

## B. HEALTH AND DISEASE IN A CHANGING ARAB WORLD 2000/2025/2050: GLOBAL, ENVIRONMENTAL, AND CLIMATE CHANGE AND EMERGING DISEASES

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The term global changes encompass several interconnected phenomena: climate change, stratospheric ozone attenuation, resource depletion, environmental pollution, ecosystem changes (emerging pathogens), demographic factors (population growth/migration), economic, and political factors, etc. All are interconnected, and several are synergistic. Underlying all forms of global change is population expansion and environmental pollution. The Arab world is an appropriate study case.

The Arab countries are undergoing a rapid transition, which affects health and its determinants. The epidemiologic transition is manifested by: 1) better control of communicable diseases; 2) rapid aging of population; 3) socioeconomic transformation; 4) progressive urbanization; and 5) changes in nutritional patterns and other lifestyle behaviors. Moreover, non-communicable diseases are rapidly increasing and have become the major cause of sickness and death in most Arab countries.

By the year 2000, the population of the Arab countries was 270 million, and it is estimated to reach 425 million and 545 million by the years 2025 and 2050, respectively. But the Arab countries are not a homogeneous group (Table 1). The health indicators show significant differences between different countries. Infant mortality ranges from 11 to 69 per 1000 live births per year while the expectation of life ranges between 57 to 77 years. Health expenditure per capita is between US\$38 and \$844 per year, compared to US\$4121 in the United States, and US\$2158 in Canada. A recent ranking of perfor-

mance of health systems worldwide showed great discrepancies between Arab countries, ranging from 8 (Sultanate of Oman) to 134 (Sudan). Because of wide differences, they were categorized into five different groups: Gulf Countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates); Iraq and Yemen; Middle East (Jordan, Lebanon, and Syria); North Africa (Algeria, Libya, Morocco, and Tunisia); and Nile countries (Egypt and Sudan).

The Arab countries are facing many challenges (Table 2). One of the major challenges that are common to the 17 Arab countries is the failure of health systems. The failure of the healthcare system in the Arab world is due to many factors, most important of which are poor governance and unrepresentative politics, competing objectives, inherent difficulties of public-sector delivery of healthcare services, program evaluation, and lack of an innovative primary healthcare system.

In this short paper all the challenges cannot be addressed, but a number of approaches provide opportunities for each Arab country or group to identify alternatives suitable for their prevailing condition.

In conclusion, universal access to quality health care in Arab countries can be attained through a comprehensive plan that addresses the effectiveness of the health systems, the appropriateness of service delivery and the development of human resources. These plans need a very timely implementation to face the enormous challenges to be overcome in establishing an effective, well-structured public health system.

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**Table 1. Selected national health indicators for Arab countries (2001)**

	Total Population Millions	Infant Mortality Rate Per/1000	Life Expectancy at Birth (Both Sexes)-2001	Per Capital Total Expenditure on Health at Average Exchange Rate (US\$)	Overall Health System Performance Ranking
Gulf Countries (30 million)					
Kuwait	2	11	75.3	586	45
Bahrain	0.5	15	72.7	512	42
Qatar	0.6	15	71.7	940	44
UAE	3	13	71.7	767	27
Saudi Arabia	21	18	70.5	448	26
Oman	3	21	71.6	295	8
Iraq and Yemen (43 million)					
Iraq	24	30	60.7	375	103
Yemen	19	69	60.0	21	120
Middle East Countries (25 million)					
Jordan	5	22	70.8	137	83
Lebanon	3	25	69.8	590	91
Syria	17	28	70.9	30	108
North African Countries (76 million)					
Algeria	31	37	69.4	64	81
Libya	5	25	70.4	246	87
Morocco	30	41	69.4	50	29
Tunis	10	25	71.1	145	52
Nile Countries (101 million)					
Egypt	69	40	66.5	51	63
Sudan	32	65	55.9	13	134

Source: World Health Organization Information System.

**Table 2. Major challenges facing Arab countries**

	Gulf Countries	Iraq & Yemen	Middle East Countries	North African Countries	Nile Countries
1. Non-communicable diseases	✓	✓	✓	✓	✓
2. Quality of health service delivery	✓	✓	✓	✓	✓
3. Health problems of migrant workers	✓				
4. Privatization	✓		✓	✓	✓
5. Health systems	✓	✓	✓	✓	✓
6. Human resources in health	✓	✓	✓	✓	✓
7. Infectious diseases		✓			✓
8. Endemic diseases					✓
9. New emerging diseases		✓			✓