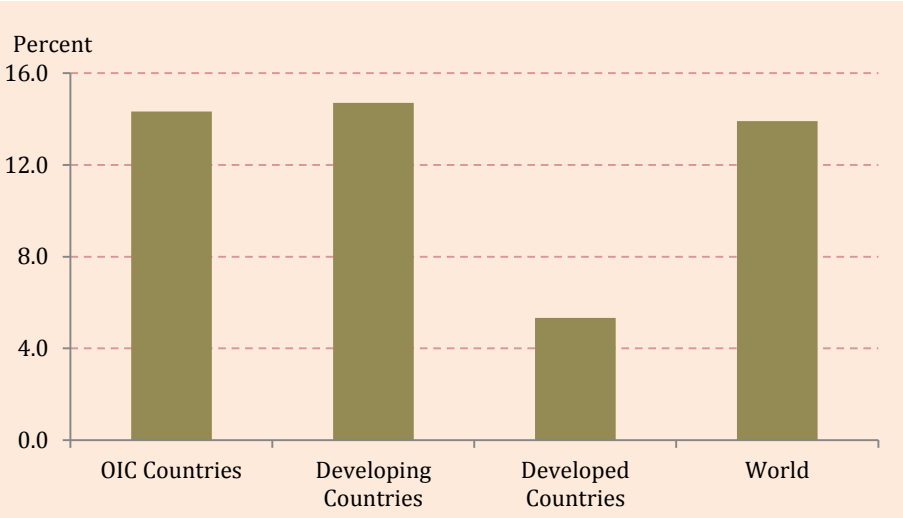


Figure 2.7: Prevalence of Low-birth-weight Newborns, 2000-2009

Prevalence of LBW newborns remained high across the developing world.

The prevalence of low birth weight newborns in OIC regional groups remained higher in member countries located in SA, LAC and SSA regions. These three regions collectively accounted for about 75 percent of total low birth weight babies born in OIC members during 2000-2009. As shown in Figure 2.8, SA region recorded the highest prevalence of low birth weight newborns with 27.8 percent of all infants below the threshold weight of 2,500 grams

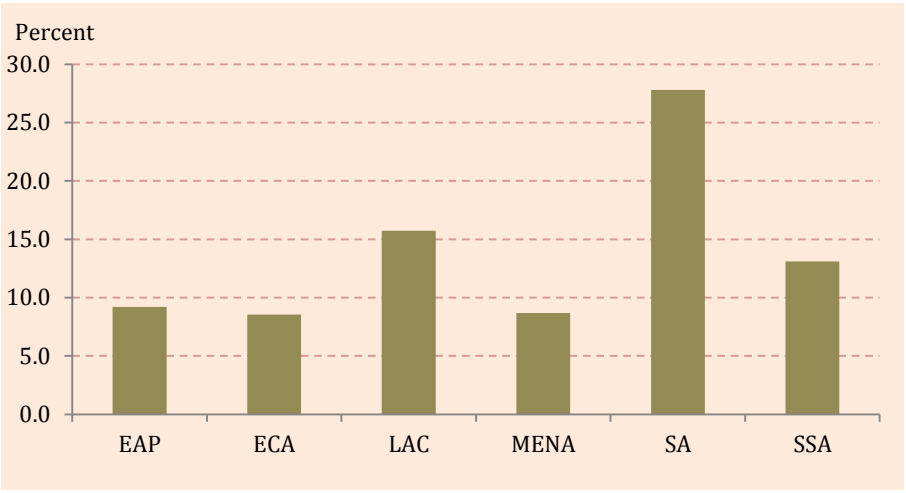


Figure 2.8: Prevalence of Low-birth-weight Newborns in OIC Regions

Prevalence of LBW newborns remained significantly high in SA region.

Source: Table A.2 in the Statistical Appendix

at birth. On the other hand, ECA region recorded the lowest rate of 8.6 percent followed by MENA with 8.7 percent. Among other regions, about 15.7 percent of total infants in LAC were registered as low birth weight newborns followed by SSA (14.8 percent) and EAP (9.2 percent).

During 2000-2009, prevalence of low birth weight newborns remained higher than the OIC average (15.7 percent) in 14 member countries, of these 10 were from SSA and 3 from SA region. The highest prevalence of low birth weight newborns was recorded in Mauritania (34 percent), followed by Pakistan (32 percent), and Niger (27 percent). On the other hand, in 15 member countries proportion of low birth weight infants remained 10 percent or less than 10 percent (see annex Table A.2). As shown in Figure 2.9, Turkmenistan registered the lowest rate of just 4 percent followed by Uzbekistan (5 percent), Tunisia (5 percent) and Kyrgyzstan (5 percent).

Figure 2.9: Prevalence of Low-birth-weight Newborns in OIC Member Countries

Source: Table A.2 in the Statistical Appendix

2.1.4 Infants Exclusively Breastfed

Globally, four million babies per year die during the very first week of life mainly due to poor neonatal conditions. According to the UNICEF, one of the best measures to prevent most of these deaths is an early initiation of breastfeeding. Breast milk is fundamental to child health, growth, development, and survival. As it not only provides newborns with nutrition but also protects them from diarrhea and acute respiratory infections, stimulates their immune systems and improves response to vaccinations. Keeping in view these benefits of breast milk, health experts are of the opinion that exclusive breastfeeding from the birth to six months could help to reduce neonatal mortality by 20 percent (Niles. C, 2010).

However, in spite of its crucial importance for the healthy survival of a newborn, a vast majority of mothers don't exclusively breastfeed their children for the first six months of life. As shown in Figure 2.10, worldwide slightly more than one third (36 percent) of newborns were breastfed during 2000-2010. In developing countries where bulk of neonatal deaths occurs about 37 percent of newborns were exclusively breastfed. While in OIC member

countries, 30 percent of newborns were exclusively breastfed for the first six months of their life.

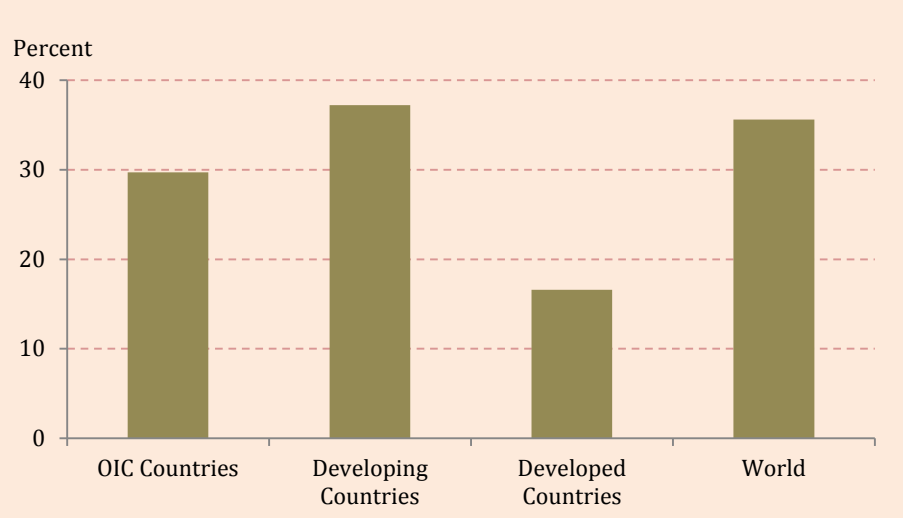


Figure 2.10: Infants Exclusively Breastfed, 2000-2010

Prevalence of breastfeeding remained comparatively low in OIC countries.

At the OIC regions level, prevalence of exclusive breastfeeding for the first six months was highest in SA and EAP where 39.5 percent, 32 percent of newborns were exclusively breastfed respectively (Figure 2.11). On the other side of the scale, breastfeeding was lowest in LAC and SSA where only 13.2 percent and 23 percent of newborns were exclusively breastfed respectively. Among other regions, over 31.6 percent of newborns in ECA and 31.1 percent in MENA were exclusively breastfed in 2000-2010. Prevalence of exclusive breastfeeding in SA region remained higher than the world, OIC and developing countries averages.

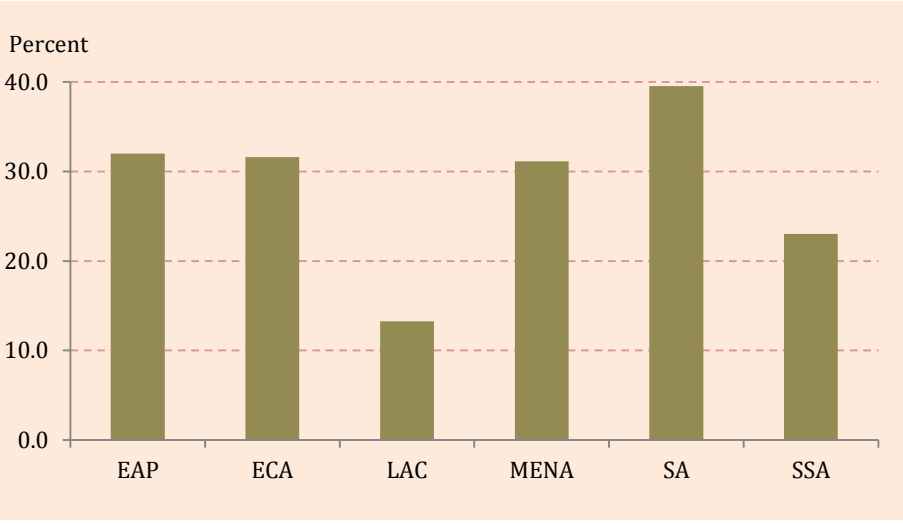


Figure 2.11: Infants Exclusively Breastfed in OIC Regions, 2000-2010

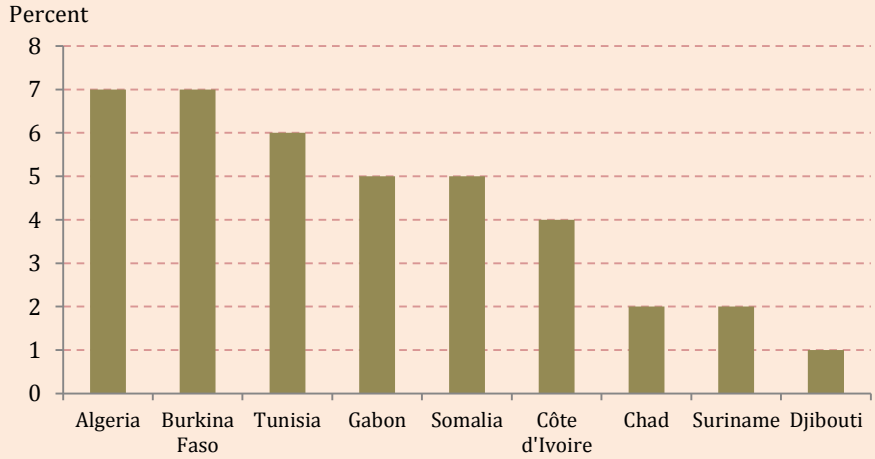
More than 30% infants are breastfed in four OIC regions.

At the individual country level, prevalence of breastfeeding ranged from a low of one percent in Djibouti to a high of 60 percent in Uganda. Among the 45 OIC member countries with available data, breastfeeding rate remained higher than the developing countries average of 37 percent in 11 member countries (see annex Table A.2). On the bottom side,

prevalence of breastfeeding remained less than 15 percent in 15 member countries. For nine of these countries it is even less than ten percent. As shown in Figure 2.12, member countries with lowest prevalence of breastfeeding include Algeria (7 percent), Burkina Faso (7 percent), Tunisia (6 percent), Gabon (5 percent), Somalia (5 percent), Côte d'Ivoire (4 percent), Chad (2 percent), Suriname (2 percent), and Djibouti (1 percent).

Figure 2.12: OIC Member Countries with Lowest Prevalence of Breastfeeding, 2000-2010

Source: Table A.2 in the Statistical Appendix



2.1.5 Immunization[3] Coverage among One Year Olds

Keeping in view the age-specific risks of the infectious diseases, childhood immunization is one of the most efficient and effective methods of preventing diseases like Measles, Meningitis, Diphtheria, Tetanus, Pertussis (whooping cough), Yellow fever, Polio and Hepatitis B. Immunization against vaccine-preventable diseases during the first year of life is recommended by the WHO for all nations. Over the years, WHO and UNICEF along with international community helped majority of the developing countries to improve their national immunization services and coverage by supplying needed vaccines and training their health workers. These noble efforts paid off and increase in immunization coverage helped to prevent millions of child deaths across the world. According to the latest estimates of WHO, immunization against vaccine-preventable diseases helps to prevent disability and death of about 2.5 million children every year (WHO, SOWVI 2009).

Measles Immunization Coverage

Worldwide Measles immunization coverage has increased substantially since 1990. As shown in Figure 2.13, share of children immunized against Measles has increased worldwide from 73 percent in 1990 to 82 percent in 2009. Measles is one of the leading causes of child mortality especially in low income countries, where 95 percent of total world Measles related deaths are taking place in these countries. However, widespread routine

[3] According to the WHO, "Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines stimulate the body's own immune system to protect the person against subsequent infection or disease".

immunization lead to steep reduction in Measles mortality from 750,000 deaths in 2000 to slightly over 100,000 deaths in 2008, corresponding to a decline of 87 percent (WHO, Fact sheet No:286, December 2009).

In developed countries, the share of infants immunized against Measles increased from 83 percent in 1990 to 93 percent in 2009. While in developing countries, about 81 percent of infants were immunized against Measles in 2009 compared to 72 percent in 1990. Although the developing countries recorded lower share than the world, they are steadily catching up with a 9 percentage point increase during 1990-2009.

Since 1990, OIC countries made great progress and Measles immunization coverage increased by 13 percentage points compared to 9 percentage points in the world

Measles immunization coverage has increased substantially in OIC member countries and coverage rate jumped from 63 percent in 1990 to 76 percent in 2009. However despite this significant improvement, Measles immunization coverage in OIC countries remained below the world, developing and developed countries averages. During 1990-2009,however, immunization coverage has increased more rapidly in OIC member countries (13 percentage points) compared to the world (9 percentage points), developing countries (9 percentage points) and developed countries (10 percentage points).

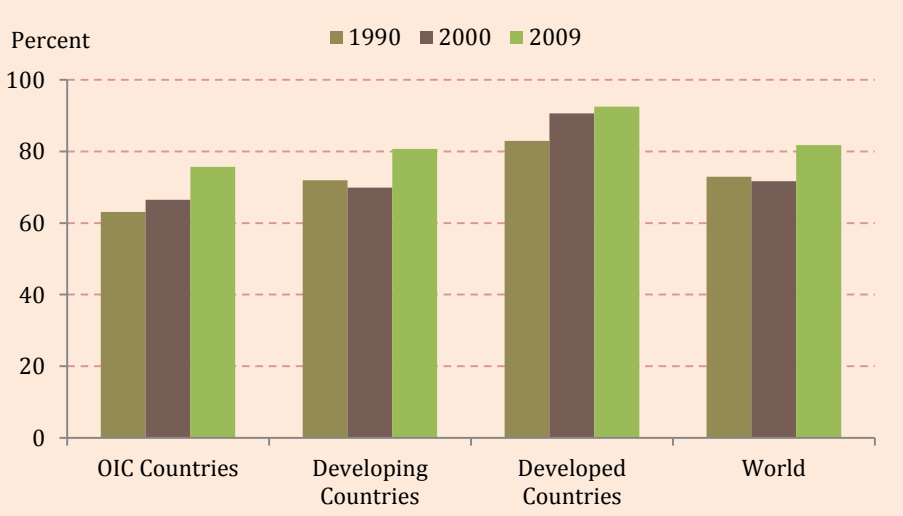


Figure 2.13: Measles Immunization Coverage

OIC countries made great progress.

Source: Table A.3 in the Statistical Appendix

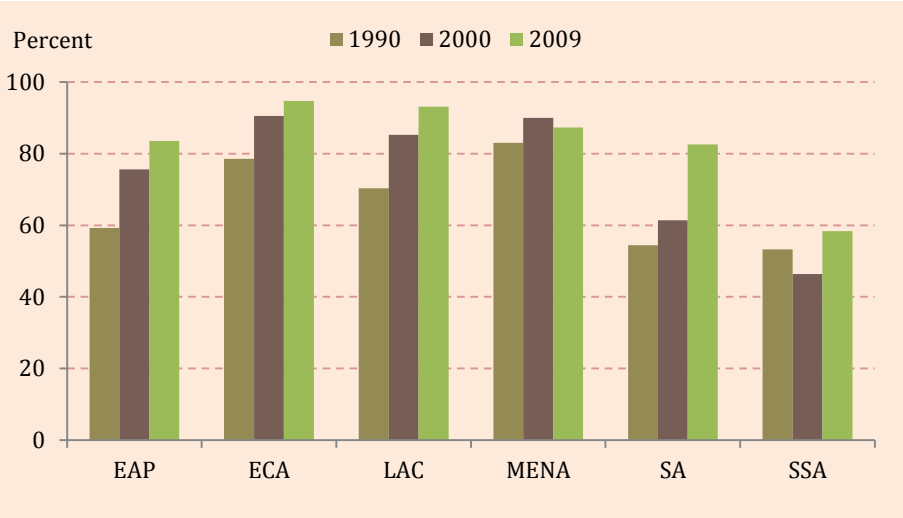
With the exception of SSA, Measles immunization coverage remained quite high across the OIC regions in 2009. During the period under consideration, ECA region emerged as the star performer in combating Measles where immunization coverage has increased exponentially from 79 percent in 1990 to 95 percent in 2009, corresponding to an increase of 16 percentage points. In 2009, immunization coverage in this region remained higher than the OIC average, developing, developed and world averages. In contrast, SSA is still seriously lagging behind and despite some improvement immunization coverage remained very low compared to other OIC regions. As shown in Figure 2.14, about 58 percent of children in SSA were immunized against Measles in 2009 compared to 53 percent in 1990, corresponding to an increase of 5 percentage points. All other OIC regions have recorded quite impressive progress in combating Measles during the period 1990-2009 and their immunization coverage rates remained higher than the OIC, developing countries and world averages. As

shown in Figure 2.14, share of children immunized against Measles has increased from 59 percent to 84 percent in EAP (an increase of 24 percentage points), 70 percent to 93 percent in LAC (an increase of 23 percentage points), 83 percent to 87 percent in MENA (an increase of four percentage points) and 54 percent to 83 percent in SA (an increase of 28percentage points).

Figure 2.14: Measles Immunization Coverage in OIC Regional Groups

Immunization coverage remained quite high across the OIC regions

Source: Table A.3 in the Statistical Appendix



At the individual country level, Measles immunization coverage remained, in general, quite high in OIC member countries. In 2009, 23 member countries recorded coverage rate higher than 90 percent whereas it was between 80 percent and 89 percent in nine member countries and 71 percent to 79 percent in 12 member countries. As shown in Figure 2.15, among the member countries with available data, lowest Measles immunization coverage was recorded in Chad (23 percent) and Somalia (24 percent).

Figure 2.15: Member Countries with Lowest Measles Immunization Coverage, 2009

Source: Table A.3 in the Statistical Appendix

DTP3 Immunization Coverage

Global coverage of third dose of combined Diphtheria-Tetanus-Pertussis vaccine (DTP3) during the first year of life has increased from 76 percent in 1990 to 82 percent in 2009,

corresponding to an increase of 6 percentage points (Figure 2.16). In developed countries, 95 percent of children received DTP3 vaccine in 2009 compared to 87 percent in 1990. While, in developing countries coverage of DTP3 during the first year of life has increased from 75 percent in 1990 to 81 percent in 2009. During the period under consideration, coverage rate in developing countries remained significantly lower than the developed countries; yet it was comparable to the world average.

Diphtheria, Tetanus and Pertussis immunization coverage in OIC countries increased to 78% compared to 82% in the world

In the OIC member countries coverage of DTP3 vaccination among one year olds has increased from 66 percent in 1990 to 78 percent in 2009. As shown in Figure 2.16, OIC coverage remained slightly below the world and developing countries averages. However, member countries are rapidly catching up as, during the same period, they registered a 12 percentage point increase in vaccination coverage compared to 6 percentage point increase both in world and developing countries and 7 percentage points in developed countries.

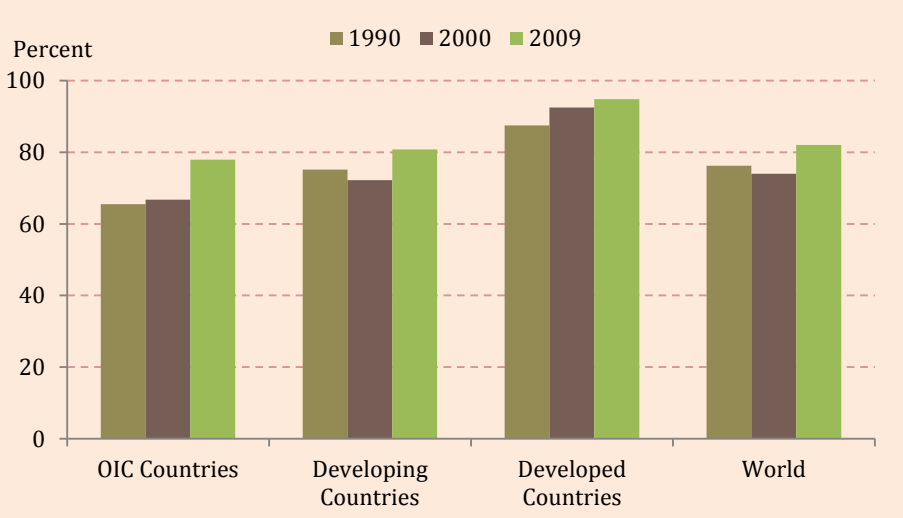


Figure 2.16: DTP3 Immunization Coverage

OIC member countries made significant gains since 1990.

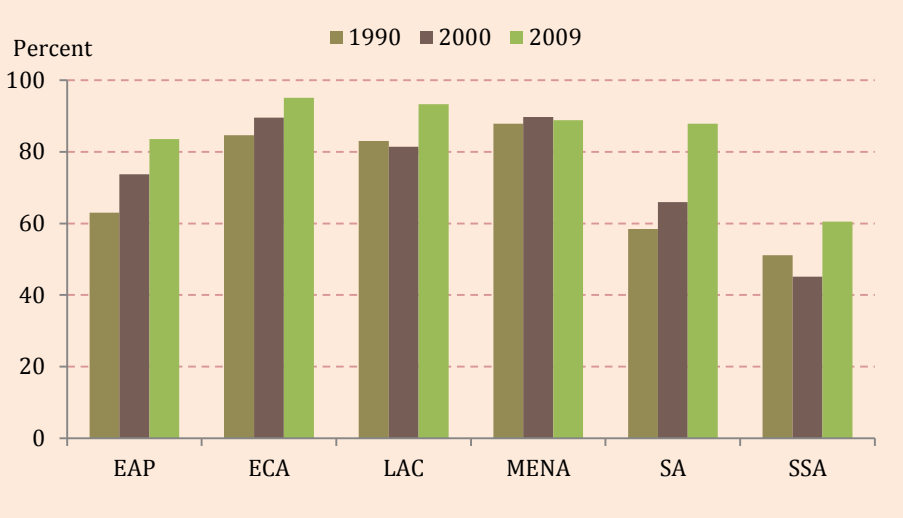
Source: Table A.3 in the Statistical Appendix

During the same period, coverage of DTP3 vaccination in the first year of life has been improved across the OIC regions (Figure 2.17). ECA region emerged as the star performer in DTP3 vaccination where coverage rate climbed up from 85 percent in 1990 to 95 percent in 2008, corresponding to an increase of 10 percentage points. In 2009, DTP3 coverage in ECA region remained higher than the averages of world, OIC, and developing countries while it was equal to the developed countries average. In contrast, SSA is still seriously lagging behind and despite some improvement; DTP3 immunization coverage remained very low in this region. As shown in Figure 2.17, about 61 percent of children in SSA were immunized against DTP in 2009 compared to 51 percent in 1990, corresponding to an increase of 10 percentage points. All other OIC regions have shown quite impressive progress during the period 1990-2009 where DTP3 coverage rates in LAC, MENA, SA and EAP regions remained higher than the OIC average, developing countries and world averages. As shown in Figure 2.17, the share of children receiving DTP3 vaccine during the first year of life has increased from 83 percent to 93 percent in LAC (an increase of 10 percentage points), 88 percent to 89 percent in MENA (an increase of 1 percentage point), 58 percent to 88 percent in SA (an

increase of 29 percentage points) and 63 percent to 84 percent in EAP (an increase of 21 percentage points).

Figure 2.17: DTP3 Immunization Coverage in OIC Regions

Immunization coverage has been improved across the OIC regions.



At the individual country level, DTP3 immunization coverage remained, in general, quite high in OIC member countries. In 2009, 26 member countries recorded coverage rate higher than 90 percent whereas it was between 80 percent and 89 percent in 14 member countries and 70 percent to 76 percent for six member countries. As shown in Figure 2.18, among the member countries with available data, lowest Measles immunization coverage was recorded in Chad (23 percent) and Somalia (31 percent).

Figure 2.18: Member Countries with Lowest DTP3 Immunization Coverage, 2009

Source: Table A.3 in the Statistical Appendix

Haemophilus Influenza Type B (Hib) Immunization Coverage

Haemophilus influenza type b (Hib) is one of the most dangerous infectious diseases especially for the infants and young children. According to the WHO estimates, about three million serious illnesses and an estimated 386,000 deaths per year are caused by Hib through meningitis and pneumonia. Almost all of these victims are children under the age of five especially those between 4 and 18 months of age are the most affected. Majority of the

deaths caused by this disease are occurring in the developing countries especially due to pneumonia. However, meningitis is also catastrophic and it causes permanent disabilities such as mental retardation or deafness in 15 to 35 percent of those victims who managed to survive (WHO, Fact sheet No: 294).

Worldwide 85 percent of one year olds got three doses of Haemophilus Influenza Type B (Hib) vaccine in 2009. While 93 percent of infants in developed countries were immunized against Hib during the first year of life, vaccination coverage was recorded at 83 percent and 82 percent in developing and OIC member countries respectively (Figure 2.19).

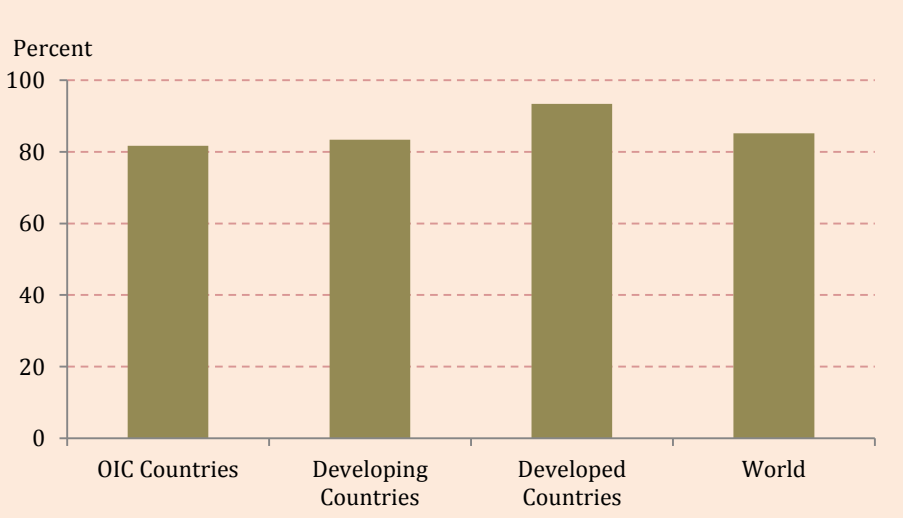


Figure 2.19: Hib3 Immunization Coverage, 2009

Coverage rate remained quite high in OIC countries.

Source: Table A.3 in the Statistical Appendix

Among the OIC regional groups, Hib3 immunization coverage ranged from a low of 72 percent in SSA to a high of 96 percent in ECA region, whereas 95 percent of infants were immunized against Hib3 in EAP, 93 percent in LAC, 88 percent in MENA and 85 percent in SA region (Figure 2.20). In 2009, on average, Hib3 immunization coverage in ECA, EAP, LAC, MENA and SA regions remained higher than the OIC average, developing countries and world averages. Furthermore, member countries in ECA and EAP region registered

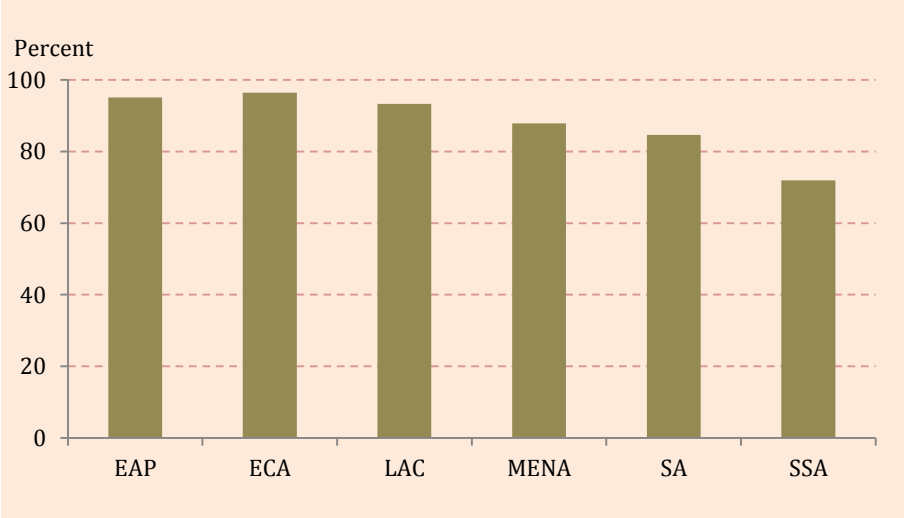


Figure 2.20: Hib3 Immunization Coverage OIC Regions

Coverage rates remained significantly high in OIC regions.

Source: Table A.3 in the Statistical Appendix

Hib3 coverage rate even higher than the developed countries rate.

At the individual country level, Hib3 immunization coverage remained, in general, quite high in OIC member countries and in 2009, 19 member countries recorded coverage rate higher than 90 percent whereas it was between 80 percent and 89 percent in 11 member countries and 70 percent to 76 percent in 6 member countries(see Annex Table A.3). As shown in Figure 2.21, among the member countries with available data, lowest Hib3 immunization coverage was recorded in Chad (22 percent) and Comoros (38 percent).

Figure 2.21: Member Countries with Lowest Hib3 Immunization Coverage, 2009

Source: Table A.3 in the Statistical Appendix

Hepatitis Type B (HepB) Immunization Coverage

Hepatitis is a liver infection caused by the hepatitis B virus which is 50 to 100 times more infectious than HIV. It is one of the most dangerous diseases and worldwide around two billion people have been affected by it (around 350 million of these people have chronic liver infections). In addition, more than half a million people die every year due to the acute and chronic liver infections. According to the latest estimates of WHO, 25 percent of adults who become chronically infected during the childhood later die due to liver cancer. These deaths are preventable by using Hepatitis B vaccine during the first year of life. This vaccine has been proved more than 95 percent effective against the infection in infants, children and young adults (WHO, Fact sheet No: 204, August 2008).

Hepatitis B immunization in OIC countries remained higher than the world average

Global coverage of three doses of hepatitis B vaccine (HepB3) during the first year of life has been increased from 69 percent in 2000 to 71 percent in 2009, corresponding to an increase of 2 percentage points (Figure 2.22). In developed countries, 85 percent of children received HepB3 vaccine in 2009 compared to 82 percent in 2000, corresponding to an increase of 3 percentage points. While, in developing countries coverage of HepB3 during the first year of life has increased from 67 percent in 2000 to 70 percent in 2009, corresponding to an increase of 3 percentage points. In 2009, coverage rate in developing countries remained lower than the developed countries and world averages. In the OIC member countries coverage of HepB3 vaccination among one year olds has increased from 74 percent in 2000 to 77 percent

in 2008. As shown in Figure 2.22, OIC coverage rate remained higher than that for developing and world averages in 2009.

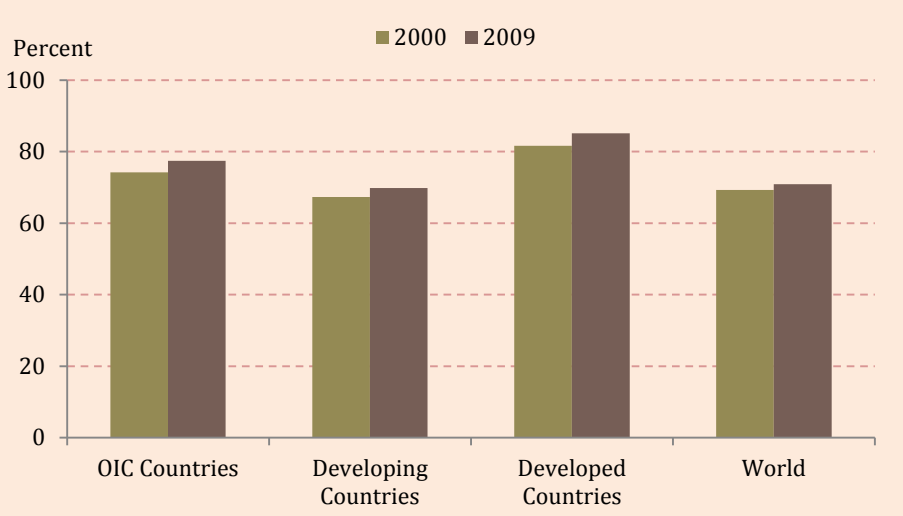


Figure 2.22: HepB3 Immunization Coverage

OIC coverage rate remained higher than the world and developing countries.

Source: Table A.3 in the Statistical Appendix

In 2009, among the OIC regions HepB3 immunization coverage ranged from a low of 60 percent in SSA to a high of 93 percent in LAC region; while 92 percent of infants in ECA, 88 percent in SA, 87 percent in MENA and 84 percent in EAP were immunized against HepB3 (Figure 2.23). In 2009, HepB3 coverage rates remained quite impressive in OIC regions and with the exception of SSA region, all regions registered immunization coverage higher than the averages of OIC and developing countries. Furthermore, member countries in ECA, LAC, MENA and SA region registered Hib3 coverage rate even higher than the developed countries average.

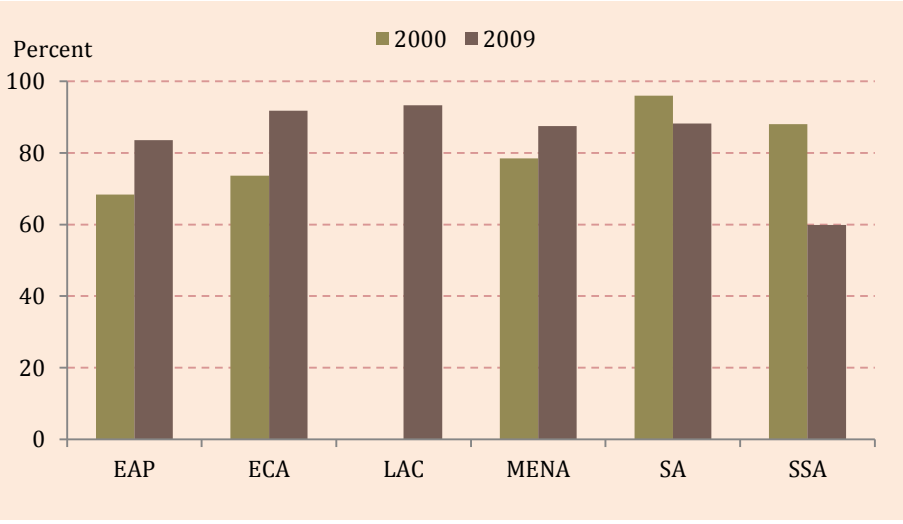


Figure 2.23: HepB3 Immunization Coverage in OIC Regional Groups

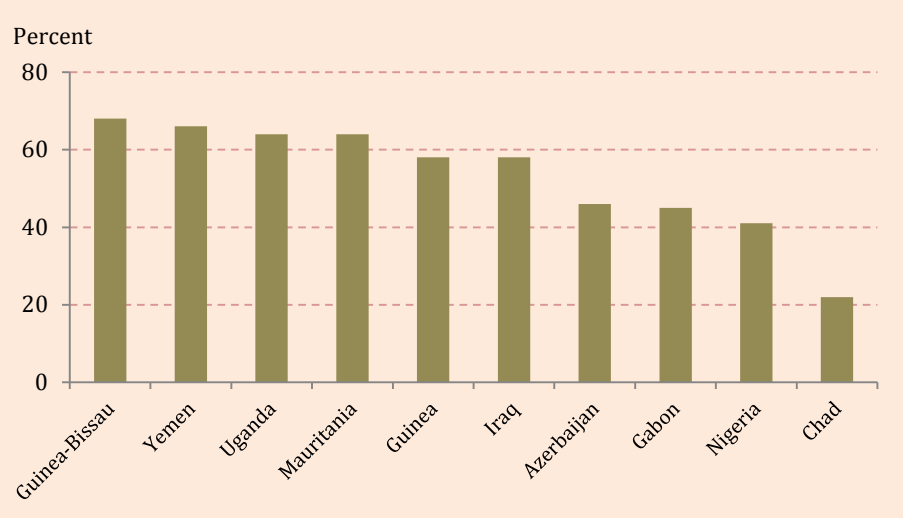
Coverage rates remained significantly high in OIC regions.

Source: Table A.3 in the Statistical Appendix

At the individual country level, HepB3 immunization coverage remained, in general, quite high in OIC member countries and in 2009, 26 member countries recorded coverage rate higher than 90 percent whereas it was between 80 percent and 89 percent in 12 member countries and 70 percent to 76 percent in 7 member countries. In this year, among the

member countries with available data, lowest HipB3 immunization coverage was recorded in Chad (22 percent) and Nigeria (41 percent).

Figure 2.24: Member Countries with Lowest HepB3 Immunization Coverage, 2009



Source: Table A.3 in the Statistical Appendix

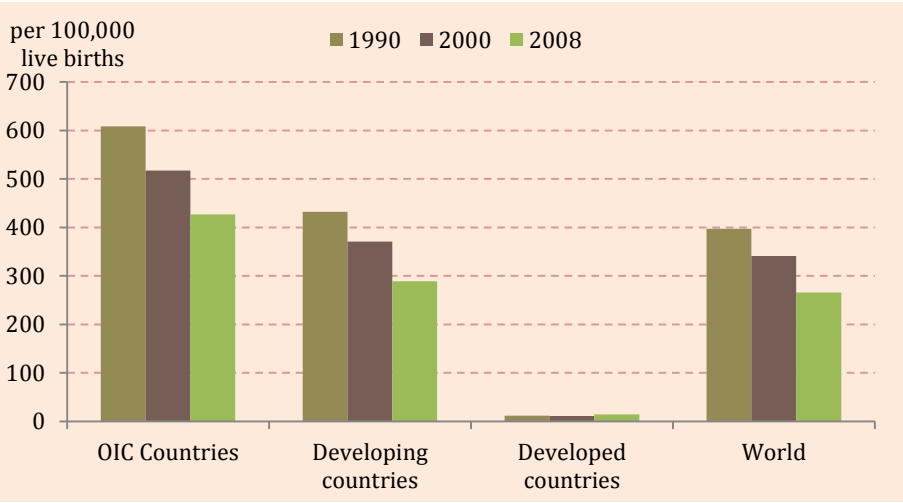
2.1.6 Maternal Mortality

Every year about 0.2 million maternal deaths occur in OIC member countries which corresponds to 50 % of the world total maternal deaths

Pregnancy and childbirth related complications remained the leading cause of death and disability for women age 15-49 especially in developing countries. According to the latest estimates (WHO, 2011), globally nearly a half million women die during and following pregnancy and childbirth. About 99.5 percent of these maternal deaths are occurring in developing countries especially in Sub-Saharan Africa and Asia. In OIC member countries, about 0.2 million women die from preventable causes related to pregnancy and childbirth. This corresponds to 50 percent of the world total maternal deaths in 2008. Majority of the maternal deaths in OIC countries occurred in SSA and SA region and these two regions accounted for about 90 percent of the total maternal deaths (i.e. 66 percent and 23 percent respectively) in 2008.

Figure 2.25: Maternal Mortality Rate

Situation has been improved across the world since 1990.



Source: Table A.4 in the Statistical Appendix

Over the years, world has made some progress to control the maternal deaths and MMR has declined from 397 deaths per 100,000 live births in 1990 to 266 deaths in 2008, corresponding to a decrease of 33 percent (Figure 2.25). A similar trend can be observed for the developing countries as well. The situation in developed countries was quite the opposite where maternal mortality witnessed an increasing trend. Nevertheless, despite the increase, MMR in developed countries remained comparatively negligible at 14 deaths per 100,000 live births. OIC member countries also witnessed some improvement in maternal health conditions and MMR declined from 609 deaths in 1990 to 427 deaths in 2008, corresponding to a decrease of 30 percent. However, compared to other groups, OIC member countries recorded higher MMR in 2008.

During the period 1990-2008, maternal mortality rate has declined across the OIC regional groups. As shown in Figure 2.26, in 2008, MMR ranged from a low of 35 and 83 deaths per 100,000 live births in ECA and MENA respectively to a high of 725 and 455 deaths in SSA and SA respectively. Among other regions, the average MMR was 200 deaths per 100,000 live births in LAC and 216 deaths in EAP. Between 1990 and 2008, OIC member countries in EAP region witnessed the highest decrease in MMR (62 percent) followed by MENA (58 percent), ECA (49 percent), SA (39 percent), SSA (26 percent) and LAC (14 percent). With the exception of SSA and SA region, MMR for OIC regions remained below the world, developing countries and OIC averages in 2008.

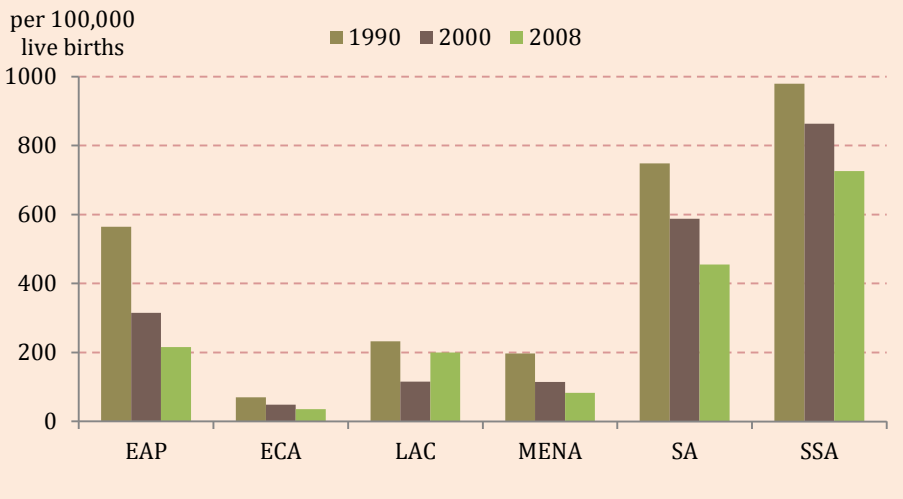


Figure 2.26: Maternal Mortality Rate in OIC Regions

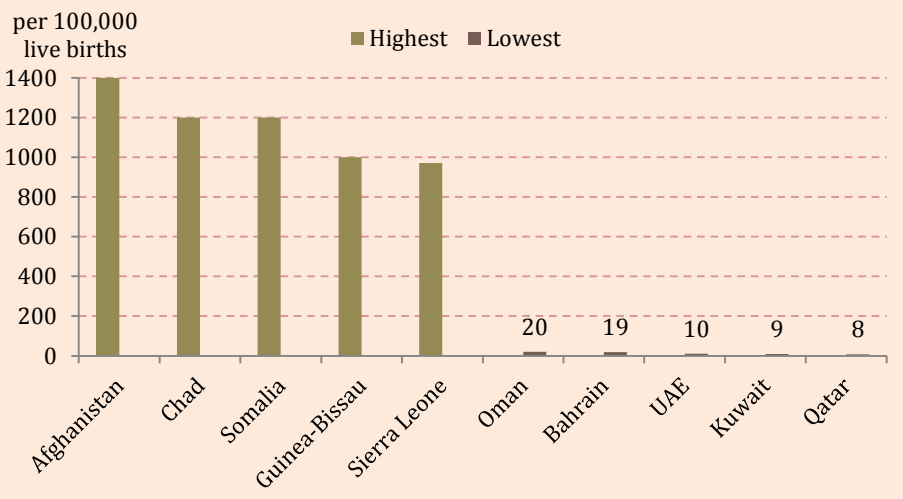
MMR remained alarmingly high in SA and SSA regions.

Source: Table A.4 in the Statistical Appendix

As shown in Figure 2.27, Afghanistan recorded the highest MMR (1400 maternal deaths per 100000 live births) in OIC region, closely followed by Chad (1200 deaths), Somalia (1200 deaths), Guinea Bissau (1000 deaths) and Sierra Leon (970 deaths). Among these countries, Afghanistan is ranked 1st with respect to highest MMR in the world, Chad and Somalia are ranked 2nd, Guinea Bissau is ranked 3rd and Sierra Leon is ranked 6th. In contrast, Qatar recorded the lowest MMR in OIC region (8 maternal deaths per 100,000 live births) followed by Kuwait (9 deaths), UAE (10 deaths), Bahrain (19 deaths) and Oman (20 maternal deaths). Between 1990 and 2008, 30 member countries registered more than 40 percent decrease in MMR. Out of these 30 member countries 13 are from MENA, 7 from SSA, 5 from ECA, 3

from SA and 2 from EAP. The member countries with highest decline in MMR from SSA region are as follow: Benin, Gambia, Togo, Senegal, Mozambique, Guinea and Niger. On the other hand, three member countries namely: Kyrgyzstan, Somalia and Suriname witnessed 5 percent, 9 percent and 19 percent increase in MMR respectively [see annex Table A.4].

Figure 2.27: Member Countries with Highest and Lowest Maternal Mortality Rates, 2008



Source: Table A.4 in the Statistical Appendix

2.1.7 Infant Mortality

Infant mortality rate (IMR) indicates the number of deaths of babies less than one year of age per 1000 live births. Generally, IMR correlates very strongly with the quality of maternal and newborn health care services and preventive measures in a country. Therefore, it is considered as an important indicator of overall coverage and effectiveness of a health care system. In addition, it also reflects the effects of socio-economic conditions on the maternal and newborns health and survival.

Since 1990, infant mortality rates have witnessed remarkable decline worldwide. As shown in Figure 2.28, on average, IMR for both sexes has declined from 61 deaths per 1 000 live births in 1990 to 41 in 2010, corresponding to a decrease of 34 percent. In developing countries, IMR declined from 66 deaths per 1000 live births in 1990 to 44 in 2010, corresponding to a decrease of 34 percent. Compared to other groups, IMR remained very low in developed countries. On average, developed countries recorded about 5 deaths per 1000 live births in 2010 compared to 8 deaths in 1990.

Despite 33% decrease in IMR since 1990, still one in every 18 children die before their first birthday in OIC countries compared to one in 25 children in world.

The infant mortality situation has been improved in the OIC member countries as well and their IMR exhibited a down ward trend during the period 1990-2010. As shown in Figure 2.28, the average IMR in OIC countries has declined from 84 deaths per 1000 live births in 1990 to 56 in 2010, corresponding to a decrease of 33 percent. However, despite this impressive progress, IMR in member countries remained quite higher than the developing countries and world. In 2010, one in every 18 children died before their first birthday in OIC countries compared to one in 23 children in developing countries, one in 25 children in world and one in 211 children in developed countries.

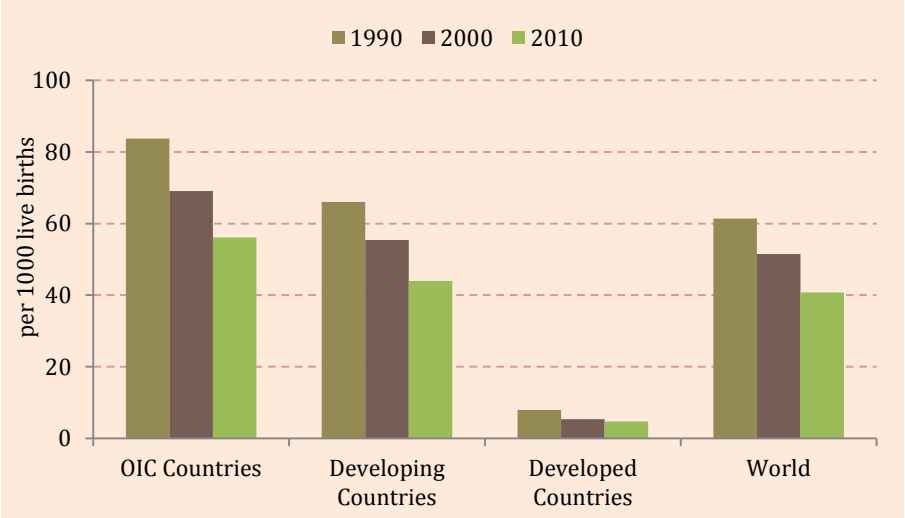


Figure 2.28: Infant Mortality Rate

OIC country witnessed significant improvement since 1990.

Source: Table A.4 in the Statistical Appendix

During the period 1990-2010, infant mortality rate has declined across the OIC regions. Yet, substantial differences exist among the regions. As shown in Figure 2.29, in 2010, average IMR ranged from a low of 24 and 26 deaths per 1000 live births in EAP and MENA region to a high of 83and 65 deaths per 1000 live births in SSA and SA respectively. Average IMR was recorded at 28 deaths per 1000 live births in ECA. Between 1990 and 2010, member countries in ECA region witnessed the highest decrease in IMR (57 percent) followed by EAP (53 percent), MENA (52 percent) and SA (36 percent). On the other hand, SSA where a bulk of OIC infant deaths occurs has registered only 27 percent decrease in IMR during 1990-2010. In 2010, average IMR for member countries in EAP, ECA and MENA remained below the OIC and developing and world averages (56, 44 and 41 deaths per 1000 live births respectively).

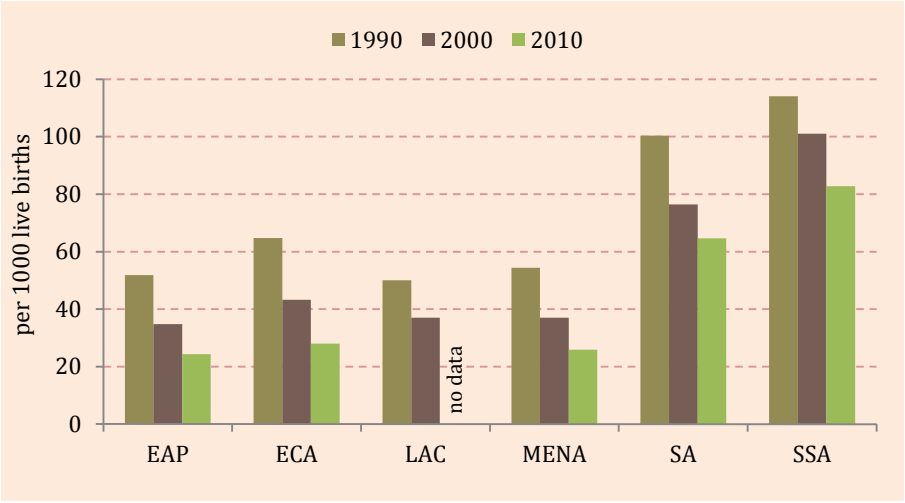


Figure 2.29: Infant Mortality Rate in OIC Regional Groups

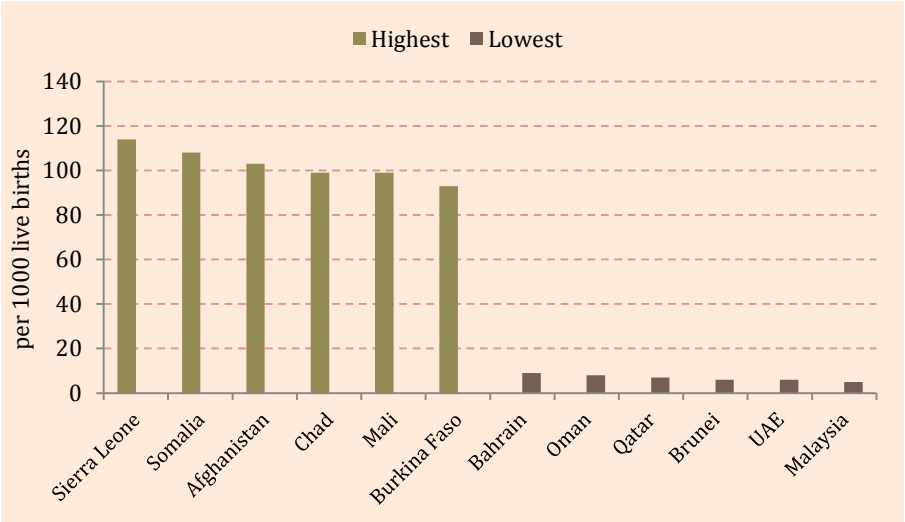
IMR remained highest in SSA region.

Source: Table A.4 in the Statistical Appendix

At the individual country level, IMR in OIC member countries ranges from a low of 5 deaths per 1000 live births in Malaysia to a high of 114 in Sierra Leone (Figure 2.30). Four member countries from MENA region registered the lowest IMR, ranging from 6 to 9 deaths per 1000 live births. On the other hand, 5 member countries from SSA region registered IMR of over

90 deaths per 1000 live births. In 2010, IMR ranged between 63 to 92 deaths per 1000 live births in 15 member countries (13of them from SSA region). In 6 of these countries (all from SSA), IMR was greater than 80 deaths per 1000 live births. On the other hand, 29 member countries registered IMR ranging from 10 to 57 deaths per 1000 live births. In 11 of these 29 countries, IMR remained lower than 20 deaths per 1000 live births. In general, 33 member countries registered IMR lower than the OIC average of 56 deaths per 1000 live births. In 28 of these 33 countries, IMR remained lower than the developing and world averages of 44 and 41 deaths per 1000 live births [see annex Table A.4].

Figure 2.30: Member countries with Highest and lowest IMR, 2010



Source: Table A.4 in the Statistical Appendix

2.2 Child and Adolescent Health

2.2.1 Under-5 Mortality

In OIC countries, 1 in 12children die before their fifth birthday compared to 1 in 18 children in the world

Under five moratlity rate (U5MR) or child mortality rate is one of the most important indicators on child health. It basically reflects the overall coverage and effectiveness of health care services alongwith socio-economic development in a country.

Over the years, U5MR has declined accross the world. As shown in Figure 2.31, global U5MR has fallen from 88 deaths per 1000 live births in 1990 to 57 in 2010, corresponding to a decrease of 35 percent. U5MR also witnessed a declining trend in developing countries and it fell below the world average in 2010. On average, U5MR in developing countries declined from 95 deaths per 1000 live births in 1990 to 62 in 2010, corresponding to a decrease of 35 percent .

The under five mortality situation has also been improved in the OIC member countries and U5MR has fallen from 126 deaths per 1000 live births in 1990 to 82 in 2010, corresponding to decline of 35 percent. However, despite this improvement, one in 12 children in OIC member countries die before their fifth birthday compared to one in 16 children in developing countries and one in 18 children in the world .

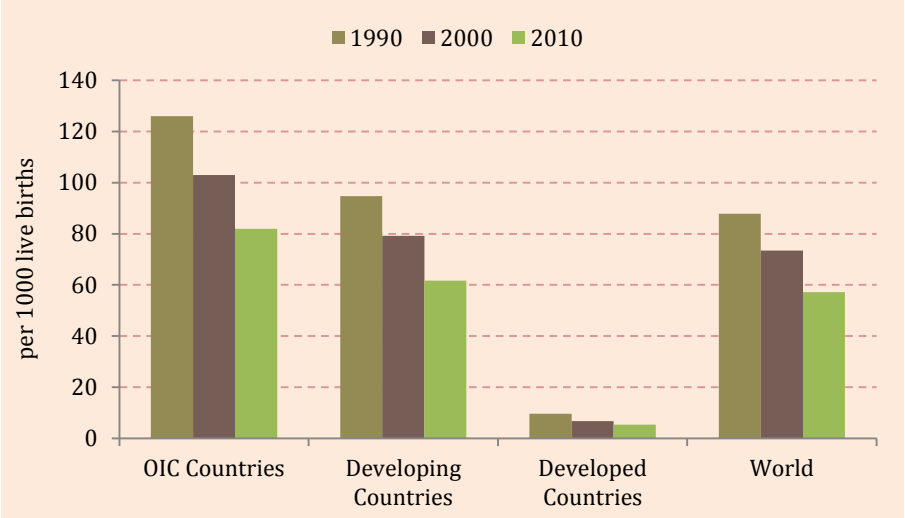


Figure 2.31: Under-Five Mortality Rate

Despite progress, U5MR remained comparatively very high in OIC countries.

Source: Table A.4 in the Statistical Appendix

Under-five mortality has declined accross the OIC regions. Yet, substantial differences exist among the regions. As shown in Figure 2.32, average U5MR for both sexes ranged from a low of 32 deaths per 1000 live births in EAP and MENA region to a high of 133 and 83 deaths per 1000 live births in SSA and SA region respectively. In other regions, the average U5MR was 33 deaths per 1000 live births in ECA. During the period under consideration , U5MR in EAP, ECA and MENA region decreased by 60 percent, 59 percent and 57 percent respectively. Meanwhile, SA and SSA region experienced 40 percent and 31 percent decrease in U5MR respectively.

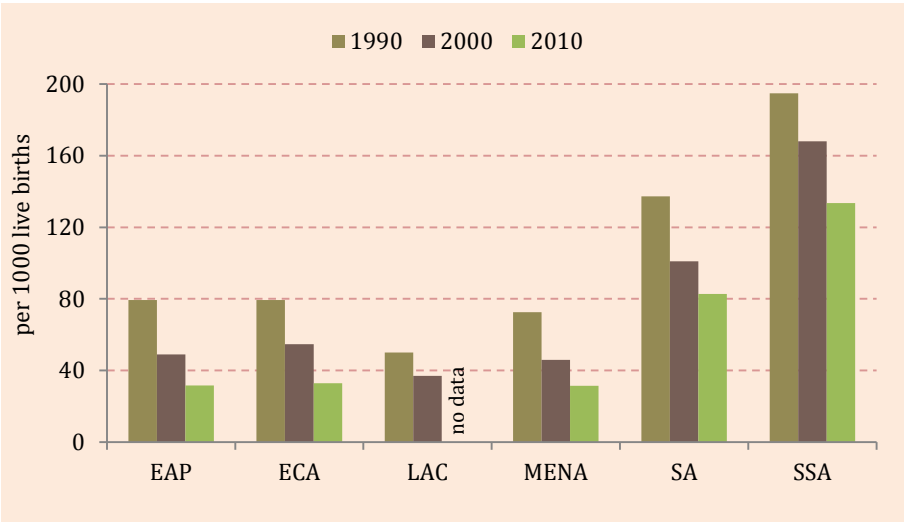


Figure 2.32: Under-Five Mortality Rate in OIC Regional Groups

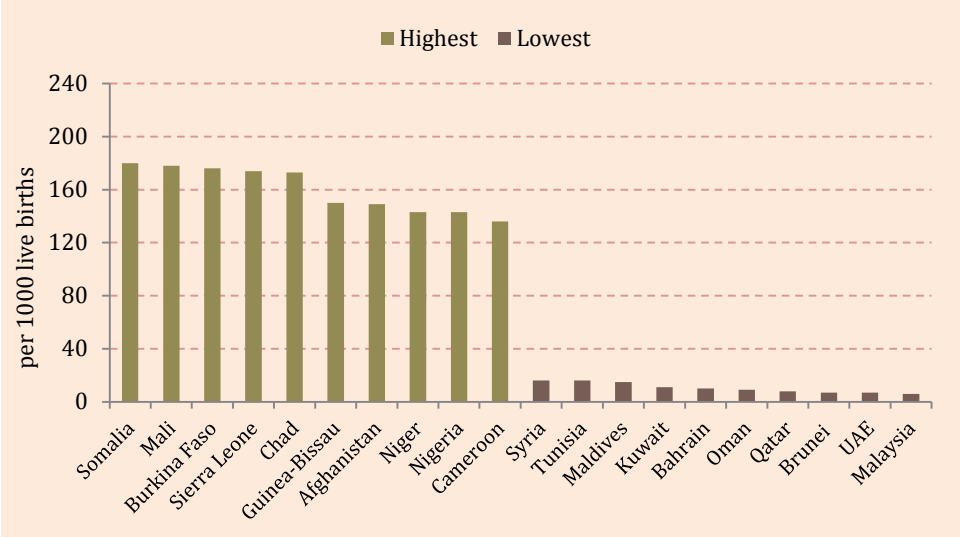
U5MR remained significantly high in SSA and SA regions.

At the individual country level, U5MR in OIC member countries ranges from a low of 6 deaths per 1000 live births in Malaysia to a high of 180 in Somalia (Figure 2.33). Seven member countries from MENA region registered the lowest U5MR, ranging from 7 to 16 deaths per 1000 live births. In contrast, 16 member countries from SSA region registered IMR of over 100 deaths per 1000 live births. Six of these 16 member countries are among the top 20 countries with highest U5MR in the world. In 2010, Somalia was ranked 1st with respect to U5MR in the world followed by Mali (ranked 2nd), Burkina Faso (ranked 3rd), Sierra Leone

(ranked 11th), Chad (ranked 13th) and Guinea Bissau (ranked 14th). On the other hand, U5MR remained less than 50 deaths per 1000 live births in 28. In 14 of these 28 countries, U5MR remained even less than 20 deaths per 1000 live births. In general, 34 member countries registered U5MR lower than the OIC average of 82 deaths per 1000 live births. In 30 of these 34 countries, U5MR remained lower than the developing and world averages of 62 and 57 deaths per 1000 live births [see annex Table A.4].

Figure 2.33: Members with Highest and Lowest U5 Mortality Rate, 2010

Source: Table A.4 in the Statistical Appendix



2.2.2 Causes of Deaths among Children under Age 5

Globally, the number of deaths among children under the age of five has declined from 12.4 million in 1990 to 8.1 million in 2009, corresponding to a decrease of 35 percent. Almost 70 percent of under five deaths take place during the first year of life (UNICEF, 2010). Under-five mortality remained highly concentrated in developing countries which accounted for over 99 percent of world total in 2009. This means that about 24000 children under the age of five died every day in developing countries. According to the WHO estimates, three quarters of total deaths were caused by infectious diseases and birth related complications which can easily be prevented by vaccination, antenatal health care and skilled attendance of birth.

In OIC countries, 3.9 million children die before reaching their fifth birth day, corresponding to 45 % of total under five deaths in the world

As shown in Figure 2.34, about 73 percent of under-five deaths in developing countries were caused by pneumonia (18 percent), diarrhea (15 percent), malaria (8 percent), neonatal pneumonia or sepsis (6 percent), preterm birth (12 percent), birth asphyxia (9 percent) and congenital abnormalities (4 percent) in 2008. Nearly half of the total deaths (47 percent) were caused by only four communicable diseases (pneumonia, diarrhea, malaria and neonatal sepsis).

In contrast, prevalence of under-five mortality remained very low in developed countries which accounted for less than one percent of world total deaths in 2008. In these countries, major causes of deaths are more skewed toward complications associated with pregnancy and delivery than the infectious diseases. As shown in Figure 2.34, more than half of total

under-five deaths in developed countries were caused by preterm birth complications (27 percent) and congenital abnormalities (26 percent) in 2008. While, mainly due to higher immunization coverage, only 5 percent of deaths were caused by four communicable diseases. In majority of the developed countries, women show a growing tendency to delay their first pregnancies which increases the risk of congenital anomalies (WHO, The European Health Report 2005).

More than half of under five deaths in OIC countries are caused by Pneumonia, Diarrhea and Malaria

In OIC member countries, 3.9 million children died before reaching their fifth birth day in 2008, corresponding to 45 percent of total under five deaths in developing countries. The major causes of under-five mortality in OIC members are similar to those in developing countries mentioned above. As shown in Figure 2.34, in 2008 more than half (53 percent) of under-five deaths were caused by four communicable disease: pneumonia (18 percent), diarrhea (17 percent), malaria (12 percent) and neonatal sepsis or pneumonia (6 percent).While, on the other hand, 25 percent of deaths were caused by preterm birth (11 percent), birth asphyxia (9 percent) and congenital abnormalities (4 percent).

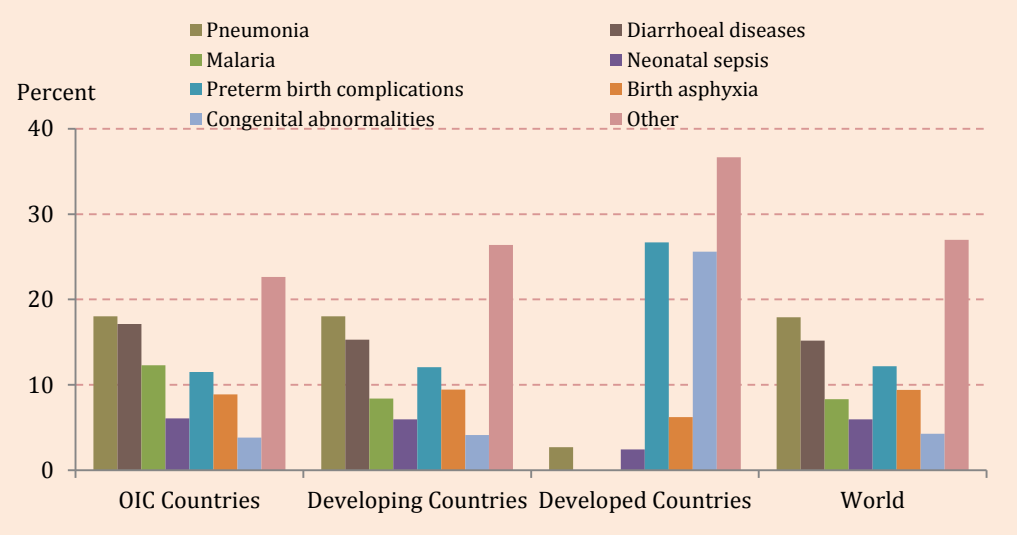


Figure 2.34: Major Causes of Under-five Deaths, 2008

Pneumonia, Diarrhea and Malaria remained the major causes of under five deaths in OIC countries.

Among the OIC regional groups, prevalence of under-five mortality remained quite high in SSA and SA region. As shown in Figure 2.35, about 86 percent of OIC total under-five deaths occurred in these two regions (62 percent in SSA and 24 percent in SA). Meanwhile, MENA region accounted for seven percent of OIC total under-five deaths followed by EAP region (4 percent), ECA region (2 percent) and LAC region (about 1 percent).

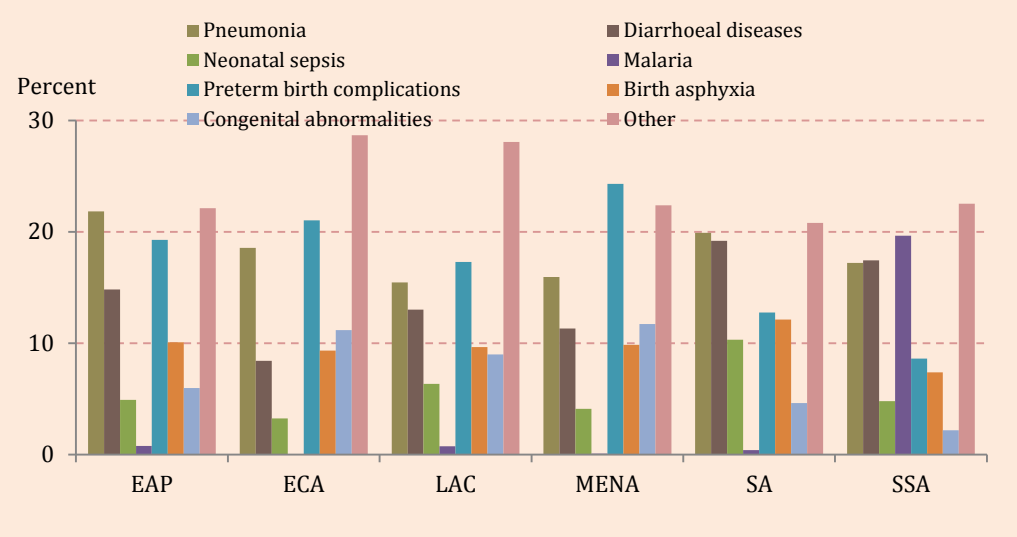
The major causes of under-five deaths remained quite similar in all OIC regions. However, the magnitude of burden of disease varies depending, among others, on socio-economic conditions and status and provision of health care services across the regions. As shown in Figure 2.35, four communicable diseases accounted for 59 percent of total deaths in SSA followed by 50 percent in SA, 42 percent in EAP, 36 percent in LAC, 31 percent in MENA and 30 percent in ECA region. Compared to other regions, deaths attributed to malaria remained quite high in SSA (20 percent). On the other hand, complications related to

pregnancy and delivery caused 46 percent of deaths in MENA, 42 percent in ECA, 36 percent in LAC, 35 percent in EAP, 29 percent in SA and only 18 percent in SSA.

Figure 2.35: Major Causes of Under-five Deaths in OIC Regions, 2008

Short comment needed.

Source: Table A.5 in the Statistical Appendix



2.2.3 Children under Age 5 Stunted, Underweight and Overweight

Prevalence of stunting, underweight and overweight in children under the age of five are very important indicators for measuring long term nutritional imbalances and malnutrition in a population. These indicators help to monitor the number of children suffering from growth retardation and therefore are more vulnerable to death and disability. All children under 5 years with weight-for-age less than -2 standard deviations (SD) of the WHO Child Growth Standards median are considered as underweight where as those with height-for-age less than -2 SD of the WHO Child Growth Standards median are considered as stunted. On the other hand, all children under 5 years with weight-for-height greater than +2 SD of the WHO Child Growth Standards median are considered as overweight.

In the last two decades, there has not been any significant progress in the nutritional status of under-fives across the world. As shown in Figure 2.36, in 2000-2009, prevalence of stunting, underweight and overweight was 32 percent, 22 percent and 6 percent, respectively compared to 36 percent, 24 percent and five percent in 1990-1999 respectively. This means that worldwide prevalence of stunting in children under the age of five has decreased by three percentage points, prevalence of underweight declined by two percentage points; whereas prevalence of overweight increased by one percentage points during 19990-2009. A similar trend can be observed in developing countries where prevalence of stunting increased from 37 percent in 1999-1999 to 34 percent in 2000-2009, prevalence of underweight declined from 24 percent to 23 percent; whereas prevalence of overweight increased from 5 percent to 6 percent. In developed countries prevalence of stunting, underweight and overweight remained comparatively very low. In 2000-2009, number of children stunted, underweight and overweight in developed countries accounted for only three percent, one percent and seven percent of total children under the age of five respectively. The situation in OIC countries also remained almost unchanged and the

prevalence of stunting, underweight and overweight was 37 percent, 23 percent and 9 percent in 2000-2009 respectively compared to 41percent, 26 percent and 5 percent in 1990-1999 respectively. During the period under consideration, on average, prevalence of stunting and overweigh in OIC countries remained higher than those for world and developing countries whereas prevalence of underweight remained equal to that for developing countries and higher than that for world.

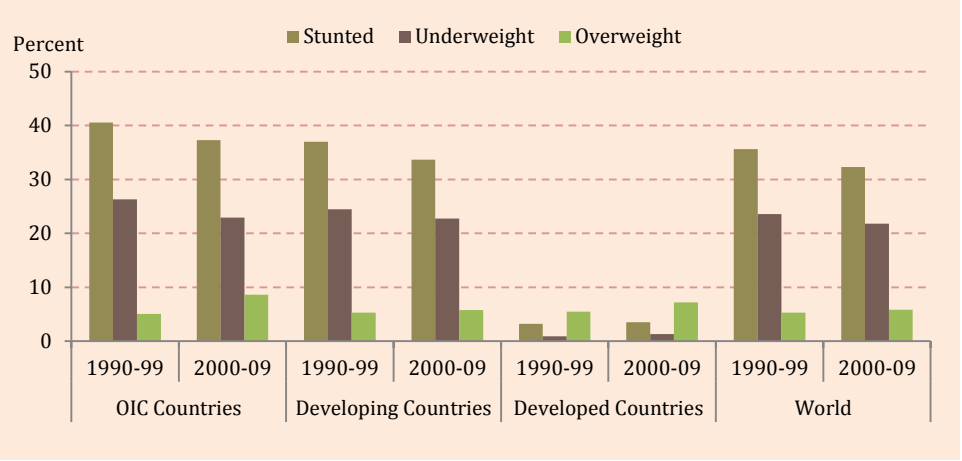


Figure 2.36: Children under 5 Stunted, Underweight and Overweight

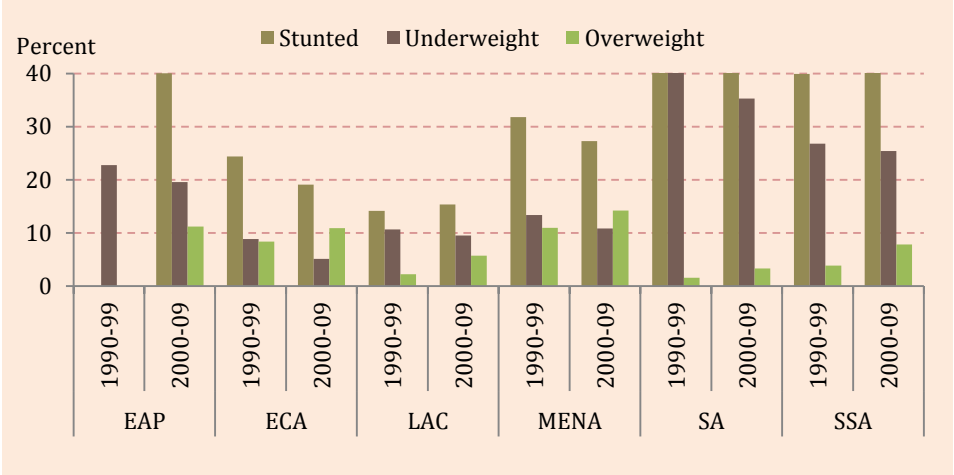
Source: Table A.6 in the Statistical Appendix

At the OIC regional level, as shown in Figure 2.37, stunting and underweight prevalence remained highest in SA (44 percent and 35 percent respectively) followed by SSA (40 percent and 25 percent) and EAP (40 percent and 20 percent). Whereas, prevalence of overweight children remained highest in MENA (14 percent) followed by ECA (11 percent) and EAP (11 percent). During the period 1999-2009, prevalence of stunting has declined across the OIC regions except LAC where it increased slightly. The highest decline was recorded by SA (7 percentage points), ECA and MENA (5 percentage points each). Similarly, prevalence of underweight children also declined across the OIC regions. On average, member countries in SA region registered the highest decline of 7 percentage points followed by ECA (decline of 4 percentage points) and EAP (MENA) (decline of 3 percentage points). The average prevalence of stunted children in SA, SSA and EAP remained higher than that for OIC, world, developing and developed countries. On the contrary, prevalence of overweight children has increased across the OIC regions. The highest increase was registered by SSA and LAC (4 percentage points each) followed by MENA and ECA (3 percentage points each). The average prevalence of overweight children in MENA, ECA and EAP remained higher than that for OIC, world, developing and developed countries in 2009.

At the individual country level, prevalence of stunted and underweight children remained highest in member countries located in SA and SSA region. As shown in Figure 2.38 (left panel), six out of top-10 OIC countries are from SSA, three from SA and one from MENA. Among these countries, more than 50 percent children under the age of five were stunted in Afghanistan (59 percent), Yemen (58 percent) and Niger (55 percent); while 40 to 45 percent of children were stunted in Chad (45 percent), Burkina Faso (45 percent), Bangladesh (43 percent), Somalia (42 percent) and Pakistan (42 percent). Underweight prevalence also

remained highest in these countries and ranged from 30 percent and 31 percent in Djibouti and Pakistan respectively to 43 percent and 41 percent in Yemen and Bangladesh respectively.

Figure 2.37: Children under 5 Stunted, Underweight and Overweight in OIC Regions



Source: Table A.6 in the Statistical Appendix

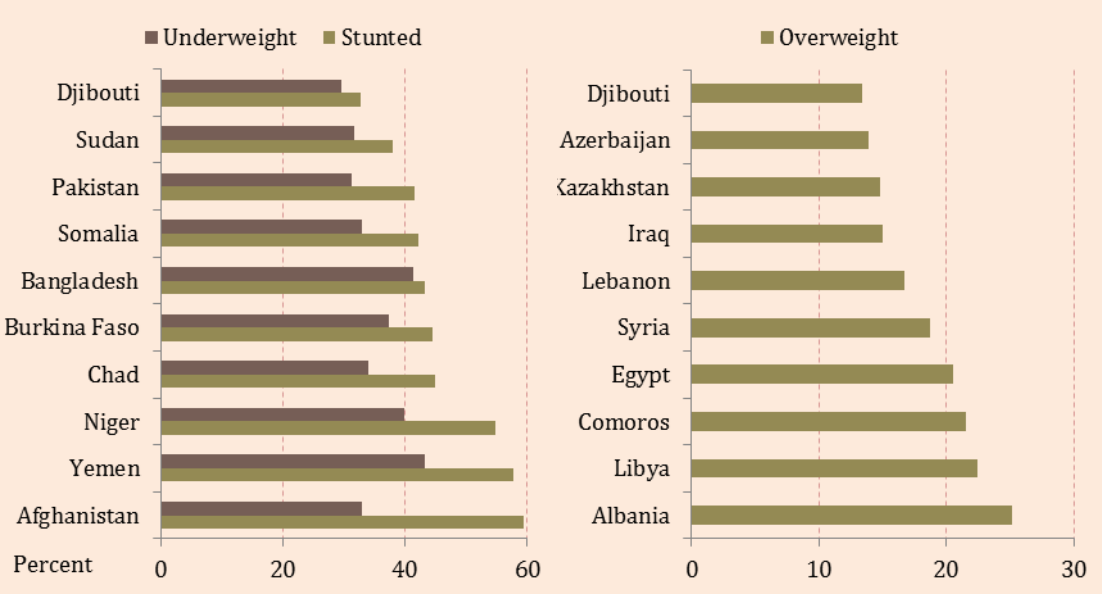
On the other hand, prevalence of overweight children remained highest in member countries located mainly in MENA and ECA region. As shown in Figure 2.38 (right panel), 5 out of top-10 OIC countries are from MENA, 3 from ECA and 2 from SSA. In these countries, prevalence of overweight children ranged from 13 percent and 14 percent in Djibouti and Azerbaijan respectively to 25 percent and 22 percent in Albania and Libya respectively.

In general, during the period 1990-2009, prevalence of stunting in children under the age of five has increased in 16 member countries (8 of them from SSA and 4 from MENA) ranging from 0.3 percentage points in Libya to 10.2 percentage points in Benin. Whereas, on the other hand, it has declined in 23 member countries (9 of them from SSA and 7 from MENA) ranging from 0.2 percentage points in Lebanon and Chad to 26 and 22 percentage points in Mauritania and Tunisia respectively.

In the same period, prevalence of underweight children has increased in eight member countries (four of them from MENA) ranging from 0.5 percentage points in Guyana to 14 percentage points in Djibouti. Whereas, on the other hand, it has declined in 31 member countries (15 of them from SSA, 7 from MENA and 4 from SA and ECA each) ranging from 0.2 percentage points in Jordon to 16 percentage points in Maldives (annex Table A.6).

During the period under consideration , prevalence of overweight children has increased in 22 member countries (ten of them from SSA, five from MENA and four from ECA) ranging from 0.3 percentage points in Mozambique to 16 percentage points both in Albania and Comoros. Whereas, on the other hand, it has declined in 7 member countries (2 of them from MENA, SA, and SSA each) ranging from 0.2 percentage points in Uganda to 17 percentage points in Tunisia.

Figure 2.38: Members with Highest Stunted, Underweight and Overweight U5 Children, 2000-2009



2.2.4 Adolescent Fertility

According to the WHO estimates, about 16 million girls aged between 15 to 19 years give birth every year. This accounts for about 11 percent of total births worldwide. Majority of these teenage mothers (more than 90 percent) live in developing countries (Factsheet No: 345 August 2010). Provided the fact that adolescents are more likely to experience complications during the pregnancy and delivery, therefore mothers and babies both are at a greater risk of mortality.

Adolescent fertility remained high in OIC countries and 1 in 14 girls aged between 15 to 19 years gave birth in OIC countries compared to 1 in 21 girls in the world.

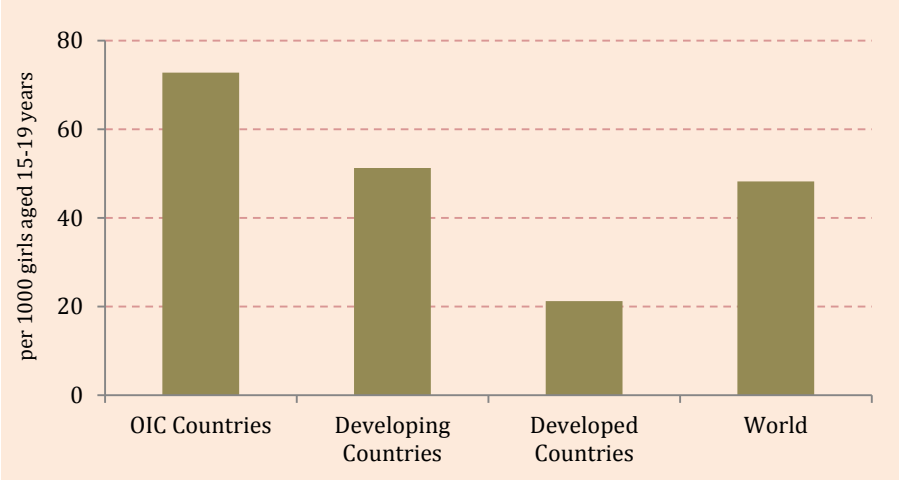
During 2000-2008, global adolescent fertility rate (AFR) was 48 births per 1000 girls aged 15–19 years. This means, on average, one in 21 girls aged between 15 to 19 years gave birth during this period. The adolescent fertility rates remained distinctively different in developed and developing countries. As shown in Figure 2.39, AFR in developed countries was just 21 births per 1000 girls aged 15–19 years compared to 51 in developing countries. This means that one in 47 girls aged between 15 to 19 years gave birth in developed countries compared to one in 19 in developing countries.

In 2000-2008, AFR in OIC member countries remained much higher than that for world, developed and developing countries. As shown in Figure 2.39, AFR in OIC was 73 births per 1000 girls aged 15–19 years which means one in 14 girls aged between 15 to 19 years gave birth during 2000-2008. Among others, early age marriages especially in rural areas remained the leading cause of higher AFR both in OIC and developing countries.

Figure 2.39:
Adolescent Fertility Rate, 2000-2008

AFR remained significantly higher in OIC countries.

Source: Table A.7 in the Statistical Appendix

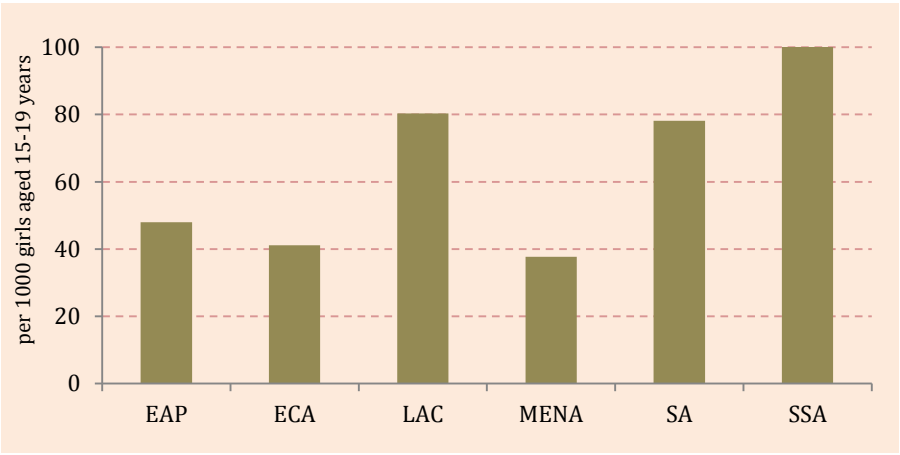


Significant disparities existed among the OIC regions as AFR ranged from a low of 38 births per 1000 girls aged 15–19 years in MENA to a high of 136 in SSA (Figure 2.40) during 2000-2008. This means that one in 27 girls aged between 15 to 19 years gave birth in MENA region compared to one in seven in SSA. Member countries in SA and LAC region recorded AFR of 78 and 80 births per 1000 girls aged 15–19 years respectively whereas it was 41 and 48 births per 1000 girls aged 15–19 years in ECA and EAP respectively. During 2000-2008, AFR in EAP, ECA, and MENA remained below the world, developing and OIC averages.

Figure 2.40:
Adolescent Fertility Rate in OIC Regions

AFR remained significantly higher in SSA, LAC and SA regions.

Source: Table A.7 in the Statistical Appendix



At the individual country level, AFR in OIC member countries ranges from a low of 4 births per 1000 aged 15-19 years in Algeria to a high of 199 in Chad (Figure 2.41). Eight member countries from MENA region registered the lowest AFR, ranging from 16 to 4 births per 1000 girls aged 15-19 years. On the other hand, 15 member countries from SSA region registered AFR of over 100 births per 1000 girls aged 15-19 years. Out of these 16 member countries, 12 were among the top 20 countries with highest AFR in the world. In 2009, Niger and Mali were ranked 1st and 3rd with respect to AFR in the world followed by Mozambique (ranked 4th), Uganda (ranked 7th), Guinea (ranked 8th) and Afghanistan (ranked 9th). On the other hand, AFR remained less than 50 births per 1000 girls aged 15-19 years in 25. In 13 of these 25 countries, AFR remained even less than 20 births per 1000 girls aged 15-19 years. In

general, 31 member countries registered AFR lower than the OIC average of 73 births per 1000 girls aged 15-19 years. In 25 of these 31 countries, AFR remained lower than the developing and world averages of 51 and 48 births per 1000 girls aged 15-19 years [see annex Table A.7].

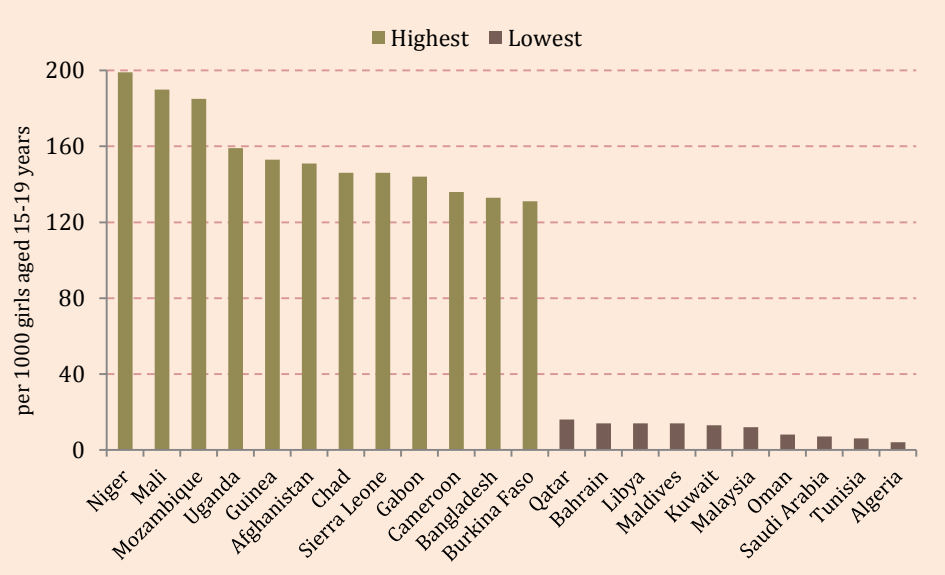


Figure 2.41: Members with Highest and Lowest Adolescent Fertility Rate, 2000-2008

Source: Table A.7 in the Statistical Appendix

2.3 General Public Health

2.3.1 Life Expectancy at Birth

Life expectancy at birth (LEB) is an important indicator on general health situation of people in a country and the quality of health care they are receiving. It is defined as the average number of years that a newborn is expected to live if health and living conditions at the time of birth remained the same. In general, life expectancy at birth in a country is determined by a variety of socio-economic factors like state of poverty and undernourishment, access to clean water and sanitation, availability of primary health care services and immunization coverage.

As shown in Figure 2.42, worldwide average life expectancy at birth rose from 65 years in 1990 to 69 years in 2009, a rise of over four years. There are still substantial differences in LEB between different parts of the world. Due to more efficient and effective health care system and better living standards, developed countries have quite higher LEB compared to the developing countries. During the period under consideration , average LEB in developed countries increased from 76 years in 1990 to 80 years in 2009 (a rise of 4 years), while for developing countries it increased from 63 years in 1990 to 67 years in 2009 (a rise of 4 years). The difference in LEB between developed and developing countries remained almost unchanged at 13 years during the period under consideration.

Despite some improvement in life expectancy at birth, OIC countries are still lagging behind the world average by 5 years

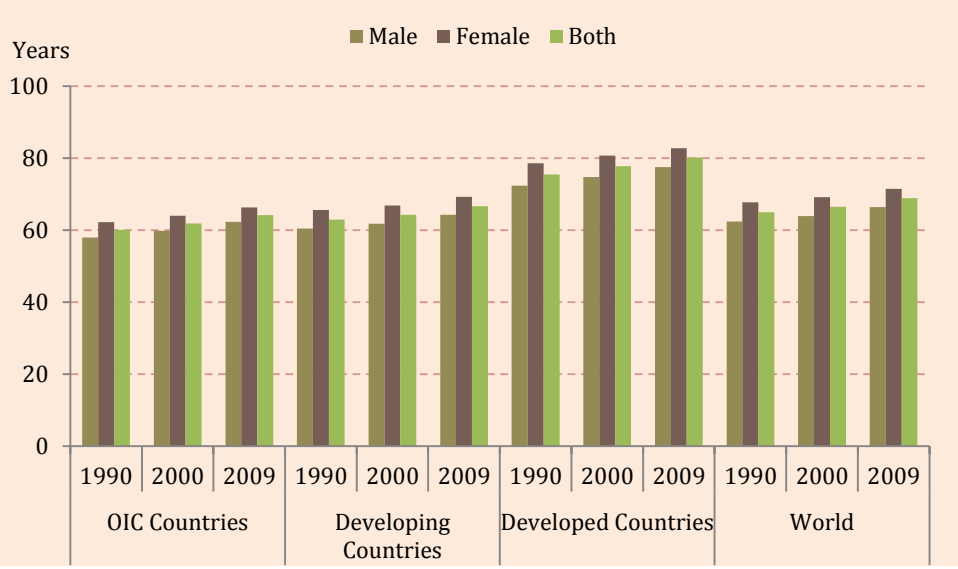
There are also significant differences in LEB between males and females, with females generally living longer than males. Globally, average LEB rose to 66 years for males and 71 years for females in 2009, a rise of 4 years for males and 3 years for females since 1990

(Figure 2.42). The gender gap in LEB with a decrease of one year reached to 5 years during 1990-2009. In developed countries, LEB rose to 78 years for males and 83 years for females, a rise of 6 years for males and 4 years for females since 1990. The gender gap in LEB for developed countries decreased from 7 years in 1990 to 5 years in 2009. On the other hand, in developing countries, LEB increased to 64 years for males and 69 years for females, a rise of 4 years for males and 3 years for females since 1990. For developing countries, gender gap in LEB decreased from 6 years in 1990 to 5 years in 2009.

OIC member countries also witnessed improvement in life expectancy at birth. As shown in Figure 2.42, average LEB rose from 60 years in 1990 to 64 years in 2009, a rise of four years. However, LEB for both sexes in member countries remained three years, five years and 16 years less than developing countries, world and developed countries respectively. LEB trends also show gender based differences in OIC member countries. Average LEB in OIC country rose to 62 years for males and 66 years for females in 2009, a rise of 4 years for both genders since 1990. In member countries gender gap in LEB remained at 4 years during the period 19990-2009.

Figure 2.42: Life expectancy at Birth

LEB remained lower in OIC countries.



Source: Table A.7 in the Statistical Appendix

Over the years, life expectancy at birth has been improved across the OIC regional groups. As shown in Figure 2.43, LEB in OIC regions varies considerably from a low of 54 and 63 years in SSA and SA respectively to a high of 73 and 72 years in EAP and MENA respectively. Among other regions, LEB was recorded at 70 years in LAC and 68 years in ECA region in 2009. During the period under consideration, member countries in SA region registered the highest gains in LEB (9 years) followed by LAC (5 years) and ECA (5 years). In 2009, LEB for both sexes remained higher than the OIC average in all OIC regions except SA and SSA.

Across the OIC regions, females continued to live longer than males. In 2009, the highest gender based difference in LEB was recorded in LAC region (females outliving males by 7 years) followed by ECA (females outliving males by 5 years) whereas in EAP, MENA and

SA females were outliving males by 4 years. On the other side of the scale, smallest gender gap in LEB was recorded in SSA, where LEB for females remained 3 years higher than that for males.

There are also considerable differences in LEB between males and females among the OIC regions. In 2009, LEB both for males and females was highest in EAP (71 and 75 years) and MENA (70 and 74 years). On the other hand, LEB both for males and females was just 53 and 56 years respectively in SSA. Between 1990 and 2009, member countries in South Asia registered the highest gains in LEB both for males (9 years) and females (10 years).

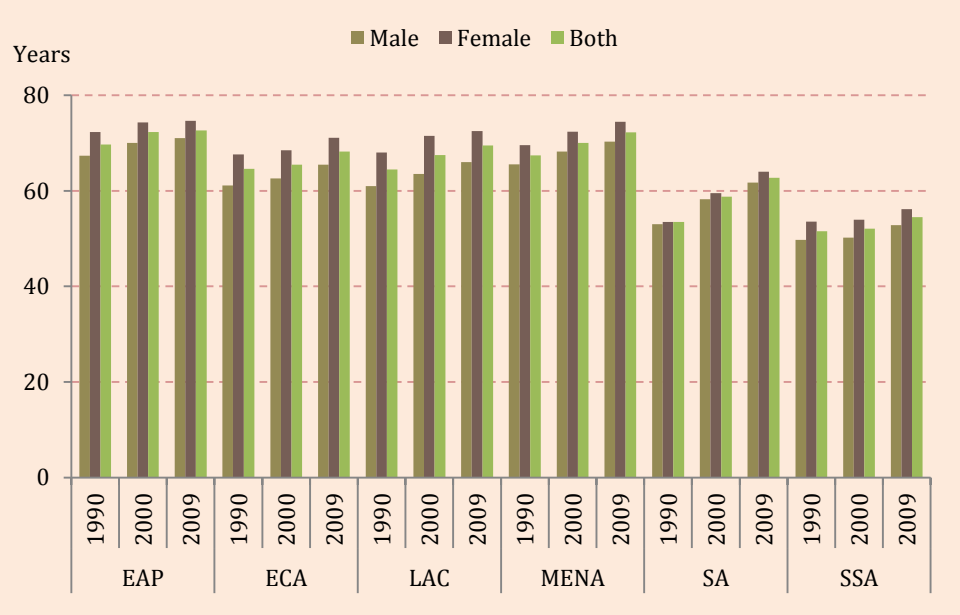


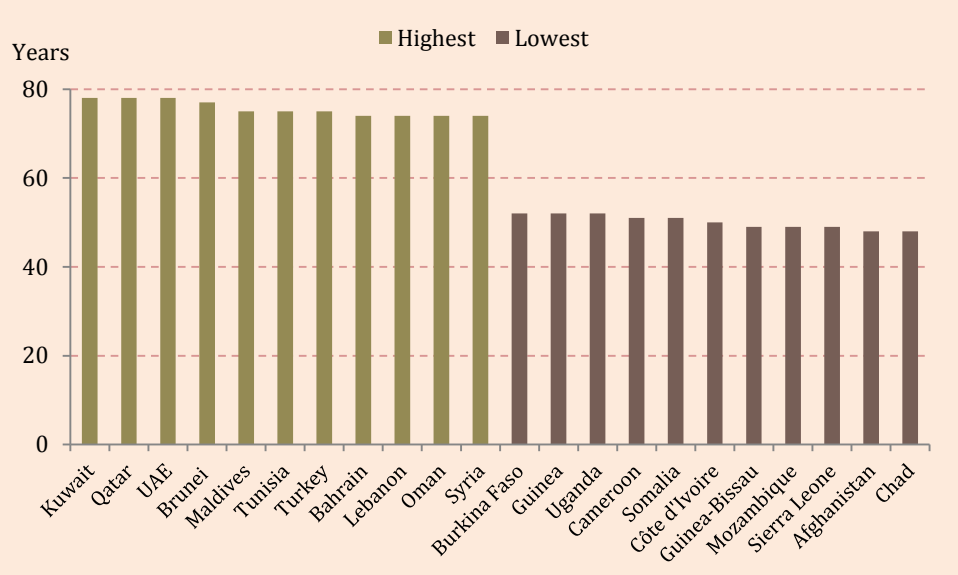
Figure 2.43: Life Expectancy at Birth in OIC Regions

LEB has been improved across the OIC regions.

Source: Table A.7 in the Statistical Appendix

At the individual country level, LEB in OIC member countries ranges from a low of 48 years both in Chad and Afghanistan to a high of 78 years in Kuwait, Qatar and UAE (Figure 2.44). Eight member countries from MENA region registered the highest LEB, ranging from 78 to 74 years. On the other hand, 17 member countries from SSA region registered LEB less than 60 years. Out of these 17 member countries, 11 were among the bottom 20 countries with lowest LEB in the world. In 2009, Chad was ranked 190th with respect to LEB in the world followed by Afghanistan (ranked 188th), Sierra Leone (ranked 185th) and Mozambique (ranked 184th). On the other hand, LEB remained more than 70 years in 21 member countries. In general, 29 member countries registered LEB higher than the OIC average of 64. In 24 of these 29 countries, LEB remained higher than the developing countries average of 67 years whereas 20 of these 24 countries registered LEB higher than the world average of 69 years [see annex Table A.7].

Figure 2.44: Members with Highest Life expectancy at Birth, 2009



Source: Table A.7 in the Statistical Appendix

2.3.2 Adult Mortality

Adult mortality rate (AMR) is defined as the probability of dying between the ages of 15 and 60 years per 1 000 population. It is considered as one of the most common measures to assess the health situation in a country. Over the years, world has strived hard to decrease the mortality rate. As shown in Figure 2.45, worldwide average AMR has declined from 208 deaths per 1 000 people in 1990 to 179 in 2009, corresponding to a decrease of 14 percent. In developing countries AMR has declined from 228 deaths per 1000 people in 1990 to 195 in 2009, corresponding to a decrease of 14 percent. However, despite this decline, AMR in developing countries remained higher than the world average. Compared to the world and developing countries rates, AMR remained very low in developed countries. On average, developed countries recorded just 83 deaths per 1000 population in 2009 compared to 115 in 1990, corresponding to an impressive decrease of 28 percent.

Adult mortality rate remained quite high in OIC countries compared to the world average

The adult mortality situation has been improved in the OIC member countries and their AMR exhibited a down ward trend during the period 1990-2008. As shown in Figure 2.45, average AMR in OIC countries has declined from 250 deaths per 1000 people in 1990 to 225 in 2009, corresponding to a decrease of about 10 percent. Neverthless, AMR in OIC countries remained quite higher compared to the developed , developed and world averages.

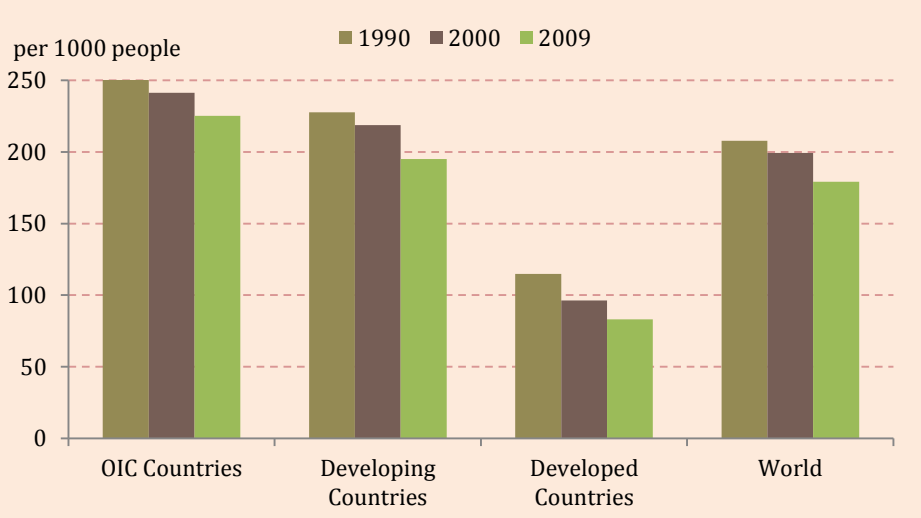


Figure 2.45: Adult Mortality Rate

AMR in OIC countries remained quite higher compared to other regions.

Source: Table A.8 in the Statistical Appendix

During the period 1990-2009, adult mortality rate has declined across the OIC regional groups except EAP and SSA. In 2009, AMR ranged from a low of 144 and 161 deaths per 1000 people in MENA and ECA respectively to a high of 368 and 234 deaths per 1000 people in SSA and SA respectively (Figure 2.46). Among other regions, the average AMR was 184 deaths per 1000 people in EAP and 221 deaths in LAC. Between 1990 and 2009, OIC member countries in MENA region witnessed the highest decrease in AMR (30 percent) followed by SA (21 percent), ECA and LAC (19 percent each). On the other hand, AMR in EAP and SSA regions witnessed an increase of ten percent and three percent respectively. In 2009, AMR for member countries in MENA and ECA regions remained below the world, developing countries and OIC averages (225, 195 and 179 deaths per 1000 people respectively).

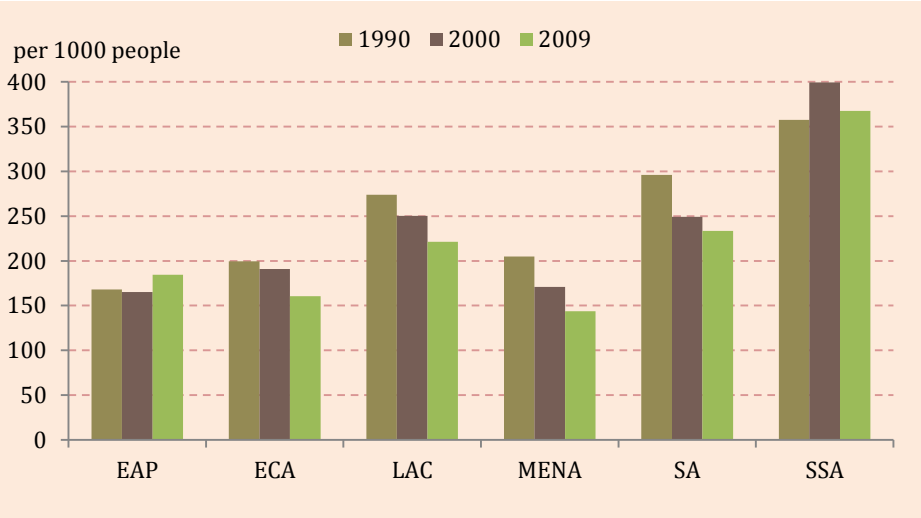


Figure 2.46: Adult Mortality Rate in OIC Regions

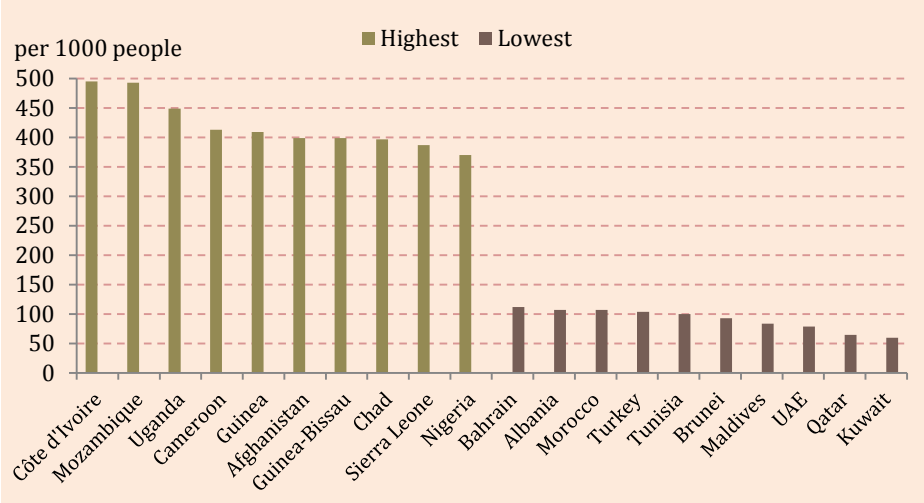
AMR remained significantly high in SSA region.

Source: Table A.8 in the Statistical Appendix

At the individual country level, AMR in OIC member countries ranges from a low of 60 years both in Kuwait to a high of 495 years in Côte d'Ivoire (Figure 2.47). Six member countries from MENA region registered the lowest AMR, ranging from 112 to 60 deaths per 1000 people. On the other hand, 10 member countries from SSA region registered AMR

higher than 350 deaths per 1000 people. Out of these 10 member countries, eight were among the top 20 countries with highest AMR in the world. In 2009, Côte d'Ivoire was ranked 7th with respect to AMR in the world followed by Mozambique (ranked 8th), Uganda (ranked 10th), Cameroon (ranked 13th) and Guinea (ranked 15th). On the other hand, AMR remained less than 150 deaths per 1000 people in 17 member countries. In general, 28 member countries registered AMR lower than the OIC average of 225 deaths. For 25 of these 28 countries, AMR remained lower than the developing countries average of 195 deaths whereas 23 of these 25 countries registered AMR lower than the world average of 179 deaths [see annex Table A.8].

Figure 2.47: Members with Highest and Lowest Adult Mortality Rate, 2009



Source: Table A.8 in the Statistical Appendix

2.3.3 Prevalence of Tobacco Use

In 2006, as shown in Figure 2.48, prevalence of tobacco use among adults in the world averaged at 25.5 percent, equaling to approximately 1.1 billion tobacco users across the world. Gender wise, about 41.5 percent of men and 9.5 percent of women in the world use tobacco according to latest available data. Majority of the global tobacco users resides in developing countries which accounted for around 83 percent of the world total in 2006. Prevalence of tobacco use among adults in developing countries was recorded at 25.3 percent whereas 43.2 percent of men use tobacco compared to 7.1 percent women. On the other hand, in developed countries share of total and women tobacco users remained comparatively high. In 2006, 26.6 percent adults were using tobacco in developed countries whereas this share was 33.3 percent for male adults and 20.3 percent for the female adults.

Prevalence of tobacco use among adults in OIC region remained below the developing, developed and world averages

In 2006, prevalence of tobacco use among adults in the OIC countries was 21.2 percent with tobacco use being more common among men (37.3 percent) compared to the women (4.8 percent) (Figure 2.48). Prevalence of tobacco use among adults in OIC region remained below the developing, developed and world averages in 2006. A similar trend can be observed in case of male and female tobacco users. As a group, OIC member countries registered lowest prevalence of tobacco use among female adults whereas prevalence of tobacco use among male adults in OIC remained lower than the developing countries and

world averages in 2006. OIC member countries accounted for 16 percent of the world and 20 percent of the developing countries total adult tobacco users. On the gender basis, OIC member countries accounted for 18 percent of male and ten percent of female tobacco users in the world whereas their share in male and female tobacco users of developing countries was recorded at 20 percent and 16 percent respectively.

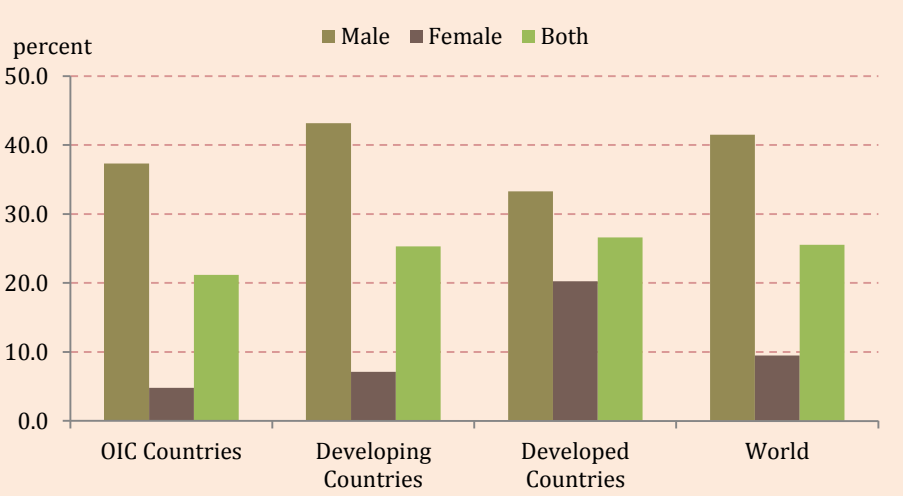


Figure 2.48: Prevalence of Tobacco Use among Adults

Share of adult tobacco users remained comparatively low in OIC countries.

Source: Table A.9 in the Statistical Appendix

As shown in Figure 2.49, prevalence of tobacco use varies significantly across the OIC regions. In 2006, the highest prevalence rate among adults was recorded in EAP region (32.7 percent) whereas the lowest prevalence was recorded in SSA region (9.4 percent). Among other regions, ECA recorded tobacco use prevalence of 28.4 percent followed by SA (23.4 percent), MENA (16.8 percent) and LAC (9.9 percent). Prevalence of tobacco use in EAP, ECA and SA regions remained higher than the OIC average whereas in EAP and ECA region it was even higher than the developing, developed and world averages. In 2006, EAP region accounted for 32 percent of total adult tobacco users in OIC whereas SA accounted for 26 percent and MENA accounted for 18 percent.

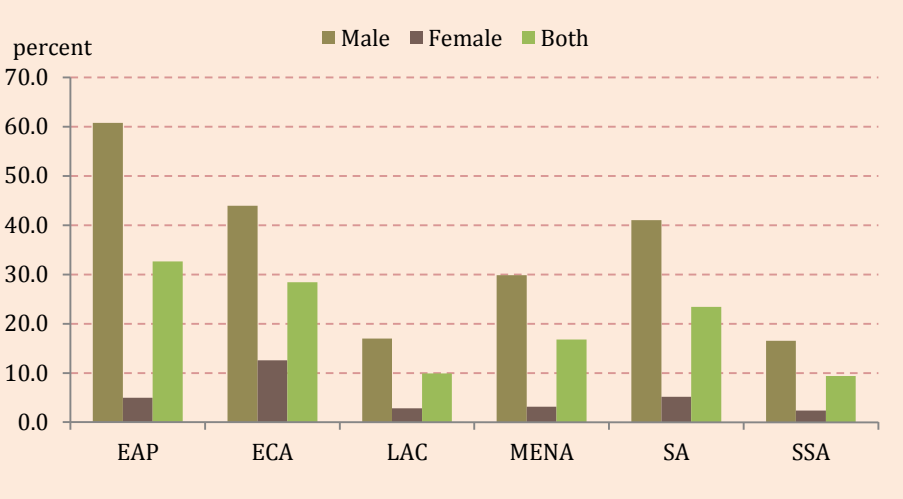
With a rate of 60.8 percent, EAP region registered highest share of male tobacco users in OIC group whereas on the downside it was only 16.5 percent in SSA region (Figure 2.49). In other regions, 43.9 percent adult males use tobacco in ECA followed by 41.0 percent in SA , 29.8 percent in MENA and 17.0 percent in LAC region. The share of male tobacco users in EAP, ECA and SA regions remained higher than the OIC average whereas in EAP and ECA region it was even higher than the developing, developed and world averages. In 2006, EAP region accounted for 34 percent of men tobacco users in OIC whereas SA accounted for 27 percent and MENA accounted for 18 percent.

In case of female tobacco users, ECA region registered the highest prevalence (12.6 percent) whereas it was just 5.2 percent in SA, 4.9 percent in EAP, 3.1 percent in MENA, 2.8 percent in LAC and only 2.4 percent in SSA region (Figure 2.49). The prevalence of tobacco use among women in ECA region remained significantly higher than the OIC, developing and world averages. This region accounted for about 30 percent of total female tobacco users in OIC countries followed by SA (25 percent) and EAP region (22 percent).

Figure 2.49: Prevalence of Tobacco Use among Adults in OIC Regions

Prevalence of tobacco use remained quite low in SSA and LAC regions.

Source: Table A.9 in the Statistical Appendix



At the individual country level, tobacco use among adults in OIC region portrays a diverse picture. In 2006, as shown in Figure 2.50, Jordan recorded the highest smoking prevalence among adults (36.1 percent) in OIC region, closely followed by Turkey (35.5 percent), Indonesia (33.4 percent) and Tunisia (32.6 percent). Jordan, Turkey, Indonesia and Tunisia are the only OIC countries which have a smoking prevalence of above 30 percent. At the global level, with respect to tobacco use among adults, Jordan is ranked at 15th, Turkey at 17th, Indonesia at 24th and Tunisia at 28th. On the bottom side, Nigeria recorded the lowest smoking prevalence among adults in OIC region (6.5 percent) followed by Cameroon (6.9 percent), Côte d'Ivoire (8.4 percent) and Chad (8.8 percent) [see annex Table A.9].

Figure 2.50: Member Countries with Highest Prevalence of Tobacco Use among Adults

Source: Table A.9 in the Statistical Appendix

In 2006,as shown in Figure 2.51, the OIC country with the highest tobacco users in its male population was Indonesia with a prevalence of 61.7 percent closely followed by Jordan (61.1 percent), Tunisia (57.6 percent), Malaysia (52.6 percent) and Turkey (51.3 percent). In these top five member countries more than half of male adults use tobacco. At the global level,with respect to men tobacco users, Indonesia is ranked at 7th, Jordan at 8th,Tunisia at 13th, Malaysia at 18th and Turkey at 19th. On the bottom side, Nigeria and Cameroon

recorded the lowest smoking prevalence among male adults in OIC region (11.9 percent each) followed by Côte d'Ivoire (14.4 percent), Chad (15.3 percent) and Suriname (17.0 percent) [see annex Table A.9].

Although tobacco use among women remained comparatively very low in OIC region, 13 member countries registered prevalence of tobacco use among female adults higher than the OIC average (4.8 percent). As shown in Figure 2.51, Turkey recorded the highest smoking prevalence among female adults (19.5 percent) in 2006, followed by Comoros (12.4 percent), Maldives (11.8 percent) and Burkina Faso (10.3 percent). At the global level, with respect to tobacco use among female adults, Turkey is ranked at 44th, Comoros at 57th, Maldives at 61st and Burkina Faso at 62nd. On the bottom side, Algeria and Morocco recorded the lowest tobacco use among female adults (0.2 percent each) in OIC region, followed by Azerbaijan (0.6 percent); Nigeria (1.0 percent) and Oman (1.3 percent) [see annex Table A.9].The prevalence of tobacco use among women in Algeria, Morocco and Azerbaijan remained lowest across the world.

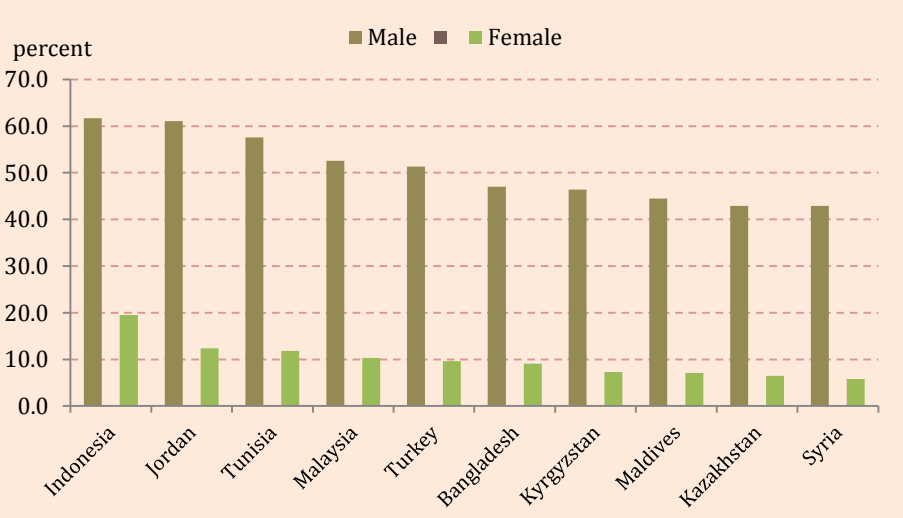


Figure 2.51: Member Countries with Highest Adult Male and Female Tobacco Users, 2006

Source: Table A.9 in the Statistical Appendix

Tobacco Use and Burden of Deaths

Today, it is a well-established fact that tobacco use is strongly associated with a number of illnesses notably cancer (particularly lung cancer), cardiovascular diseases and respiratory diseases. According to the WHO estimates, of the total deaths of 57 million in 2008, about 29 million (51 percent of the total deaths) were caused by a few main tobacco use related diseases (Table 1). Among these 29 million deaths, 59 percent deaths were caused by the cardiovascular diseases followed by cancer (26 percent) and respiratory diseases (15 percent). Worldwide, 80 percent of total deaths caused by diseases associated with tobacco use occurred in developing countries. In the OIC member countries, around five million people died due to the tobacco use related diseases in 2008, corresponding to 16 percent of the worldwide deaths.

In OIC countries, around five million people die due to the tobacco use related diseases which corresponds to 16% of world total deaths

Table 1: Deaths Caused by Diseases associated with Tobacco Use (Millions)

	Cancers	Cardiovascular diseases	Respiratory diseases	Total deaths caused by diseases associated with Tobacco Use
OIC Countries	1.0	3.2	0.6	**4.7**
Developing Countries	5.3	14.4	3.7	**23.4**
Developed Countries	2.2	3.0	0.5	**5.7**
World	7.6	17.3	4.2	**29.1**

Source: WHO, Estimated Deaths by Cause 2011.

Among the OIC regions, the share of deaths caused by tobacco use related diseases in total deaths remained significantly higher in ECA region where 70 percent of total deaths were caused by tobacco use related diseases (Table 2). Among other regions, more than 50 percent of the total deaths in 2008 were caused by the tobacco use related diseases in EAP and MENA region whereas this ratio was 48 percent for the LAC, 36 percent for the SA and only 19 percent for the SSA region.

Table 2: Deaths Caused by Diseases associated with Tobacco Use (Millions)

	Cancers	Cardiovascular diseases	Respiratory diseases	Total deaths caused by diseases associated with Tobacco Use
EAP	0.2	0.6	0.1	**0.9**
ECA	0.1	0.5	0.1	**0.7**
LAC	0.0	0.0	0.0	**0.0**
MENA	0.2	0.7	0.1	**1.0**
SA	0.2	0.7	0.2	**1.1**
SSA	0.2	0.7	0.2	**1.0**

Source: WHO, Estimated Deaths by Cause 2011.

Implementation of WHO Framework Convention on Tobacco Control (FCTC)

Currently, 52 OIC member countries are signatories of the WHO-FCTC

The tobacco epidemic is preventable through prudent policy measures and interventions both at national and international levels. In this regard, there are many cost-effective strategies and public policies, like bans on advertising, promotion and sponsorship of tobacco products; tobacco tax and price increases; forbidding smoking in all public and workplaces; and requiring large, clear and visible graphic health messages on tobacco packaging etc. All of these measures are outlined in the WHO Framework Convention on Tobacco Control (FCTC) which was adopted by the World Health Assembly on 21 May 2003 and entered into force on 27 February 2005.

As of August 2011, 52 OIC member countries are signatories of the WHO-FCTC. This shows the commitment of member countries to control the tobacco epidemic and save their citizens

from hazardous effects of tobacco use. Over the years, OIC member countries strived hard and took various legislative and administrative initiatives to implement the measures prescribed by the WHO-FCTC. In this section, we will give an overview of implementation rates of selected measures under the Convention globally and among the OIC member countries.

- According the WHO-FCTC Secretariat, as of July 2011, 41 member countries submitted their country progress reports on the implementation of the Convention. According to these country reports, 35 out of 41 member countries (85 percent) reported existence of comprehensive legislation to control tobacco use at the national level. On the other hand, 40 out of 41 member countries (98 percent) reported that they have established a focal point (FP), tobacco control unit (TCU) and/or a national coordinating mechanism (NCM) for tobacco control in their countries. At the global level, 85 out of 144 (59 percent) countries reported that they have developed and implemented comprehensive and multi-sectoral national tobacco-control strategies, plans and programs in accordance with the Convention.
- In the OIC group, all reporting countries responded that they have implemented any smoke-free policy in indoor workplaces (like offices, hospitals, educational facilities etc.) and public transport to prevent exposure to tobacco smoke as required by the Article 8 of the Convention. Globally, 113 countries (78 percent) responded that they had implemented any policy to protect citizens from exposure to tobacco smoke in indoor workplaces.
- Article 11 of the Convention guides about the labeling and packaging of the tobacco products. According to the country reports, 40 out of 41(98 percent) member countries responded that they have adopted policies which require tobacco product packaging to carry health warning the harmful effects of tobacco smoke. Furthermore, 15 (37 percent) member countries reported that they require the rotation of health warnings; 12 (29 percent) countries require the warnings to cover 50 percent or more of the principal display area whereas the warnings cover 30 percent or more of the display area in another 12 (29 percent) member countries. Globally, 125 countries (87 percent) reported that they had adopted policies that require tobacco product packaging to carry health warnings whereas 94 Parties (65 percent) reported that they require the rotation of health warnings; 48 Parties (33 percent) require the warnings to cover 50 percent or more of the principal display area.
- Organizing education, communication, training and public awareness programs is an important requirement prescribed in the Article 12 of the Convention. In this regard, 33 out of 41 member countries (80 percent) reported that they have implemented any education, communication, training and public awareness program. At the global level, 107 countries (74 percent) responded that they have implemented any of such awareness programs.

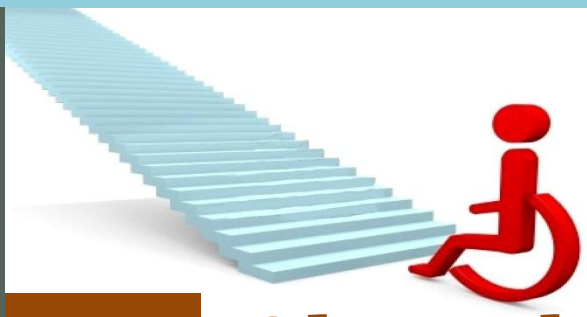
Majority of the OIC countries implemented the tobacco control measures prescribed by the WHO-FCTC

- Among the 41 reporting countries, 26 (63 percent) replied that they had introduced a comprehensive ban on tobacco advertising, promotion and sponsorship as required by the Article 13 of the Convention. On the other hand, 77 countries (54 percent) across the globe responded that they had introduced a comprehensive ban on tobacco advertising, promotion and sponsorship.
- In order to discourage the tobacco use, 21 out of 41 (51 percent) member countries introduced tax and price measures as required by the article 6 of the convention. 9 out of these 21 members reported increase in prices and/or taxes whereas prices remained unchanged at the 2008 level in 12 member countries.

Table 3: Implementation of WTO-FCTC IN OIC Countries (as of July 2011)

Article/indicator	Information available for 41 OIC Countries	
	Number of affirmative answers	%
ARTICLE 5 (General obligations)		
Comprehensive legislation	35	85%
National focal point for tobacco control	40	98%
ARTICLE 6 (Pricing and tax measures)		
Taxes on tobacco products	21	51%
Increase in prices and/or taxes	9	22%
ARTICLE 8 (Protection from exposure to tobacco smoke)		
Any smoke free policy in indoor workplaces and public transport	41	100%
ARTICLE 11 (Packaging and labeling of tobacco products)		
Health Warning on harmful effects of tobacco	40	98%
Rotation of warnings	15	37%
Warnings covering ≥ 50%	12	29%
ARTICLE 12 (Education, communication, training and public awareness)		
Educational and public awareness programs	33	80%
ARTICLE 13 (Tobacco advertising, promotion and sponsorship)		
Comprehensive ban	26	63%

Source: Table A.15 in the Statistical Appendix.



3 Obstacles to Progress in Health Sector in OIC Countries

3.1 Inadequate Infrastructure: Water Sources and Sanitation Facilities[4]

Adequate access to improved water sources and sanitation fascilities is very crucial for human health. As lack of sanitation fascilities, poor hygiene practices and contaminated drinking water leads to various accute and chronic diseases. According to the WHO estimates (WHO, 2008), about 3.6 million people die each year from water and sanitation related diseases and about half of the world total hospitalizations are also caused by the use of unsafe water and unhygenic sanitation practices.

3.1.1 Access to Improved Water Sources

Over the years, world has made remarkable progress to ensure people's access to safe and clean water sources. As shown in Figure 3.1, the proportion of the world total population with access to improved drinking water sources increased from 76 percent in 1990 to 87 percent in 2008, corresponding to an increase of 11 percentage points. Accross the world excess to clean water sources in rural areas remained quite low compared to the urban areas. In 2008, only 78 percent of rural population was using improved water sources compared to

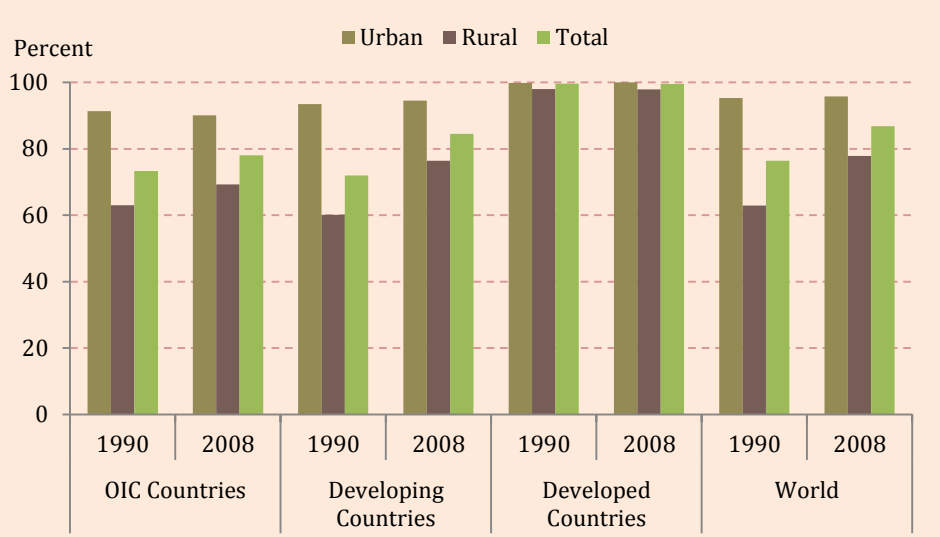
[4] According to the WHO / UNICEF Joint Monitoring Program (JMP) for Water Supply and Sanitation, sources that meet the definition of improved water include a household connection, borehole, protected dug well, protected spring, or rainwater collection. While facilities that meet the definition of improved sanitation include a flush or pour-flush toilet/latrine (connected to piped sewer system or septic tank or pit latrine), ventilated improved pit (VIP) latrine, pit latrine with slab and composting toilet.

96 percent in urban areas. However, global efforts to scale up excess in rural arease are paying off and the proportion of rural population using improved water sources has been increased by 15 percentage points since 1990.

Figure 3.1: Population Using Improved Water Sources

Significant rural and urban disparities exist across the developing world.

Source: Table A.10 in the Statistical Appendix



In developed countries, virtually entire population has access to improved water sources since the 90's. And there are no considerable disparities between urban and rural areas in this regard. In developing countries, access to clean water has increased from 72 percent in 1990 to 85 percent in 2008, corresponding to an increase of 13 percentage points. However, significant disparities still exist between rural and urban areas. In 2008, only 76 percent of rural population was using improved water sources compared to 93 percent in urban areas. This means dispite an impressive improvement of 16 percentage points since 1990, about a quarter of rural population is still using unsafe water sources in developing countries.

78% people have access to improved water sources in OIC countries compared to 87% in the world

In OIC countries, the proportion of population with access to improved drinking water sources increased from 73 percent in 1990 to 78 percent in 2008, corresponding to an increase of only five percentage points. In line with global trend, access to clean water in rural areas remained quite lower compared to urban areas accross the member countries. As shown in Figure 3.2, only 69 percent of rural population was using improved water sources compared to 90 percent in urban areas. This means about 31 percent of rural population in member countries is still using unsafe water sources for drinking, cooking, bathing and other domestic activities.

During the period under consideration , access to safe water has been improved accross the OIC regional groups. As shown in Figure 3.2, there are significant disparities within OIC group and for 2008 access to safe water sources ranges from a low of 60 percent and 82 percent in SSA and SA respectively to a high of 94 percent and 93 percent in LAC and ECA respectively. Menwhile, improved water coverage remained 88 percent in MENA and 82 percent in EAP region. Between 1990 and 2008, OIC member countries in ECA recorded the highest increase in coverage of improved water sources (13 percentage points) followed by SSA (11 percentage points) and EAP (ten percentage points). In 2008, access to improved

water sources in LAC, ECA and MENA regions remained above the OIC, developing and world averages (78 percent, 85 percent and 87 percent respectively).Meanwhile; share of population with access to improved water sources remained higher than the OIC average in EAP and SA regions.

Significant disparities exist in coverage of improved water resources between rural and urban areas across the OIC regions. In general, coverage rates remained higher in urban areas. Among the OIC regional groups, the highest urban and rural disparity in improved water coverage is recorded in SSA (33 percentage point difference) and EAP (18 percentage point difference). On the other hand, smallest urban and rural sanitation disparity is recorded in LAC (7 percentage point difference) and SA region (12 percentage point difference).

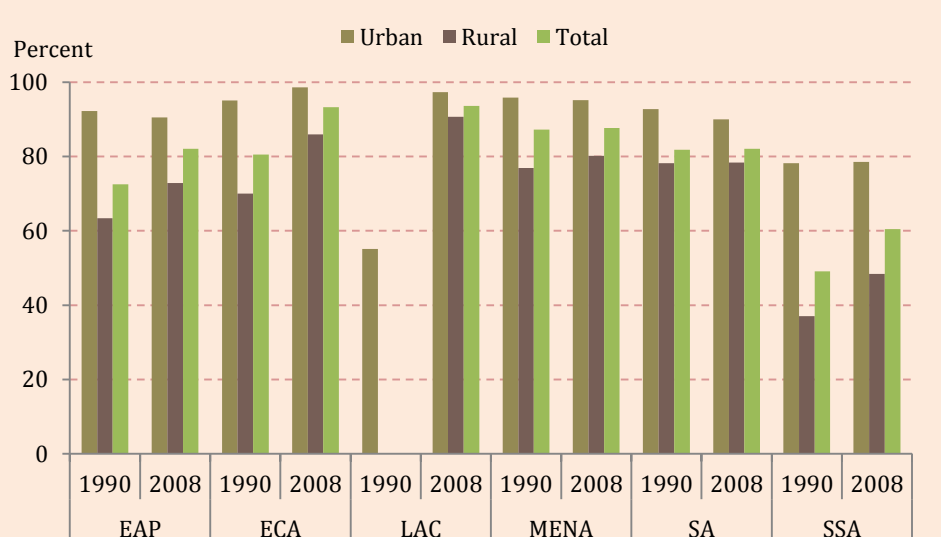


Figure 3.2: Population Using Improved Water Sources

Access to improved water sources remained quite high in urban areas across the OIC regions.

Source: Table A.10 in the Statistical Appendix

3.1.2 Access to Improved Sanitation

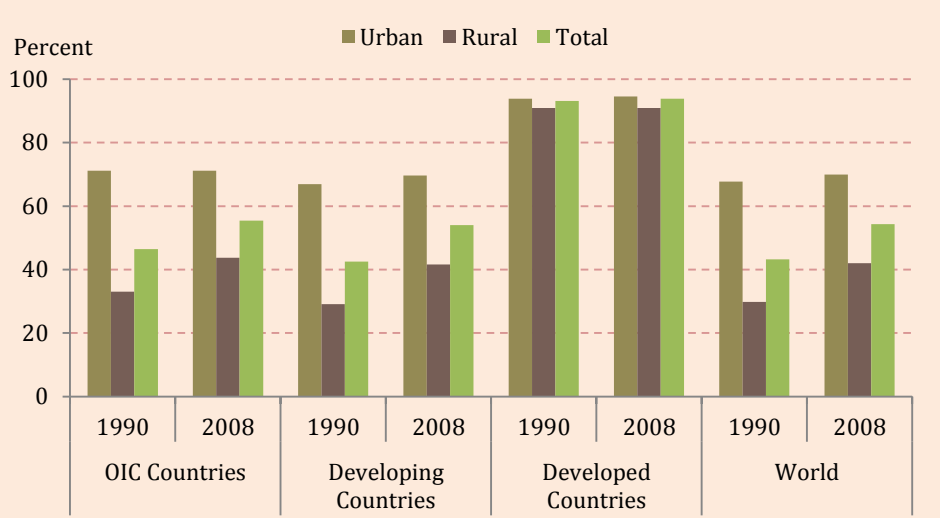
Despite some progress over the years, access to improved sanitation facilities remained very low across the globe. As shown in Figure 3.3, improved sanitation coverage increased from 43 percent in 1990 to 54 percent in 2008, corresponding to an increase of only 11 percentage points. Globally, there is significant difference in sanitation coverage between rural and urban areas. In 2008, 72 percent of people living in urban areas were using improved sanitation facilities compared to only 42 percent in rural areas. There is also significant difference in sanitation coverage between developed and developing countries. The sanitation coverage remained particularly low in developing countries where despite an increase of 11 percentage points since 1990, still only half of total population (54 percent) uses improved sanitation; while in developed countries more than 90 percent of total population is using improved sanitation facilities since 90's. In addition, while there's virtually no disparity between urban and rural sanitation coverage in developed countries, urban sanitation coverage (70 percent) remained quite higher than the rural coverage (42 percent) in developing countries.

In OIC member countries coverage of improved sanitation facilities increased from 46 percent in 1990 to 55 percent in 2008, corresponding to an increase of nine percentage points. The vast majority of those without access to improved sanitation are living in the rural areas. As shown in Figure 3.3, in 2008, only 44 percent of people living in rural areas were using improved sanitation facilities in OIC member countries compared to 71 percent in urban areas. However, during the period under consideration, sanitation coverage remained constant in urban areas whereas it has been increased by 11 percentage points in rural areas of the member countries.

Figure 3.3: Population Using Improved Sanitation Facilities

Access to improved sanitation remained low in rural areas across the developing world.

Source: Table A.10 in the Statistical Appendix



In OIC countries, access to improved sanitation facilities remained higher than the world average

Access to improved sanitation facilities has been improved across the OIC regions. As shown in Figure 3.4, there are significant disparities within OIC group and for 2008 improved sanitation coverage ranges from a low of 30 percent and 48 percent in SSA and SA respectively to a high of 91 percent and 85 percent in ECA and MENA respectively. Between 1990 and 2008, OIC member countries in EAP region witnessed the highest increase in access to improved water sources (19 percentage points) followed by MENA (17 percentage points) and SA (14 percentage points). In 2008, sanitation coverage in ECA, MENA, LAC, and EAP regions remained above the world, developing countries and OIC averages (54 percent, 54 percent and 55 percent respectively).

Among the OIC regions, there are also disparities in rural and urban coverage of improved sanitation facilities. The largest disparity between urban and rural coverage is recorded in EAP (31 percentage point difference), followed by the SA (25 percentage point difference), SSA (18 percentage point difference) and MENA (17 percentage point difference). On the other hand, urban and rural sanitation disparity remained smallest in ECA (9 percentage point difference) and LAC region (11 percentage point difference).

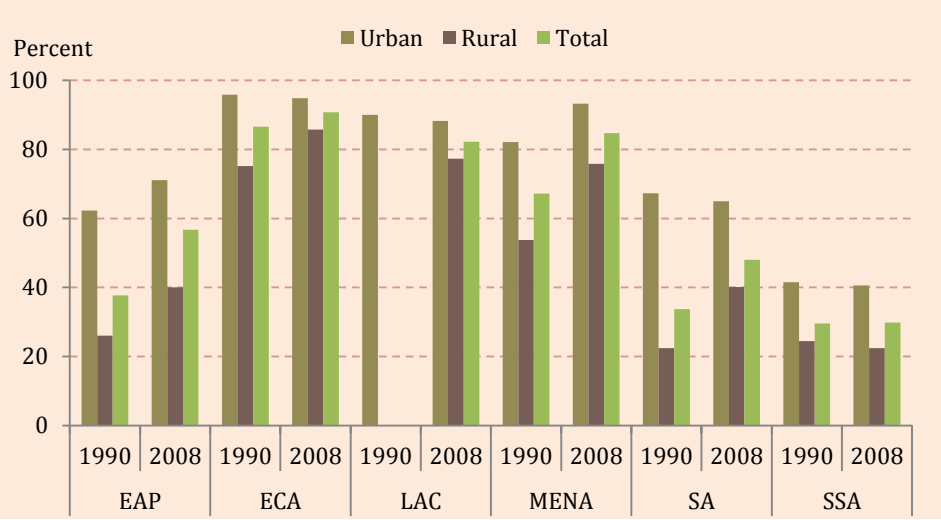


Figure 3.4: Population Using Improved Sanitation Facilities

Access to improved sanitation remained comparatively low in SSA and SA regions.

Source: Table A.10 in the Statistical Appendix

3.2 Inadequate Public/Private Expenditure on Health

3.2.1 Total Expenditure on Health[5]

According to the estimates of WHO, world spent a total of US$ 5678 billion on health care which represented 10.1 percent of world total GDP (in current US$ terms) in 2009. However, distribution of health spending remained highly unequal across the globe. In general, the bulk of world health spending remained concentrated in developed countries which accounted for 83 percent of it. In 2009, developed countries spent US$ 4694 billion on health which represented 12.2 percent of their GDP. On the other hand, developing countries spent only US$ 984 billion on health care which represented only 5.5 percent of their GDP. During 2000-2009, health spending as percent of GDP has increased by 0.8 percentage points for the world, 0.3 percentage points for the developing and 1.8 percentage points for the developed countries (Figure 3.5).

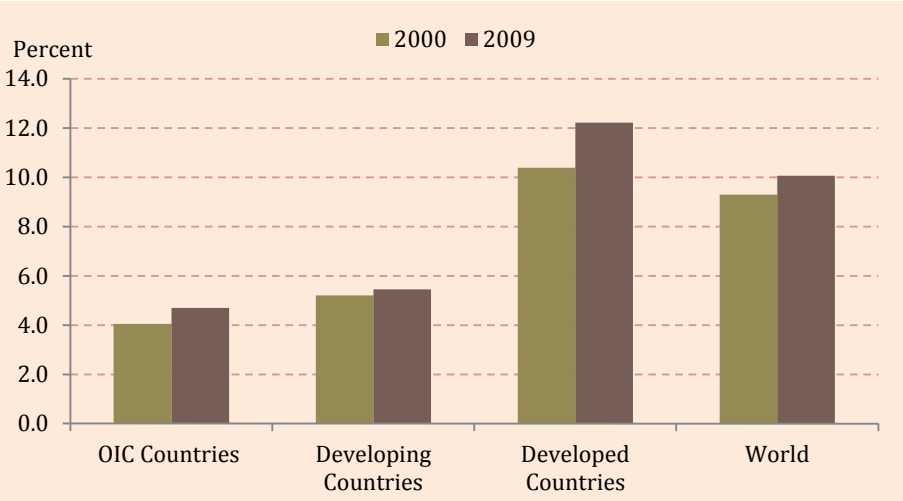


Figure 3.5: Total Health Expenditure (percent of GDP)

OIC countries allocated only 4.7 percent of their GDP for health.

Source: Table A.11 in the Statistical Appendix

[5] Total expenditure on health is sum of public and private expenditure on health

Situation in OIC countries is not very promising as, on average, they allocated less share of GDP for health care compared to the world share

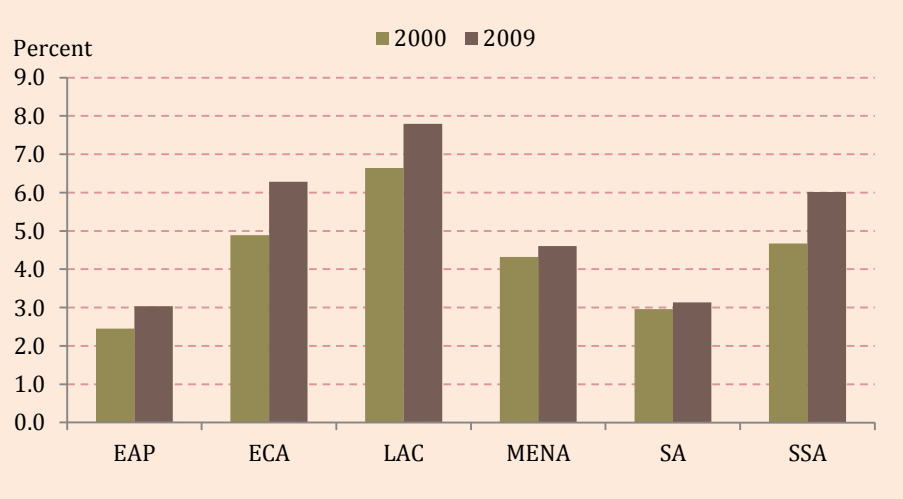
Health spending remained comparatively quite low in OIC member countries and they accounted for only 3 percent of world total and 17 percent of developing countries total health spending. In 2009, OIC member countries spent US$ 196 billion on health which represented 4.7 percent of their GDP. The situation in member countries is not very promising and they allocated less share of GDP for health care compared to the world, developed and developing countries shares.

During the period 2000-2009, the share of health expenditures in GDP has been improved across the OIC regions. In 2009, as shown in Figure 3.6, LAC region dedicated 7.8 percent of GDP for the health sector followed by ECA (6.3 percent) and SSA (6.0 percent). For other regions, this ratio was 4.6 percent in MENA, 3.1 percent in SA and 3.0 percent in EAP. The share of GDP devoted for health expenditures in LAC, ECA and SSA remained higher than the OIC and developing countries averages in 2009.

Figure 3.6: Total Health Expenditures as percent of GDP

LAC, ECA and SSA region allocated comparatively higher share of GDP for health.

Source: Table A.11 in the Statistical Appendix



At the individual country level, in 2009, the ratio of health expenditures to GDP ranged from 13.1 percent in Sierra Leone to only 2.3 percent in Turkmenistan. The list of the OIC top ten health spenders in 2009 includes (in descending order) Sierra Leone, Jordan, Uganda, Guyana, Lebanon, Maldives, Suriname, Afghanistan, Sudan and Chad (Figure 3.7). It is interesting to highlight that all these countries except Lebanon and Surinam are OIC-LDCs. The higher share of health spending to GDP in these countries could be mainly attributed to the large amount of foreign aid they receive for the health sector. In 2009, the ratio of health expenditures to GDP was higher than OIC average (4.7 percent) in 37 member countries. In 29 of these 37 countries, the ratio of health expenditures to GDP remained even higher than the developing countries average of 5.5 percent.

During 2000-2009, share of health expenditures in GDP increased in 37 member countries- ranging from 0.1 percentage point increase in Côte d'Ivoire to 4.0 percentage points in Sudan. On the other side of the scale, share of health expenditures in GDP decreased in 17 member countries - ranging from 0.1 percentage points decrease in Benin to 2.6 percentage point decrease in Lebanon (see Annex Table A.11).

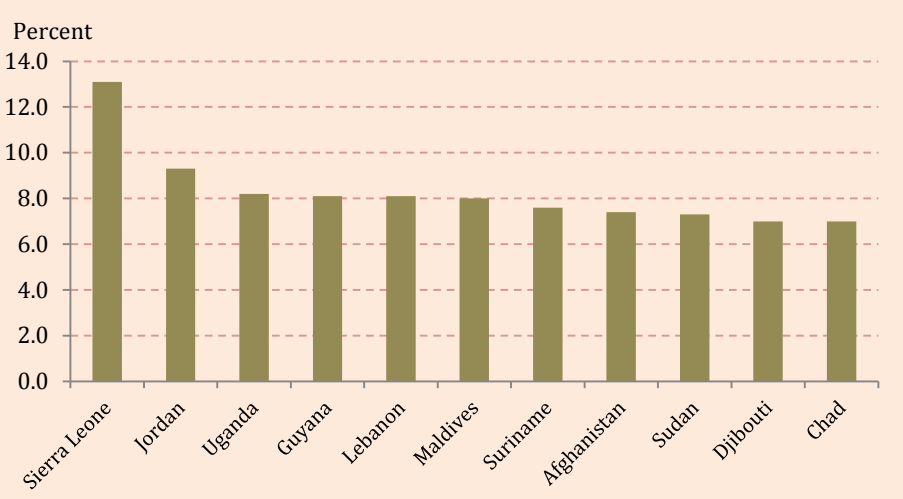


Figure 3.7: Top 10 OIC Countries by Total Expenditures on Health as percent of GDP, 2009

Source: Table A.11 in the Statistical Appendix

3.2.2 Composition of Total Health Expenditures

Total health expenditure comprises both the public and private sources for health care financing. Public financing for health care includes mainly funds from government budget and social security schemes whereas private financing includes mainly private health insurance and out-of-pocket payments.

Worldwide public sector is the main source of health financing. However, in general, public health spending remained quite higher in advanced and high income countries compared to the developing and low income countries. As shown in Figure 3.8, on average, public sector accounted for 61 percent of global health spending in 2009. The public share of health spending remained quite higher in developed countries compared to that for developing countries. In 2009, about 63 percent of total health spending in developed countries was financed by the public sector whereas this ratio was 53 percent in developing countries. Similar to the global trends, public share of health spending was 56 percent in OIC member countries. Compared to world and developed countries averages, public sector contribution in health spending remained low in developing and OIC countries.

In line with the global trends, public sector remained the major source of health financing in OIC countries

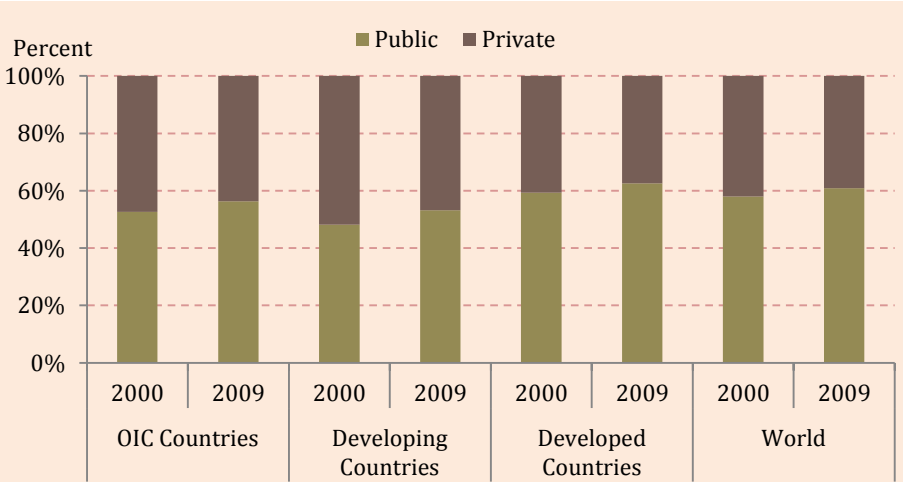


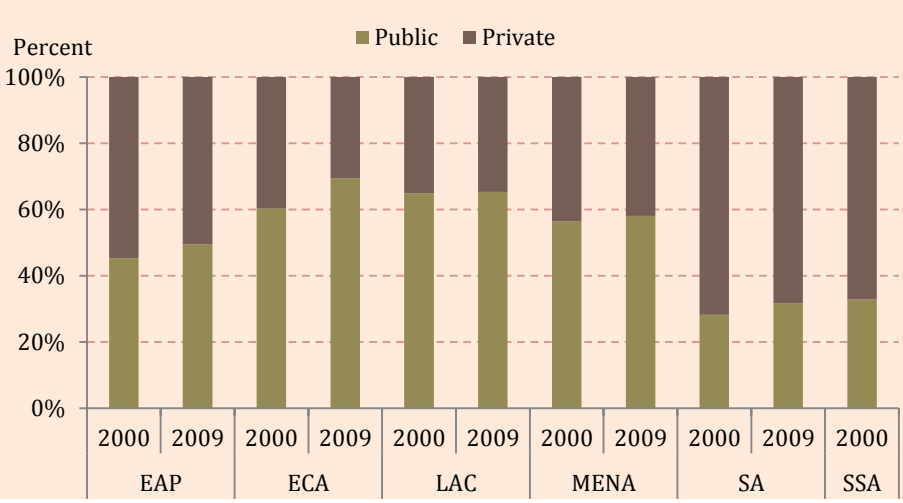
Figure 3.8: Public and Private Share in Total Health Expenditures

Compared to developing countries, public share in health spending remained high in OIC region.

Source: Table A.11 in the Statistical Appendix

The composition of total health spending differs considerably across the OIC regions (Figure 3.9). On average, public share of health spending remained dominant in ECA (69 percent), LAC (65 percent) and MENA (58 percent). On the contrary, private share of health spending remained dominant in SA (68 percent), SSA (65 percent) and EAP region (51 percent). In ECA and LAC regions, public share of health spending remained higher than the world, developed, developing and OIC countries averages; whereas it was higher than the developing countries and OIC averages in MENA region.

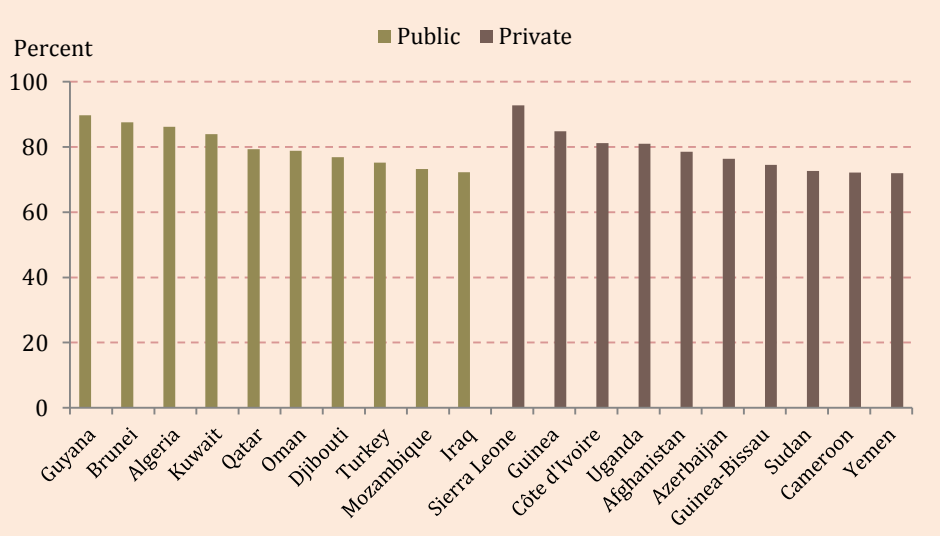
Figure 3.9: Public and Private Share in Total Health Expenditures in OIC Regions



Source: Table A.11 in the Statistical Appendix

At the individual country level, in 2009, the share of total health expenditures financed by the public sector ranged from 89.7 percent in Guyana to only 7.2 percent in Sierra Leone. On the other hand, the share of total health expenditures financed by the private sector ranged from 92.8 percent in Sierra Leone to only 10.3 percent in Guyana. In 2009, more than 50 percent of total health expenditures were financed by the public sector in 29 member countries whereas private sector remained the major source of total health expenditures in 26 member countries (see Annex Table A.11).

Figure 3.10: Members with Highest Public and Private Share in Total Health Expenditures, 2009



Source: Table A.11 in the Statistical Appendix

During 2000-2009, share of public sector in total health expenditures increased in 39 member countries- ranging from 0.2 percentage point increase in Suriname to 43.5 percentage points in Iraq. On the other side of the scale, share of public sector in total health expenditures decreased in 16 member countries - ranging from 0.1 percentage points decrease in Sierra Leone (and Sudan) to 27.2 percentage points and 25.8 percentage points decrease in Turkmenistan and Yemen respectively (see Annex Table A.11).

3.2.3 Government Health Expenditures

The ratio of government health expenditures to the total government expenditures measures the relative importance of the health sector on the national development agenda as well as the extent of government financial support for it.

As shown in Figure 3.11, worldwide governments' spending on health sector accounted for about 15.1 percent of total government expenditures in 2009 and it was 0.5 percentage points higher than the 2000 level (14.6 percent). In developed countries, budgetary allocations to health sector were recorded at 17.0 percent in 2009, corresponding to an increase of 1.3 percentage points since 2000. On the other hand, in developing countries share of government health spending in total government expenditures slightly improved and witnessed an increase of only 0.2 percentage points from 9.5 percent in 2000 to 9.7 percent in 2009. In OIC member countries, governments' health spending increased from 7.7 percent of total government expenditures in 2000 to 8.46 percent in 2009, corresponding to an increase of 0.9 percentage points. This shows that, on average, governments in OIC member countries spent less on health sector compared to the world, developed and developing countries spending.

On average, governments in OIC countries spend less on health sector compared to the world spending

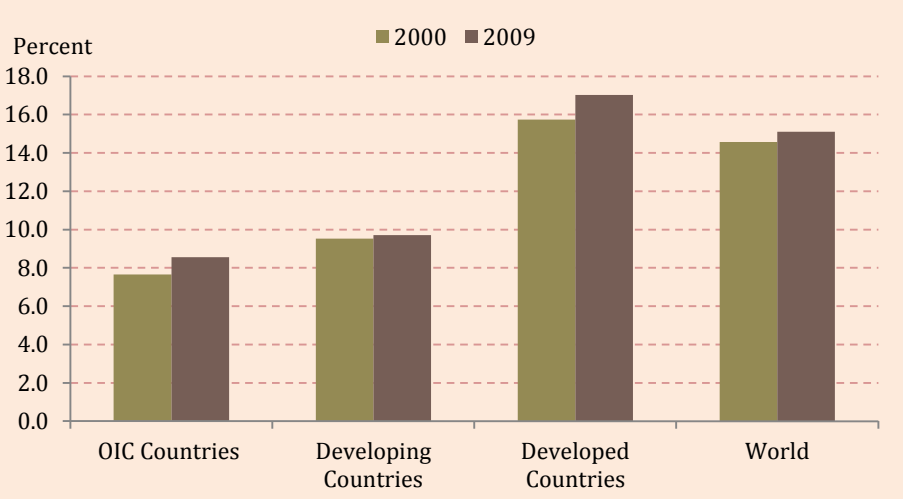


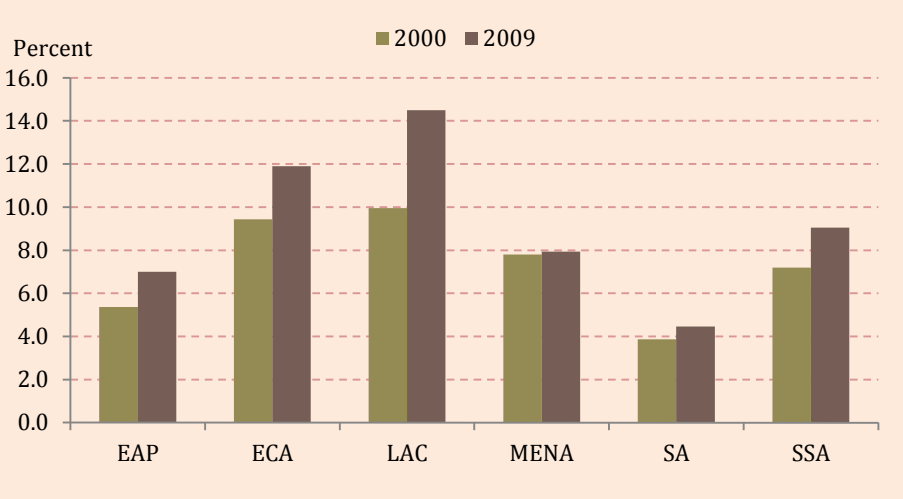
Figure 3.11: Government Health Expenditures (percent of total Government Expenditures)

Source: Table A.11 in the Statistical Appendix

During the period under consideration, share of health sector in total government expenditures has been improved across the OIC regions. With significant disparities, as shown in Figure 3.12, budgetary allocations to health in OIC regions ranged from a low of 4.5 percent and 7.0 percent in SA and EAP respectively to a high of 14.5 percent and 11.9 percent in LAC and ECA respectively. This ratio was 9.1 percent in SSA and 7.9 percent in

MENA region. During the period under consideration, LAC witnessed the highest increase of 4.6 percentage points followed by ECA (2.5 percentage points) and SSA (1.9 percentage points). On average, governments in LAC and ECA region allocated more resources to health compared to the OIC and developing countries average allocations in 2009.

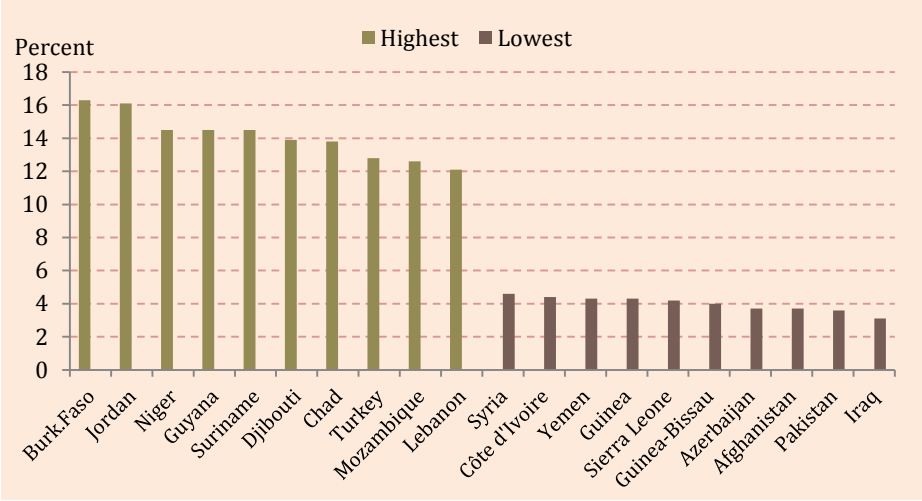
Figure 3.12: Government Health Expenditures in OIC Regions (percent of total Government Expenditures)



Source: Table A.11 in the Statistical Appendix

At the individual country level, 18 member countries allocated more than 10 percent of their total expenditures for the health sector in 2009. Out of these 18 countries, Burkina Faso and Jordan remained at the top with the share of 16.3 percent and 16.1 percent respectively (Figure 3.13). Among others, Niger allocated 14.5 percent of its total government expenditures for the health sector, followed by Guyana (14.5 percent), Suriname (14.5 percent), Djibouti (13.9 percent), Chad (13.8 percent), Turkey (12.8 percent), Mozambique (12.6 percent) and Gabon (12.1 percent). On the opposite side of the scale, 10 member countries allocated less than 5 percent of their total resources for the health sector in 2009 (Figure 3.13). The situation remained worse in Iraq, Pakistan, Afghanistan and Azerbaijan where share of health sector in total government expenditures was recorded at only 3.1 percent, 3.6 percent, 3.7 percent and 3.7 percent respectively.

Figure 3.13: Member Countries with Highest and Lowest Government Health Expenditures, 2009



Source: Table A.11 in the Statistical Appendix

3.2.4 Major Sources of Health Expenditures

Health financing is a critical component of health systems. It is mainly related with generation, allocation and use of financial resources to provide health care services to all people at a reasonable and affordable cost. Globally health care is financed by a mixture of tax-based financing, social health insurance, private health insurance, out-of-pocket health spending and external contributions (aid and donations etc). The relative share of these sources in total health expenditures has many implications for access, equity and financial sustainability of health care services in a country (WB, 2006).There is global evidence that to achieve the goal of universal health coverage it is necessary to generate a significant amount of financial resources for health through prepaid and pooled contributions like tax-based financing, social health insurance and private health insurance; whereas the share of direct out-of-pocket spending on health should be reduced (WHO, 2005).

This section discusses the major source of health financing and their relative contribution in total health expenditures of developed, developing and OIC countries.

In a ***tax-based financing*** system government revenues are predominantly used to finance health care spending. Usually individuals contribute to the provision of health services through taxes on incomes, purchases, property, capital gains, and a variety of other items and activities. It is widespread across the globe and provides a significant share of health expenditures in almost every country (WHO, 2009).

As shown in Table 4, about 27.6 percent of world total health expenditures were financed by government revenues in 2009. On average, share of government revenue in health expenditures remained more or less the same across the world and there were no significant disparities between developed and developing groups in 2009. In developed countries 27.8 percent of total health expenditures were derived from government while this share was 26.8 percent in developing countries. Governments in OIC region also continued to finance a quarter (25.3 percent) of total health expenditures in 2009. Between 2000 and 2009, share of tax based financing in total health expenditures witnessed an increasing trend at global and developed countries level; whereas it was exactly the opposite in case of developing and OIC countries where share of total health expenditures financed by government has witnessed a declining trend.

Taxes and social security schemes accounted for 40.6% of total health expenditures in OIC countries compared to 53.6% in the world

Social security or Social health insurance is recognized as one of the most important methods to achieve universal health coverage. In this category, contributions from workers, the self-employed, enterprises and government are pooled into a single or multiple funds on a compulsory basis. Social security is most widely used in developed countries and it is second major source of health care financing in these countries (Doetinchem, O., Guy C., David, E., 2009).

As shown in Table 4, over a quarter of world total health expenditures (26.0 percent) was financed by social security schemes in 2009. These schemes accounted for 26.9 percent of total expenditures on health in developed countries whereas 21.7 percent in developing

countries. In OIC member countries social security coverage remained comparatively lower than the other groups and only 15.3 percent of total health expenditures were financed by these schemes in 2009.

The contribution of ***external resources*** to total health expenditures remained very low across the world. As shown in Table 4, only 0.2 percent of world total health expenditures were financed by external resources in 2009. Meanwhile, this category remained completely absent in developed countries whereas in developing countries it accounted for 1.0 percent of total health expenditures. In OIC member countries external resources contributed 1.9 percent of total health expenditures in 2009. Compared to 2000, share of external resources in total health expenditures remained constant both in developing and OIC countries whereas it increased at world level.

Table 4: Major Sources of Total Health Expenditures (percent)

	Tax		Social Security		External Resources		Private Insurance		Out-of-pocket		Others	
	2000	2009	2000	2009	2000	2009	2000	2009	2000	2009	2000	2009
OIC Countries	26.1	25.3	11.4	15.3	1.9	1.9	3.4	3.2	39.5	36.3	17.7	18.0
Developing Countries	26.9	26.8	18.5	21.7	1.0	1.0	7.5	7.3	42.5	35.2	3.6	7.9
Developed Countries	25.5	27.8	28.8	26.9	0.0	0.0	20.2	20.4	15.1	13.5	10.4	11.4
World	25.7	27.6	27.6	26.0	0.1	0.2	18.7	18.1	18.3	17.3	9.6	10.8

Source: Table A.12 in the Statistical Appendix

Private health insurance *(PHI)* is another major source of health financing across the globe. Unlike social security, PHI is usually voluntary and it includes policies sold by the for-profit commercial firms, non-profit companies, and community health insurers. According to the WHO health financing mechanisms, premiums are paid directly by the employers, associations, individuals and families to insurance companies, which pool risks across their membership base.

Private health insurance schemes accounted for only 3.2% of total health expenditures in OIC countries compared to 18.1% in the world

As shown in Table 4, PHI contributed about 18.1 percent of world total health expenditures in 2009. In general, PHI schemes are used both in developed and developing countries, however provided the differences in wealth and institutional development in both groups, PHI is more widespread in developed countries. According to the latest estimates, PHI contributed about 20.4 percent of total health expenditures in developed countries compared to only 7.3 percent in developing countries. In OIC member countries, PHI coverage remained comparatively very low and it contributed only 3.2 percent of total health expenditures in 2009.

Out-of-pocket health expenditures are paid by people directly at the time of use of health care services. It includes gratuities and in-kind payments made to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services, whose

primary intent is to contribute to the restoration or to the enhancement of the health status of people (WHO, WHR 2005). According to the WHO estimates, it is the most regressive way of health financing and has variety of harmful consequences especially for the low income and poor households. According to the findings WHO, each year, out-of-pocket health expenditures drive about 100 million people below the poverty line and cause serious financial problems for another 150 million people across the globe (WHO, NHA Policy Highlight No.2/April 2010).

In OIC countries, Out-of-pocket health spending remained significantly higher than the world average

Globally, it is the most widely used method to pay for health services especially in developing countries. As depicted in Table 4, out-of-pocket health spending accounted for 17.3 percent of world total health expenditures in 2009. Over the years, developing countries relied heavily on out-of-pocket spending to finance health expenditures. In 2009, out-of-pocket spending contributed 35.2 percent of total health expenditures in developing countries compared to only 13.5 percent in developed countries. Being a substantial part of developing countries, OIC member countries are no exception. In OIC region, out-of-pocket spending accounted for 36.3 percent of total health expenditures in 2009. Compared to 2000, share of out-of-pocket spending in total health expenditures declined across the globe.

Major Sources of Health Expenditures in OIC Regions

The share of total health expenditures financed by government revenues varies greatly across the OIC regions. In 2009, it ranged from a low of 12.3 percent and 15.7 percent in SA and SSA respectively to a high of 27.7 percent and 27.3 percent in MENA and ECA respectively (Table 5). Governments in EAP and LAC also financed 25.3 percent and 16.4 percent of their total health spending respectively. Between 2000 and 2009, member countries in MENA, LAC and SSA witnessed decrease in government allocations to health sector whereas EAP, ECA and SA witnessed an increasing trend.

Table 5: Major Sources of Health Expenditures in OIC Regions (percent)

OIC Regions	Tax		Social Security		External Resources		Private Insurance		Out-of-pocket		Others	
	2000	2009	2000	2009	2000	2009	2000	2009	2000	2009	2000	2009
EAP	18.1	25.3	1.3	4.2	0.3	1.0	4.7	4.3	40.2	36.9	35.5	28.2
ECA	23.4	27.3	29.8	36.3	1.0	0.3	3.7	1.5	31.3	23.3	10.8	11.4
LAC	17.4	16.4	10.9	12.8	7.9	14.3	0.2	4.8	19.4	11.5	44.2	40.3
MENA	32.2	27.7	7.8	10.9	0.6	0.5	3.5	4.6	37.5	35.6	18.3	20.7
SA	9.3	12.3	0.8	0.6	3.1	6.8	0.1	0.0	60.9	62.0	25.9	18.3
SSA	17.2	15.7	0.5	1.0	14.1	10.1	1.9	1.5	60.4	59.7	5.9	12.0

Source: Table A.12 in the Statistical Appendix

Social security remained a very limited source of health care financing in all OIC regions except ECA. In 2009, only 0.6 percent of total expenditures on health were financed by social health insurance schemes in SA, 51.0 percent in SSA and 4.2percent in EAP region. On the

other hand, these schemes accounted for 36.3percent of total health expenditures in ECA, 12.8percent in LAC and 10.9 percent in MENA. Between 2000 and 2009, share of social health insurance in total health care spending has witnessed an upward trend in all OIC regions except SA region (Table 5).

Compared to social security schemes, private health insurance coverage was distributed more evenly across the OIC regions. As shown in Table 5, in 2009, contribution of PHI in total health spending ranged from a low of 0.03percent and 1.5 percent in SA and LAC respectively to a high of 4.8 percent and 4.6 percent in LAC and MENA respectively. In EAP and ECA PHI contributed about 4.3 percent and 1.5 percent of total health expenditures respectively. Between 2000 and 2009, member countries in LAC and MENA, witnessed increase in PHI contribution to health spending whereas it declined in rest of OIC regions.

Out-of-pocket spending remained the most popular method of financing health expenditures across the OIC regions especially in SA and SSA. In 2009, out-of-pocket spending in total health expenditures ranged from a low of 11.5 percent and 23.3 percent in LAC and ECA respectively to a high of 62.0 percent and 59.7 percent in SA and SSA respectively (Table 5). In other regions, out-of-pocket spending accounted for 36.9 percent of health expenditures in EAP and 35.6 percent in MENA region. During the period under consideration, with the exception of SA region, share of out-of-pocket spending in total health expenditures decreased across the OIC regions and ECA and LAC region witnessed the highest decline of 8.1 percentage points and 7.9 percentage points respectively.

There is great degree of variation among the OIC regions and the share of external resources in total health expenditures remained comparatively higher in LAC (14.3 percent), SSA (10.1 percent) and SA region (6.8 percent). On the other hand, external resources contributed only 0.3 percent, 0.5 percent and 1.0 percent of health expenditures in ECA, MENA and EAP region respectively. Between 2000 and 2009, share of external resource in total health expenditures witnessed significant decline in SSA (4.0 percentage points) whereas it increased by 6.4 percentage points in LAC and 3.7 percentage points in SA region (Table 5).

3.2.5 Per capita Health Expenditures

Per capita health expenditures remained comparatively very low in OIC member countries

Per capita expenditure on health is an important indicator which indicates consumption of health goods and services at the micro level. As shown in Figure 3.14, per capita health expenditures (at average exchange rate) have increased across the world between 2000 and 2009. In this period, global per capita health expenditures increased from US$ 486 to US$ 857, corresponding to growth of 76 percent. In developed countries, per capita health spending increased from US$ 2766 in 2000 to US$ 4807 in 2009, corresponding to growth of 74 percent. Meanwhile, per capita health spending in developing countries increased from US$ 68 to US$ 177, corresponding to growth of 158 percent. Per capita health expenditures remained comparatively very low in OIC member countries. During the period under consideration, average OIC per capita health expenditures increased from US$ 57 to US$ 131, corresponding to growth of 129 percent.

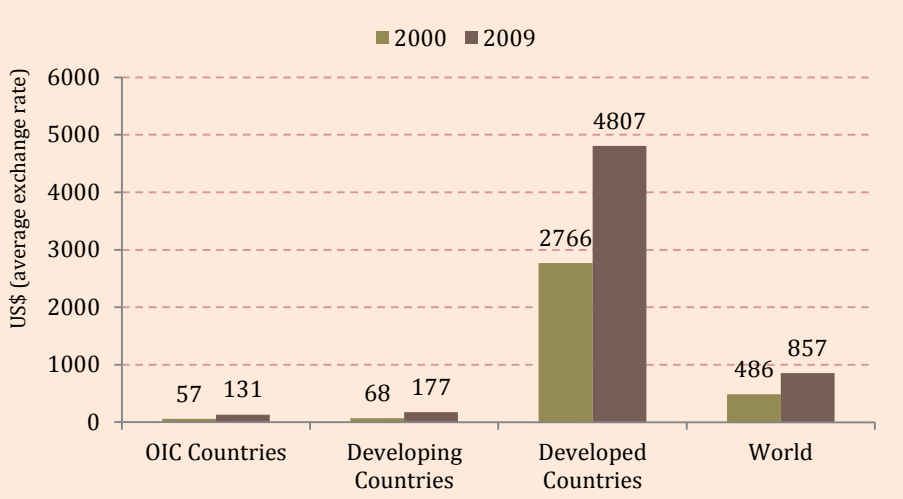


Figure 3.14: Per capita Health Expenditures

OIC member countries are seriously lagging behind.

Source: Table A.11 in the Statistical Appendix

At the OIC regions level, per capita health spending ranged from a low of US$ 23 and US$ 58 in SSA and SA respectively to a high of US$ 365 and US$ 256 in ECA and MENA respectively, while it was US$ 253 in LAC and US$ 86 in EAP (Figure 3.15). Those regions where per capita spending on health was comparatively low in 2000 registered significantly

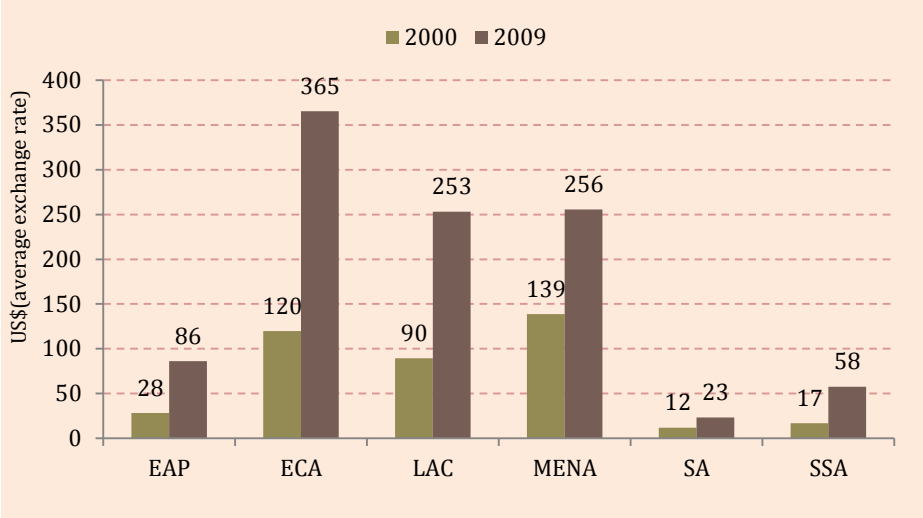


Figure 3.15: Per capita Health Expenditures in OIC Regions

Per capita health expenditures remained significantly high in ECA region.

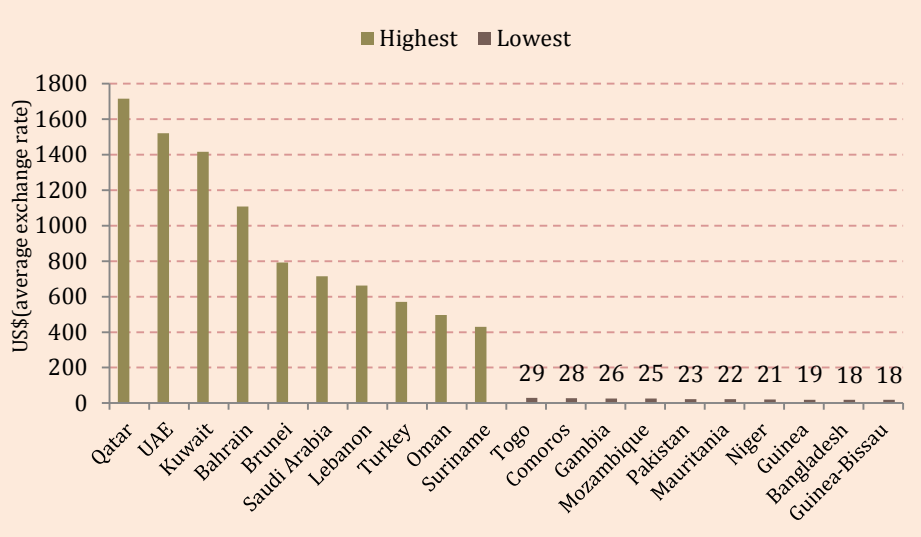
Source: Table A.11 in the Statistical Appendix

higher growth during the period under consideration. As shown in Figure 3.15, SSA registered an increase of 241 percent followed by EAP (206 percent) and ECA (205 percent). On average, per capita health spending in ECA, MENA and LAC remained higher than the developing and OIC countries averages in 2009.

At the individual country level, per capita health expenditures at average exchange rate remained highest in member countries located in MENA region. As shown in Figure 3.16, 7 out of top-10 OIC countries are from MENA, 1 from EAP, ECA and SSA each. Among these countries, per capita health expenditures remained greater than US$ 1000 in Qatar (US$ 1715), UAE (US$ 1520), Kuwait (US$ 1416) and Bahrain (US$ 1108). In contrast, per capita health expenditures at average exchange rate remained very low in member countries located mainly in SSA and SA region. As shown in Figure 3.16, 8 out of these 10 countries are from SSA and 2 from SA region. In these countries, per capita health expenditures

ranged from US$ 18 in Guinea Bissau and Bangladesh to US$29 and US$ 28 in Togo and Comoros respectively. In 2009, 22 member countries recorded per capita health expenditures higher than the OIC average whereas 21 out of these 22 countries registered per capita health expenditures higher than the developing countries average (see Annex Table A.22).

Figure 3.16: Member Countries with Highest and Lowest Per capita Health Expenditures, 2009



Source: Table A.11 in the Statistical Appendix

3.3 Insufficient Health Force and Hospitals

Adequate number of hospitals, trained professional and managerial staff, modern equipment and pharmaceuticals are the basic ingredients for an efficient and effective health system in a country. This section highlights the performance of OIC member countries with respect to basic health infrastructure and workforce.

3.3.1 Health Work Force

OIC countries accounted for 26% of world and 40% of developing countries total health workforce

Health work force is the back bone of health care system in a country. Globally, it is a well-established fact that the size, composition and distribution of health workers play an important role for prompt and efficient delivery of health care services. Over the years, among others, shortage of well-trained health workforce remained the most basic reason behind low immunization coverage, limited outreach of primary health care and high infant, child and maternal mortality rates across the developing world (WHO, WHR 2006). There are various social, economic and political reasons behind the global disparity of health workers.

In 2000-2010, globally there were 9.2 million physicians. This means that, on average, there were 15 physicians per 10,000 people. Out of these 9.2 million doctors, around 69 percent were in developing countries however, the density of doctors in developing countries remained quite lower (10.8 physicians per 10,000 people) compared to the developed countries (28.7 physicians). In 2000-2010, there were over 1.2 million physicians in OIC member countries. This constitutes about 13.0 percent of the world and 18.8 percent of total physicians in developing countries. The density of physicians remained comparatively very

low in OIC member countries as there were only 7.6 physicians per 10,000 people in 2000-2010 (Figure 3.17).

According to the latest statistics, in 2000-2010 there were 19.4 million nurses and midwives in the world. This means that on average there were 28.4 nurses and midwives per 10,000 people. Out of these 19.4 million nurses and midwives, around 59.3 percent were in developing countries; however, the density of nurses and midwives in developing countries was quite lower (19.7 nurses and midwives) compared to the developed countries (79.7 nurses and midwives). In 2000-2010, there were over 2.6 million nurses and midwives in OIC member countries. This corresponds to 13.4 percent of the world total and 22.6 percent of total nurses and midwives in developing countries. The density of nurses and midwives remained only 16.7 per 10,000 people in the OIC member countries (Figure 3.17). Across the world, density of health workforce (physicians, nurses and midwives) remained higher than the 23 threshold level for considering a country/region to be facing a health workforce crisis.

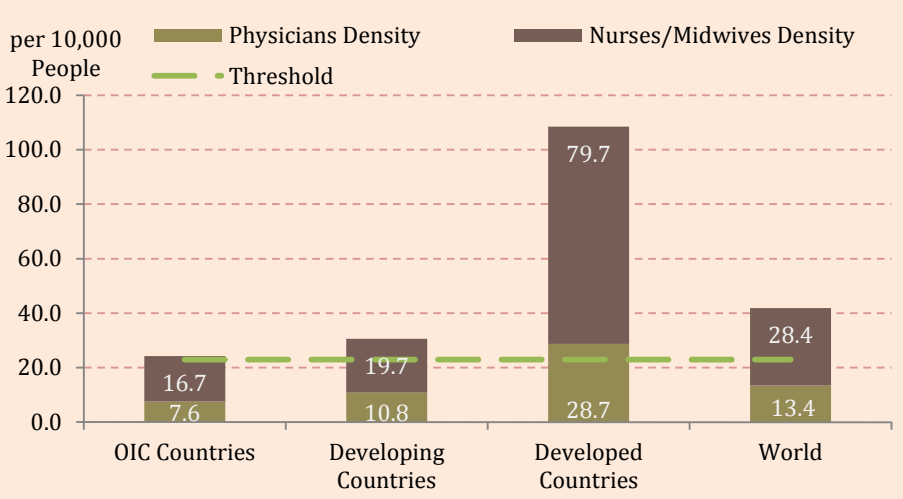


Figure 3.17: Density of Health Workforce, 2000-2010

Density of health workforce remained comparatively low in OIC countries.

Source: Table A.13 in the Statistical Appendix

The distribution of doctors varies greatly across the OIC regional groups. In 2000-2010, 42.9 percent of total physicians in the OIC member countries were located in MENA region whereas 26.4 percent in ECA and 16.0 percent in SA region. Collectively, these three regions accounted for more than 85 percent of total physicians in OIC member countries. In contrast, EAP and SSA accounted for just 7.7 percent and 6.9 percent of OIC total respectively. Density of physicians per 10,000 people also varies greatly across the OIC regions as it ranges from a low of 2.0 and 3.4 physicians in SSA and EAP respectively to a high of 21.5 and 13.8 in ECA and MENA respectively. In SA and LAC there were only 5.4 and 4.4 physicians per 10,000 people respectively (Figure 3.18).

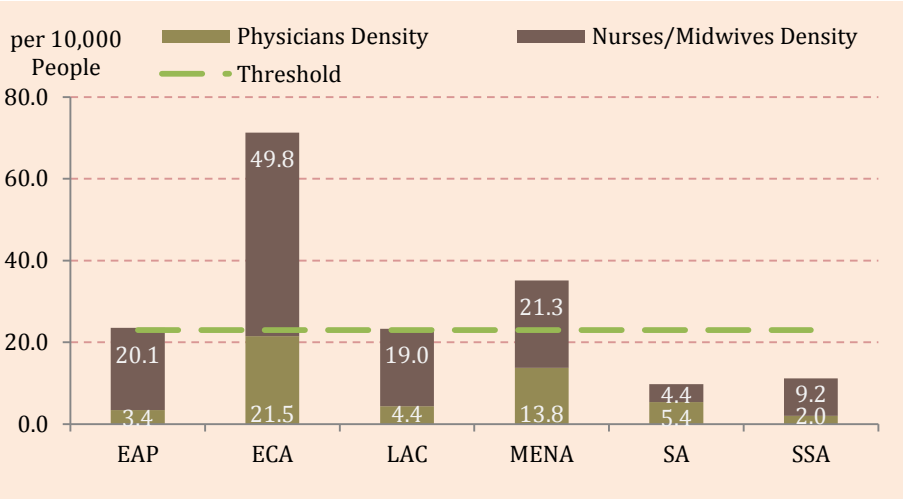
In 2000-2010, 30.4 percent of total nurses and midwives in the OIC member countries were located in MENA region whereas this share reached to 28.0 percent in ECA and 20.8 percent in EAP region. Collectively, these three regions accounted for more than 63 percent of total nurses and midwives in OIC member countries. In contrast, LAC and SA accounted for only 0.1 percent and 5.9 percent of OIC total nurses and midwives respectively. Quite surprisingly, member countries in SSA region accounted for 14.8 percent of OIC total nurses

and midwives in 2000-2010. The density of nurses and midwives also differs greatly across the OIC regions as it ranges from a low of 4.4 and 9.2 nurses and midwives per 10,000 people in SSA and SA respectively to a high of 49.8 and 21.3 nurses and midwives in ECA and MENA respectively (Figure 3.18). There were 20.1 nurses and midwives per 10000 people in EAP and 19.0 in LAC region. On average, density of nurses and midwives in ECA region remained higher than the world, developing and OIC averages; while in MENA region it was higher than the developing and OIC averages. With the exception of SA and SSA regions, density of health workforce (physicians, nurses and midwives) remained higher than the 23 threshold level for considering a country/region to be facing a health workforce crisis.

Figure 3.18: Density of Health Workforce in OIC Regions

Density of health workforce varies greatly across the OIC region.

Source: Table A.13 in the Statistical Appendix



3.3.2 Hospital Beds per 10,000 Population

Number of hospital beds is an important indicator of overall capacity of a health care system. As availability of sufficient number of hospital beds help to deliver health care services to patients in a more effective way.

Globally, there were 29 beds per 10,000 people in 2000-2009. At the regional level, density of hospital beds remained quite higher in developed countries where 57 hospital beds were available per 10,000 people; whereas in developing countries there were just 24 hospital beds available per 10,000 people. The availability of hospital beds remained comparatively very low in OIC member countries as there were only 12 hospital beds for 10,000 people in 2000-2009 (Figure 3.19).

Only 12 hospital beds are available for 10,000 people in OIC countries compared to 29 beds in the world

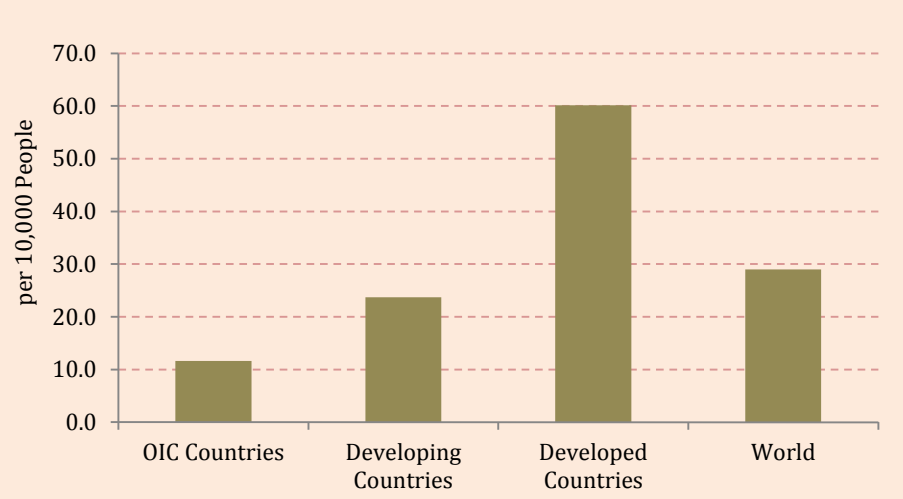


Figure 3.19: Hospital Beds, 2000-2009

OIC countries are seriously lagging behind.

Source: Table A.13 in the Statistical Appendix

The availability of hospital beds per 10,000 people varies greatly across the OIC regions. As shown in Figure 3.20, in 2000-2009 there were about 41 hospital beds per 10,000 people in ECA compared to only 7 hospital beds in SSA. Among other regions, there were 25 hospital beds per 10,000 people in LAC followed by 19 in MENA, 17 in EAP and 10 hospital beds per 10,000 people in SA. On average, hospital beds per 10,000 people in ECA remained higher than the world, developing countries and OIC averages.

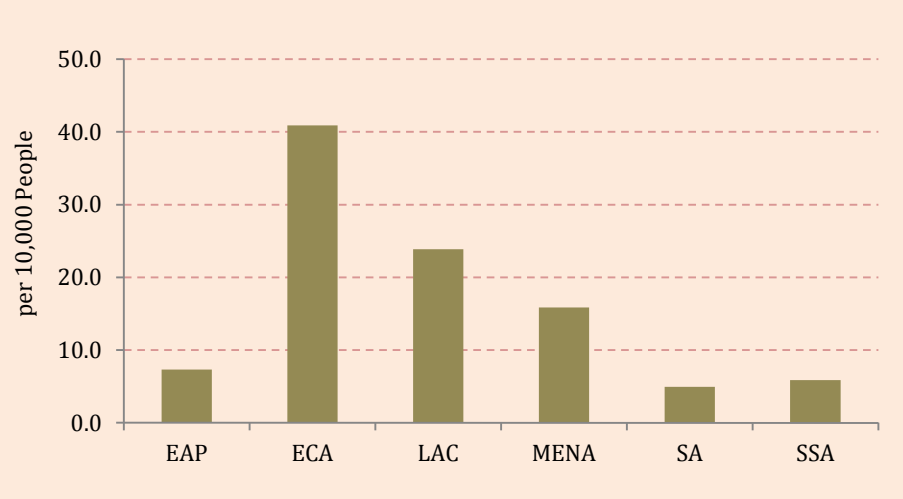


Figure 3.20: Hospital Beds in OIC regions, 2000-2009

Availability of hospital beds per 10,000 people remained significantly high in ECA region.

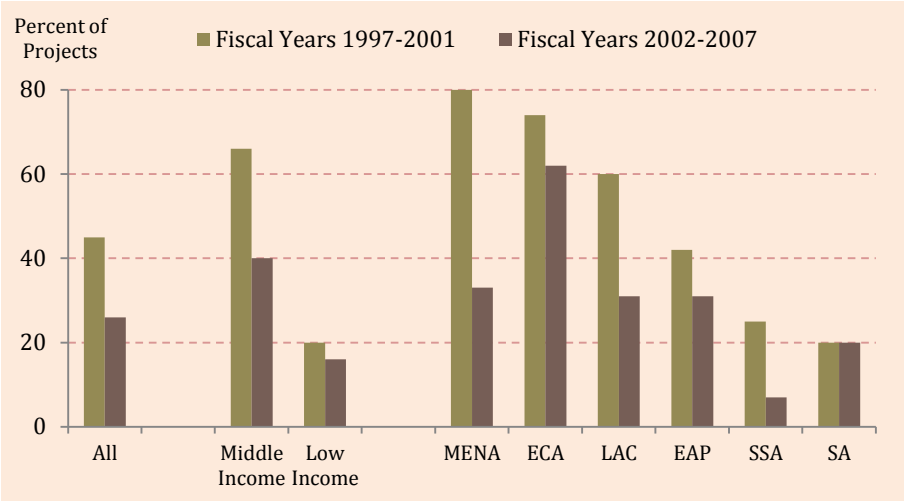
Source: Table A.13 in the Statistical Appendix

3.4 Poor Progress at Health Reforms

Health reform, or restructuring of the health system, is a key ingredient for a better off health status in the OIC member countries. At the global level, however, the World Bank Report on the outcomes of Health, Nutrition and Population (HNP) Programme (2009) reveals how the share in health projects with reform objectives declined by nearly half from 45 percent to 26 percent between the fiscal years 1997-2001 and 2002-2007 (Figure 3.21). The share has declined most significantly in Middle East and Africa, where 70 percent of the OIC countries are located. Three quarters of the reform projects since 1997 have been

implemented in the middle-income countries, including many OIC countries (see annex Table A.14).

Figure 3.21: Share of HNP Project Approvals with Health Reform Objectives



Source: Table A.14 in the Statistical Appendix

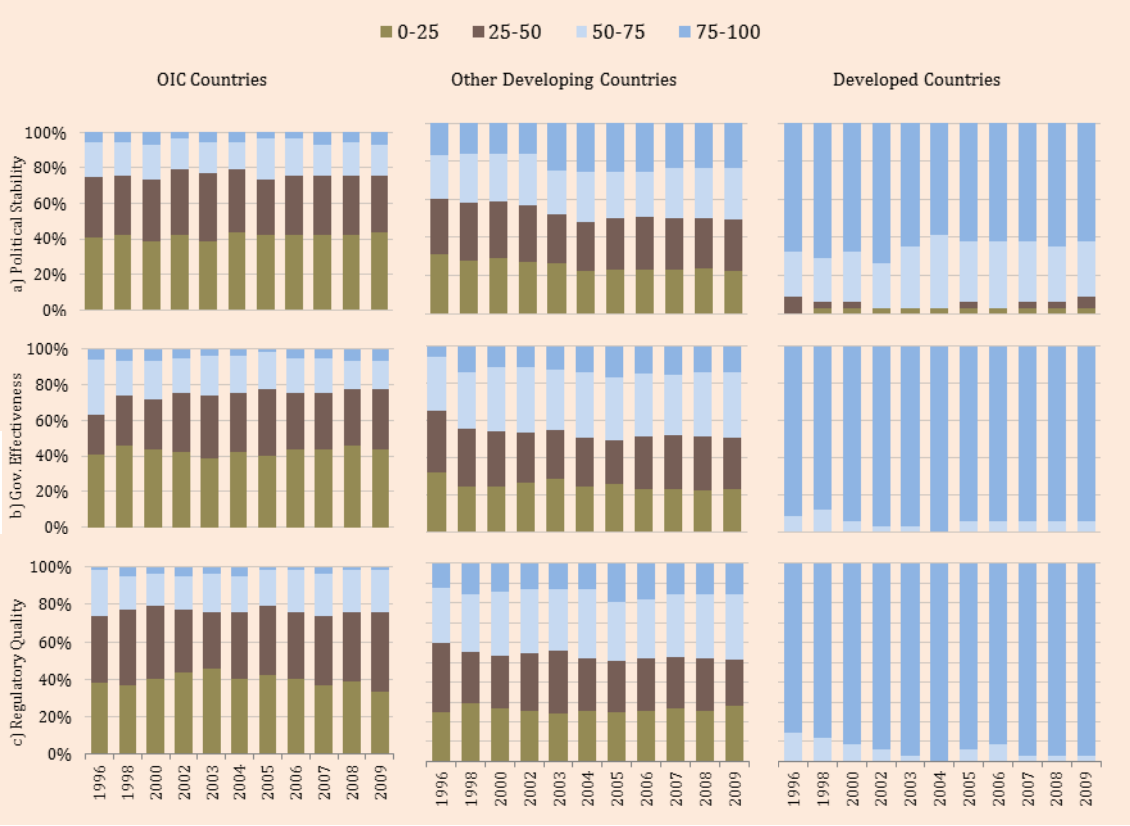
However, health reform projects characteristically have lower outcomes than do projects without reform objectives. The obstacles for many health system reforms are similar to those blocking improvement in public administration more generally, as are the measures to overcome them. As for OIC countries, factors that inhibit stronger performance in health reforms are various.

- ***Complex links between reforms and their outcomes for the under-serviced:*** The links between health reform projects in the OIC countries and their benefits for the poor are generally complex and uncertain. The first and second Health Reform Projects in the Kyrgyz Republic (1996–2006), for example, improved the efficiency of the health system, but they were less successful in redistributing funds in favour of the poor or addressing their health needs. Primary care was strengthened, broadened, and made more available, with clear improvements in access to care for the poorer populations. However, the guaranteed benefits were not universally implemented because of a shortage of funds. The centralization of fragmented pooling arrangements should have enhanced opportunities for efficiency and cross-subsidization, but it is not clear that this actually benefited the poor. During the second project, anticipated redistribution of resources from relatively rich to the poorer regions did not occur. Neither project tracked health outcomes among the poor.
- The Egypt Health Reform Program (1998–present), on the other hand, intended to improve the health of the poor, yet chose to concentrate initially on relatively affluent governorates to increase the chances of success. The poor within these areas would benefit by rationalizing health infrastructure investment with an emphasis on underserved neighbourhoods. But fewer than 40 percent of facilities followed the pro-poor rationalization guidelines; positive gains were undermined by enrolment and service fees without proper mechanisms to exempt the poor. Concern for the

failure to enrol the poor was not voiced until 2004; tracking of the enrolment of the poor was not added as an indicator for the project until late 2007.

- ***Governance:*** Poor reform outcomes in the OIC member countries particularly result from political instabilities, government ineffectiveness and lack of prudent regulatory frameworks, each of which have a direct impact on the ownership of and commitment to health reforms. The likelihood that the government will be destabilized by violent means, namely the political instability, undermines the prospects for reform as the support will be abandoned with a change in government (Figure 3.22a). Indeed, the World Bank Independent Evaluation Group (IEG) reports that the all three OIC countries that undertook health reform and were studied in-depth by IEG (Bangladesh, Egypt and Kyrgyz Republic) experienced changes in leadership with the potential to affect the health reform agenda (IEG, 2009). Moreover, poor quality in public and civil services as well as policy formulation and implementation, high degree of exposure to political pressure and lack of credible

Figure 3.22: Governance: Proportion of countries by indicator value



Source: Table A.25 in the Statistical Appendix

support from government to reform policies also undermine the success of structural health reforms in the member countries (Figure 3.22b). Last but not least, government inability to formulate and implement profound policies and regulations

that enable and promote private sector involvement in health sector constitutes another significant setback for the member countries (Figure 3.22c).

- ***Inadequate Stakeholder Analysis:*** Health reform projects create winners and losers; it is important that their interests be understood from the outset. High-level commitment is no guarantee that key stakeholders in the health system or the general public will go along with a reform; stakeholders who have a role in implementing any reform can simply not cooperate. The general public may perceive, for example, that a reduction in excess hospital capacity is reducing their access to health care. Even within an institution, the interests and incentives may vary according to whether the person is a manager or delivers services. The experiences of Bangladesh and Egypt are typical in this regard. In Kyrgyzstan Health Reform, on the contrary, the reform strategy was totally owned by a group of reformers in the Ministry of Health and a considerable prior analysis and a strategy for navigating the winners and losers.

4 OIC Cooperation in Health Domain

The domain of health constitutes an important element among the extensive range of mandates which emanate from the OIC Ten-Year Program of Action. This is based on the realization of the fact that health is central to overall human development and reduction of poverty. The OIC Ten-Year Program of Action has recommended the following actions pertaining to health sector:

"Mandate the Islamic Development Bank to coordinate with the OIC General Secretariat in order to make the necessary contacts with the World Health Organization and other relevant institutions to draw up a program for combating diseases and epidemics, to be financed through the special fund that will be created within the IDB".

"Strengthen laws aimed at preserving the rights of children, enjoying the highest possible health levels, taking effective measures in order to eradicate poliomyelitis and protect them from all forms of violence and exploitation".

Health sector is an important constituent of the OIC Ten-Year Program of Action

The 11th Islamic Summit Conference, held in Dakar in 2008 called upon the OIC General Secretariat and the IDB to step up their activities, with the involvement of relevant international organizations, such as the WHO, in the area of combating diseases and epidemics. The Summit also appreciated the establishment of contact between the OIC and the US Department of Health and Human Services and their agreement to formalize their relations. Subsequently, the OIC and the US Government signed a Cooperation Framework on "Reaching Every Mother and Baby in the OIC Emergency Care" on 1st December 2008.

The 35th, 36th and 37th sessions of the Islamic Council of Foreign Ministers adopted resolutions in the area of health which, inter alia, underscored the importance of cooperation in the field of health related Millennium Development Goals and requested the OIC General Secretariat to explore with relevant international organizations and specialized UN agencies such as WHO, UNICEF, UNFPA and UNAIDS the possibilities of elaboration and implementation of feasible regional health projects. The 37th ICFM appreciated the efforts of the OIC General Secretariat to coordinate with Global Polio Eradication Initiative and Roll Back Malaria Partnership. It requested the General Secretariat to expedite the implementation of the project "Reaching Every Mother and Baby in the OIC with Emergency Care" under the OIC-US Cooperation Framework signed in 2008.

OIC General Secretariat collaborate with international health agencies to implement regional health projects

The 2nd Islamic Conference of Health Ministers (Tehran, 1-4 March 2009) under the theme "Health Equity in Islamic Ummah" issued Declaration that encouraged the international organizations to assist the OIC member states to expand national immunization programs to reach all unvaccinated children. It requested the OIC, WHO and other relevant international organizations to cooperate to foster health capacity building programs in the OIC member states to promote health equity. The Declaration urged all the OIC member states and international organizations including WHO to provide and mobilize adequate resources and support to protect public health and strengthen the healthcare delivery system in Palestine in general and Gaza in particular, Syrian Occupied Golan and other conflict affected areas.

The 2nd Conference also approved establishment of a Steering Committee on Health to monitor the implementation of the decisions of the Health Ministers Conferences. The Steering Committee functions under the authority of and is guided by the Islamic Conference of the Ministers of Health.

The Steering Committee on Health comprises 15 member states representing the three OIC regions, the OIC General Secretariat, the OIC Institutions such as IDB, ISESCO, COMSTECH, SECRIC and Intergovernmental Organizations such as WHO. It held its 1st Meeting on 4- 5 April 2009 at Ministry of Health of Iran, Tehran and adopted its Terms of Reference. The Steering Committee decided to request the OIC member states and members of the Committee to provide regular feedback on the actions taken to implement the resolutions adopted by the First and the Second Islamic Conference of Health Ministers. The next meeting of the Steering Committee on Health is expected to take place in late 2011.

Combating diseases and epidemics

Polio Eradication

Eradication of polio continues to be among the critical issues that need to be addressed in earnest by the OIC. Of the last 4 remaining endemic countries in the world, 3 are OIC member states. Additionally, some OIC member states are also among the list of countries marked with the recurrence of polio. Although no new polio cases have been reported in the last 6 months from the polio re-affected member states, challenges in these countries remain. For example, the recent spread of polio once again in Central Asia. This region was certified

polio-free since 2002, but due to a recent importation of poliovirus of Indian origin, Tajikistan reported polio cases. It is feared that polio may have spread to other Central Asian countries. Russia has reported 13 cases – reportedly, importations from Central Asia.

After the 2nd Islamic Conference of Health Ministers (Tehran, 2009), the OIC General Secretariat established close contact with the Global Polio program to enhance collaboration on polio eradication for 2009 and beyond. On the basis of the work program, the OIC General Secretariat contacted Heads of State of Afghanistan, Nigeria and Pakistan, the three remaining polio affected member states and the Head of State of Chad being one of polio re-affected OIC countries to advocate and draw their attention to polio eradication.

The OIC General Secretariat secured religious injunction from the Islamic Fiqh Academy which issued a fatwa to encourage the Muslims to participate and support the national polio vaccination campaigns. Quoting extensively from the Qu'ran, the fatwa lays out the duty to protect children when disease is preventable. The fatwa addresses the critical need to raise awareness in Muslim communities about the benefits of polio immunization campaigns.

Eradication of Polio is a health priority in OIC region

The IDB has expressed its readiness to provide initial contribution of US$ 500,000 for UNICEF to procure polio vaccines on behalf of the Government of Afghanistan.

The OIC General Secretariat participated during the launching of national polio vaccination campaign in Pakistan in October 2009. The Government of Pakistan appointed Ms. Aseefa Bhutto Zardari as Ambassador for Polio Eradication in Pakistan. The Postal Department of Pakistan issued a special stamp on this occasion.

The OIC General Secretariat co-sponsored along with US State Department and UNICEF a panel discussion on Polio in December 2009 at the UN HQ New York. A joint event on combating polio was also organized in September 2010 at the sidelines of the annual session of the UN General Assembly. OIC Secretary General and President Obama's special envoy for OIC attended the event.

Cooperation with the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria

A Memorandum of Understanding (MoU) between the OIC General Secretariat and the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria was signed by the OIC Secretary General and the Executive Director of the Global Fund during the 36th session of the Council of Foreign Ministers (Damascus, 23-25 May 2009).

The MoU aims at strengthening cooperation between the two organizations to fight against the three diseases. Pursuant to the MoU, the General Secretariat has been working with the OIC Member States and other partners, including the IDB, to advocate action against HIV/AIDS, Malaria and Tuberculosis and to raise awareness about the Global Fund's vision, mission and work.

Since the creation of the Global Fund, 46 OIC Member States have benefitted from the Global Fund in the form of US$ 4 billion allocated for fighting HIV/AIDS, US$ 3 billion for Malaria and US$2 billion for Tuberculosis. Kingdom of Saudi Arabia, State of Kuwait,

Nigeria, Uganda and Brunei-Darussalam are among the OIC member states which have contributed to the Global Fund.

In September 2010, at the sidelines of the annual session of the UN General Assembly, the OIC Secretary General and the Global Fund co-hosted a lunch for OIC member states The purpose of the event was to brief donor countries among the OIC member states on the status of fight against HIV/AID, Malaria and Tuberculosis and to invite them to contribute to the Global Fund.

Elimination of Malaria

Elimination of HIV/AIDS, Malaria and Yellow fever remained high on the OIC health agenda

The delegation of Roll Back Malaria Partnership (RBM) visited the OIC Headquarters in April 2009. The two sides agreed to coordinate their activities and accelerate their efforts to combat malaria so as to achieve universal coverage by 2010 with the view to move countries steadily towards malaria elimination and eventual eradication. The possibility of producing anti malaria pills was also discussed.

On the invitation of the RBM, the OIC General Secretariat to participate along with the Islamic Chamber of Commerce and Industries (ICCI) at the 5th RBM Procurement and Supply Chain Management (PSM) Working Group Meeting held on 20-22 January, 2010 at WHO Headquarters, Geneva. The meeting gave opportunity for the OIC and ICCI to establish contacts with potential partners on a project to produce anti-malaria pills.

The Government of Abu Dhabi, United Arab Emirates announced grant of 25 million US dollars, over five years, to support the work of the RBM Partnership and bolster efforts to eradicate the parasite infection from the malaria endemic countries, including in the OIC member states.

Yellow fever

The General Secretariat circulated Status report on yellow fever received from WHO and UNICEF to the OIC member states. In response, the Arab Republic of Egypt reported several measures to combat yellow fever. The Government of the Kingdom of Saudi Arabia offered through the OIC donation of 4000 ampoules of yellow fever vaccine to the WHO and UNICEF.

Vaccines and drugs production

IDB launched Mega Project on production of biotechnological based drugs and vaccines in OIC member countries

The 8th Islamic Summit of the OIC (Tehran, December 1997) adopted strategies presented by the IDB towards the Preparation of the Ummah for 21st Century in the areas of education, health, human resources development and Intra-OIC trade. The IDB formed a Task Force in the field of health and evolved a new strategy for implementation of the self-reliance in vaccine production in the Islamic World program. Out of the approved US$ 5.6 million, US$ 2.063 million has been spent which includes six projects approved or processed for approval for a total amount of US$ 1.829 million.

The 1st Islamic Conference of Health Ministers (Kuala Lumpur, June 2007) adopted Resolution No.KLOICHMC-1/2007/2.1 which urged the OIC member states to consider

being self-reliant and self-sufficient in their immunization programs by ensuring the reliable supply of good quality, safe, effective and affordable vaccines by strengthening National Regulatory Authorities.

The 11th Islamic Summit Conference adopted resolution No. 1/11-S&T (IS) welcoming the launching of the Mega Project on production of biotechnological based drugs and vaccines. All OIC member states are invited to participate in the implementation of the Mega Projects either by joining the holding companies to be established for the Mega Projects or by offering to produce and manufacture or to assist in distribution and marketing of the products.

In the context of efforts towards self-sufficiency and self-reliance in vaccines and drugs production, the OIC General Secretariat, on the invitation of the US Department of Health and Human Services, participated in Sustainable Influenza Vaccine Production Capacity Stakeholders' workshop from 11 to13 January 2010 in Washington, DC. The opportunity was utilized to further explore possibilities of transfer of technology for production of vaccines and drugs. Experts from Turkey, Kazakhstan, Indonesia, Malaysia and ICCI also participated in an International Vaccine Technology workshop held in Hyderabad, India in September 2010.The workshop was organized by the US Department of Health and Human Services as one of the recommendations of the of the workshop held in Washington in January 2010. A meeting to discuss next steps being planned

OIC-US cooperation on mother and child health

The 1st Islamic Conference of Health Ministers (Kuala Lumpur, June 2007) adopted Resolution No.KLOICHMC-1/2007/2.5 on Mother and Child Health. In pursuance of this resolution, the OIC General Secretariat with the assistance of the Center of Disease Control and Prevention (CDC) of US prepared a project entitled "Reaching Every Mother and Baby in the OIC Emergency Care". The OIC and the US Government signed a Cooperation Framework on 1st December 2008 to implement the project.

OIC-US project on mother and child health aims to reach one million women and their babies annually in OIC member countries

The project has the followings specific objectives to:

- reach up to one million women and their babies annually;
- train midwives to achieve the required numbers of care providers for mothers and babies;
- ensure basic emergency care in primary care centers and obstetric surgical units with specialized services;
- equip computerized/palm pilot/internet based surveillance and monitoring capacity in primary and specialized center.

The 36th CFM requested the OIC General Secretariat to fully implement the project entitled "Reaching Every Mother and Baby in the OIC with Emergency Care".

The President of the United States in his speech delivered in Cairo on June 4, 2009, inter alia, committed to expand partnerships with Muslim communities to promote child and maternal health under the action to be taken in the Science and Technology domain.

Bangladesh and Mali are selected to pilot the OIC-US project on mother child health

In August 2010, a delegation of USAID and US State Department visited OIC Headquarters in Jeddah to discuss the implementation of US-OIC project on Mother Child Health. It was decided to pilot the project in two OIC countries namely Bangladesh from the Asian region and Mali from African region.

The OIC and USAID delegations visited Bamako, Mali on 1 – November 2010 and met with the Government of Mali on the implementation of the project. The meeting identified causes of high mortality rate for mother and infants and recommended various actions towards reducing the rate to meet the commitment of the government of Mali at the UN General Assembly in September 2010. The partnerships between OIC-US Government and Government of Mali to reduce mortality rate of mother during delivery and infant for first 4 weeks was launched on 4 November 2010. The implementation of the project will involve religious and community leaders, women groups, civil societies and a number of international partners and expected to commence in 2011.

5 Concluding Remarks and Policy Recommendations

Over the years, many OIC member countries witnessed significant improvement in health care coverage. As a result, mortality rates both for adults and children, have witnessed declining trends and life expectancy at birth has been improved. However, despite these positive trends, OIC member countries are still lagging behind the world and developing countries averages. The health care coverage situation remained significantly poor in member countries located in South Asia and Sub-Saharan Africa region mainly due to the lack of adequate and sustainable financial resource, poor health infrastructure, insufficient trained health workforce and slow progress on health reforms. The nature and magnitude of these key challenges faced by the health sector in many OIC member countries require a greater commitment from the governments to put health sector higher on the national development agendas and build health infrastructure and train workforce to meet the current and future demands for the health services. In addition, OIC member countries need to emphasize the compliance with international health regulations to ensure safe and secure health care services for their citizens.

In this section, we will make some policy recommendations to overcome the major challenges faced by the health sector in OIC member countries:

5.1 Health Financing

Health financing is a critical component of health care systems. Globally, health care is financed by a mixture of tax-based financing, social health insurance, private health

insurance, out-of-pocket health spending and external contributions (aid and donations etc). The relative share of these sources in total health expenditures has many implications for access, equity and financial sustainability of health care services in a country.

Majority of the OIC member countries rely heavily on out-of-pocket expenditure to finance health services whereas the share of social security and private health insurance in total health expenditures remained comparatively very low. This has been one of the major obstacles to provide health services to the low income poor groups of the society in the OIC region.

Keeping in view this state of affairs, governments in OIC member countries need to consider following measures to facilitate the accessibility of health care services to all:

- Reform health financing system to enable wider access. The reforms require continued increasing investment and public spending on health, reducing out-of-pocket spending and increasing pre-payment and risk-pooling, which may include tax-based financing, compulsory social insurance and other types of health insurance.
- Increase the budgetary allocations for health sector and establish an accountability mechanism to ensure transparent and efficient use of these funds.
- Take necessary measures to facilitate Intra-OIC investment in health sector.
- Collaborate with international agencies like WHO, UNICEF and World Bank to benefit from their expertise and financial contribution to build health infrastructure.
- Start prepayment and risk pooling based health financing schemes like Seguro Popular in Mexico, New Rural Cooperative Medical Scheme in China and Social Health Insurance Scheme in Mali to overcome financial barriers to health care access especially in rural areas (WHO Countdown Report, 2000-2010).

5.2 Preparing Health Workforce

Health workers are broadly defined as people who are engaged in activities to protect and improve the health of their communities. Demographic and epidemiological changes, introduction of new technologies and initiation of new treatment methods all contribute to the growing need to deal with the status, performance and problems of health workers. Many countries around the world lack the sufficient health service providers including doctors, nurses and midwives. It is not only health service providers who are in short supply – shortfalls exist in all categories of health workers including laboratory technicians, pharmacists, logisticians and managers. The World Health Organisation estimates that there is a global shortage of 4.3 million health workers – with Sub-Saharan Africa worst affected.

The OIC countries in particular face considerable challenges with respect to the *quantity*, *diversity* and *competency* of the health workforce. Health workforce shortages are especially serious in member countries located in South Asia and Sub-Saharan Africa region. During

the period 2000-2010, the number of health workers per 10,000 people in these two regions was, on average, below the 23 threshold level for considering a country/region to be facing a health workforce crisis. Inadequate salaries, lack of incentives and supervision affect the performance, motivation and retention of health workers. As a result, the fewest health workers are usually found where health needs are the greatest. The shortage of health workers is also among the most significant constraints to achieving the three health-related Millennium Development Goals (MDGs): reducing child mortality, improving maternal health, and combating HIV/AIDS and other diseases, such as tuberculosis and malaria.

In this respect, number of people to be trained, diversity of workforce to be prepared in proportion to demographic and socio-cultural characteristics of population and capability of health workers to be developed when performing tasks assigned to each health worker requires a comprehensive assessment. Table 5 depicts the driving forces and challenges in maintaining adequate number, diversity and competencies of the health workforce.

Quantity dimension: One of the most important challenges for health systems is to create and sustain an effective workforce for the delivery of health care. Insufficient health workforce in the OIC countries indicates low level of healthcare capacity and services, a threat which necessitates encouraging development of more adequate human capital in the fields of medicine and healthcare. Of the 57 countries with a critical shortage of health workers, 30 are OIC member countries. In this respect, strategies should be developed to improve the training opportunities and increase the number of health workforce. Proper strategies can be developed only if the problems are accurately identified.

Table 5: Challenges to Health Workforce Production

Drivers influencing workforce composition	Challenges		Possible actions	Desired impact on workforce production
Health needs Demographics Disease burden Epidemics	Numbers	Limited Shortages	- Increase class size - Shorten training time	Appropriate numbers
		Widespread shortages	- Develop new institutions - Increase regional cooperation	
Health systems Financing Technology Consumer preferences	Diversity	Misdistribution	- Select from underserved areas - Locate training in underserved areas	Enhanced diversity
		Homogeneity	- Outreach to minorities to apply - Retention efforts during training	
Context Labour and education Public sector reforms Globalization	Competency	Missing	- New institutions, cadres - Regional, international networks	Competencies ensured
		Ineffective	- Evaluation and certification - Accreditation, licensure	

Source: The World Health Report 2006, WHO.

Diversity dimension: The growing diversity of patient populations and increasing awareness of the importance of socio-cultural and linguistic issues in providing health care have brought new attention to imbalances in the admissions processes. The profiles of students entering health professions rarely reflect national profiles of social, linguistic and

ethnic diversity, as students are disproportionately admitted from the higher social classes and dominant ethnic groups in society (WHO, 2006). In response to these problems, strategies to increase diversity should include admission quotas, specialized programmes for under-represented students in secondary schools, outreach to those who might not consider health professional training to be an option and expanded selection criteria to offer admission to students with personal attributes that make them well suited to providing health services.

Competency dimension: Many factors interact to affect the quality of health care. The structure of the health care system, educational opportunities for health practitioners, the administrative system, the pace of change, economic conditions and the technology available may influence the ability of the existing workforce to acquire new skills and implement them in practice (Woodward and Psych, 2000).[6] Thus, a comprehensive strategy is needed if the quality of the overall system is to improve, including the development of indicators to measure progress.

In order to overcome shortage of well trained efficient health workforce, OIC member countries need to focus on following policy actions:

- Establish a health service commission for training, recruitment and management of health workforce both at national and Intra-OIC level.
- Enhance cooperation both at national and Intra-OIC level, to increase investment in health education and training institutions.
- Launch scholarship programs to attract more students in health professions.
- Ensure mutual recognition of medical diplomas, certificates and degrees.
- Take necessary measures to integrate teaching and learning with clinical practice.
- Motivate the health workers through financial and non-financial incentives to work in underserved rural and remote areas.
- Collaborate with NGOs and international bodies to train and deploy health workers at community level (like community midwives in Indonesia and Leady Health Visitor (LHV) program in Pakistan) to provide especially MNH services in rural areas.

5.3 Improving Infrastructure

Every day, millions of people receive some sort of health care to maintain or restore their health and ability to function. However, far too many do not. Quality problems are generally reflected in a wide variation in the use of health care services, underuse of some services, overuse of other services, and misuse of services. This section concentrates on improving

[6] Christel A. Woodward and C. Psych (2000), "Strategies for assisting health workers to modify and improve skills: Developing quality health care", Discussion Paper no: 1, WHO, Geneva.

infrastructure of health care provision through better sanitation and water sources, hospitals and development of e-health system.

5.3.1 Water Sources and Sanitation

The importance of water, sanitation and hygiene (WASH) for health and development has been widely acknowledged, but there are considerable risks and threats in preservation and provision of these services. Global driving forces, including population growth, urbanization and climate change, are expected to affect significantly the availability and quality of access to water and sanitation services and of freshwater resources. Water resources development needed also for other purposes that carry in themselves potential health risks. Millions of people are exposed to dangerous levels of biological contaminants and chemical pollutants in their drinking-water partly due to inadequate management of urban, industrial or agricultural wastewater. Notwithstanding these developments, almost two billion people over the last decade were victims of natural disasters, including floods and droughts, which act as key contributors to sanitation- and water-related diseases. Therefore, there is an urgent need for improving access to water and sanitation services to improve health and safeguard it against potential disasters.

In this respect, following recommendations can be made for the due consideration of policy makers in OIC member countries:

- In coordination with appropriate authorities and stakeholders, efficient systems for assessing water quality must be established, implemented and maintained.
- It is important for authorities to provide appropriate facilities for access to safe drinking-water, sanitation and hand washing with soap in health care establishments, schools and other public buildings and settings.
- Promotion and training tools on safe water, sanitation and hygiene practices are required, especially for those who operate and use these establishments.
- There are also considerable disparities between urban and rural areas with respect to access to drinking water at home as well as from other improved sources, improved sanitation facilities and hygiene. Member countries must prioritize and implement strategies to reduce these disparities, preferably in consultation with bilateral and multilateral partners and in close coordination with responsible local authorities. Providing adequate sanitation will have profound implications for human health and poverty alleviation.

5.3.2 Hospitals

Hospitals are institutions for health care providing patient treatment by specialized staff and equipment. Due to lack of qualified staff, equipment and infrastructure, many developing countries are not able to provide basic health services. In such cases, improving hospital infrastructure through rehabilitation, reconstruction and installation of water systems, sanitation and electricity is required to improve the people's health condition and revitalize primary healthcare. In this regard, it is essential to regularly assess the situation of hospital

infrastructure to improve service delivery. Hospitals in low-income countries in general suffer from similar constraints and these include:

- Inadequate medicines, supplies and equipment
- Lack of referral system for recommending higher levels of care, which results in late presentation of patients and increased death and disability
- Lack of essential support services including blood banking, laboratory services and pharmacy
- Shortage of facilities required for health service delivery including piped water and sanitation systems, regular electricity supply, and means for the safe disposal of health care waste
- Poor infrastructure resulting in, amongst other concerns, poor infection control

The capacity of a health care system is often measured by the number of hospitals or hospital beds. This interpretation may be misleading, because a more comprehensive assessment requires knowledge of how many patients are admitted to hospital, how long they stay and how intensively the bed stock is used. What matters at the end of the day is a quality and efficiency of health service. Hospital managements should respond to the needs of patients timely and efficiently. The changing population structure, patterns of diseases, consumer expectations and opportunities for medical intervention with new knowledge and technology put pressures on hospitals to transform. Certain flexibility should always be present to adapt to changing conditions.

5.3.3 e-Health

e-Health can simply be defined as the use of information and communication technologies for health. It allows improving the quality of treatment and broadening access to medical care through clinical communications between healthcare providers such as online referrals, electronic prescribing and sharing of electronic health records. It can also provide access to information databases, knowledge resources and decision support tools to guide service delivery. e-Health helps consumers to receive safer, better coordinated and more accessible care as a result of the improved accuracy, completeness and accessibility of personal health information and the ability to gain remote access to care delivery services. Similarly, care providers can make more informed decisions at the point of care as a result of better access to accurate and complete consumer health information, the support of relevant decision support tools and access to an improved evidence base for treatment decisions.

Developed countries have already made significant progress in introducing e-Health systems, but many developing countries still remain at the starting phase. However, it has often been argued that e-Health would be an imprudent investment for developing countries when essential needs like water and sanitation, housing, food and basic education are not being met. The possibility of investing limited resources in complicated equipment to the detriment of more productive approaches for development of human capital and

improving performance of health systems have created concerns especially for low-income countries.

Therefore, for the developing countries, the greatest challenge is perhaps to generate evidence that e-Health can improve health system performance, help build human capital for health, improve access to knowledge, support decision making and lead to better outcomes for patients.

Given the importance of e-Health, following broad recommendations can be made for the consideration of member countries:

- Prudently assess the feasibility of introducing e-Health system and prioritize their investment decisions.
- Upon the verification, public-private partnerships can be utilized in moving forward to build infrastructure and to advance specific e-Health programmes. This approach is a way to overcome funding constraints by attracting funding or in-kind support for e-Health development.

5.4 Health Reforms

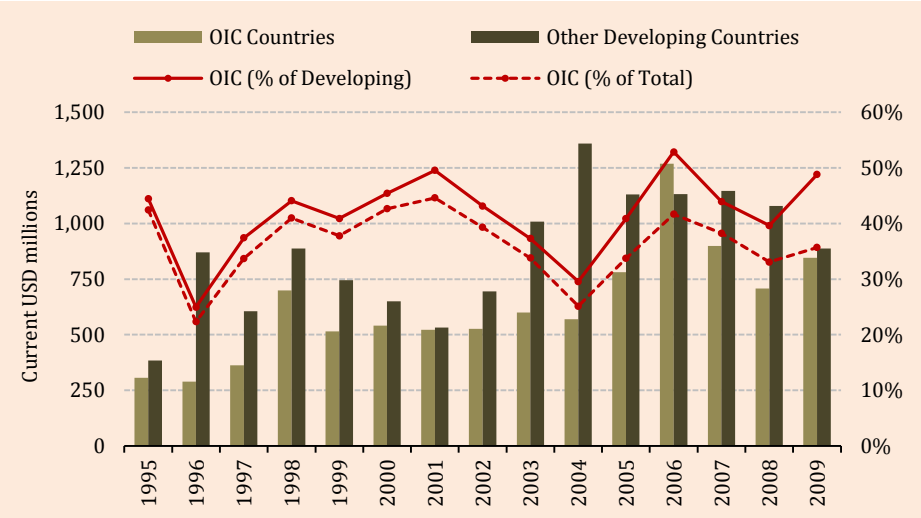
Although their direct impact on health status is not visible in the short-run, health reforms primarily aim at more equitable health finance, development of health insurance, decentralization of health systems, and regulation or engagement of the private health sector. The importance of ensuring health equity through health reforms in the OIC member countries was emphasized by the 2nd ICHM in 2009. The current World Health Report (WHO, 2011b) focuses on the ways to eliminate inequalities in access to health services through developing effective health finance systems.

Health reforms are distinct from efforts to improve outcomes by increasing inputs – money, training, salaries, facilities, and materials – although increasing inputs can be, and has been, used to leverage and support reforms. Thus, obstacles outlined through sections 3.1-3.4 should not be considered as outcomes of but facilitators for successful health reforms in OIC member countries. Although there is no a priori international consensus on how a health system should operate, reform programmes address the needs for fundamental changes in health system structure, incentives and allocation of resources. Improved efficiency of health services access, together with enhancements in health status and reduction of imbalances in health care delivery, is often at the core of health reform programs.

Implementation of the guaranteed benefits of a health reform is very much dependant on the sufficiency of funds to maintain the momentum of reforms. Development Assistance for Health (DAH), in this regard, defines two channels for health aid flow and *general health* title, as one of them, covers mainly flows to reform-oriented activities such as health sector policy, planning and programmes; education, training and research; as well as non-basic health services. Figure 5.1 reveals that OIC member countries benefit from a large portion of aid flow aiming at health sector development. Despite a remarkable decrease, during 2006-2008, in the share of OIC countries in total aid flows to the developing countries for health sector

development, a considerable increase in the volume of flows to OIC countries accompanied by a sharp decrease in flows to other developing countries in 2009 helped this value converge to its 2006 levels.

Figure 5.1: DAH Allocations for Health Sector Development



Source: OECD CRS Online Database

The efficient allocation of these sources to the sector reforms should be the utmost concern as the effects of health sector infancy is still reflected in poor reform outcomes and resultant inequalities in health finance and suboptimal blend of public and private stakeholders. Poor public governance figures presented in the previous section, on the other hand, introduces another challenge for the appropriate use of these resources.

Public Sector Reform (IEG, 2008), on the other hand, identifies six factors associated with comparatively successful administrative reforms: good analysis and diagnosis; pragmatic opportunism in selecting reforms; realistic expectations; appropriate lending packages (usually including technical assistance); tangible indicators of success; and effective donor coordination. Successful major health reform programs, as in many OIC countries, feature similar characteristics.

The reform attempts of the last decade gave considerable food for thought to the policymakers in OIC member countries about the successes and pitfalls of support for health reforms:

- The participation of all stakeholders is important for ownership and, thus success, of reforms.
- Reforms endorsed by a prior analytic work hold a greater chance of success.
- Well-reasoned ordering of reform elements can enhance ownership by political economy, reduce uncertainty about and complexity of reforms, ensure adequate capacity and facilitate learning from reform process.
- Monitoring and evaluation are critical to the success of health reforms. Therefore, development of an effective and transparent national evaluation mechanism is of paramount importance.

5.5 Complying with International Health Regulations

The International Health Regulations ('IHR' or 'Regulations' hereafter), of which revised version (i.e. IHR (2005)) entered into force on 15 June 2007 and are binding on 194 countries; require countries to report certain disease outbreaks and public health events to World Health Organization (WHO). In the globalized world, diseases can spread far and wide via international travel and trade. Particularly for OIC countries with relatively poor access to health services, the spread of diseases can cause severe health crises and heavily impact livelihoods. Complying with the precautionary Regulations, in this regard, is of critical importance for improving health status in the OIC member countries.

The First and Second ICHM in 2007 and 2009, respectively, drew attention to the need for successful implementation of the Regulations and urged member countries to develop, strengthen and maintain the *core capacities for surveillance and response* by mobilizing domestic as well as external resources and expertise.

The IHR monitoring framework defines the eight types of core capacity for tracking implementation: (1) national legislation, policy and financing; (2) coordination at national level and the communication of National IHR Focal Points, both globally and nationally; (3) surveillance; (4) response; (5) preparedness; (6) appropriate communication of risks; (7) human resources; and (8) adequate laboratory services. For each type of capacity, progress is monitored by measuring specific achievements over time in respect of defined attributes. Although the progress made in these capacities is not easily accessible at the country level, WHO evaluates the implementation status through self-assessment questionnaires. The results from the February 2010 questionnaire show that 68 percent of reporting state parties have assessed their core capacities for IHR implementation, while 58 percent developed national plans to meet these capacities (WHO, 2011a). However, more than half of the reporting state parties are still at the foundation level, exhibiting poor adherence to the Regulations.

The outcomes of national IHR focal point meetings are helpful in understanding potential challenges ahead of IHR-bound state parties, including OIC member countries. High turnover of health personnel, limited multi-sectoral collaboration, insufficient logistics and transport services for rapid response personnel to reach remote areas, poor awareness among public as well as health care providers for development of early warning systems, among others, pose difficulties to the implementation of the Regulations. Besides these, another potential compliance problem can emerge with regard to those core capacities over which federal OIC governments may not have explicit jurisdiction (Wilson et al, 2008). For example, surveillance powers may fall to the regional (such as state, province or governorate) level of government in federal OIC countries. To address this issue, a combination of strategies based on specific circumstances will have to be developed.

For a more effective IHR implementation, OIC member countries should consider following policy actions:

- Dedicate resources, technical and financial, to strengthen core capacities.
- IHR committees/task forces with broad representation of related agencies should also be constructed both at national and Intra-OIC level..
- Moreover, mobilization of legal expertise among member countries to develop a new or improve existing legislation in the context of IHR (2005) is also core to achievement of IHR implementation goals.

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Statistical Appendix

List of Tables

Table A.1: Antenatal Care Coverage and Births Attended by Skilled Personnel

	ANCC (%), 2000-2010		Birth Attendance (%)	
	At least 1 visit	At least 4 visits	1990–1999	2000–2010
Afghanistan	36	…	…	14
Albania	97	67	89	99
Algeria	89	…	77	95
Azerbaijan	77	45	100	89
Bahrain	100	100	98	97
Bangladesh	52	21	14	18
Benin	84	61	64	78
Brunei Darussalam	99	…	99	100
Burkina Faso	85	18	42	54
Cameroon	82	60	55	59
Chad	39	17	12	21
Comoros	74	…	52	62
Côte d'Ivoire	85	45	45	57
Djibouti	92	7	…	93
Egypt	74	66	46	79
Gabon	94	63	…	87
Gambia	98	…	…	57
Guinea	88	50	31	46
Guinea-Bissau	78	…	…	39
Guyana	92	…	93	83
Indonesia	93	82	43	73
Iran	99	94	…	97
Iraq	84	…	…	80
Jordan	99	94	97	99
Kazakhstan	100	…	100	100
Kuwait	100	…	98	100
Kyrgyzstan	97	…	98	98
Lebanon	96	71	89	98
Libya	93	…	94	100
Malaysia	79	…	81	100
Maldives	99	85	…	95
Mali	70	35	40	49
Mauritania	75	16	40	61
Morocco	68	31	40	63
Mozambique	92	53	44	55
Niger	46	15	18	33
Nigeria	58	45	42	39
Oman	100	…	91	100
Pakistan	61	28	19	39
Palestine	...	...	...	...
Qatar	100	…	99	100
Saudi Arabia	97	…	91	100
Senegal	87	40	47	52
Sierra Leone	87	56	…	42
Somalia	26	6	34	33
Sudan	64	…	85	49
Suriname	90	…	80	90
Syria	96	42	76	95
Tajikistan	89	49	81	88
Togo	84	…	51	62
Tunisia	96	68	81	95
Turkey	92	74	81	91
Turkmenistan	99	83	…	100
Uganda	94	48	38	42
United Arab Emirates	100	…	99	100
Uzbekistan	99	…	98	100
Yemen	47	14	22	36
OIC	**73**	**38**	**45**	**56**
Developing Countries	**80**	**44**	**59**	**64**
Developed Countries	**100**	**75**	**99**	**99**
World	**80**	**44**	**62**	**66**

Source: WHO, World Health Statistics 2011.

Table A.2: Low Birth Weight New-borns and Infants Exclusively Breastfed [for the first 6 months]

	Low Birth Weight Newborns (%)	Infants Exclusively Breastfed (%)		Low Birth Weight Newborns (%)	Infants Exclusively Breastfed (%)
	2000–2009	**2000–2010**		**2000–2009**	**2000–2010**
Afghanistan	...	...	**Maldives**	22	48
Albania	7	39	**Mali**	19	34
Algeria	6	7	**Mauritania**	34	19
Azerbaijan	10	12	**Morocco**	15	15
Bahrain	...	...	**Mozambique**	15	37
Bangladesh	22	43	**Niger**	27	10
Benin	15	43	**Nigeria**	12	13
Brunei Darussalam	...	...	**Oman**	9	...
Burkina Faso	16	7	**Pakistan**	32	37
Cameroon	11	21	**Qatar**	...	...
Chad	22	2	**Saudi Arabia**	...	...
Comoros	25	21	**Senegal**	19	34
Côte d'Ivoire	17	4	**Sierra Leone**	14	11
Djibouti	10	1	**Somalia**	...	5
Egypt	13	53	**Sudan**	...	34
Gabon	14	5	**Suriname**	11	2
Gambia	20	41	**Syria**	9	29
Guinea	12	48	**Tajikistan**	10	25
Guinea-Bissau	24	28	**Togo**	12	48
Guyana	19	21	**Tunisia**	5	6
Indonesia	9	32	**Turkey**	11	42
Iran	7	44	**Turkmenistan**	4	11
Iraq	15	25	**Uganda**	14	60
Jordan	13	22	**United Arab Emirates**	...	...
Kazakhstan	6	17	**Uzbekistan**	5	26
Kuwait	...	...	**Yemen**	...	12
Kyrgyzstan	5	32	**OIC**	**14**	**30**
Lebanon	6	...	**Developing Countries**	**15**	**37**
Libya	...	...	**Developed Countries**	**5**	**17**
Malaysia	11	...	**World**	**14**	**36**

Source: WHO, World Health Statistics 2011.

Table A.3: Immunization Coverage among 1-year-olds (%)

	Measles			DTP3			HepB3		Hib3
	1990	**2000**	**2009**	**1990**	**2000**	**2009**	**2000**	**2009**	**2009**
Afghanistan	20	35	76	25	31	83	...	83	83
Albania	88	95	97	94	97	98	96	98	98
Algeria	83	80	88	89	86	93	...	91	93
Azerbaijan	...	67	67	...	75	73	...	46	...
Bahrain	87	98	99	94	97	98	97	98	97
Bangladesh	65	72	89	69	81	94	...	95	...
Benin	79	70	72	74	78	83	...	83	83
Brunei Darussalam	99	99	99	93	99	99	99	99	99
Burkina Faso	79	51	75	66	57	82	...	81	81
Cameroon	56	49	74	48	62	80	...	80	80
Chad	32	28	23	20	26	23	...	22	22
Comoros	87	70	79	94	70	83	...	83	38
Côte d'Ivoire	56	71	67	54	67	81	...	81	81
Djibouti	85	50	73	85	46	89	...	89	89
Egypt	86	98	95	87	98	97	98	97	...
Gabon	76	55	55	78	45	45	...	45	...
Gambia	86	92	96	92	89	98	88	98	98
Guinea	35	42	51	17	47	57	...	58	58
Guinea-Bissau	53	71	76	61	49	68	...	68	68
Guyana	73	86	97	83	88	98	...	98	98
Indonesia	58	74	82	60	71	82	65	82	...
Iran	85	99	99	91	99	99	99	99	...
Iraq	75	87	69	83	78	65	67	58	...
Jordan	87	94	95	92	91	98	93	98	98
Kazakhstan	...	99	99	...	97	98	99	99	97
Kuwait	66	99	97	71	98	98	95	94	98
Kyrgyzstan	...	98	99	...	99	95	44	96	...
Lebanon	61	71	53	82	83	74	83	74	74
Libya	89	93	98	84	94	98	92	98	98
Malaysia	70	88	95	90	95	95	94	95	95
Maldives	96	99	98	94	98	98	96	98	...
Mali	43	55	71	42	43	74	...	75	74
Mauritania	38	62	59	33	53	64	...	64	64
Morocco	79	93	98	81	95	99	43	98	99
Mozambique	59	71	77	46	70	76	...	72	74
Niger	25	37	73	22	34	70	...	70	70
Nigeria	54	33	41	56	29	42	...	41	...
Oman	98	99	97	98	99	98	99	98	98
Pakistan	50	59	80	54	62	85	...	85	85
Qatar	79	91	99	82	80	99	89	99	99
Saudi Arabia	88	94	98	92	95	98	93	98	98
Senegal	51	48	79	51	52	86	...	86	86
Sierra Leone	...	37	71	...	44	75	...	75	75
Somalia	30	35	24	19	33	31	...	...	...
Sudan	57	58	82	62	62	84	...	76	76
Suriname	65	84	88	83	71	87	...	87	87
Syria	87	83	81	91	84	80	76	77	80
Tajikistan	...	88	89	...	83	93	...	93	93
Togo	73	58	84	77	64	89	...	89	89
Tunisia	93	95	98	93	97	99	94	99	...
Turkey	78	87	97	84	85	96	71	92	96
Turkmenistan	...	97	99	...	97	96	...	97	...
Uganda	52	57	68	45	52	64	...	64	64
United Arab Emirates	80	94	92	85	94	92	92	92	92
Uzbekistan	...	99	95	...	99	98	...	98	98
Yemen	69	62	58	84	61	66	12	66	67
OIC	**63**	**66**	**76**	**66**	**67**	**78**	**74**	**77**	**82**
Developing Countries	**72**	**70**	**81**	**75**	**72**	**81**	**67**	**70**	**83**
Developed Countries	**83**	**91**	**93**	**87**	**92**	**95**	**82**	**85**	**93**
World	**73**	**72**	**82**	**76**	**74**	**82**	**69**	**71**	**85**

Source: WHO, World Health Statistics 2011.

Table A.4: Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR) and Under-Five Mortality Rate (U5MR)

	IMR per 1000 live births			MMR per 100000 live births			U5MR per 1000 live births		
	1990	**2000**	**2010**	**1990**	**2000**	**2008**	**1990**	**2000**	**2010**
Afghanistan	140	104	103	1700	1800	1400	209	151	149
Albania	36	25	16	48	41	31	41	29	18
Algeria	55	41	31	250	140	120	68	49	36
Azerbaijan	74	56	39	64	59	38	93	67	46
Bahrain	15	11	9	25	23	19	17	12	10
Bangladesh	99	63	38	870	500	340	143	86	48
Benin	107	89	73	790	560	410	178	143	115
Brunei Darussalam	9	7	6	28	24	21	12	9	7
Burkina Faso	103	98	93	770	650	560	205	191	176
Cameroon	85	91	84	680	660	600	137	148	136
Chad	113	105	99	1300	1300	1200	207	190	173
Comoros	88	75	63	530	390	340	125	104	86
Côte d'Ivoire	105	100	86	690	580	470	151	148	123
Djibouti	95	83	73	370	330	300	123	106	91
Egypt	68	37	19	220	110	82	94	47	22
Gabon	68	63	54	260	260	260	93	88	74
Gambia	78	66	57	750	560	400	165	128	98
Guinea	135	106	81	1200	920	680	229	175	130
Guinea-Bissau	125	107	92	1200	1100	1000	210	177	150
Guyana	50	37	25	310	120	270	66	47	30
Indonesia	56	38	27	620	350	240	85	54	35
Iran	50	35	22	150	59	30	65	44	26
Iraq	37	34	31	93	84	75	46	43	39
Jordan	32	25	18	110	79	59	38	29	22
Kazakhstan	48	38	29	78	59	45	57	44	33
Kuwait	13	10	10	10	8	9	15	13	11
Kyrgyzstan	59	44	33	77	81	81	72	52	38
Lebanon	31	25	19	52	36	26	38	29	22
Libya	33	22	13	100	74	64	45	27	17
Malaysia	15	9	5	56	39	31	18	11	6
Maldives	74	37	14	510	110	37	102	47	15
Mali	131	113	99	1200	980	830	255	213	178
Mauritania	80	77	75	780	640	550	124	116	111
Morocco	67	46	30	270	160	110	86	55	36
Mozambique	146	119	92	1000	780	550	219	177	135
Niger	132	98	73	1400	1100	820	311	218	143
Nigeria	126	112	88	1100	980	840	213	186	143
Oman	36	17	8	49	27	20	47	22	9
Pakistan	96	80	70	490	340	260	124	101	87
Qatar	17	11	7	15	11	8	21	13	8
Saudi Arabia	36	22	15	41	28	24	45	26	18
Senegal	70	63	50	750	560	410	139	119	75
Sierra Leone	162	142	114	1300	1300	970	276	233	174
Somalia	108	108	108	1100	1200	1200	180	180	180
Sudan	78	72	66	830	770	750	125	114	103
Suriname	44	35	27	84	110	100	52	40	31
Syria	31	20	14	120	58	46	38	23	16
Tajikistan	91	75	52	120	120	64	116	93	63
Togo	87	76	66	650	450	350	147	124	103
Tunisia	39	24	14	130	83	60	49	28	16
Turkey	66	34	14	68	39	23	80	43	18
Turkmenistan	78	61	47	91	95	77	98	74	56
Uganda	106	88	63	670	640	430	175	144	99
United Arab Emirates	18	11	6	28	15	10	22	12	7
Uzbekistan	63	53	44	53	29	30	77	63	52
Yemen	90	72	57	540	340	210	128	100	77
OIC	**84**	**69**	**56**	**609**	**518**	**427**	**126**	**103**	**82**
Developing Countries	**66**	**55**	**44**	**432**	**371**	**289**	**95**	**79**	**62**
Developed Countries	**8**	**5**	**5**	**12**	**11**	**14**	**10**	**7**	**5**
World	**61**	**51**	**41**	**397**	**341**	**266**	**88**	**73**	**57**

Source: WHO, World Health Statistics 2011 and Global Health Observatory Data Repository, Oct. 2011.

Table A.5: Distribution of Causes of Death among Children Aged <5 Years (%)

	HIV/AIDS	Diarrhoea	Measles	Malaria	Pneumonia	Prematurity	Birth asphyxia	Neonatal sepsis	Congenital anomalies	Other diseases	Injuries
Afghanistan	0	26	1	0	24	6	7	6	3	23	4
Albania	0	2	0	0	18	15	7	1	22	26	10
Algeria	0	15	1	0	20	19	11	5	7	19	3
Azerbaijan	0	13	0	0	24	18	8	4	6	23	3
Bahrain	0	1	0	0	3	15	10	1	33	30	6
Bangladesh	0	13	1	1	16	15	16	15	3	17	3
Benin	1	14	0	22	20	10	6	2	3	19	2
Brunei	0	0	0	0	4	6	11	2	33	36	7
Burkina Faso	1	16	0	28	18	7	5	3	2	18	3
Cameroon	5	16	1	19	18	8	6	4	2	18	2
Chad	3	20	0	24	18	6	7	3	1	18	1
Comoros	0	17	0	13	18	14	8	5	2	19	2
Côte d'Ivoire	4	12	0	26	15	11	8	5	3	13	1
Djibouti	5	19	0	0	19	11	9	6	7	21	2
Egypt	0	6	0	0	11	30	5	1	18	23	5
Gabon	10	10	1	12	17	15	8	4	4	16	1
Gambia	3	14	1	22	16	11	8	5	3	15	3
Guinea	1	13	3	28	16	8	8	6	2	14	1
Guinea-Bissau	2	16	2	25	15	8	6	5	2	16	2
Guyana	4	9	0	1	6	20	11	11	10	22	7
Indonesia	0	15	0	1	22	20	11	5	6	19	2
Iran	0	11	0	0	17	25	8	4	14	17	4
Iraq	0	13	0	0	21	21	11	4	7	17	5
Jordan	0	5	0	0	11	32	6	1	19	20	5
Kazakhstan	0	2	0	0	18	1	1	0	15	56	7
Kuwait	0	1	0	0	3	28	2	2	47	13	4
Kyrgyzstan	0	14	0	0	22	18	12	4	7	20	3
Lebanon	1	2	0	0	8	30	6	1	23	20	8
Libya	0	3	0	0	9	31	6	1	22	21	7
Malaysia	1	1	0	0	6	22	8	1	27	24	9
Maldives	0	7	0	3	14	27	12	5	9	21	3
Mali	1	22	0	16	21	8	7	4	2	19	2
Mauritania	0	19	0	6	23	12	9	6	3	20	3
Morocco	0	16	0	0	19	17	12	7	8	17	3
Mozambique	10	11	0	23	16	9	7	5	2	14	2
Niger	1	19	0	21	20	7	6	3	1	20	2
Nigeria	4	15	0	26	14	8	8	6	2	15	1
Oman	0	2	0	0	7	28	6	1	25	22	8
Pakistan	0	20	0	0	20	13	12	10	5	17	2
Qatar	0	2	0	0	6	26	5	1	27	24	11
Saudi Arabia	0	5	0	0	10	31	6	1	19	20	9
Senegal	1	14	3	19	17	11	8	5	3	16	2
Sierra Leone	1	14	5	29	15	8	6	4	1	14	2
Somalia	0	23	6	3	20	8	8	5	3	22	3
Sudan	1	19	0	5	22	16	6	2	3	22	3
Suriname	2	4	0	0	4	27	12	6	12	28	6
Syria	0	4	0	0	11	27	6	1	22	22	7
Tajikistan	0	18	0	0	20	16	10	6	4	23	3
Togo	4	15	0	19	18	11	8	5	3	15	2
Tunisia	0	5	0	0	10	30	6	1	20	21	6
Turkey	0	2	0	0	15	28	10	2	18	20	6
Turkmenistan	0	13	0	0	23	17	10	6	6	22	3
Uganda	6	18	2	16	15	8	7	5	2	18	3
United Arab Emirates	0	1	0	0	5	31	6	1	29	20	8
Uzbekistan	0	13	0	0	22	20	9	4	7	21	3
Yemen	0	21	1	1	19	15	11	5	5	20	3
OIC	**2**	**16**	**1**	**13**	**18**	**11**	**9**	**6**	**4**	**18**	**2**
Developing Countries	**2**	**14**	**1**	**7**	**17**	**13**	**10**	**6**	**5**	**22**	**4**
Developed Countries	**0**	**0**	**0**	**0**	**2**	**20**	**7**	**3**	**23**	**35**	**9**
World	**2**	**14**	**1**	**8**	**17**	**12**	**9**	**6**	**5**	**21**	**3**

Source: WHO, World Health Statistics 2011.

Table A.6: Children Aged <5 years

	Stunted (%)		Underweight (%)		Overweight (%)	
	1990-1999	2000- 2009	1990–1999	2000–2009	1990-1999	2000–2009
Afghanistan	53	59	45	33	7	5
Albania	20	27	7	7	10	25
Algeria	23	16	11	4	13	13
Azerbaijan	...	27	9	8	...	14
Bahrain	...	...	8	...	...	...
Bangladesh	62	43	52	41	1	1
Benin	35	45	27	20	3	11
Brunei Darussalam	...	...	...	...	...	...
Burkina Faso	46	45	34	37	2	8
Cameroon	37	36	18	17	8	10
Chad	45	45	34	34	3	4
Comoros	41	47	22	25	6	22
Côte d'Ivoire	32	40	18	17	5	9
Djibouti	32	33	16	30	...	13
Egypt	35	31	9	7	15	21
Gabon	...	26	...	9	...	6
Gambia	36	28	23	16	...	3
Guinea	34	40	21	21	4	...
Guinea-Bissau	...	48	...	17	...	17
Guyana	14	18	10	11	2	7
Indonesia	...	40	23	20	...	11
Iran	20	...	10	...	7	...
Iraq	...	28	10	7	...	15
Jordan	11	8	4	2	4	7
Kazakhstan	14	18	4	5	5	15
Kuwait	...	4	2	2	...	9
Kyrgyzstan	33	18	8	3	9	11
Lebanon	17	17	4	4	...	17
Libya	21	21	4	6	...	22
Malaysia	21	...	17	...	6	...
Maldives	47	32	42	26	7	4
Mali	36	39	24	28	2	5
Mauritania	50	24	20	17	...	...
Morocco	30	23	8	10	11	13
Mozambique	45	47	28	21	6	6
Niger	47	55	45	40	1	4
Nigeria	40	41	27	27	...	11
Oman	13	...	11	...	2	...
Pakistan	43	42	34	31	2	5
Qatar	12	...	5	...	10	...
Saudi Arabia	21	9	14	5	1	6
Senegal	34	20	20	15	4	2
Sierra Leone	...	37	25	21	...	10
Somalia	...	42	...	33	...	5
Sudan	40	38	32	32	2	5
Suriname	15	11	11	8	3	4
Syria	27	29	11	10	...	19
Tajikistan	42	33	...	15	...	7
Togo	30	27	23	21	3	...
Tunisia	31	9	3	3	25	9
Turkey	19	16	7	4	4	9
Turkmenistan	...	28	...	11	...	...
Uganda	45	39	22	16	5	5
United Arab Emirates	...	...	...	...	...	...
Uzbekistan	39	20	15	4	19	13
Yemen	59	58	48	43	4	5
OIC	**41**	**37**	**26**	**23**	**5**	**9**
Developing Countries	**37**	**34**	**24**	**23**	**5**	**6**
Developed Countries	**3**	**3**	**1**	**1**	**5**	**7**
World	**36**	**32**	**24**	**22**	**5**	**6**

Source: WHO, World Health Statistics 2011.

Table A.7: Adolescent Fertility Rate (AFR) and Life Expectancy at Birth (Years)

	AFR per 1000 girls aged 15-19	Life Expectancy at Birth (Years)								
		Male			Female			Both sexes		
	2000–2008	1990	2000	2009	1990	2000	2009	1990	2000	2009
Afghanistan	151	42	44	47	46	48	50	44	46	48
Albania	17	65	68	72	71	73	75	68	70	73
Algeria	4	66	68	71	69	71	74	67	69	72
Azerbaijan	42	59	62	66	66	67	70	63	64	68
Bahrain	14	73	72	73	74	74	76	74	73	74
Bangladesh	133	54	61	64	53	61	66	54	61	65
Benin	114	53	52	54	58	58	60	55	55	57
Brunei Darussalam	31	71	75	76	76	79	77	73	77	77
Burkina Faso	131	49	48	49	53	53	56	51	51	52
Cameroon	136	54	51	51	55	52	51	55	51	51
Chad	146	51	48	47	53	50	48	52	49	48
Comoros	95	56	56	58	59	61	62	57	58	60
Côte d'Ivoire	111	50	47	49	56	50	52	52	49	50
Djibouti	27	56	56	58	60	60	62	58	58	60
Egypt	50	60	66	69	65	71	73	62	68	71
Gabon	144	59	58	60	64	63	64	62	60	62
Gambia	104	53	55	58	55	58	61	54	57	60
Guinea	153	48	48	49	52	53	55	50	50	52
Guinea-Bissau		42	44	47	48	49	51	45	47	49
Guyana	90	58	61	64	67	71	70	63	66	67
Indonesia	52	63	66	66	68	70	71	65	68	68
Iran	35	60	65	70	66	70	75	63	67	73
Iraq	68	64	65	62	69	70	70	67	68	66
Jordan	28	67	68	69	71	73	74	69	70	71
Kazakhstan	31	61	58	59	70	68	70	65	63	64
Kuwait	13	72	75	78	75	76	79	73	76	78
Kyrgyzstan	29	61	62	63	68	69	70	65	65	66
Lebanon	18	64	68	71	71	75	77	68	71	74
Libya	14	67	69	70	72	74	75	69	71	72
Malaysia	12	68	69	71	73	74	76	71	72	73
Maldives	14	58	67	74	55	67	76	57	67	75
Mali	190	47	48	50	50	52	56	49	50	53
Mauritania	61	56	56	57	58	59	60	57	58	58
Morocco	18	63	67	71	68	72	75	65	69	73
Mozambique	185	43	46	47	52	50	51	48	48	49
Niger	199	43	51	57	45	51	58	44	51	57
Nigeria	123	47	47	53	49	48	54	48	48	54
Oman	8	66	69	72	70	75	77	67	71	74
Pakistan	20	58	61	62	60	62	64	59	61	63
Qatar	16	75	77	78	75	77	79	75	77	78
Saudi Arabia	7	66	69	69	71	75	75	68	71	72
Senegal	96	54	58	60	59	62	63	57	60	62
Sierra Leone	146	38	37	48	43	45	50	40	41	49
Somalia	123	46	49	51	51	51	51	48	50	51
Sudan		58	58	59	57	58	59	57	58	59
Suriname	66	64	66	68	69	72	75	66	69	72
Syria	75	64	69	71	70	74	76	67	71	74
Tajikistan	27	60	62	66	65	65	69	63	64	68
Togo		52	54	57	57	59	61	54	56	59
Tunisia	6	69	71	73	72	75	77	70	73	75
Turkey	56	62	67	72	67	73	77	65	70	75
Turkmenistan	21	58	59	60	65	65	67	62	62	63
Uganda	159	45	43	48	51	51	57	48	47	52
United Arab Emirates	22	71	75	77	76	79	79	73	77	78
Uzbekistan	26	63	63	66	69	68	71	66	66	69
Yemen	80	57	59	63	58	62	67	58	61	65
OIC	**73**	**58**	**60**	**62**	**62**	**64**	**66**	**60**	**62**	**64**
Developing Countries	**51**	**60**	**62**	**64**	**66**	**67**	**69**	**63**	**64**	**67**
Developed Countries	**21**	**72**	**75**	**78**	**79**	**81**	**83**	**76**	**78**	**80**
World	**48**	**62**	**64**	**66**	**68**	**69**	**71**	**65**	**67**	**69**

Source: WHO, World Health Statistics 2011.

Table A.8: Adult Mortality Rate (probability of dying between 15 and 60 years per 1000 population)

	1990	2000	2009
Afghanistan	434	431	399
Albania	133	130	107
Algeria	169	153	120
Azerbaijan	225	208	176
Bahrain	106	105	112
Bangladesh	344	254	234
Benin	235	321	319
Brunei Darussalam	133	101	93
Burkina Faso	332	368	353
Cameroon	321	397	413
Chad	294	380	397
Comoros	289	284	257
Côte d'Ivoire	380	492	495
Djibouti	285	302	298
Egypt	210	174	174
Gabon	243	292	291
Gambia	328	299	270
Guinea	289	374	409
Guinea-Bissau	427	415	399
Guyana	304	281	257
Indonesia	168	166	190
Iran	252	194	118
Iraq	202	189	222
Jordan	175	163	155
Kazakhstan	235	308	310
Kuwait	104	78	60
Kyrgyzstan	224	250	245
Lebanon	202	157	124
Libya	175	158	142
Malaysia	170	157	137
Maldives	312	173	84
Mali	294	323	286
Mauritania	292	290	289
Morocco	164	135	107
Mozambique	359	432	493
Niger	325	271	228
Nigeria	386	430	370
Oman	191	157	131
Pakistan	234	218	208
Qatar	90	83	65
Saudi Arabia	187	156	154
Senegal	265	244	241
Sierra Leone	477	517	387
Somalia	435	383	366
Sudan	289	294	283
Suriname	221	204	172
Syria	221	162	127
Tajikistan	198	199	171
Togo	321	328	307
Tunisia	124	117	100
Turkey	185	150	104
Turkmenistan	247	278	298
Uganda	449	538	449
United Arab Emirates	136	91	79
Uzbekistan	198	202	179
Yemen	285	253	209
OIC	**250**	**241**	**225**
Developing Countries	**228**	**219**	**195**
Developed Countries	**115**	**96**	**83**
World	**208**	**199**	**179**

Source: WHO, World Health Statistics 2011.

Table A.9: Prevalence of Tobacco Use among Adults and Deaths Caused by Tobacco-use Related Diseases

	Tobacco Users (%), 2006			Deaths (Thousands), 2008		
	Male	Female	Both Sexes	Cancer	Cardiovascular diseases	Respiratory diseases
Afghanistan	...	...	...	12	65	8
Albania	43	4	23	5	16	1
Algeria	29	0	15	21	49	12
Azerbaijan	...	1	...	10	43	3
Bahrain	22	3	14	0	1	0
Bangladesh	47	4	26	104	316	69
Benin	18	2	10	4	14	4
Brunei Darussalam	...	...	...	0	0	0
Burkina Faso	21	10	15	6	17	5
Cameroon	12	2	7	9	39	11
Chad	15	2	9	4	18	5
Comoros	27	12	20	0	1	0
Côte d'Ivoire	14	2	9	8	47	13
Djibouti	...	...	...	0	2	0
Egypt	28	1	14	51	178	13
Gabon	...	...	...	1	3	1
Gambia	29	3	16	1	2	1
Guinea	...	...	...	5	19	5
Guinea-Bissau	...	...	...	1	3	1
Guyana	...	...	...	1	2	0
Indonesia	62	5	33	215	513	119
Iran	30	5	18	47	171	17
Iraq	30	3	16	15	52	5
Jordan	61	10	36	3	12	1
Kazakhstan	43	9	25	22	95	5
Kuwait	37	4	25	1	2	0
Kyrgyzstan	46	2	24	5	22	3
Lebanon	31	7	18	5	12	1
Libya	...	...	...	4	13	1
Malaysia	53	3	28	20	42	9
Maldives	45	12	28	0	0	0
Mali	18	3	10	6	13	4
Mauritania	34	5	19	2	4	1
Morocco	30	0	15	20	69	8
Mozambique	21	3	11	11	43	12
Niger	...	...	...	5	12	3
Nigeria	12	1	6	74	240	62
Oman	21	1	12	1	5	0
Pakistan	35	7	21	102	363	76
Qatar	...	...	...	0	0	0
Saudi Arabia	23	4	15	9	43	3
Senegal	19	1	10	5	12	3
Sierra Leone	...	...	...	2	6	2
Somalia	...	...	...	4	18	3
Sudan	28	3	15	17	98	14
Suriname	17	3	10	0	1	0
Syria	43	...	...	6	34	3
Tajikistan	...	...	...	3	16	1
Togo	...	...	...	3	10	2
Tunisia	58	7	32	8	21	2
Turkey	51	20	35	67	179	32
Turkmenistan	...	...	...	3	22	1
Uganda	19	4	11	17	44	12
United Arab Emirates	25	3	19	1	3	0
Uzbekistan	23	3	13	13	100	5
Yemen	29	6	17	8	36	4
OIC	**37**	**5**	**21**	**969**	**3162**	**567**
Developing Countries	**43**	**7**	**25**	**5348**	**14369**	**3728**
Developed Countries	**33**	**20**	**27**	**2236**	**2957**	**506**
World	**41**	**9**	**26**	**7583**	**17327**	**4234**

Source: WHO, World Health Statistics 2011 and WHO, Global Burden of Disease database 2011.

Table A.10: Population using Improved Drinking-water Source and Sanitation Facilities

	Water (%)						Sanitation (%)					
	Urban		Rural		Total		Urban		Rural		Total	
	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008
Afghanistan	...	78	...	39	...	48	...	60	...	30	...	37
Albania	100	96	...	98	...	97	...	98	...	98	...	98
Algeria	100	85	88	79	94	83	99	98	77	88	88	95
Azerbaijan	88	88	49	71	70	80	...	51	...	39	...	45
Bahrain	100	100	...	...	...	...	100	100	...	...	...	...
Bangladesh	88	85	76	78	78	80	59	56	34	52	39	53
Benin	72	84	47	69	56	75	14	24	1	4	5	12
Brunei	...	...	...	...	...	...	...	...	...	...	...	...
Burkina Faso	73	95	36	72	41	76	28	33	2	6	6	11
Cameroon	77	92	31	51	50	74	65	56	35	35	47	47
Chad	48	67	36	44	38	50	20	23	2	4	6	9
Comoros	98	91	83	97	87	95	34	50	11	30	17	36
Côte d'Ivoire	90	93	67	68	76	80	38	36	8	11	20	23
Djibouti	80	98	69	52	77	92	73	63	45	10	66	56
Egypt	96	100	86	98	90	99	91	97	57	92	72	94
Gabon	...	95	...	41	...	87	...	33	...	30	...	33
Gambia	85	96	67	86	74	92	...	68	...	65	...	67
Guinea	87	89	38	61	52	71	18	34	6	11	9	19
Guinea-Bissau	...	83	37	51	...	61	...	49	...	9	...	21
Guyana	...	98	...	93	...	94	...	85	...	80	...	81
Indonesia	92	89	62	71	71	80	58	67	22	36	33	52
Iran	98	98	83	...	91	...	86	...	78	...	83	...
Iraq	97	91	44	55	81	79	...	76	...	66	...	73
Jordan	99	98	91	91	97	96	98	98	...	97	...	98
Kazakhstan	99	99	92	90	96	95	96	97	97	98	96	97
Kuwait	99	99	99	99	99	99	100	100	100	100	100	100
Kyrgyzstan	98	99	...	85	...	90	94	94	...	93	...	93
Lebanon	100	100	100	100	100	100	100	100	...	...	...	...
Libya	54	...	55	...	54	...	97	97	96	96	97	97
Malaysia	94	100	82	99	88	100	88	96	81	95	84	96
Maldives	100	99	87	86	90	91	100	100	58	96	69	98
Mali	54	81	22	44	29	56	36	45	23	32	26	36
Mauritania	36	52	26	47	30	49	29	50	8	9	16	26
Morocco	94	98	55	60	74	81	81	83	27	52	53	69
Mozambique	73	77	26	29	36	47	36	38	4	4	11	17
Niger	57	96	31	39	35	48	19	34	2	4	5	9
Nigeria	79	75	30	42	47	58	39	36	36	28	37	32
Oman	84	92	72	77	80	88	97	97	61	...	85	...
Pakistan	96	95	81	87	86	90	73	72	8	29	28	45
Qatar	100	100	100	100	100	100	100	100	100	100	100	100
Saudi Arabia	97	97	63	...	89	...	100	100	...	...	...	...
Senegal	88	92	43	52	61	69	62	69	22	38	38	51
Sierra Leone	...	86	...	26	...	49	...	24	...	6	...	13
Somalia	...	67	...	9	...	30	...	52	...	6	...	23
Sudan	85	64	58	52	65	57	63	55	23	18	34	34
Suriname	99	97	...	81	...	93	90	90	...	66	...	84
Syria	96	94	75	84	85	89	94	96	72	95	83	96
Tajikistan	...	94	...	61	...	70	93	95	...	94	...	94
Togo	79	87	36	41	49	60	25	24	8	3	13	12
Tunisia	95	99	62	84	81	94	95	96	44	64	74	85
Turkey	94	100	73	96	85	99	96	97	66	75	84	90
Turkmenistan	97	97	...	...	...	...	99	99	97	97	98	98
Uganda	78	91	39	64	43	67	35	38	40	49	39	48
United Arab Emirates	100	100	100	100	100	100	98	98	95	95	97	97
Uzbekistan	97	98	85	81	90	87	95	100	76	100	84	100
Yemen	...	72	...	57	...	62	64	94	6	33	18	52
OIC	**91**	**90**	**63**	**69**	**73**	**78**	**71**	**71**	**33**	**44**	**46**	**55**
Developing Countries	**93**	**95**	**60**	**76**	**72**	**85**	**67**	**70**	**29**	**42**	**43**	**54**
Developed Countries	**100**	**100**	**98**	**98**	**100**	**100**	**94**	**95**	**91**	**91**	**93**	**94**
World	**95**	**96**	**63**	**78**	**76**	**87**	**68**	**70**	**30**	**42**	**43**	**54**

Source: WHO, World Health Statistics 2011.

Table A.11: Total Health Expenditures

	% of GDP		Public Share (%)		Private Share (%)		Share of Public Health Expenditures in Budget	
	2000	2009	2000	2009	2000	2009	2000	2009
Afghanistan	6	7	3	22	97	79	7	4
Albania	6	7	36	41	64	59	7	8
Algeria	4	6	73	86	27	14	9	11
Azerbaijan	5	6	19	24	82	76	4	4
Bahrain	4	5	68	69	33	31	10	11
Bangladesh	3	3	39	32	61	68	8	8
Benin	4	4	44	55	56	45	10	9
Brunei Darussalam	3	3	87	88	14	12	6	7
Burkina Faso	5	6	40	62	60	38	9	16
Cameroon	5	6	22	28	78	72	7	8
Chad	6	7	43	55	58	45	13	14
Comoros	3	3	54	62	46	38	10	8
Côte d'Ivoire	5	5	26	19	74	81	7	4
Djibouti	6	7	68	77	32	23	12	14
Egypt	5	5	41	41	60	59	7	6
Gabon	3	4	42	48	58	52	6	8
Gambia	6	6	34	50	66	50	9	12
Guinea	5	6	12	15	88	85	4	4
Guinea-Bissau	6	6	16	26	84	75	2	4
Guyana	6	8	85	90	16	10	10	15
Indonesia	2	2	37	52	63	48	5	7
Iran	5	6	42	39	58	61	8	9
Iraq	1	4	29	72	71	28	1	3
Jordan	10	9	48	65	52	35	11	16
Kazakhstan	4	5	51	59	49	41	9	11
Kuwait	3	3	74	84	26	16	6	6
Kyrgyzstan	5	7	44	51	56	49	12	12
Lebanon	11	8	30	49	70	51	8	12
Libya	3	4	57	66	43	34	6	6
Malaysia	3	5	52	45	48	55	6	7
Maldives	9	8	47	65	53	35	11	8
Mali	6	6	33	48	67	52	10	9
Mauritania	4	3	79	63	21	37	10	5
Morocco	4	6	29	34	71	66	4	7
Mozambique	6	6	72	73	28	27	18	13
Niger	4	6	51	58	49	42	10	15
Nigeria	5	6	34	36	67	64	4	6
Oman	3	3	82	79	18	21	7	6
Pakistan	3	3	21	33	79	67	2	4
Qatar	2	3	69	79	31	21	5	7
Saudi Arabia	4	5	72	67	28	33	9	8
Senegal	4	6	37	56	63	44	9	12
Sierra Leone	15	13	7	7	93	93	4	4
Sudan	3	7	28	27	73	73	8	10
Suriname	8	8	49	49	51	51	10	15
Syria	5	3	40	31	60	69	7	5
Tajikistan	5	5	20	33	80	67	7	6
Togo	5	6	30	28	70	72	8	8
Tunisia	6	6	55	54	45	46	8	10
Turkey	5	7	63	75	37	25	10	13
Turkmenistan	4	2	80	52	20	48	14	7
Uganda	7	8	27	19	73	81	7	12
United Arab Emirates	3	3	77	69	23	31	8	9
Uzbekistan	6	5	44	47	56	53	6	10
Yemen	5	6	54	28	46	72	8	4
OIC	**4**	**5**	**53**	**56**	**47**	**44**	**8**	**9**
Developing Countries	**5**	**5**	**48**	**53**	**53**	**47**	**10**	**10**
Developed Countries	**10**	**12**	**59**	**63**	**40**	**36**	**16**	**17**
World	**9**	**10**	**58**	**61**	**42**	**38**	**15**	**15**

Source: WHO, World Health Statistics 2011.

Table A.12: Major Sources of Total Health Expenditures (%)

	Tax		Social Security		External Resources		Private Insurance		Out-of-pocket	
	2000	2009	2000	2009	2000	2009	2000	2009	2000	2009
Afghanistan	...	4.7	...	0.0	0.8	17.5	...	0.0	...	77.6
Albania	10.3	11.2	7.4	15.6	6.0	2.7	0.0	0.0	63.8	59.0
Algeria	35.0	29.6	26.0	26.7	0.1	0.0	0.8	0.7	25.8	13.1
Azerbaijan	13.5	8.2	0.0	0.0	4.0	0.6	0.2	0.5	63.2	69.4
Bahrain	46.0	37.4	0.3	0.9	0.0	0.0	8.3	8.2	22.3	18.1
Bangladesh	12.0	10.8	0.0	0.0	6.9	8.0	0.1	0.0	58.0	65.9
Benin	28.4	25.2	0.2	0.0	17.2	22.6	0.1	3.3	56.1	41.5
Brunei Darussalam	54.2	44.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Burkina Faso	35.6	49.6	0.3	0.0	13.9	21.9	0.6	1.3	57.0	35.6
Cameroon	12.5	20.4	0.7	1.3	4.1	8.1	0.0	0.0	73.6	68.4
Chad	81.7	56.8	0.0	0.0	24.9	6.9	0.2	0.0	55.3	43.3
Comoros	39.8	36.5	0.0	0.0	26.4	15.3	0.0	0.0	45.9	38.4
Côte d'Ivoire	22.8	7.7	0.0	0.0	5.4	10.6	1.4	1.0	72.3	80.2
Djibouti	53.1	35.0	7.7	7.5	32.6	30.2	0.5	0.3	31.7	22.8
Egypt	15.0	13.3	9.8	8.9	1.0	1.5	0.2	1.0	58.0	57.5
Gabon	36.0	43.4	2.4	11.9	2.6	1.7	0.0	0.0	58.0	52.1
Gambia	23.8	19.2	0.0	0.0	22.2	26.3	1.5	1.5	35.7	24.2
Guinea	7.9	7.4	0.2	0.2	9.0	15.6	0.0	0.0	87.2	84.3
Guinea-Bissau	5.2	7.7	0.9	0.7	46.5	42.0	0.0	0.0	51.5	41.7
Guyana	31.8	29.3	0.0	0.0	4.2	30.8	0.0	0.0	15.5	10.3
Indonesia	14.7	27.7	2.3	7.1	0.0	1.8	4.1	1.8	46.2	35.3
Iran	27.1	19.5	24.0	26.4	0.0	0.0	2.1	2.0	56.2	58.9
Iraq	...	8.2	...	0.0	26.5	3.1	...	0.0	...	27.8
Jordan	26.9	28.4	4.6	13.9	4.4	1.7	2.7	4.7	38.7	29.6
Kazakhstan	26.5	29.7	0.0	0.0	7.4	0.0	0.1	0.0	48.5	40.3
Kuwait	45.4	34.8	0.0	0.0	0.0	0.0	1.6	1.4	24.6	14.7
Kyrgyzstan	51.2	32.4	4.4	35.7	9.9	12.1	0.0	0.0	49.7	39.9
Lebanon	12.7	24.4	16.1	27.9	2.1	1.3	12.0	7.9	55.7	40.5
Libya	37.7	17.4	0.0	0.0	0.0	1.0	0.0	0.0	42.8	33.9
Malaysia	19.7	21.3	0.3	0.4	0.6	0.0	5.7	8.0	35.9	40.5
Maldives	23.0	27.7	0.0	0.0	2.2	1.2	0.0	1.6	39.3	25.3
Mali	25.0	28.7	0.0	0.0	7.8	25.6	0.1	0.3	66.5	51.8
Mauritania	69.8	30.0	0.0	0.0	17.2	25.6	0.0	0.0	21.1	37.4
Morocco	17.5	22.6	0.0	8.2	0.5	0.0	16.5	9.0	54.1	56.6
Mozambique	35.8	27.5	0.2	0.0	26.4	72.0	0.3	0.4	12.7	11.7
Niger	55.7	40.6	1.4	0.7	38.0	32.6	4.9	1.4	43.2	40.8
Nigeria	7.6	6.4	0.0	0.0	16.2	4.9	3.4	2.0	61.6	60.9
Oman	49.3	37.6	0.0	0.0	0.0	0.0	3.9	5.1	11.7	13.5
Pakistan	6.4	14.6	1.2	1.2	0.8	3.7	0.2	0.0	63.3	56.8
Qatar	42.8	65.8	0.0	0.0	0.0	0.0	0.0	0.0	26.4	16.2
Saudi Arabia	55.6	42.6	0.0	0.0	0.0	0.0	3.0	10.6	18.9	17.1
Senegal	24.8	28.7	3.2	2.3	17.4	14.0	4.5	7.9	57.9	34.9
Sierra Leone	5.5	5.6	0.0	0.0	6.6	20.4	0.6	0.9	88.0	83.1
Sudan	14.6	19.1	2.2	3.2	4.4	3.2	1.5	0.7	66.6	69.8
Suriname	5.6	7.8	19.9	21.2	10.9	3.3	0.4	8.1	22.5	12.2
Syria	16.3	18.1	0.0	0.0	0.1	1.0	0.0	0.0	59.6	69.0
Tajikistan	14.3	11.8	0.0	0.0	2.3	11.7	0.0	0.0	78.8	65.1
Togo	24.1	18.5	3.7	3.5	6.6	17.4	3.8	3.1	60.7	60.5
Tunisia	19.0	21.9	15.9	26.7	0.9	1.2	8.1	5.2	36.2	40.0
Turkey	23.5	28.1	34.9	45.2	0.1	0.0	4.4	1.8	27.7	16.0
Turkmenistan	42.8		5.2		1.4	0.6	0.0		20.4	
Uganda	15.9	15.8	0.0	0.0	28.3	20.9	0.1	0.0	41.5	53.0
United Arab Emirates	24.8	28.2	0.0	0.0	0.0	0.0	4.7	7.4	16.2	20.3
Uzbekistan	19.7	31.6	0.0	0.0	6.2	1.8	0.0	0.0	54.2	51.5
Yemen	24.9	11.2	0.0	0.0	8.0	5.3	1.0	0.9	43.7	71.0
OIC	**26.1**	**25.3**	**11.4**	**15.3**	**1.9**	**1.9**	**3.4**	**3.2**	**39.5**	**36.3**
Developing Countries	**26.9**	**26.8**	**18.5**	**21.7**	**1**	**1**	**7.5**	**7.3**	**42.5**	**35.2**
Developed Countries	**25.5**	**27.8**	**28.8**	**26.9**	**0**	**0**	**20.2**	**20.4**	**15.1**	**13.5**
World	**25.7**	**27.6**	**27.6**	**26**	**0.1**	**0.2**	**18.7**	**18.1**	**18.3**	**17.3**

Source: WHO, World Health Statistics 2011.

Table A.13: Health Workforce and Hospital Beds

	Physicians per 10,000 population	Nurses and Midwives per 10,000 population	Hospital beds per 10,000 population
	2000-2010	**2000-2010**	**2000–2009**
Afghanistan	2	5	4
Albania	12	40	29
Algeria	12	20	17
Azerbaijan	38	84	79
Bahrain	14	37	19
Bangladesh	3	3	4
Benin	1	8	5
Brunei Darussalam	14	49	27
Burkina Faso	1	7	9
Cameroon	2	16	15
Chad	0	3	4
Comoros	2	7	22
Côte d'Ivoire	1	5	4
Djibouti	2	8	
Egypt	28	35	17
Gabon	3	50	13
Gambia	0	6	11
Guinea	1	0	3
Guinea-Bissau	1	6	10
Guyana	5	23	19
Indonesia	3	20	6
Iran	9	16	14
Iraq	7	14	13
Jordan	25	40	18
Kazakhstan	39	78	77
Kuwait	18	46	18
Kyrgyzstan	23	57	51
Lebanon	35	22	35
Libya	19	68	37
Malaysia	9	27	18
Maldives	16	45	26
Mali	1	3	6
Mauritania	1	7	4
Morocco	6	9	11
Mozambique	0	3	8
Niger	0	1	3
Nigeria	4	16	5
Oman	19	41	19
Pakistan	8	6	6
Qatar	28	74	14
Saudi Arabia	9	21	22
Senegal	1	4	3
Sierra Leone	0	2	4
Somalia	0	1	
Sudan	3	8	7
Suriname	5	16	31
Syria	15	19	15
Tajikistan	20	50	61
Togo	1	3	9
Tunisia	12	33	21
Turkey	15	19	24
Turkmenistan	24	45	41
Uganda	1	13	4
United Arab Emirates	19	41	19
Uzbekistan	26	108	48
Yemen	3	7	7
OIC	**8**	**17**	**12**
Developing Countries	**11**	**20**	**24**
Developed Countries	**29**	**80**	**60**
World	**13**	**28**	**29**

Source: WHO, World Health Statistics 2011.

Table A.14: World Bank HNP Sector Projects with Health Reform Orientation (1997-2007)

Year	Project Name	Country
1997	Health Sector Development Program	Niger
1998	Health Sector	Egypt
1998	National Health Development Program	Guinea-Bissau
1998	Health Sector Investment Program	Mauritania
1998	Integrated Health Sector Development	Senegal
1998	Health Sector	Tunisia
1999	Health V	Indonesia
1999	Health Sector Reform	Jordan
1999	Health Restructuring	Kazakhstan
1999	Health Sector Development Program	Mali
1999	Health Management	Morocco
1999	Health	Uzbekistan
2000	Health Sector Support	Chad
2001	Health Reform LIL	Azerbaijan
2001	Health II	Kyrgyz Republic
2002	Health Sector Development	Djibouti
2002	Health Reform Support	Yemen
2003	Health Sector Emergency Rehabilitation	Afghanistan
2003	Health Sector Reconstruction and Development	Sierra Leone
2004	Health Transition	Turkey
2005	HNP Sector Program	Bangladesh
2005	Health Sector Support	Guinea
2005	Health II	Uzbekistan
2006	Health Sector Reform	Azerbaijan
2006	Health and Social Protection	Kyrgyz Republic
2006	Institutional Strengthening & Health Sector Support Program	Niger

Source: World Bank IEG

Table A.15: Summary of latest information on achievements, priorities and challenges from OIC Member States that have ratified WHO FCTC (as of 19 July 2011.)

Country (date(s) of submission of report(s))	Tobacco legislation	Article 5 Tobacco control infra-structure[a]	Article 6 Price and tax measures	Article 8 Protection from exposure to tobacco smoke[b]	Article 11 Packaging and labelling	Article 12 Education, communication, public awareness	Article 13 Comprehensive advertising ban[c]	Implementation priorities	Implementation constraints / barriers
Albania **(3 Aug 2008)**	Law 9636 For Health Protection from Tobacco Products, 2006	Yes (FP, TCU, and NCM)	Prohibition of sales to international travellers. No change in price since 2008[2]	Complete	Rotating health warnings cover 50% of display area	Yes	Yes	Improve health communication campaigns, increase of demand reduction measures and development of a national survey	Lack of financial, technical, and staffing resources
Algeria **(22 Feb 2011)**		Yes (FP, TCU, and NCM)	Taxes and prices have increased since last report	Partial	Rotating health warnings cover at least 30% of display area	Yes	Yes	Multi-sectoral committee to monitor and evaluate the national strategy for tobacco control	Lack of expertise in certain tobacco control areas
Azerbaijan **(15 March 2011)**	Law on Tobacco and Tobacco Products, 2002	Partially developed and implemented tobacco control strategies	Prohibition of sales to international travellers. No change in price since 2008[2]	Partial	Health warnings required	No policy for educational and public awareness campaigns. * Training programs in place for various professionals (e.g., health and social workers)	No	Protection of the public's health; establishment of a national inter-sectoral committee	Lack of governmental coordination
Bahrain **(20 June 2009)**	Tobacco Act, 2009	Yes (FP, TCU, NCM)	No information on trend	Partial	Rotating pictorial health warnings (50% of display area)	Yes	Yes	Legislation to improve smoking cessation programs and improve protections against second hand smoke	Legislation implementation and enforcement challenges
Bangladesh **(2 March 2010)**	The Smoking and Using of Tobacco Products Control Act, 2005	Yes (FP, TCU, NCM)	Restricts imports of tobacco products by international travellers. No information on trends.	Partial	Rotating health warnings cover at least 30% of display area	Yes	Yes	None reported	None reported
Benin **(22 Feb 2011)**	Tobacco Control Act,	Yes (FP only)	No change in tax levels	Partial	Health warnings,	Programmes for health and social	Yes	None reported	None reported

Country (date(s) of submission of report(s))	Tobacco legislation	Article 5 Tobacco control infra-structure[a]	Article 6 Price and tax measures	Article 8 Protection from exposure to tobacco smoke[b]	Article 11 Packaging and labelling	Article 12 Education, communication, public awareness	Article 13 Comprehensive advertising ban[c]	Implementation priorities	Implementation constraints / barriers
	2010.		since 2009.		covering more than 50% of the pack, no pictures	workers exist, but there is need to target educators, administrators and decision-makers			
Brunei Darussalam **(27 Feb 2010)**	Tobacco Order, 2005	Yes (FP, TCU, NCM)	No information on trends	Complete	Rotating pictorial health warnings (50% of display area)	Yes	No	Measures regarding packaging/labelling, sales to/by minors, education/public awareness, price/tax measures & illicit trade.	Lack of resources; tobacco control considered a low-priority by non-health agencies.
Burkina Faso **(23 Feb 2009)**	Tobacco Control Act, 2010.	Yes (FP, TCU, and NCM)	No information on trend	Complete	Health warnings cover no less than 30%, no pictures	Yes	No	Development of comprehensive tobacco legislation; education, advocacy and social mobilization; cessation.	Inadequate information and awareness of different targets on smoking; weak legal framework; lack of financial resources.
Cameroon **(8 Nov 2008)**		Yes (FP, TCU, and NCM)	No change in price since 2008[2]	Partial	Health warnings exist (50% of the pack), no pictures	Yes	Yes	Smoking cessation programs, alternative crops for tobacco growers & legislation on smoking regulations	Lack of financial and technical resources.
Chad **(8 Sept 2009)**	Tobacco Control Act, 2010.	Yes (FP, TCU, and NCM)	No information on trend	Complete	Health warnings exist (no less than 30%), no pictures	Programmes foreseen in the current Action Plan	Yes[2]	Action Plan 2009-2013	Political obstacles; power of the tobacco industry
Comoros **(12 May 2009)**	Tobacco Control Act (amended 2011).	Yes (FP, TCU, and NCM)	Prohibition of sales to international travellers	Complete	Legislation requiring general warning exists, regulation not yet developed	No	Yes	FCTC compliant laws and regulations; developing a national plan; financial resources.	Political and social environment; lack of resources
Djibouti **(5 Aug 2009)**	Framework law organizing the multi-sectoral fight against smoking, 2008	Yes (FP, TCU, and NCM)	No information on trend	Complete	Rotating health warning required, including pictures (50% of the pack)	Yes	Yes	Financial and fiscal measures; monitoring resources; mass mobilization for advocacy; legislation.	Lack of financial and human resources
Egypt **(16 Aug 2010)**	Prevention of the Adverse Effects of	Yes (FP, TCU, NCM)	Restructure and increase on excise	Complete	Rotating health warning required,	Yes	Yes	None reported	None reported

Country (date(s) of submission of report(s))	Tobacco legislation	Article 5 Tobacco control infra-structure[a]	Article 6 Price and tax measures	Article 8 Protection from exposure to tobacco smoke[b]	Article 11 Packaging and labelling	Article 12 Education, communication, public awareness	Article 13 Comprehensive advertising ban[c]	Implementation priorities	Implementation constraints / barriers
	Tobacco, 1987, 2002, 2007, 2010 (amendments)		taxes[2]; earmarks exist[2]		including pictures (50% of the pack)				
Gambia **(21 Dec 2009)**	Prohibition of Smoking Act 1998; Labelling Regulation, 2010.	Yes (FP, TCU, and NCM)	No change in price since 2008[2]	Complete	Rotating health warnings required (no less than 30%), no pictures	Some programmes exist, but no details are known on their nature	Yes	Protection from tobacco smoke; packaging and labelling; research and surveillance.	Financial resources.
Guyana **(12 Jan 2011)**		Yes (FP, TCU, NCM)	No changes since previous report	Partial	Health warning exists (further requirements pending legislation implementation)	Yes	No	Legislation to increase tobacco education, cessation, and smoke-free zones	Lack of financial and staff resources; economic evaluation of tobacco control measures.
Iran (Islamic Republic of) **(21 April 2007)**	Comprehensive Act on National Control and Campaign Against Tobacco, 2005	Yes (FP, NCM)	No change in price since 2008[2]	Complete	Rotating pictorial health warnings (50% of display area)	Yes	Yes	Implementation of FCTC	None reported
Iraq **(13 June 2010)**		Yes (FP, TCU, NCM)	No information on trends	Partial	Health warnings required	Yes	No	Health warnings; restrictions on advertising; & cessation programs	Lack of legislation
Jordan **(25 Feb 2010)**	Public Health Act 2008	Yes (TCU, NCM)	Taxes & prices have increased	Partial	Rotating pictorial health warnings (no less than 30%)	Yes	Yes	None reported	Tobacco control not a priority within government
Kazakhstan **(8 May 2009)**	Preventive maintenance and restriction of tobacco smoking, 2002	Yes (FP, TCU, NCM)	245% increase in cigarette excise tax	Partial	Health warnings required (no less than 30%)	Yes	No	None reported	Pro-tobacco lobbyists; low awareness in the general public
Kuwait **(30 June 2011)**	State of Kuwait, law No. 15 on smoking control, 1995	Yes (FP, NCM)	No information on trend	Partial	Health warnings exist	Yes	Yes	Increase tobacco taxes; enforce protection of smoke exposure in public places; pictorial images on packaging; complete advertising ban in all areas	Lack of financial resources and labour force; legislation agreement on tobacco companies and raising taxes
Kyrgyz Republic **(23 Aug 2008)**	On the protection of citizens of Kyrgyz	Yes (FP, TCU, and NCM)	Organizing tax policy for systematic increase of	Partial	Warning labels cover 40% of display areas with 9 rotating	Yes	No	Creation of smoke free zones; promotion of smoking cessation education & public	Absence of Article 5.3 in national law

Country (date(s) of submission of report(s))	Tobacco legislation	Article 5 Tobacco control infra-structure[a]	Article 6 Price and tax measures	Article 8 Protection from exposure to tobacco smoke[b]	Article 11 Packaging and labelling	Article 12 Education, communication, public awareness	Article 13 Comprehensive advertising ban[c]	Implementation priorities	Implementation constraints / barriers
	Republic against harmful tobacco impact, 2006		excise tax rate. No information on trend		pictorial warnings			awareness programmes; decrease level of morbidity, disablement & mortality from tobacco use	
Lebanon **(7 Mar 2011)**	Tobacco Control Law, 1995	Yes (FP, TCU, and NCM)	No information on trend	Partial; however these are ministerial decrees where implementation mechanisms do not exist	Health warning exists covering 15% of display area	Yes	No	Institute smoking ban in indoor public places and public transport; institute comprehensive advertising ban; increase warning labels to 40-50% with pictures	Tobacco industry and government involvement; more effort from NGOs in advocacy for policy
Libyan Arab Jamahiriya **(30 June 2009)**	Law No 494, 1989; Decree of Tobacco Control, 2009	Yes (FP, TCU, and NCM)	No information on trend	Partial	Rotating health warnings cover 50% of display area	Yes	Yes	No information	No information
Malaysia **(15 Dec 2010)**	Control of Tobacco Product Regulations, 2004 & 2008 (amendment)	Yes (FP, TCU, NCM)	Taxes have increased since last report	Partial	Rotating pictorial health warnings (50% of display area)	Yes (2 more phases of anti-smoking media campaigns conducted in 2009)	Yes	§ 8, 11, 12 & 13 through current tobacco legislation; expansion of media campaigns, more focus on §5.3	No information
Maldives **(15 Feb 2007)**	*Adopted* Tobacco Control bill in 2010; needs to be implemented by 18 August 2011	Yes	No information on trend	Complete smoking ban in all indoor public workplaces and public transport	Rotating health warnings (no less than 30%)	Yes	Yes	Implementation of a national tobacco control law; cessation programmes; enforcement of existing regulations	Slow process to draft tobacco control law; few NGOs working on tobacco control; low population awareness on tobacco control regulations
Mali **(17 March 2009)**	Inter-ministerial Order No. 18171/2003	Yes (FP, TCU, and NCM)	No information on trend	Complete	Health warnings exist (no less than 30%), no pictures	Lack of educational and public awareness programmes	No	Legislation on production, marketing & consumption; drafting of national strategy; education.	Lack of resources
Mauritania **(23 Dec 2009)**	No	Yes (FP and TCU)	No information on trend	Complete	No legislation	Some programmes exist, targeted at both adults and young people, but no details are known	No	Adoption of anti-smoking law; training; creating a tobacco control unit; raising taxes.	No information

Country (date(s) of submission of report(s))	Tobacco legislation	Article 5 Tobacco control infra-structure[a]	Article 6 Price and tax measures	Article 8 Protection from exposure to tobacco smoke[b]	Article 11 Packaging and labelling	Article 12 Education, communication, public awareness	Article 13 Comprehensive advertising ban[c]	Implementation priorities	Implementation constraints / barriers
Niger **(28 Jan 2009)**	Tobacco Control Act, 2006	Yes (FP and NCM)		Partial	Health warnings exist (no less than 30%), no pictures	Yes	Yes	Smoke-free legislation; adoption of Draft National Program; public awareness; training; availability of materials and equipment	Lack of National Program, texts on tobacco control, financial resources and training of health workers
Nigeria **(14 Nov 2008)**	National Tobacco Control Bill, 2011	Yes (FP, TCU, NCM)	No information on trend	Complete smoking ban in indoor public workplaces and public transport	Rotating health warnings (50% of display area)	Yes	Yes	Increase awareness; national surveillance; tobacco cessation programmes	Tobacco industry; funding for capacity building and surveillance
Oman **(6 Oct 2010)**	Municipality Decision No. 2, 2009	Yes (FP, TCU, NCM)	No information on trend	Partial	Health warnings exist	Yes	No	Protection from smoke exposure	Tobacco industry; legislation obstacles
Pakistan **(4 Oct 2010)**	Prohibition of Smoking in Enclosed Places and Protection of Non-Smokers Health Ordinance, 2002	Yes (FP, TCU, and NCM)	Prohibition of sales to international travellers	Complete	Pictorial health warnings required	Yes	No	Increase capacity of TCU; improve legislation; increase taxation and pricing; research and awareness on hazards of smoking	Lack of capacity, resources, scientific knowledge about technical aspects and available data/research
Qatar **(27 July 2010)**	Tobacco Control Law No. 20, 2002	Yes (TCU and NCM)	Tobacco tax earmarking exists (2%)	Partial	Health warnings exist	Yes	Yes	Protection from tobacco smoke exposure in public places	No information
Saudi Arabia **(28 Oct 2008)**	Tobacco Control Law, 2002	Yes (TCU and NCM)	Prohibition of sales to international travellers	Partial	Health warnings exist	Yes	Yes	National strategy and law regarding Articles 6, 8, 11 & 12; build capacity	No information
Senegal **(27 April 2007)**	Health warnings 2008. Ban on free sample distribution, 2010.	Yes (FP, TCU, and NCM)	No information on trend	Complete (public workplaces only)	Health warnings exist (less than 30%), no pictures	Lack of educational and public awareness programmes	No	Research; legislation and implementation; school prevention programs; civil society partnerships.	Lack of capacity for tobacco control.
Sudan **(28 Jan 2008)**	Tobacco Control Act, 2005	Yes (FP and NCM)	No information on trend	Partial	Health warnings required	Yes	Tobacco law enforcement; surveillance system; cessation; labelling and health warnings.	Financial constraints and political commitment.	
Syrian Arab Republic	Law No. 62, 2009	Yes (FP, TCU, and NCM)	No change in price since	Complete	Health warnings required	Yes	Yes	Education, awareness, & training; national	No information

Country (date(s) of submission of report(s))	Tobacco legislation	Article 5 Tobacco control infra-structure[a]	Article 6 Price and tax measures	Article 8 Protection from exposure to tobacco smoke[b]	Article 11 Packaging and labelling	Article 12 Education, communication, public awareness	Article 13 Comprehensive advertising ban[c]	Implementation priorities	Implementation constraints / barriers
(28 Feb 2010)			2007					monitoring system; smoking cessation programs; improve tobacco products testing; illicit tobacco trade skills	
Togo **(24 Feb 2011)**	Tobacco Control Act, 2010	Yes (FP, TCU, and NCM)	Tobacco tax earmarking exists; tobacco prices increased	Complete	Health warnings required	Programmes targeted at both adults and young people exist	No	Enact legislation and implement the activities of the Convention.	Lack of financial resources.
Turkey **(30 Mar 2010)**	Law on Prevention and Control of Hazards of Tobacco Products, 1996, 2008	Yes (FP, TCU, and NCM)	Increasing taxes (ad valorem and specific tax) since 2007	Complete	Rotating pictorial health warnings (50% of display area)	Yes	Yes	Political commitment	Tobacco industry
Uganda **(17 Sept 2009)**	Tobacco Control Act, 2010	Yes (FP, TCU, and NCM)	No information on trend	Complete (public transport only)	Health warnings exist (less than 30%), no rotation, no pictures	Some programmes targeted at both adults and young people exist	No	Tobacco control policy and legislation.	Lack of funding within the National Budget; coordination of multi sectoral efforts.
United Arab Emirates **(27 Jan 2009)**	Federal Law No. (15), 2009	Yes	No information on trend	Partial	Pictorial health warnings required	Yes	Yes	Improve tobacco control legislation and jurisdiction, establish national tobacco control programme	Need for a well-established national system
Yemen **(3 Nov 2009)**	Tobacco Act 2005	Yes (FP, TCU, and NCM)	No information on trend	Partial	Pictorial health warnings required	Yes	Legislation; capacity-building; public awareness; illicit trade regulation	Weak political commitment; insufficient financial resources; lack of trained staff.	

[a] Parties reported to have a focal point (FP), tobacco control (TCU) unit and/or a national coordinating mechanism for tobacco control (NCM)

[b] Parties reported complete or partial protection to exposure in public workplaces and public transport

[c] Parties reported *Yes* or *No* to a comprehensive ban on tobacco advertising, promotion, or sponsorship