

WHO Regional Publications, Eastern Mediterranean Series 31

Building the knowledge base on the social determinants of health

Review of seven countries in the
Eastern Mediterranean Region



**World Health
Organization**

Regional Office for the Eastern Mediterranean

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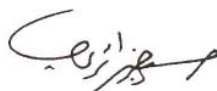
In the Name of God, the Compassionate, the Merciful

Foreword

The Commission on Social Determinants of Health is a WHO initiative established to tackle ill-health and inequity through actions on the social determinants which affect health outcomes. These social determinants include education, gender, employment, urban settings, early childhood development and social exclusion, among others, operating at the national and global level. The Commission's agenda—responding to increasing inequalities and inequities in health and well-being at the global, regional and national levels—recognizes that such social differentials are responsible for a large proportion of ill-health, expressed in terms of differences between the most and least advantaged sectors of society. Many of these differences are avoidable and hence inequitable.

The Commission aims to encourage activities that engage WHO and Member States more fully in a holistic view of health, going beyond efforts to control disease. This requires collaboration with other actors who deal more directly with the relevant social determinants: ministries other than the ministries of health who are the traditional partners of WHO, as well as international and nongovernmental agencies, civil society and academia. Efforts to encourage community participation and a gender-sensitive approach to health and development are crucial here. The WHO Regional Committee for the Eastern Mediterranean recognized in the 1980s that a purely medical approach to health care was not enough to ensure equitable health development. Strong and concerted action was also needed by other government sectors to address the social determination of health. The basic development needs approach was adopted by the Region as a strategy to address poverty reduction and improvement of health and quality of life through structured community leadership and intersectoral action. This approach is just one of a number of community-based initiatives which address health development.

Tackling social determinants also involves re-energizing primary health care and the Health for All ideal. As articulated in the Alma-Ata Declaration of 1978, primary health care seeks to deliver universal promotive and curative services for all, thus promoting health equity and the inclusion of disadvantaged and marginalized groups in society. The Eastern Mediterranean Region can justly claim to have been a pioneer in piloting and implementing primary health care, through work at the Regional Office and in Member States. Thus it is appropriate, in the 30th anniversary year of the Declaration, to explore in greater depth the meaning and significance of social determinants of health, in order that all peoples in the Region can enjoy the best possible health.



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Preface

The WHO Commission on Social Determinants of Health was launched in Chile in March 2005. The WHO Regional Office for the Eastern Mediterranean, working with WHO headquarters and through the country offices, seeks to capitalize on its experience in formulating regional priorities and strategies and providing technical support to ministries of health in Member States, to forward the agenda on social determinants of health and health equity in individual countries. In May 2005, the second global meeting of the Commission was held in Cairo, immediately followed by a regional meeting at the Regional Office. Discussions at these two meetings revealed that the links between social determinants and health outcomes were not at present well understood or documented in the Region. Without such a knowledge base it was not possible to formulate policies and interventions that could address health inequalities.

This finding served to emphasize that a first stage in any initiative on the social determinants of health would be to build up an evidence base for the major social determinants and for the health disparities and health inequities that result from them, and to illuminate the processes by which these determinants affect health outcomes. The first activities therefore were the preparation of a regional discussion paper and a series of country studies in the Region. The purpose of this publication is to present the summaries of these country level reviews of the existing body of evidence on the social determinants of health and health inequalities, within the framework of the work of the Commission on Social Determinants of Health. The summaries illustrate the range of the social determinants that affect health outcomes and health equity in the Region, examine the processes by which these produce health outcomes (most often negative health outcomes) and identify some strategies to improve these health outcomes by tackling social determinants.

The scope and range of this evidence for the impact of social determinants on health outcomes should be a central concern for country level policy-makers and advisers, for the WHO staff who provide ministries of health with technical support and for other interested parties. It is to the producers and users of this evidence that this review is directed. The publication invites readers to explore social determinants in their own countries, to identify the characteristics of particular disadvantaged groups and the processes which result in poor health, and to go on to develop policies which are fully cognizant of these determinants, and identify specific strategies to tackle them.

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Chapter 1

Introduction

1.1 Commission on Social Determinants of Health

The Commission on Social Determinants of Health was established primarily in response to growing concern about inequalities in health both between and within countries. Between 1950 and 1990 overall global health improved, as life expectancy increased and infant mortality fell. For most of this time, differences between countries also decreased. However, since around 1990 differences in life expectancy between countries have been growing, and within countries differences in health status between areas and social groups have widened. The “trickle down” effect of economic growth has bypassed many countries, with health status deteriorating, especially in countries in sub-Saharan Africa. Vulnerable and socially disadvantaged groups (and in some cases whole countries) have been left behind; they have less access to health services, get sicker and die earlier than people living in more advantaged settings.

Differentials in health status can be attributed in large part to the social conditions in which people are born, live, work and age. Specifically, they relate to social class or status, to differential access to education, employment and housing, and to vulnerabilities originating in discrimination based on gender and/or on social, occupational, religious or ethnic identity. Such differentials can also be attributed to the geographical area in which people live, whether deprived urban or rural settings, or poor areas remote from health and social services. Many groups and individuals may suffer from multiple deprivations, for example, poor rural women. Many people live in countries which lack the resources, or the will, to provide adequate health services and other necessary conditions for a healthy life [1,2,3].

Inequalities in health status originate in what are now termed “social determinants of health”. They arise from systematic disparities in health (or its social determinants) between more and less socially advantaged social groups. Such inequalities put vulnerable groups at further disadvantage, thus diminishing opportunities to be healthy. The social determinants of health refer to both specific features and pathways by which societal conditions affect health and that potentially can be altered by informed action [4].

The Commission distinguishes between *inequalities* or *disparities* in health, and *inequities*. *Inequities* are defined as unfair or unjust differences in health status that are remediable [5,6]. Social determinants of health and health equity are usually considered together because globally, up to half of all ill health can be explained in terms of differences between the most advantaged persons or groups, and the least advantaged. Societies in which differentials in health status are small are usually societies in which social position, rights and opportunities are relatively equally distributed. In other words, equity in health is highly correlated with social equity. Progress on health equity cannot be achieved without taking action on the social determinants of health and moving beyond the arena usually occupied by ministries of health, and beyond the immediate causes of disease. This concern for equity was emphasized in the Commission's Interim Report, issued in June 2007, entitled: *Achieving health equity: from root causes to fair outcomes* [3].

While the term "social determinants of health" might not be familiar to health professionals or the general public, the Commission is fully aware that it is not the first to point out that health status originates, in large part, from the social settings in which people find themselves, and that these social settings are responsible for many of the health inequalities found in this unequal world. When it was established, the Commission emphasized its roots in the WHO commitment to Health for All put forward in the Alma-Ata Declaration of 1978. This drew attention, in Article 1, to "The existing gross inequality in the health status of the people particularly between developed and developing countries as well as within countries [that] is politically, socially and economically unacceptable and is, therefore, of common concern to all countries". The Commission called for the renewal of a process that would draw attention to the importance of the social causes of ill health and to inequalities and inequities in health that prevail at the global, national and subnational levels. This builds on health rights acknowledged within the UN as a whole, in the Universal Declaration of Human Rights, and in the Constitution of WHO, which specified everyone's "right to the highest attainable level of health".

The Commission aims to encourage the identification and integration of the social determinants of health as an essential part of public policy and practice. This goal requires a dialogue at the level of government, within and beyond ministries of health, and including academia and civil society, about the aims and objectives of policy related to social determinants and social and health disadvantage. The initiative is not a technical public health programme to be universally applied as in the case of, for example, the Expanded Programme on Immunization (EPI). Rather, it is a social programme that recognizes differences within and between countries. Thus, in the WHO Eastern Mediterranean Region, each country office and Ministry of Health needs to develop appropriate strategies to implement policy.

The Commission identified three successive but interrelated processes by which its objectives are to be fulfilled:

- the development of a knowledge base, presenting available evidence for the linkages between social determinants and health;
- using this knowledge base as an advocacy and a policy-making tool to draw attention to, and act on, inequities in health; advocacy is interpreted here as much more than “social marketing”, rather such a strategy should follow a broad approach, more like that of human rights groups, providing documentation as a basis for action;
- policies, once identified and proven to be effective, should be translated into action and made sustainable [2].

The Commission has presented a general guide to the range of thematic areas that can be considered in a regional and country setting. These determinants are multi-dimensional and interrelated. The Commission established knowledge networks to explore linkages between social determinants and health, and identified academic institutions and individuals to collect and analyse the evidence base in each knowledge area and present their findings to the Commission. These knowledge networks deal with gender; early child development; social exclusion; employment conditions; urban settings; health systems; priority public health conditions; globalization; and measurement and evidence [7].

In order to initiate the first phase in this process, the development of a knowledge base, and use the framework provided by the knowledge networks, the WHO Regional Office for the Eastern Mediterranean commissioned a series of papers on the social determinants of health in seven countries of the Region: Egypt, Islamic Republic of Iran, Jordan, Morocco, Oman, Pakistan and the occupied Palestinian territory. The studies were conducted by social scientists from diverse backgrounds, rather than by biomedical researchers or epidemiologists. As they stand, these seven country-level studies reflect the state of current knowledge in 2006. They are based on a review of literature, published and non-published, rather than on original research, and are thus exploratory in nature.

It was not easy to identify social scientists with an interest in health, as within the Region there are few local opportunities for advanced training in schools of public health or social research institutes. The absence of such institutional bases means the absence of career opportunities for social scientists with a particular interest in health and the social causes of ill-health. The scarcity of trained people also helps to explain the paucity of relevant literature in this area of concern. Given the cumulative nature of knowledge, and the impact one field can have on others, this scarcity helps to explain the lack of interest in social determinants among policy-makers and biomedical scientists.

As the knowledge base for the social determinants of health in the Region is sparse, and for comparative purposes is variable from country to country, it was not possible

in this review to adhere to a strict template for the topics covered in each country study. Some countries had national sample surveys, such as Demographic and Health Surveys, Pan Arab Project for Child Development (PAPCHILD) and Family Health Surveys. However, these surveys were not originally intended to direct attention to the social determinants of health, although they do provide health data that can be correlated with determinants such as gender, education, and region (mainly categorized as urban/rural). Moreover, they are restricted in range and mostly focus on child and maternal health and family planning. Other evidence which would provide for a full exploration of social determinants of health is found in widely scattered sources, including refereed and non-refereed articles in academic journals, and reports of ministries, nongovernmental organizations and international and national agencies.

This publication is directed at professionals in the area of social and health policy and management, within and beyond the ministries of health, and in country offices of WHO in the Eastern Mediterranean Region. Because these determinants cannot be tackled by ministries of health alone, evidence that links social determinants to health outcomes and health inequities should be the concern of government servants beyond the health ministries, and also other stakeholders in academia and civil society.

It is hoped that this publication will increase awareness of social determinants of health, and of health equity, among health and social policy professionals, as well as interested members of the general public. More specifically, it should prompt countries of the Region to initiate similar studies, either of a general nature or directed at specific topics identified as important determinants of health and/or health inequity.

1.2 Social determinants of health in the Region

The Eastern Mediterranean Region is a very diverse region, comprising high-income, middle-income and low-income countries, with their associated characteristic range of health indicators (Table 1.1). These indicators reflect a dynamic situation, in which high-income countries and many middle-income countries have already completed the epidemiological transition from communicable to noncommunicable diseases. This transition is most clearly illustrated in the only high-income country studied, Oman, and in Jordan, a middle-income country. The country studies also illustrate the extent to which nearly all countries in the Region, whether low-, middle- or high-income, are experiencing an increase in chronic diseases related to lifestyle change (such as those associated with obesity and smoking) and longer life expectancies, and in deaths and injuries from road crashes.

Until recently, commentators assumed that the least favourable indicators of health and well-being in the Region were to be found in rural areas. However, the rapid growth of urban and peri-urban areas, through a combination of migration and natural increase,

Table 1.1 Health status indicators for countries of the Eastern Mediterranean Region, 2006

Income status	Newborns with birth weight at least 2.5 kg (%)	Children with acceptable weight for age (%)	Infant mortality rate/1000 live births	Maternal mortality ratio/100 000 live births	Life expectancy at birth (years)
Low-income countries ^a	63-89	54-74	62-147	350-1600	44-64
Middle-income countries ^b	88-95	87-99	17-108	11-294	58-73
High-income countries ^c	92-95	86-93	8-19	0-22	73-77

^a Afghanistan, Djibouti, Pakistan, Somalia, Sudan, Yemen

^b Egypt, Islamic Republic of Iran, Iraq, Jordan, Lebanon, Libyan Arab Jamahiriya, Morocco, occupied Palestinian territory, Syrian Arab Republic, Tunisia

^c Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates

Source: [8]

has resulted in the expansion of “slums” and “informal settlements” characterized by poor living and health conditions. These differences within urban areas have not been as well documented as those between urban areas.

While poverty is an underlying cause of ill-health, the work of the Commission on Social Determinants of Health is concerned with the social determinants caused by poverty and marginalization and how these can be influenced in ways that promote health equity. The emphasis therefore is on social groups who share certain characteristics, rather than on individuals. A social determinants approach also directs attention to attitudes and practices which result in social exclusion, the systematic denial of life chances. Some determinants are cross-cutting and overlapping. For example, discrimination against women may reinforce existing disadvantages they may share with men, such as lack of access to health care or opportunities for gainful work.

The Regional Office initially identified a number of social determinants of health in the Region as a starting point for discussion:

- Gender equity and women’s empowerment. Low status and gender discrimination at all stages in the life cycle limit women’s capacity to maintain their own health and that of their family. Relevant issues include: improving access to health care for women; education/literacy for girls and women; employment and social protection; female genital mutilation.
- Low levels of female literacy and female education in the Region have adverse effect on child survival and morbidity.
- Early childhood development. This focuses on the child's early environment and its influence on physical, emotional, mental and social development which has a profound

impact on health and well-being during the whole life cycle. Children growing up in unfavourable conditions are more likely to have to work, or may turn to a life on the streets, which further prejudices their life chances.

- **Migration.** The lack of health rights and access to health services for citizen and non-citizen migrant workers are of concern in the Region. Non-citizen workers, legal and illegal, are mainly, but not only, a concern in member states of the Gulf Cooperation Council. A key to approaching these issues is the recognition that a healthy workforce is an efficient workforce.
- **Urbanization.** Residents of constantly expanding, unplanned housing areas, with poor access to health and social services and poor living conditions, are likely to suffer disproportionately from overcrowding, malnutrition and social stress, all of which have adverse effects on health.
- **Employment conditions.** Unemployment and informal sector employment, which usually provides limited or no social protection, are major social determinants that have an adverse impact on physical and mental health.
- **Social exclusion.** This can be seen as a mechanism originating in attitudes and practices that adversely affect the health of certain social groups. These may include, among others, occupational groups such as garbage collectors, and groups excluded on the basis of social identity, religion, ethnicity or language. The socially excluded also include those suffering from certain types of illness or conditions that directly affect their wellbeing, for example persons with disability, people with mental health disorders or substance addiction, and people living with HIV and other diseases. All these groups are likely to be stigmatized, an attitude that results in discrimination and poor access to health care, and ultimately to poor life chances. Policies, laws and customary practices need to be identified and analysed in order to tackle social exclusion.
- **Inequitable health systems.** These perpetuate barriers to health care for the most vulnerable. Such systems are characterized by scarcity of national resources for health or low priority for health, in competition with other sectors; the absence of national health policies that prioritize health equity, or a failure to follow through on such policies; and/or the maldistribution of facilities and funding, not distributed according to need. These inequities are exacerbated by financial barriers and social behaviours that may prevent marginalized groups from accessing health care. Such groups usually have greater needs for care, but use it less than better off groups. High out-of-pocket payments are a major burden for the poor.
- **Environmental conditions.** The health of individuals and communities is adversely affected by critical shortage of water and lack of access to safe water and sanitation; unsafe working conditions; air pollution at home, at work and on the streets, from indoor cooking, polluting industrial processes and motor vehicle emissions; lack

of solid waste disposal systems; and the impact of pesticides and other agricultural chemicals on rural health.

- Lifestyle and behaviour. These include: smoking, with high and increasing rates among women and youth [9]; nutrition problems: in the Eastern Mediterranean Region the double burden of disease, with the coexistence of obesity and undernutrition, may exist within the same country but affecting different social groups and ages [10]; and road crashes [11]. These may be presented as problems for individuals, which can be approached through targeted health education. However, they are also social issues. While mass media, supported by multinational corporations, influences those who have a disposable income, the disadvantaged have little choice in lifestyle matters.
- Conflicts and post-conflict emergencies. Conflict and its consequences destroy health and other infrastructure, and cause death and destruction, loss of human rights and widespread mental health problems. Conflicts have had a major impact on the health of people in several countries in the Region.

Some of the social determinants identified above have been slow to emerge as topics for public debate, research and policy analysis because of social conservatism. Discussion of these issues is sometimes seen as questioning existing social and political structures and is consequently met with defensive reactions. A solid evidence base would help to make these issues visible and provide a platform for discussion. It would enable countries to move forward in their attempts to mitigate the social determinants that result in poor health for the people of the Region.

1.3 Approach and framework for analysis

The country studies summarized in this publication were commissioned in late 2005. The authors, mostly social scientists with a background in health, were asked to:

- analyse the social determinants that have an impact on or implications for the health of the population of the country;
- review interventions and action programmes currently being implemented by the public sector or civil society to address some of these determinants;
- summarize the current level of commitment, especially within the public sector, to address social determinants of health; and
- suggest recommendations for action to raise the profile of social determinants of health on the political agenda in the country.

The authors of the country papers used the knowledge areas identified by the Commission on Social Determinants of Health and other areas identified as of special relevance in the Region as a general guideline for their work. They identified the social determinants most relevant for their countries, and those that reflected their own concerns and those of their colleagues.

The framework for the analysis of the complex linkages between social determinants and health outcomes developed by the Secretariat of the Commission on Social Determinants of Health provides a guide to the identification of the major concerns of each of the country papers. The Commission has identified structural determinants as those which originate in the socioeconomic and political context at the country and global level. They affect the social and economic relationships that determine the distribution of power, prestige and resources globally and within a particular country or society, including those needed to maintain health and social well-being. These, in turn, result in intermediate determinants, the social relations, behaviours and psychological characteristics that affect the final health outcomes, in either positive or negative ways.

Thematic areas have been identified as arenas for policy action and intervention. These relate to specific life situations, especially groups or areas disadvantaged with regard to issues such as gender equity, employment, urban settings, social exclusion and early child development, which are known, or suspected to be, associated with poor health outcomes and/or health inequities. The Commission's nine knowledge networks were given the task of collating existing evidence of various factors within these thematic areas for their impact on health outcomes, and identifying the pathways through which they affect health outcomes. They were also mandated to present "best practices" and make some recommendations for tackling health inequities [7,12].

Because of the complexity of the linkages between social determinants and health outcomes it was not possible, in a short country paper, to cover all themes or topics. However, identifying the starting points for the various studies helps to highlight the differences and reflect the diversity of countries in the Region. It also served to identify some commonalities, such as the importance given to gender as a basis for social discrimination.

The study of the occupied Palestinian territory takes the broadest view of the social political context, by identifying the occupation as the basic fact of life for all Palestinians and the major structural determinant. The conflict determines the basic structure of power, prestige and discrimination in the territory as being in the hands of the occupiers. The differentials and deterioration of material circumstances are expressed, especially since the beginning of the second *intifada* in 2000, in the triad of conflict, poverty and gender inequity. This has, in turn, resulted in extreme difficulties in the delivery of health care and the maintenance of social welfare, which eventually resulted in a deterioration in mental and physical health status.

The study of the Islamic Republic of Iran begins from the socioeconomic and political context, namely governance and social policies committed to equity, especially health equity as achieved through the primary health care system. Iran faces challenges in achieving these objectives in rural areas, especially remote and border areas. The study of Jordan explores social determinants of health from the vantage point of the health

system and identifies inequities in access to health care on the basis of determinants such as poverty, gender, age and place of residence.

Gender discrimination, as a structural and intermediate determinant, is identified as a central social determinant of health in all the countries studied, with rather less emphasis in Islamic Republic of Iran and Oman. In Egypt, Morocco and Pakistan, gender, female illiteracy and rural residence act in synergy to contribute to health inequity.

Note on sources

Unless otherwise noted, the health and demographic indicators cited are from *Demographic, social and health indicators for the countries of the Eastern Mediterranean*, 2006 [8]. Figures quoted are from 2000 or more recent years; where possible the date to which these figures refer is given in parentheses. Sources mentioned in the text include relevant websites which are constantly being updated. The summaries are written in the present tense, based on data available in April 2006.

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Chapter 2

A regional perspective on social determinants of health

2.1 Egypt

There are several major sources of health inequity in Egypt.

Gender discrimination: Especially for poor women, gender discrimination continues as a cause of ill-health in spite of improvements in the status of women in Egypt in recent decades. The gender education gap persists.

Employment: Most women still work in the informal sector and are without insurance or social protection.

Place of residence: The five main regions identified in the Demographic and Health Surveys differ greatly with respect to socioeconomic characteristics, living standards and health status; the most disadvantaged area is rural Upper Egypt.

Inequitable distribution of health care resources: Government funding for health benefits the richer segments of society more than the most disadvantaged.

Introduction

This summary presents a synthesis of the evidence base linking social determinants to health status, focusing on the continuing existence of health inequity in Egypt. Among countries of the Region, Egypt is fortunate in having had a series of Demographic and Health Surveys since 1988, a PAPCHILD survey in 1991 (for young children and women of reproductive age), national public health expenditure surveys, and recent national surveys which provide information on child labour and adolescents. These data are the major sources for the study. Other data are derived from project reports and evaluations and small scale studies, such as those of slum dwellers. All these data are used to identify health inequity in particular population groups, i.e. avoidable and remediable health inequalities.

Poverty is the major underlying determinant of poor health in Egypt. Demographic and Health Surveys have consistently found that the indicators for wealth, using household assets as a proxy measure of the standard of living, for education and for health in the rural areas of Upper Egypt (the Nile valley south of the delta) are lower than

Table 2.1 Proportion of population under the national poverty line^a by region, Egypt, 1990/1991 and 1999/2000

Region		1990/1991	1999/2000
Egypt (all)		24.3	16.7
Metropolitan governorates		9.8	5.1
Lower Egypt	Urban	7.7	6.2
	Rural	27.1	11.8
Upper Egypt	Urban	13.5	19.3
	Rural	43.4	34.2

^a Those below the poverty line are unable to afford the cost of essential food and other basic requirements such as education and health.

Source: [1]

Table 2.2 Infant and child mortality by place of residence, Egypt, 2003

Region	Infant mortality rate	Under-5 mortality rate	
Urban governorates	26.3	33.5	
Lower Egypt	41.3	49.2	
	Urban	33.4	40.8
	Rural	44.3	52.5
Upper Egypt	54.8	68.8	
	Urban	45.1	56.3
	Rural	58.3	73.4

Source: [2]

Table 2.3 Regional differences in factors affecting the health of Egyptian women, 2003

Factor	Urban governorates	Lower Egypt		Upper Egypt	
		Urban	Rural	Urban	Rural
Median age at first marriage (years)	22.3	21.7	19.3	21.0	17.7
Median age of first birth (years)	24.0	23.6	21.2	23.1	20.4
Birth interval (48+ months) (%)	37.5	40.0	29.1	30.6	23.2
Teenage pregnancy (%)	3.3	4.9	9.7	6.8	11.3
Mean ideal no. of children	2.6	2.6	2.7	2.8	3.3
Mean wanted no. of children	1.8	2.2	2.5	2.3	3.4
Mean actual no. of children	2.3	2.8	3.2	2.9	4.2
Current use of family planning (%)	68.5	66.3	64.8	59.8	44.7
Unmet need for family planning (%)	5.1	5.2	7.7	9.0	17.4

Source: [2]

those for metropolitan areas (Cairo, Alexandria and the Suez Canal cities) and Lower Egypt (the delta) as shown in Tables 2.1–2.3. The areas of extreme disadvantage in cities are more difficult to identify in national surveys because of the heterogeneity of the urban communities and the differences in the size of enumeration units used.

Inequity in distribution of health care resources

This study raised a critical issue regarding inequity in the distribution of health resources. The Health Insurance Organization, university hospitals and government health facilities not run by the Ministry of Health and Population are located in the big cities, where people are most likely to be able to afford to pay for them. This means that the health services are allocated according to ability to pay rather than according to need.

Although they are utilized by all income groups to some extent, the health programmes which provide the greatest benefit for the poor are government outpatient services provided by the Ministry of Health and Population. However, the use of government inpatient services is almost equally distributed across all income groups. Expenditure by the Health Insurance Organization, the university hospitals, and by other ministries all favour the higher income groups (Table 2.4). In the case of the Health Insurance Organization, the richest quintile captures more than 36% of total Health Insurance Organization expenditure. This is mainly due to the fact that many poor people work in the informal sector and are not yet covered by the Health Insurance Organization; their children are only covered if they are enrolled in school [3]. As poorer families tend

Table 2.4 Distribution of public health expenditure by income quintile (%), Egypt, 2002

Income quintile	Public health expenditure (EGP)				Total
	Ministry of Health and Population	Health Insurance Organization (general)	Health Insurance Organization (students)	Other ministry	
1 st (poorest)	19.4	14.5	17.5	13.0	16.4
2 nd	20.3	16.1	17.6	14.4	17.5
3 rd	20.1	15.7	20.9	19.5	19.1
4 th	21.9	20.5	23.9	28.2	23.5
5 th (richest)	19.3	33.6	20.3	25.3	23.6
Total (%)	100	100	100	100	100
Average per capita	24.1	10.4	5.5	15.4	55.9

Source: [3].

to have more children, a per child distribution of spending reveals a more inequitable distribution than a per capita analysis. On the basis of this evidence, health insurance is not available for most poor people in Egypt.

Health inequities among certain population groups

Children

Poverty is an underlying cause of poor health among children. The infant mortality rate (deaths of children under 1 year old) for children in the lowest quintile households is more than double that of children in the highest quintile (richest) households. The child mortality rate (deaths of children under-5 years) for children in the poorest quintile is two and a half times that of the children in the richest quintile households [2].

In Egypt, as elsewhere, the education of mothers has a positive effect on child health, as shown in Table 2.5. The impact of the mother's education is greater than that of the father.

Gender discrimination, shown when parents favour boys over girls, affects the health and survival chances of children. Boys are more likely than girls to be given treatment outside the home for acute respiratory infection and diarrhoea (the two major causes of morbidity and mortality among children under 5 years), and to receive life-saving antibiotics for acute respiratory infections [2].

Place of residence is one of the most important factors contributing to inequity in child health. Table 2.2 shows that the highest infant and child mortality rates are in Upper Egypt, especially in rural Upper Egypt, and the lowest in urban governorates. Similarly, the highest level of stunting (height for age) occurs in rural Upper Egypt (21.8%), compared to 15.6% in urban governorates and only 10% in urban Lower Egypt [2]. As the poorest areas, in Upper Egypt, are also those with the lowest average levels of education, inequity in child health by region of residence can easily be understood.

Female genital mutilation (also known as female circumcision) is common in Egypt, and mostly takes place between the ages of 7 and 12 years. Estimates of the proportion of women "circumcised" range from 65% to almost 80% in community studies, but are higher in the Demographic and Health Surveys. The 2003 survey identified a small decline in the proportion of women reporting that their daughters had been circumcised. Women with no education and from poor households were found to be more likely to have, or plan to have, their daughters circumcised. Successful activities to transform the social conventions that support female genital mutilation have been initiated in Egypt at the community level. Female genital mutilation-free village programmes focus on encouraging non-directive and non-judgemental community discussion and debate, involving both women and men, which gradually brings a formerly hidden topic into the open, and leads to questioning [6].

Table 2.5 Infant and under-5 mortality rates (per 1000 live births) by mother's education in 1995, 2000 and 2003, Egypt

Level of mother's education	1995		2000		2003	
	Infant mortality rate	Under-5 mortality rate	Infant mortality rate	Under-5 mortality rate	Infant mortality rate	Under-5 mortality rate
Illiterate	93.4	123.4	68.3	89.1	57.3	73.4
Can read and write	72.9	98.3	60.9	76.8	52.6	62.2
Preparatory	53.1	63.8	47.5	54.2	32.2	53.3
Secondary +	32.4	39.1	33.2	37.6	28.7	32.2

Source: calculated from [2,4,5]

Approximately 2.78 million children in Egypt worked at some time during 2001, according to a CAPMAS survey [7]. This represents 21% of children in the age group 6–14 years (even though the child law of 1996 prohibits the employment of children under age 15). The main reason for children working is to contribute to the family income, as reported by 85% of boys and 95% of girls. The governorates with the highest percentage of child labour are among the poorest, with 44% of all children in Fayoum aged 6–14 years working at some time during the year. Thus, working children come from the poorest homes, with the least favourable conditions for maintaining health, and work certainly increases these health risks. One quarter of working children reported one or more injuries during or due to their work; of those injured 4% experienced a long-term disability.

A project in Ezbet El Nawar in Greater Cairo identified major problems of child health related to access to safe water and sanitation in a slum area. Although the vast majority of households are connected to the piped water and sanitation systems, water cuts are frequent and the water is contaminated as residents turn to well water. Cross contamination can occur between water and sewerage pipes, and the sewerage system often backs up and floods streets and basements. These problems contribute to the high rate of childhood illness. In such settings, the provision of a water and sanitation system is not enough [8]. The quality of services available is the key to child health in these slum areas.

Adolescents

Mortality among adolescents is relatively low (4–5 per 1000); most deaths are due to accidents. Likewise, morbidity is also relatively low, especially since parasitic diseases have been successfully controlled. However, since most preventive treatment focuses on schoolchildren, out-of-school children, especially girls in the poorest governorates, are likely to be missed.

Malnutrition continues to affect a significant proportion of Egyptian adolescents. Anaemia, which can have a significant adverse impact on both mental and physical development, is a particular concern. Assessments of malnutrition among adolescents vary, from half in 1997 to one-third in 2000 [4,9].

Obesity among adolescents is a growing health concern, related to changing dietary practices and leisure activities. Girls are more likely to be overweight than boys. The proportion of those overweight was twice as high among adolescents from a high socioeconomic stratum, compared to those in the middle or low strata [9].

Estimates of smoking among adolescents vary, with up to 22.8% of male students and 15.8% of female students smoking any tobacco product [10]. Girls (and boys) are increasingly likely to smoke the shisha (water pipe), mistakenly believing that this is less dangerous than cigarette smoking [11]. These data demonstrate the need for education programmes to counter beliefs such as that smoking increases self-confidence and makes both girls and boys more attractive to the opposite sex.

Women of reproductive age

Poverty is an important determinant of the health of women during their reproductive years. Because of the persistence of early marriage, 20% of women from the poorest families were teenage mothers (and hence had higher maternal mortality rates), compared to 3.6% among women in the highest quintile [2].

Illiteracy is also likely to be a major determinant of health inequity, with continuing gender gaps in adult illiteracy and educational status. Half of Egyptian females over 15 years of age are illiterate, compared to 29% of men. However, the differential for enrolment in secondary schools, with gross enrolment rates of 78% for females and 85% for males (in 2000) suggests that education inequities are diminishing [12]. Demographic and Health Surveys show that educated Egyptian women are likely to enjoy better health than illiterate women: they marry later, are more likely to use modern methods of contraception and desire a smaller number of children than less educated mothers. During pregnancy they are more likely to use antenatal care, have medical personnel attend during delivery, and use postnatal checkups.

Rural residence also is an important determinant of health among women of reproductive age, with urban women marrying later, having smaller families and more commonly using contraception than rural women, as shown in Table 2.3. A study in three villages in Giza governorate, south of Cairo, found that many women were unaware of the importance of their reproductive health. The survey showed that that 63% of surveyed women were anaemic, 18% were hypertensive and 43% were obese. Although women feel pain, they cannot afford to rest or even seek medical help. Most of them felt that their pain is normal and is due to their position as mothers and wives [13].

Policy implications: strategies to decrease health inequity

Strengthening health information systems

Although Egypt has plenty of data from censuses and national field surveys, reliable longitudinal and representative data linking measures of health with measures of social status or advantage at the individual or small area level are not available. A strong health information system incorporating both population and facility-based data is essential to help the government to demonstrate and address inequalities.

Equal distribution of health resources

One measure of equity is the extent to which public policy and authority are structured to serve public interests and justice. For example, in Egypt the university hospitals and the health insurance hospitals are located in the big cities mainly because people in these big cities can afford the co-payments. In short, the current distribution of health care resources in Egypt is according to ability to pay, rather than according to need. Adequate progress in narrowing gaps, particularly where resources are limited, requires frameworks that ensure attention to those with the greatest health needs and least resources.

Eradicating poverty and illiteracy

As poverty and illiteracy are two main factors producing health inequity, eliminating them and improving the economic conditions of poor people is essential. This requires activities directed to poor communities and raising the status of women through offering credit for income-generating projects. Eliminating illiteracy, especially among females, requires creating different types of schools suitable for each community, such as one-classroom schools and community schools. These now reach many illiterate females in rural areas, especially in rural Upper Egypt, providing flexibility in timing and in type of schooling that reflects the needs of local women.

Health education programmes and face-to-face communication activities

Using health education to reach women in Egypt, especially the illiterate, can help to raise the awareness of mothers about their own health, reproductive health and the health of their children. The successful role of female social workers (*raidat refiat*), in rural areas in raising awareness of reproductive health in general and family planning in particular is greatly appreciated by the Ministry of Health and Population. The study of reproductive health in villages in Giza demonstrates the great need for sensitive health education programmes especially in the areas of reproductive and child health.

Improving the quality of free health services

Improving the quality of the free health services that are available in health units and maternal and child health centres in almost all villages in Egypt is essential. More than half of women in the rural areas still never use, or rarely use, these services, except for the immunization of their children. Although health units with a female physician are located in each of the three villages covered in the Giza study, local women more often consult their husbands or any other family member when they are ill. Women mentioned that physicians in the health unit rarely listen to them, and offer them a prescription without a physical examination. Women in these villages mostly tolerate and endure their pain, which results in the under-reporting of morbidity and under-utilization of health services. These women urgently need high quality health services that can adequately respond to their needs.

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2.2 Islamic Republic of Iran

The Islamic Republic of Iran has a longstanding commitment to health equity, and health indicators have improved since 1979. However, social determinants of health and health inequities still exist with respect to:

- regional disparities in health and social status, especially in remote and border provinces, and more generally in rural areas;
- gender differences in exposure to disease risk;
- out-of-pocket expenditure, which accounts for around half of all health expenditure.

International or global determinants of health, such as international sanctions and lack of international support, also hinder the country's efforts to achieve health equity.

Introduction

After the Islamic revolution in 1979, the main strategy of the government was to increase social and health equity, mainly by extending the benefits of development to rural areas: increasing services such as primary health care, education, water supply and electricity, and improving communications. Although there have been significant improvements in health status at national level, there is still inequity in health between urban and rural areas and between provinces. Recent welfare legislation promotes health equity and a “flourishing society”. The possibilities offered by the recent five-year plan represent important efforts to incorporate the social determinants of health into health policy.

Health expenditure

The percentage of GDP spent on health is 6.5%, which is relatively high for the Region. Out-of-pocket expenditure on health is 50%, which suggests that more needs to be done to achieve universal access to health care [1].

Health indicators

Life expectancy increased from 37.5 years in 1976, to 71.1 years in 2003. Life expectancy increased for males from 58.5 in 1984 to 67.6 and for females from 59.2 to 70.4 years in 2001. Maternal mortality ratio declined from 237 per 100 000 live births in 1974, and 91 per 100 000 live births in 1989 to 37.4 in 1997. Infant mortality rates declined from 104 in 1976, to 52.5 per 1000 live births in 1990 to 28.6 in 2000. Under-five mortality rate declined from 113 in 1979 to 36 in 2000. The proportion of underweight children under 5 years of age fell from 15.8% in 1991 to 5% in 2005.

These improvements in health status can be attributed, in large part, to improvements [1,2,3,4] in social determinants such as:

- increase in access to local health services, which reached 100% of urban and 86% of the rural population in 2000;
- increase in access to an improved water source, from 55% of the population in 1978 to 95% in 2005;
- increase in adult literacy rate, from 47% in 1976 to 82% in 2004;
- decrease in poverty, in the proportion of the population with an income under US\$ 1 a day, from 2.24% in 1995 to 0.62% in 2002;
- decrease in food poverty, from 12.75% in 1995 to 9% in 2002.

Regional disparities in health status

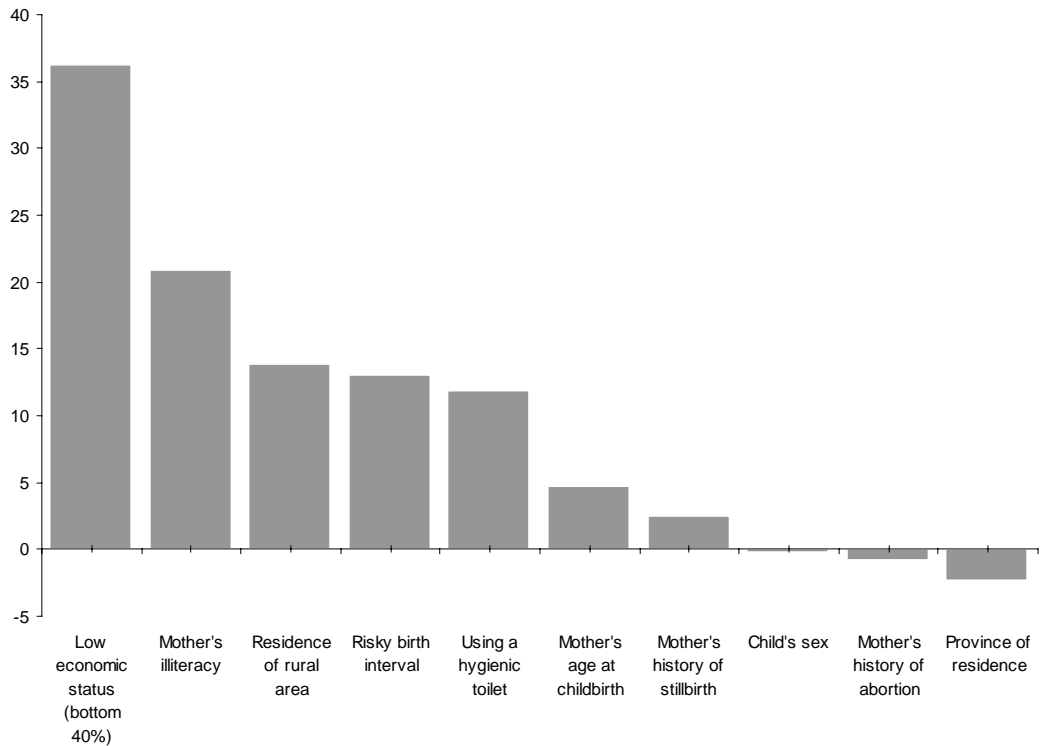
Regional disparities in health exist in the Islamic Republic of Iran in spite of a longstanding national commitment to health equity which has taken into account the social determinants of health. These disparities are identified in the Demographic and Health Survey 2000 which disaggregates data at the provincial level [2].

Rural areas were neglected prior to the revolution, and the great majority of physicians were practising in towns. The indicators presented here demonstrate the continuing need to correct the rural–urban imbalance, in accordance with official policies prioritizing health and social interventions in rural areas.

In remote provinces lack of security contributes to low health status and limited social development. In the east and the west, the country's borders adjoin those of Iraq and Afghanistan, areas of complex emergency. In the extreme south-east, the province of Sistan-Baluchistan adjoins that of Baluchistan, a province of Pakistan. In the border provinces local security is affected by drug and arms trafficking, and illegal immigration. In addition, some of these areas and some other provinces with poor health indicators suffer from poor communications and a shortage of staff in the health and welfare sector.

Mortality rates for children vary from region to region. Within rural areas, under-5 mortality rates are highest (45 per 1000 live births) in Sistan and in the provinces of Kordestan, Kohkiluyeh, Hormozgan and Khorasan, and lowest (15 per 1000 live births) in Tehran.

The relative importance of the social determinants which affect infant mortality are shown in Figure 2.1. The most important determinant of low infant mortality, responsible for more than one third of the differential, is household economic status, followed by mother's illiteracy, residence in rural area, and risky (i.e. short) birth interval [5]. As an independent determinant, province of residence appears less important. This is because provinces with high infant mortality are also poor, have high rates of illiteracy, and are largely rural. Thus, this finding does not negate the need to target specific provinces in activities to decrease infant mortality.



Source: AR Hosseinpoor, based on analysis of data from the Demographic and Health Survey 2000 [2].

Figure 2.1. Social determinants that affect infant mortality

Within provinces, infant mortality varies according to household economic status, but the extent of this variability differs from province to province. For example Sistan-Baluchistan and Ardebil provinces have a high average infant mortality, but little or low inequality. Zanzan and East Azerbaijan have high average infant mortality rates but a high inequality [6].

Underweight children are more commonly found in the rural areas, 13.7%, compared to 9.6% in urban regions. About 50% of underweight rural children live in the provinces of Sistan-Baluchistan, Khorasan, Hormozgan, Fars and Kermanshah. Furthermore, nearly half of the underweight children in urban areas live in Tehran (by far the largest city in the country), Khorasan, Khuzestan, Isfahan and Sistan-Baluchistan provinces.

Maternal mortality rates are not available on a regional basis. However, regional figures are available for the proportion of deliveries by trained personnel, which has been identified as an indicator of maternal health for the assessment of Millennium Development Goals. These show the lowest rates in 2004 in Sistan-Baluchistan,

Kohkiloyeh, Hormozgan and Kordestan. While 45% of women in rural Sistan deliver with the help of untrained personnel, in half of the 18 provinces the figure is less than 5%.

The total fertility rate is higher in rural areas, 2.4, than in urban areas, 1.8. However, some of the same provinces that show poor infant health status experience high rates, for example Sistan and Baluchistan, 4.1, followed by Hormozgan (2.8), Khuzestan (2.6), Qom (2.6) and West Azerbaijan (2.5).

Contraception (use of all methods) for married women, 15–49 years, is 73.8% nationally, with lower rates in rural areas, 67.2%, compared with urban areas, 77.4%. In Baluchistan, Hormozgan and Qom Provinces the rate is less than 50% [2].

Access to health care can be assessed through an estimation of the proportion of active health houses (first level access to health care) as a percentage of numbers needed, in 1999. Figures range from 100% for Yazd, to 75% for Qazvin and 72.3% for Sistan-Baluchistan, with a national average of 90% [6].

Regional contrasts in socioeconomic indicators

The ratio of girls to boys in primary, secondary and tertiary education increased from 79.2% in 1990 to 93.1% in 2002, and in tertiary education from under 40% to over 100%. The higher drop-out rate of male students, particularly at the secondary and tertiary levels, has partly contributed to the higher ratio of female students at these levels. However, there is still a gap in the literacy rate for 15–24 year-old males and females, although this has narrowed markedly since 1990.

Access to safe drinking water is lower in rural areas, 86%, compared to 97% for urban areas. Sistan-Baluchistan is the least well provided province, with 55% overall and 43% in rural areas. A sanitary toilet is available for 97.7% of households in the whole country. Again, Sistan-Baluchistan has the lowest percentage, 80.4%. Access to a shower in the home is 45.4% for rural and 88% for urban areas. In Sistan-Baluchistan, in rural areas the rate is 9.9% compared to 60.4% in urban areas [2].

Gender differences in exposure to disease risk

Gender is an important social determinant of health which affects survival rates for males and females. The percentage of DALYs (disability adjusted life years)¹ for various diseases, based on figures for three provinces in the 2003 burden of disease study [7], are used as an indication of these contrasts.

¹ The sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability.

Traffic injuries are responsible for the highest percentage of DALYS in males of all ages, 25%, compared to 7% for females. Traffic injuries are commoner among males because more males than females are exposed to road traffic; in general, hazardous driving is associated with values of “masculinity” and risk-taking for males.

Depressive disorders are responsible for the highest percentage of DALYS due to listed illnesses in females, 10%, compared to 3% in males. Detailed studies have also confirmed high levels of depression, mental illness and intentional injury among females.

Substance abuse is responsible for 5% of DALYs in males, compared to <1% in females. High rates of substance abuse are recorded among male prison populations, associated with injecting drug use and the spread of HIV/AIDS.

Child survival: For infants under 5 years of age, low birth weight and prematurity is responsible for a higher percentage of DALYS among boys, as would be expected. However, among girls, a slightly higher percentage of DALYS are recorded for iron deficient anaemia, diarrhoeal diseases, malnutrition and iron deficiency. Although each of these are responsible for <2% of total DALYs, the difference may, in part, be the result of mothers’ discrimination against girls with regard to feeding patterns.

International or global determinants of health

International or global determinants of health are those that originate outside the country. Some of the border provinces are adversely affected by conditions in neighbouring countries in complex emergencies. These result in: lack of security, drug trafficking and illegal migration.

Global determinants have also affected the country, due to the long-term effects of the eight year war with Iraq in the 1980s and the longstanding problems of international relations experienced by the Islamic Republic of Iran, which have resulted in international sanctions and lack of international support for social and economic development.

Tackling social and health inequity

The key commitment to health equity

In the years after the revolution the government enshrined the principles of health and social equity in a new Constitution, and set about implementing policy accordingly. In so doing, it was accepting a broad definition of health, and, through its policies, an implicit recognition of the importance of what came to be known as “the social determinants of health” in the identification of inequities in health status.

The Constitution states national objectives for the development of a just economic system, in accordance with Islamic criteria, in order to provide for social welfare,

eliminate poverty, and abolish all forms of deprivation with respect to food, housing, work and health care, and the provision of social insurance for all. The relevant health and equity articles of the Constitution include health as a human right and government's responsibility to provide health to the totality of the population on an equitable basis.

Actions to carry forward social determinants of health and health equity

A unique and far reaching reorganization of the government health sector has occurred over the past 20 years. In 1985, with the approval of Parliament, all health-related schools and institutions were moved from the Ministry of Higher Education and integrated into the new Ministry of Health and Medical Education. In time, the chancellors of the health universities became responsible not only for education and research but also for the health care of their entire province. The main rationale for the formation of the new ministry was the need for medical education to reflect more closely the objectives of the health system, especially the pursuit of health equity. To respond effectively to the needs of all people, medical training needed to incorporate preventive medicine, mental health and social well-being, and to be oriented towards promoting health for the community, as well as for the individual. This required the reorientation of health-related education in general, and that of medical students in particular [4].

The social security system is designed to protect people during unemployment, old age and disablement. People who have no guardians, mothers (especially during pregnancy), children, divorcees, the elderly and self-supporting women also receive support as needed. Under the current system, basic needs should be ensured for each household. The programmes are being carried out in coordination with the following ministries: Welfare, Health, Housing, Education, Labour, Welfare and the Interior; and other stakeholders such as nongovernmental organizations.

A 5 year national plan for confronting HIV/AIDS (2002-2007) is concerned, in part, with promoting harm reduction strategies among injecting drug users, a marginal section of the population (mostly male). "Triangular clinics" have been set up in Kermanshah Province to provide integrated services for reducing the level of risk among injecting drug users, curing STDs and protecting and supporting people living with HIV/AIDS [8].

Community-based initiatives, based on the programmes originally introduced by WHO Regional Office for the Eastern Mediterranean, target groups such as the poor, girls and women, youth, the poor, and those living in crisis areas. The basic development needs component is among the top priorities in the country, especially in rural areas, where it is being carried out with the active involvement of local communities [9]. The three provinces of Bushehr, Chahaar-Mahal and Bakhtiari, and West Azarbaijjan were selected as model sites.

The Secretariat of the Commission on Social Determinants of Health in WHO signed a formal agreement with the Ministry of Health and Medical Education in August 2005 in which WHO agreed to support the efforts of the Islamic Republic of Iran, as a country partner, in the area of social determinants of health and health equity. To this end a national Social Determinants of Health Secretariat was established in the Ministry of Health and Medical Education.

Conclusions

The national social determinants of health team could be strengthened by intersectoral action at all levels, with all sectors working together:

- through local social determinants of health teams, following the fourth national development plan and preparing their own plans to eliminate disparity within and between provinces;
- for the provision of a unified system of data collection at local, sub-national and national level, in which all relevant government sectors collaborate.

Action to correct regional disparities in health status might include:

- expanding primary health care and focusing on provinces with the lowest health status;
- a special programme to educate local staff, as the lack of human resources is a major reason for disparity between provinces;
- sustained provision of micronutrients and fortified foods for areas with the highest proportion of underweight children;
- expansion of community-based initiatives, focusing on intersectoral cooperation and community participation, to all parts of the country, especially to those provinces with the poorest health status.

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2.3 Jordan

Although health status overall in Jordan is good, and a relatively high proportion (10%) of GDP is spent on health, inequities exist in the health system:

- The public sector provides 80% of the services but accounts for only 40% of the expenditure.
- Only one third of the population have health insurance.
- Forty per cent (40%) of health expenditures are out of pocket.
- Females have higher out of pocket health expenditures and use the health services more than males.

Introduction

The focus of this study is the role of the health system in facilitating or hindering health equity in Jordan. The way a health system is designed, operated and financed can have an important role in contributing to inequities in health for vulnerable groups. This is the case even in a country such as Jordan which has one of the most effective health services in the Eastern Mediterranean Region. This review focuses largely on the role of the health system in hindering or facilitating health equity.

Jordan is a small country, with a population of 5.48 million (2005) and relatively good average health indicators, as shown in Table 2.6. It is undergoing an epidemiological and nutritional transition, with high rates of cardiovascular disease associated with diabetes, hypertension, obesity and smoking. Obesity among young people is growing, with 10% of children aged between 5 and 18 years obese.

Table 2.6 Basic health indicators, Jordan

Indicator	Value
Infant mortality rate (per 1000 live births)	22 (2005)
Under-five mortality rate (per 1000 live births)	27 (2005)
Maternal mortality ratio (per 100 000 live births)	40.3 (2005)
Full immunization coverage, 12 months	89% (2005)
Married mothers using contraceptives (any)	56 % (2002)
Women who seek at least one antenatal visit	99 %
Births attended by skilled health personnel	100 % (2004)
Access to safe drinking-water	98 %
Access to improved sanitation	60%
Percentage of children under 5 years old who are underweight	4% (2002)

Source: [1]

The average annual population growth rate declined from a relative high of 3.6% in 1996 to 2.5% in 2005. Overall, nearly one quarter of the total population growth is due to in-migration, particularly of Palestinian refugees as a result of the Arab-Israeli wars in 1948 and 1967, Jordan returnees from the Gulf War of 1990–1991 and the influx of over 1 million Iraqis, most of whom are poor, since 2004.

The population is predominantly urban. The rural population is more disadvantaged, with fewer health services and less access to safe water and sanitation. Poverty is significantly higher in rural areas, 19% compared to 13% in urban areas. However, since 83% of the population lives in urban areas, there are three times as many urban poor as rural poor [2].

Social determinants of health and health equity need to be seen within the context of the national commitment to providing for the well-being of all citizens. Social security, gender equity and education are rights for all Jordanians, but social protection is not always equally available to citizens and to non-citizens. Specifically:

- Social security is a right for all Jordanians, covering industrial accidents and occupational illness: old age, disability and death benefits.
- Family allowances and unemployment insurance are provided for in law but are not yet available.
- Education is free and compulsory until aged 15, however the growth of private education and increasing cost of tuition in public universities are leading to inequality in opportunities and increasing the gap between rich and poor.
- All Jordanians are equal before the law, but female exclusion and honour crimes are still problems.
- Although the law prohibits children under 16 from working, the number of child workers, child vendors and child beggars is increasing.

A strategy for social welfare has been developed through dialogue with Jordanian citizens. This 10-year plan covers political, institutional, economic, educational and social reform.

Social determinants of health which are likely to contribute to adverse health outcomes include:

- high rates of unemployment: around 15%, higher in urban areas, among females and young people; over 90% in some poverty pockets;
- growing social inequity: the fruits of economic growth are concentrated in the hands of a few to the exclusion of the many;
- unplanned urbanization: about 50% of the population live in Greater Amman;
- the rapidly growing youthful population which requires an investment of significant resources in education and health services;

- the rapidly growing elderly population, which is creating a demand for health care;
- high rates of immigration, especially of migrants who are poorly educated and have few skills; Jordan has about 450 000–500 000 legal and illegal foreign workers;
- scarcity of water resources for domestic water supplies which are essential for the maintenance of health.

Organization of the health sector

Jordan spends about 10% of its GDP on health, about US\$ 241 per person per year, and has one of the most modern health care infrastructures in the Region. It is a complex amalgam of three major sectors: public, private and donors. The public sector consists of two major public programmes that finance as well as deliver care: the Ministry of Health and Royal Medical Services (for following sections see references [2,3]).

Each major health programme has its own delivery system, and there is little coordination among them. There is no single managerial entity responsible for the overall health system. In addition to managing the Civil Insurance System, the Ministry of Health is responsible for public health, quality, standard setting, medical education and training, etc., but beyond setting standards and approving charge schedules it has little control of the private sector. As part of its strategy to contain health costs, the government has recently established the Joint Procurement Directorate to purchase supplies and equipment for all public health providers including the Ministry of Health, Royal Medical Services and public university hospitals.

The health system performs relatively well in terms of overall access to services and outcomes (as measured by indicators such as infant mortality and life expectancy). However, the country is at a crossroads in the evolution of its health system. The rising cost of public programmes—driven by the aging population, the epidemiological transition to chronic and noncommunicable diseases, continued high rates of population growth, and clinical and economic inefficiencies in the service delivery system—are placing a heavy burden on the country's fiscal position.

Inequity in health financing

With the existence of a two tier health system, private and public, inequities are evident in the distribution of health care expenditures. Sixty per cent (60%) of health expenditure is in the private sector, providing 20% of health services, while the public sector accounts for 40% of expenditure and 80% of services.

The public sector provides public health services for all the population and a safety net for the poor. The government argues that contracting out services was successfully

used as a social and economic policy tool to deal with the effects of poverty and unemployment. As the government does not have the capacity to care for all insured people including the poor, contracting-out allows for the wealthy insured people to be treated in the private sector and pay part of the fees, as a co-payment. Thus, in 2003 38 000 patients were admitted to private hospitals with which Ministry of Health had contractual agreements, thus freeing beds for an almost equal number of admissions for uninsured poor patients in Ministry of Health hospitals, nearly free of charge.

Health insurance coverage

One third (32%) of Jordan's population has no health insurance. The uninsured tend to be male, between 15 and 45 years of age, not highly educated, unemployed, and living in urban areas. Insurance coverage is higher among women, elderly, illiterate, and rural citizens. Table 2.7 shows the percentage of Jordan's population formally covered through various public sector (48%) and private insurance and United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) programmes.

Overall coverage is lowest in the most heavily populated areas, such as Amman, and in the lowest income groups. More rural residents, 73%, are covered, compared to urban residents, 56%.

Fifty-five percent (55%) of Jordanian nationals, but only 20% of non-Jordanians, are covered by health insurance, which indicates a problem for vulnerable migrant workers. Palestinian refugees, including those returning from Iraq, are covered by UNRWA. Jordanian citizens returning from Iraq or Gulf Cooperation Council countries can be covered if they prove they are poor and meet the criteria and conditions for free coverage under the Civil Health Insurance Law.

Table 2.7 Population coverage by source, Jordan

Source of coverage	2000	2004
Civil insurance	18	19.5
Royal Medical Services insurance	23	27
University hospitals	2	1.3
Private firms and corporations	11	8.8
UNRWA	13	11
Uninsured/Uncovered	33	32.4

Note: The insured figures include multiple coverage.
Sources [2,3]

The uninsured can purchase services at Ministry of Health facilities at highly subsidized prices. Public programmes generally cover a comprehensive array of services including pharmaceuticals with very limited patient cost-sharing. However, uninsured individuals, even those purchasing subsidized care in Ministry of Health facilities, must generally pay the full price of pharmaceuticals. Private insurance benefits are more variable and the usual forms of medical underwriting (e.g. pre-existing condition exclusions) are extant.

The fact that 48 % of the population is covered by public programmes, while 60% of all health spending is privately financed suggests that many who are eligible for public financing are paying out of pocket for services in the private sector which they could obtain free or at a subsidized rate in the public sector. Out-of-pocket health expenditure comprises 40.5% of total health expenditure; while this is not among the highest figures in the Region, it reflects, in part, the inadequate insurance coverage for some sectors of the population. The essence of a 'fair' system of financing is to spread the health risks of the population on the basis of ability to pay. While Jordan's Ministry of Health facilities are in effect the 'insurer of last resort', it is clear that there is significant potential to improve the equity of the financing of health services.

The characteristics of the uninsured clearly indicate the inequities in the present system of health financing and insurance coverage. The uninsured are more likely to be: between 15 and 45 years old, not highly educated, living in urban areas, with less than average access to outpatient care, and with higher than average out-of-pocket expenditures.

Access to health care

That the country is relatively small geographically and has a fairly well developed health system means that non-emergency access to facilities is generally not a problem.

To solve access problems for patients who are not insured and cannot pay the treatment costs, the Royal Court Clinics located in Amman and sponsored by the government refer applying patients to public hospitals. The government reimburses hospitals for the full cost of these referrals.

The Healthcare Utilization and Expenditures Survey (2002) showed that the Ministry of Health occupies a critical place in the health care safety net. Outpatient visits by the illiterate, the poor and those living in rural areas are much more likely to occur at the Ministry of Health facilities than at facilities in any other health sector (61%, 69% and 66%, respectively). Inpatient stays by the young, the illiterate, the poor, those living in the north, and the uninsured are particularly likely to occur in Ministry of Health facilities.

The use of outpatient care reflects inequities in access according to need for the uninsured, who use 20% fewer visits than the insured, and the elderly (those over 60

years), who have fewer per capita visits annually than those aged 41–59 years, yet are more likely to need health care. However, the elderly use many more hospital stays than the young, which indicates that at least some of their greater needs are met through the health system.

Inequities in out-of-pocket expenditures on outpatient care exist for:

- the elderly and illiterate, whose average expenditure on outpatient care exceeds 10% of household income;
- urban residents, who spend roughly twice what rural residents spend;
- illiterate Jordanians, who spend twice as much as the most highly educated;
- uninsured Jordanians, who spend nearly twice as much per annum as do the insured; and
- females who spend more than males.

Pharmaceuticals account for more than 75% of out-of-pocket expenditures on outpatient care. This is a burden for all people, especially at-risk groups such as those mentioned above, and it is likely to increase as the price of medicines increases.

These data indicate a pattern of inequities in access to, and use of, health care associated with the following social determinants.

- **Poverty.** The use of inpatient care rises from the first (poorest) quintile through the fourth quintile but falls for the fifth. That poorer people, who are likely to have poorer health than those who are better off, use less inpatient care indicates an inequity in access to such care.
- **Place of residence.** Urban residents spend roughly twice what rural residents spend in out-of-pocket expenditure on outpatient care; rural residents are, overall, poorer than urban residents. Urban residents are wealthier and use the private sector more frequently. Fifty-six percent (56%) of urban residents are insured, compared to 73% of rural residents. Health care services are more accessible in urban areas.
- **Gender.** Females pay three times as much in out-of-pocket expenditure on inpatient care as males, and also spend more in out-of-pocket expenditure on outpatient care. Higher expenditure reflects higher overall use of health services by females, most likely reflecting their greater needs during their reproductive span. Females have more outpatient visits than males (3.89 visits per capita per annum) compared to males (3.21 visits); they also have more admissions than males (96 per 1000 compared to 61).

Towards a more equitable health system

Specific challenges facing health development in Jordan were identified in a joint Ministry of Health/WHO report on health strategies in November 2001. Among other

factors, it highlighted the negative impact of poverty on accessibility to quality health care particularly in view of the high proportion of uninsured people.

The government has taken many decisions during the past three years to improve equity, such as:

- amending the Civil Health Insurance Law in 2004 to include in the civil health insurance system: all government employees, irrespective of their service position; the husband and children of female government employees; and any citizen who wishes to join this highly subsidized system;
- provision of free health insurance for all children below 6 years of age (350 000 children);
- provision of free health insurance for all people living in poverty pockets;
- offering subsidized health insurance schemes for senior citizens (over 65) and pregnant women.

As part of the Socioeconomic Transformation Programme, the government is expanding and improving health care provision for the poor. This includes plans to expand health insurance coverage from 60% in 2000 to 80% by the end of 2006, and upgrading primary health care facilities, which are mainly used by the uninsured. Future plans include the establishment of an independent health insurance organization, and providing free health insurance for senior citizens (over 65 years of age).

While the health care system appears to function well overall, there are still subpopulations at risk of deficient access to health care and severe financial burden, such as the poor, the elderly and the unemployed. This has implications for the health policy-makers who aim to strengthen the health care system in Jordan. The Ministry's initiatives may need to be configured so that they are more carefully directed towards enhancing the health care delivery system, with a particular focus on the at-risk population. From a policy point of view, there is a need to evaluate existing programmes designed to provide a health care safety net, to identify shortcomings in these programmes, and to devise new programmes to protect those currently outside the safety net.

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2.4 Morocco

Social determinants associated with poor health status in Morocco include:

- place of residence, especially rural areas and certain provinces remote from the centre of government, with data on urban slums only now emerging;
- gender discrimination, resulting in low status of women, especially in rural areas;
- lack of education resulting in a high level of female illiteracy in rural areas;
- distance from basic health facilities, and poor quality of facilities;
- lack of health insurance, with only 17% of the population covered at present.

These determinants are discussed as they affect the health of young children and women of childbearing age. The National Human Development Initiative (Initiative Nationale pour le Développement Humain), launched May 2005, offers prospects for improvement.

Introduction

The major themes of this analysis of the social determinants of health in Morocco are:

- the paucity of appropriate information
- the challenge of poor health in rural areas and deprived provinces
- social determinants of the health of young children
- social determinants of the health of women of childbearing age.

Paucity of information

The information needed to identify social determinants of health is scarce and unreliable, often lacking sufficient detail to be of real value. For example, the annual statistical book of the Directorate of Statistics and the annual health statistics of the Ministry of Health fail to provide data on mortality and morbidity in rural areas, which have the highest levels of poverty and poor health and social conditions. The Demographic and Health Surveys of 1987 and 1992, the 1997 Pan Arab Project for Child Development (PAPCHILD) survey and the 2003/2004 Pan Arab Family Health Survey (PAPFAM) survey focus on maternal and child health, and reproductive health. They are largely descriptive, rather than analytical, and neglect qualitative studies. More importantly, they overlook large sectors of the population: adolescents, post menopausal women and males above the age of 5 years.

Challenge of poor health in rural areas and deprived provinces

Rural and urban contrasts in life expectancy at birth demonstrate the extent of rural disadvantage in Morocco. As shown in Table 2.8, both women and men live shorter lives in rural than in urban areas and these differences have persisted over time.

Table 2.8 Change in life expectancy at birth by sex and area of residence (1987–2001), Morocco

Area	1987		1994		2001	
	Men	Women	Men	Women	Men	Women
Urban	67.8	71.8	69.4	73.7	71.0	75.4
Rural	61.1	63.0	64.0	65.9	66.2	68.1
Both	63.7	66.4	66.3	69.5	68.0	72.1

Source: [1]

The disadvantages of rural areas which are likely to have an adverse impact on health include:

- poor access to basic services such as health facilities, water and sanitation;
- high levels of poverty: 27% of the rural population live in poverty, compared to 12% of the urban population;
- high levels of illiteracy, especially for women: 75% of rural women are illiterate, compared to 40% of urban women;
- the low status of rural women.

The lack of health facilities and poor access to health services remain distinctive features of rural life in Morocco.

- More than 30% of the rural population in Morocco has to travel at least 10 kilometres to reach the nearest health facility.
- The number of inhabitants per physician ranges from 6362 in the rural area of Taounate (in the remote north east) to 380 in the capital, Rabat.
- The number of public hospital beds per 100 000 population ranges from 31 in the rural area of Berkane (in the remote north-east), to 444 in Rabat.

Lack of safe water and sanitation characterizes rural areas in Morocco, as shown in Table 2.9. Few rural households have access to drinking-water. As fetching drinking-water is usually left to women and added to their numerous other responsibilities (childbearing, children's education, housework, collecting firewood), it is likely to increase their vulnerability and damage their health.

Rural disadvantage has been a longstanding problem in Morocco. It was identified in the premier Programme de prioritiés sociales (BAJ), which targeted 14 remote provinces, mostly in the extreme north and south of the country. Interventions began in 1996/97 in these deprived areas, home to more than a quarter of the Moroccan population; 75% were rural residents. These areas suffered from:

- inadequate health services;
 - low health expenditure per person: 300 dirhams per person, compared to 619 elsewhere;

Table 2.9 Percentage (%) of households with access to basic facilities, Morocco, 2004

Facility	Urban	Rural	Both
Running water	83.0	18.1	57.5
Electricity	89.9	43.2	71.6
Sewage disposal system	79.0	1.7	48.6

Source: [2]

- shortage of health personnel and facilities: with only 11% of the countries doctors, and 16% of the nation's hospital beds;
- limited use of health services: 38% of women use antenatal services, compared to 63% in non-BAJ areas;
- poverty: 27% of the population lived in poverty, compared to 16% elsewhere;
- illiteracy: 62% of those over 15 were illiterate compared to 47% elsewhere;
- isolation: lack of roads and communications.

Constraints such as these force many of those living in rural areas and deprived provinces to give up any idea of medical care when they are ill, and seriously hinder evacuations in emergency cases. These years of exclusion will be hard to make up. However, they are now being addressed by the National Human Development Programme, launched in May 2005, which is also including the disadvantaged urban populations.

Social determinants affecting the health of young children

Over and above the constraints imposed by these regional contrasts, are the effects of age and gender, especially during the vital first years of a child's life. Infant mortality is frequently used as an indicator of the health status of a population. As the following discussion clearly indicates, being born in the countryside, to an illiterate mother, or in needy conditions, all prejudice a child's chances of survival and good health.

Contrasts in post-neonatal mortality, of almost exclusively exogenous origin, are linked to determinants such as hygiene, food and care. In Morocco, the level of post-neonatal mortality is five times greater among the poorest quintile (24 per 1000), compared to the richest (5 per 1000). For neonatal mortality, the differences are much less striking, with the risk of death during the first month of life only twice as likely for children born into the poorest quintile, as shown in Table 2.10.

Gender discrimination is evident from data on gender-specific mortality (Table 2.10). In Morocco the universal advantage enjoyed by females gradually disappears with age and for the age group between 1 and 5 years gives way to a slight excess female mortality

Table 2.10. Child mortality rates according to specific social and economic characteristics, Morocco

Socioeconomic characteristics	Neonatal mortality	Post-neonatal mortality	Infant mortality	Child mortality	Infant and child mortality
Sex of the child					
Male	33	18	51	9	59
Female	23	14	37	11	48
Area of residence					
Urban	24	9	33	5	38
Rural	33	22	55	15	69
Mother's level of education					
Illiterate	33	19	52	11	63
Primary	21	11	33	10	42
Secondary or higher	17	6	23	4	27
Well-being quintile					
Poorest	38	24	62	16	78
Middle	25	12	37	10	47
Richest	19	5	24	2	26

Source: [3]

in young girls. The PAPCHILD survey failed to identify evidence for discriminatory practices in nutrition or immunization (see Table 2.11). Two other surveys concluded that there was no connection between anaemia and vitamin A deficiency and gender. However, they did find that the socioeconomic level of the family was a determining factor in the existence, or not, of these deficiencies; here, as elsewhere, discrimination due to gender and class overlaps. Clearly further research is needed on the attitudes and behaviour underlying gender discrimination.

Social status is a major determining factor of survival for Moroccan children, whether for accessing preventive measures such as immunization, or curative treatment involving the health care services, as shown in Table 2.11. Similarly, stunting or acute malnutrition most severely affects children from deprived backgrounds.

Social determinants of the health of women of childbearing age

High maternal mortality levels illustrate the social insecurity and vulnerable health status of many Moroccan women. Although control of maternal mortality has been one of the Ministry of Health's main priorities for several years, the national figure remains high, at around 227 maternal deaths per 100 000 live births. Rates in rural areas, 267, are much higher than in urban areas, 186 [3]. The national average is around three times that in the north African countries of Tunisia and Libyan Arab Jamahiriya. The maternal mortality rates in Jordan, with a similar GNP per capita, 41 deaths per 100 000 live births,

Table 2.11 Immunization, medical treatment and nutrition of children under the age of 5 years, Morocco

Socioeconomic characteristics	Children having received all vaccines ^a	Children having received no vaccines	Children with ARI ^b symptoms or fever having had treatment	Stunted children	Children with chronic malnutrition
	(%)	(%)	(%)	(%)	(%)
Sex of the child					
Male	86.8	1.6	36.0	19.1	6.7
Female	91.2	1.2	33.0	17.1	6.2
Area					
Urban	93.5	1.0	43.3	12.9	3.8
Rural	84.1	2.0	24.5	23.6	9.2
Mother's level of education					
Illiterate	86.0	1.9	30.1	21.8	8.2
Primary	91.8	0.8	38.7	14.3	4.0
Secondary or higher	95.9	0.6	44.1	10.5	3.4
Well-being quintile					
Poorest	80.7	2.8	18.0	29.1	12.0
Middle	90.6	0.4	31.9	16.1	4.5
Richest	97.4	0.7	50.7	10.2	3.3

Source: [3]

^a BCG, measles, three doses of DPT and poliovaccine^b Acute respiratory infection

18% of that in Morocco, reflects the greater investment in women's health on the part of the Jordanian authorities [4].

To lower maternal mortality, programmes and actions need to incorporate the components that determine their impact. A number of factors contribute to high maternal mortality and the precarious state of health of many Moroccan women during pregnancy.

- Health infrastructure is poor, with only 1 maternity bed for 2770 women of child-bearing age; there are only 65 midwives and fully trained birth attendants for the entire rural population [3].
- Poor quality health services may deter women from seeking health care. Even when health services are free and easily accessible, they may not be actually utilized. A 1996 study in the northern provinces of Morocco found that people may be deterred from using the health services by the behaviour of health personnel, such as poor treatment, disdain and even insulting behaviour towards clients. The disadvantaged are those most likely to suffer from such discrimination [5].

- The remoteness of health facilities and the absence of roads and means of transport hinder the emergency referral of pregnant mothers or delay management of such cases by health personnel.
- Financial barriers hinder the access of women to appropriate services. A study in 1997/1998 [6], found that:
 - almost a quarter of Moroccan women mentioned money as the reason for not consulting a doctor when ill;
 - women resorted to self-medication or direct referral to a pharmacy: 41% in urban areas compared to 22% in rural areas.

Financial barriers for women (and other sectors of the population) were aggravated by the structural adjustment programme in Morocco in the 1980s. The effects of this programme continue to be reflected in higher costs for health care, thus rendering it even less accessible to the poor.

- Denial of decision-making rights remains a major problem for many women. The Ministry of Health survey of 1997/98 reported that 68% of rural women and 34% of urban women had to be accompanied during a medical consultation [6].

As long as this situation lasts, and as long as lack of education and poverty exist, health programmes directed towards women will achieve a limited impact. As a result of these barriers to access, and the weaknesses and shortcomings of the health system, few women receive adequate health care during pregnancy, while giving birth and during the antenatal period (Table 2.12). Of all the health needs linked to childbirth, those concerning postnatal care remain by far the least well provided for. On a national level, in the best-off social categories even a single postnatal visit is still rare among Moroccan women.

Once again, women who are from rural areas, who are illiterate and live in poor households fare worse than women who are literate, live in the wealthiest households and in urban areas.

Conclusions

Health inequities persist in Morocco, and are related to several determinants. Place of residence results in deprivations in rural areas and certain provinces remote from the centre of government. Gender discrimination increases the vulnerability of women and children, adversely affecting their health. Poverty, lack of education, distance from basic health facilities and inadequate health services contribute to the poor health of all sectors of the population.

Attempts to improve the health of the most disadvantaged in Morocco will need to address the problem of the limited health budget allocated by the Moroccan government

Table 2.12 Use of health care facilities and health personnel by women who gave birth to live children during the past 5 years, Morocco

Socioeconomic characteristics	Women who did not receive antenatal care (%)	Women who had no postnatal visit (%)	Women who gave birth at home (%)	Women who were attended by a traditional midwife during delivery (%)
Area of residence				
Urban	15.1	83.7	16.4	7.7
Rural	52.1	96.4	61.1	33.8
Mother's educational level				
Illiterate	44.5	94.7	52.4	28.2
Primary	21.5	88.9	23.8	12.6
Secondary or higher	6.6	79.9	7.6	3.4
Well-being quintile				
Poorest	60.3	97.1	70.5	39.9
Middle	29.4	89.9	31.8	14.1
Richest	6.9	73.6	6.0	3.1
National	67.8	93.4	38.5	20.6

Source: [3]

to the Ministry of Health. This has not been sufficient to make up for the years of austerity imposed by the structural adjustment programme in the 1980s.

Health insurance covers only 17% of Moroccans, of whom the vast majority are public sector employees and their dependents living in urban areas [7]. The rest of the population use free public primary health care facilities and hospital care, which is free for the very poor, or they pay for private services.

The policies and action programmes that, until recently, aimed to ensure the right to health and widespread access to health services were unable to turn back the long history of centralized administration dating from the colonial period and perpetuated by the structural adjustment programme. Programmes continued to be designed on a national level, and no parallel actions were undertaken to tackle the many social problems which continued to affect the health of so many Moroccans. While the impact of gender discrimination on the health of Moroccan women is now obvious, it seems that decision-makers failed to take this factor into account when formulating policies and developing programmes. The role of men in specific problems related to women's health (family planning, for example) was gradually recognized, but a gender-based health policy in Morocco still lay in the future.

The National Human Development Initiative (Initiative nationale pour le développement humain – INDH), launched in May 2005, with the full support of King Mohamed VI, is a multidimensional and multi-partner approach to eradicate the

pockets of poverty in rural and urban areas and to bring the standard of living and social conditions of the most underprivileged populations into line with rest of the country. It will concentrate on integrated and targeted action programmes for the most seriously deprived areas, including 360 rural communities housing nearly 3.5 million people and around 1.5 million people living in 250 crowded urban neighbourhoods.

INDH is similar in many ways to the basic development needs programme, a component of the community-based initiatives programme [8]. This was launched with the support of WHO Regional Office for the Eastern Mediterranean in Morocco in the early 1990s. INDH is characterized by its broader geographical range and greater number of interventions. However, both share an integrated, multi-partner and participatory approach to poverty eradication. Both promote a multi-dimensional approach to health issues and give top priority to access to basic facilities (health care, water, electricity, roads), strengthening human capital (promotion of literacy, training, employment, etc.), and creating income-generating activities (microfinance and cooperatives). INDH interventions are too recent for evaluation. However, the strong will of the highest authority to reach the goals set for this initiative, the human and material means that have been mobilized in order to do so, together with the innovative and realistic approach that has been adopted, point to success for this initiative.

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2.5 Oman

Oman is a welfare state which provides health care and other social services for all citizens. Health indicators are high, compared to the rest of the Eastern Mediterranean Region, but not as high as other GCC countries.

Social determinants in Oman that relate to adverse health outcomes include:

- rural residence;
- lifestyle changes in diet, leisure and transport use resulting in obesity and attendant health risks;
- environmental determinants, such as inadequate drinking-water, sanitation and poor housing;
- disadvantages for many non-citizens.

Introduction

Oman has experienced a remarkable social and epidemiological transition in the past three decades, demonstrated by improvements in health and social indicators. Oman is considered a welfare state, in which health and social welfare services are now widely available to Omani citizens. While health and social indicators are high for the region, they are below those of other member countries of the Gulf Cooperation Council (GCC). Also, health inequities exist between rural and urban residents, for non-Omanis compared to Omani citizens, and as a result of lifestyle and environment-related social determinants.

There are considerable gaps in our knowledge of the health status of the residents of Oman, and of the social determinants of their health. The Oman Family Health Survey of 1995 [1] showed that the social and epidemiological transition was well under way a decade ago, with a decline in the age at marriage and in fertility, and signs of a decline in the marital fertility rate. However, as of mid-2006, there is no comparable later survey information to provide detailed insights into health status and health determinants since then, even for maternal and child health. The 1995 Family Health Survey only sampled Omani households.

Non-Omanis comprise one quarter of the residents of Oman, but they are invisible in the health statistics. The demographic and health status indicators (2006) used in this report are provided by the Ministry of Health and refer only to Omani citizens [2]. While the 2003 census data provides information on differences in age structure and occupation between Omanis and non-Omanis, it does not include health data. General health indicators for Omanis have improved considerably from 1970 to 2005, as shown in Table 2.13. Currently, 100% of the urban population, and 90% of the rural population has access to local health services [2].

The decline in child mortality is attributed to the increased education of women, improvement in living conditions, provision of health care services and their extension into most parts of Oman. For the past decade almost all mothers have received prenatal

care; less than 1% of mothers never visited a clinic for antenatal care in 2004. However, far fewer visited for postnatal care.

The total fertility rate (TFR) has declined, from around 9.5 births per woman in 1981–85, and around 7.4 in 1991–95 to 3.1 in 2005. The decline in fertility is due to the spread of contraceptive methods, increasing from 24% of married women surveyed in 1990 to 32% in 2000, and to the expansion of education among women and the increase in the average age at marriage. Female life expectancy, as of 2005, is 75.4 years, compared to 73.2 for males [1,2].

Health systems and health equity in Oman

The principal of health equity for Omanis is guaranteed by the Laws and Statutes of the Sultanate: Article 101, 1996, Chapter 2 The Principles of Government Policies, Article 12 Social Principles. Item 6 stresses that “the government is responsible for general health matters and the treatment and prevention from illnesses and diseases, seeks to provide all citizens with health care and encourages the construction of hospitals and health centres and private clinics under the supervision of the State ... and it also seeks to protect and preserve the environment and combat pollution”. Policy statements stress concern for equity, including access to health care services and the removal of disparities at the regional level, as well as for preventive health and community participation.

Health care provided by the Ministry of Health is almost free for Omanis, and financed from general revenues rather than a health insurance system. Primary health services are provided by the Ministry of Health. Other services are provided by the Ministry of Health, the Sultan Qaboos University Hospital, the Armed Forces Hospital, the Royal Oman Police Hospital, and private hospitals and clinics. In order to recoup some health costs, the government levies modest fees, such as charging for a medical card, and for part of the cost of medical consultation and clinical services. The government also charges insurance companies for the treatment of victims of road accidents, as well as recouping partial treatment expenses from private sector guest workers. Pensioners and their dependents and beneficiaries of social security also have access to these services. The cost and availability of care for non-Omani guest workers, who comprise around one quarter of the total population, is related to their employment status (see also below).

The total health expenditure in Oman is 3.2% of GDP in 2005, and 4.9% of government expenditure [2]; these figures are low compared with other countries in the world with a similar GDP. In line with economic improvements, expenditure by the Ministry of Health has increased from OMR 6 million in 1970 to OMR 176.5 million in 2004. While health expenditure is slightly higher than the regional average, it is lower than that of the other member countries of the Gulf Cooperation Council. Overall, general government expenditure comprised 83% of all health expenditure in 2005, reflecting the

Table 2.13 Basic health indicators, Oman

Indicator	1970	1990	2005
Life expectancy at birth (years)			
Males			73.2
Females			75.4
Infant mortality rate (per 1000 live births)	103	29	10.3
Child mortality rate (per 1000 live births)	149	35	11.1
Newborns with low birthweight	na	8.7%	8%
Maternal mortality ratio (per 1000 000 live births)	na	na	15
Delivery by trained personnel			99%
Antenatal care coverage			99%
Vaccination coverage for one year-olds	na	96-99%	98-100%
Pregnant women immunized with 2 or more doses of tetanus toxoid			96%

Sources: [2,3]

relatively small role of the private sector. The government's expenditure on the Sultan Qaboos University Hospital is increasing, as it is the main referral and research hospital in the country.

Regional disparities in social and health status

Sharp contrasts in regional development in Oman exist between the highly developed urban areas and the rural areas, with a sparse, dispersed pattern of settlement, lower living standards and poorer access to health and social services. The cost of development, particularly in the health sector, is higher than in most other GCC countries, which have higher oil revenues, smaller territories and easier access to the population in most regions.

The UNDP Human Development Index (HDI) can be used to divide Oman into three areas: Muscat Governorate, with HDI of 0.74; all other provinces and governorates except Muscat and Al Wusta, with HDI of 0.72 to 0.74; and Al Wusta, with HDI of 0.63 [4].

Rural areas still lag behind urban areas in terms of health and social indicators. For example, the total fertility rate in 1995 was highest in rural areas (about 8), compared to urban areas (just over 6) [1].

Family income in rural areas is half that in urban areas; the national average is OMR 638 per month [5]. A 1992 study found that 17% of Omanis lived in poverty. According

to the MDG report for 2004 no Omanis lived on less than US\$ 1 a day; as a measure of income equity, it was stated that the share of the poorest quintile (20%) in national consumption was 5.1% [6].

Safe water for domestic use is commonest in Dhofar and Muscat, followed by Musandam, Al Batinah and Al Wusta, in descending order. One third of the population relies on mains based public supply, 30% use tanker supplies from public sources, while the rest of the population (mainly in remote rural areas) rely mainly on wells and *falajs* (water from underground conduits supplied to open tanks) [4].

Access to health services is more difficult in rural than in urban areas, with all of the urban population having access to local health services in 2005, compared to 90% of the rural population. Primary health care is available in all but the most remote areas, secondary level facilities are available in the towns and capitals of the governorates and regions, and only the capital, Muscat, has a specialized hospital. Seventy three per cent (73%) of the rural population live more than 5 kilometres from the nearest health centre or hospital, compared to 27% of the urban population [4].

Health seeking behaviour: The urban population of Muscat is more likely to resort to health facilities as they believe that traditional medicine and practice are ineffective. However, many of the elderly and rural people may still resort to traditional healers, or to the wide range of traditional treatments.

Patterns of disease reflect differences in environmental and socioeconomic disadvantage and poor living environments in rural and desert areas. Eye diseases are common, especially among herders in the desert exposed to high temperatures and dust, mostly in Al Wusta and Ad Dakhliyah. Infective conjunctivitis is the most common eye disease; active trachoma has declined as a result of a national programme for the control of eye diseases which offered care through 179 health facilities by 2004. Severe respiratory diseases have increased among children under 5 years, and remain common among adults, especially women living in poor housing and exposed to indoor pollution. Respiratory problems are reported most commonly from the agricultural areas on the coast, such as North Al Batinah and the Governorate of Dhofar. They account for around 31% of total outpatients and 13% of inpatients (Ministry of Health, 2005, unpublished).

Environmental hazards

Oman depends on groundwater for 80% of its drinking-water supply, except in the Governorate of Muscat which covers 85% of its needs from desalinated water.

Groundwater is scarce and difficult to protect from pollution from unsafe sanitation systems, and from rising levels of salt. Water pollution affects 89% of the water in *falajs*, 57% of well water and 48% of the water in mobile tanks; together these sources provide domestic water for two-thirds of the Omani population. Social behaviour contributes to

the pollution of *falajs*, when people bathe and wash clothes, and especially when they use chemical detergents, despite the warnings of the authorities [4].

In desert regions, such as Al Wusta, the bedouins, despite their healthy diet, live in a dry, hot and sandy environment, in dwellings made of palm tree leaves, and suffer a tough and open environment which results in eye disease, for men as well as for women, particularly the elderly.

In agricultural regions, particularly in the South where livestock and human beings live in close proximity, zoonotic diseases such as brucellosis, occur.

Poor housing poses a number of health hazards, associated with poor domestic water storage, difficulties encountered in maintaining adequate family hygiene, and lack of adequate kitchen and refuse disposal facilities, the lack of adequate sanitation facilities, and the mingling of human beings and livestock, particularly chickens, in enclosed spaces.

Lifestyle as a determinant of health

The Oman Human Development Report 2003 [4] identifies a number of health problems related to modern lifestyles. These include the emergence of new types of disease related to the change in nutritional patterns and the increase in life expectancy, in exposure to psychological pressure, and in increasing mobility and road accidents.

Obesity with its increased risk of cardiovascular disease and diabetes is increasing among Omani citizens. A recent sample survey found a prevalence rate of diabetes of 17.7% in those over 20 years of age in the urban capital region of Muscat, compared to 10.5% in rural areas. Obesity among Omani males aged 20 years and over had increased from 10.5% obese in 1991 to 16% in 2000; a higher proportion of females were obese, but the rate fell slightly, from 25.1% in 1991 to 23.8% in 2000. People living in urban areas were more obese than those in rural areas: 21% compared to 13%, reflecting the more rapid change in leisure patterns and food habits in urban areas.

Food habits are changing rapidly among Omanis. Traditional Omani meals consist of rice with meat, fish, chicken or *kashi* (dry sardines), served with dates: a diet short of protein and vitamins. As elsewhere, the increase in the consumption of processed food, and fast food from restaurants is convenient and affordable for the growing number of middle class families.

Fast food first found favour among children and teenagers. Children opt for fast food in imitation of other children and in response to advertising. A Ministry of Health study of school nutrition and nutrition awareness in 2005 (unpublished) found that 95% of students receive a daily stipend of 100 baisas (1 rial = 1000 baisas) to buy potato chips and flavoured drinks in lieu of breakfast. While the fast food habit has now extended to parents, the elderly mostly still prefer food prepared inside the house.

Malnutrition remains a problem among poor families in rural areas. In 2005, 8% of infants had low birthweight, which reflects poor maternal nutrition and is a poor start for life.

Smoking is less prevalent among Omani males, 9%, and females, 4%, than in other countries of the Region [2]. However, given the rising trend in smoking among both males and females in the Region as a whole (although it apparently remains lower in GCC countries) it is important to take action to prevent the extension of this habit which is so harmful to health.

Gender as a determinant of health appears to have declined over the past decade. Current levels of enrolment in school show little difference between girls and boys. The Family Health Survey of 1995 found that parents had high aspirations for their children's education, equally for boys and for girls. At that time there were still differences in fertility and age at marriage according to levels of mother's education, which resulted in more at-risk pregnancies for less educated women, and a greater risk for the survival of their children. For example, the total fertility rate in 1995 was highest among illiterate women (almost 9) compared to those with secondary education (around 4) [1].

Determinants of health among the non-Omani population

Non-Omani workers and their dependents comprise a quarter of the population of Oman. The demographic characteristics of non-Omanis suggest that their health needs are likely to be very different from those of Omani citizens. Among non-Omanis, 87% are aged 15–64. The sex ratio for expatriates was 282, which reflects the large number of working males, compared to 102 for Omanis. Only 12% of expatriates are less than 15 years old. While some expatriates occupy high status jobs, one quarter of those employed are in the construction industry, and most of the rest are in small-scale service occupations, in agriculture and in private households (the last group mostly female domestic servants) [5]. It is difficult to assess the health status of non-Omanis compared to Omanis, as the 1995 Family Health Survey sampled only the Omani population, the health statistics from the Ministry of Health appear to cover only the Omani population, and there is no health data included in the 2003 census.

Government-provided medical care is primarily designed for Omani citizens. Guest workers in the government sector receive the same social security benefits and almost free medical care as their Omani counterparts. However, this group includes only 4.5% of the expatriates [5]. The government recuperates part of the cost of treatment for private sector workers from their employers. The sponsors of guest workers in the informal sector are expected to get their employees a medical card and arrange for their medical care. These workers (the large proportion of the total expatriate workforce, who work in shops and small scale-services, as farm labourers, general labourers and domestic workers) are less likely to have access to health services.

Because of the low living standards and the poor environmental conditions of work, non-Omanis working in the building trade and in the informal sector are vulnerable to accidents and to infectious diseases. If such diseases are not treated, they can pose health risks to others, Omanis and non-Omanis.

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2.6 Pakistan

Social determinants of health that result in inequity are now recognized as due to:

- residence in rural areas, where three quarters of people live
- gender inequities;
- poverty, which increased from 26% in 1990–91 to 32% in 200–2001.

Other emerging issues that need to be tackled are:

- distance from health facilities
- health inequities experienced by religious and ethnic minority groups
- disability.

Health care financing issues related to health equity include:

- low government allocation to health, 1% GDP
- high level of out of pocket expenditure

Introduction

Any discussion on the social determinants of health can derive its legitimacy from the Primary Health Care Declaration of 1978, to which Pakistan was a signatory, and also from the People's Health Charter of 2000. Health as a right is a significant principle for guiding the reform of the health sector. Financial allocation is one of the significant parameters for commitment to health as a right. Pakistan allocates only 2.6% of general government expenditure to health, one of the lowest figures in the Region; this represents only 27.7% of total health expenditure [1]. There is considerable discussion in the Pakistan media (print and electronic) on political and development issues, and the failure of the state to address poverty and inflation. These are among the major determinants of inequities, and without addressing them a reduction in health inequities will remain only a dream.

Pakistan is classified as a low-income country. Since it gained independence in 1947 the country has alternated between civil and military governments which has not provided a stable environment for policy development. At the time of its independence, Pakistan inherited a rather narrow resource base. The breakup of the country in 1971 also contributed to this overall bleak picture. Despite this tumultuous political history, Pakistan has recently managed to achieve an average gross domestic product (GDP) growth rate of around 6% [2].

The economic growth model pursued by Pakistan does not give priority to tracking improvements in health outcomes, or in other major social indicators such as education, water and sanitation, and security of the person. Thus, development in the social sectors has remained low. Pakistan's geopolitical position and its tensions with two of its neighbours have a direct bearing on the low status accorded to health and other social sectors. When defence becomes the priority, military expenditures are legitimized, and the first to suffer are the poor and marginalized.

Emerging recognition of inequities

Health indicators in Pakistan remain poor [1]:

- infant mortality rate is 77 per 1000 live births.
- 30% of children were underweight as of 2002.
- maternal mortality ratio is 350 deaths per 100 000 live births as of 2005.
- malnutrition is estimated to account for nearly half of child deaths every year.

Data is available to compare health outcomes in the different regions of Pakistan, on immunization coverage, nutritional status, infant mortality and maternal mortality. However, even these indicators are misleading as they reveal little in terms of how different groups fare.

Policy-makers and politicians in Pakistan have begun to recognize the disparities between the urban and rural sectors. Since the 1980s, when the language of gender began to appear in the discourse related to women and development, there has been an effort to note gender disparities. Similarly, some data are available on inequalities in health outcomes based on income/poverty levels. Inequalities in these three areas – urban–rural residence, gender and poverty – are now documented in various reports and studies. However, these data alone rarely provide a full understanding of the pathways that link these determinants to health and social inequity.

With regard to rural-urban inequalities, rural areas, where three-quarters of the people live, are poorer, and have far fewer health and educational facilities than urban areas. In rural areas, health indicators such as infant mortality and maternal mortality are higher. The rural literacy rate for the population 10 years and older is 44%, compared to 71% in urban areas, recording little change over the previous three years surveyed [3]. A focus on urban-rural differences is not enough. It is important that inequities within the rural and urban sectors are also highlighted. For example, nearly 50% of Karachi's population live in squatter settlements.

With regard to gender disparities, data disaggregated according to sex is only routinely available for infant mortality rates, urban–rural death rates, and age-specific death rates. Women's access to health services and care remains low; in 2005 only 39% of births were attended by trained personnel [1]. Literacy for women is a key to the health of her family, yet the gap in gross primary school enrolment for girls (77%) and for boys (94%) is the largest such gender differential in the Region [1]. Dropout rates in public primary schools are much higher among girls and increasing, compared to the rate for boys.

A portrait of the "average" Pakistani woman indicates that she is illiterate and has 5 children, of whom those under 3 years old are malnourished. She works 15 hours a day, is anaemic, gives birth to low-birth-weight babies, and does not have access to

safe abortion. Although its position has improved somewhat, the low rank of Pakistan on the gender-related development index (ranked 105 of 136 countries) and the gender empowerment measure (ranked 66 of 75 countries listed) indicates the extent of gender disparity in Pakistan [4]. The “missing women” indicator represents women who are not alive as a result of social and economic discrimination; Sen estimated, based on global norms of male/female ratio, that there are close to 74 million missing women in south Asia, with Pakistan having the highest percentage, 13% missing [5].

Indicators of inequality in health and social status are only a starting point for assessing inequity. The link between women’s position (her status in society) and her condition (i.e. the more visible conditions like health status and educational level) explains why there is high mortality and morbidity in women in Pakistan. Women’s low status in society is linked to their health outcomes, and also to the well-being of their families and communities. It is associated with delay in access to health services, restrictions on women’s mobility, domestic violence, mental stress emanating from male unemployment, armed conflict and deaths due to armed conflict, and the high workload placed on women. When customary practices place serious restrictions on women, and they live in a near perpetual state of insecurity, and when lawgivers have no sense of people’s rights, the challenge is to capture these deeply entrenched realities as determinants of the inequities that prevail. For example, the law concerning the custom of *swara*, marrying a girl to a rival to settle a dispute, does not give relief to the victims; if a *swara* victim makes a complaint, her father will be arrested.

The poverty rate increased from 26.1% in 1990-1991 to 32.1% in 2000-2001, reversing the decline recorded in the 1970s and 1980s [6]. Poverty differentials show up in health statistics. For example, children of families in the poorest quintiles have lower rates of immunization than children in better off families. However, it is not enough to take an income measure of poverty.

A livelihood framework for the assessment of vulnerability of livelihood should be used to determine the relationship between poverty and health outcomes. The 2003 Participatory Poverty Assessment in Pakistan, highlighted the exclusion of the poor, both men and women, from essential services like health, education, credit and justice. While it presents the plight of the poor as articulated by the poor, how this knowledge is to be incorporated into policies remains a challenge [7].

Going beyond conventional determinants

The scope of the discussion on social determinant of health and health inequities needs to be extended into other areas, for which there are few statistics and little understanding of the complex linkages between poor health status and disadvantage.

- Distance from health facilities, especially from the nearest secondary care hospital, and access to transport is a serious problem. There are no data on the availability of

emergency obstetric care at a minimum of 2 hours travel distance; this is critical as 80% of maternal deaths are attributed to lack of such care. Although Pakistan has a network of basic health units within a 2 km–3 km distance of users, the road network and public transport remains poorly developed.

- Religious and ethnic minority groups experience health inequities. The more vocal and visible expressions of discontent come from the indigenous movements, rather than political parties. Armed conflict between the government and local groups in two of the four provinces is an indication of the neglect and deprivation of these areas.
- Disability is rarely mentioned in discussions of inequity. The National Health Policies of 1997 and 2001 do not mention the disabled and of the 49 major social initiatives undertaken by the government between 1950 and 2005, none are for disabled persons.

Additional proposed social determinants include:

- access to livelihood including the issue of landownership in rural areas and control by the rural elite;
- food security;
- a functioning health system.

The health system

The health sector continues to be a confusing mix of public, private and civil society provisions. Public–private partnerships are vigorously promoted by donors. This has resulted in the creation of more than one health system. There is one system for the rich and better off, and those covered by insurance provided by their employers, and another for the people at large, and especially for the very poor. An equity approach would require one system, which could contribute to the building of a society based on fairness.

The government health sector does not address the issues relating to social determinants, as it focuses primarily on providing health care through a hierarchically organized health system. However, the health sector has some outreach programmes, such as immunization and basic health care at the community level. There is a federally administered community-based national programme, which employs over 50 000 lady health workers, but this functions as a vertical programme. There are provincial initiatives in the four provinces, funded by various donors. Examples are the Reproductive Health Project of the Asian Development Bank in Sindh province; a project founded by the UK Department for International Development on maternal and neonatal health in two provinces; and a project on averting maternal death and disability, implemented in Sindh through UNICEF. Many nongovernmental organizations provide health care in urban and rural areas, focusing either on family planning services or primary health care mainly for mothers and children.

The decentralization of services to the district level, begun in 2001, offers the opportunity for more local input and participation in health-related activities. However, a striking feature of Pakistan's health care system is the lack of coordination between the two ministries with most of the responsibility for health, the Ministry of Health and the Ministry of Population. Furthermore, these ministries do not interact with other ministries to address issues of food security, clean water or other public health issues. The Pakistan Medical Association is on record for raising public health issues, but its relationship with the Ministry of Health is more adversarial than collaborative.

With Pakistan experimenting with the outsourcing of public sector health facilities, there is little debate about whether such initiatives are likely to increase inequities. The Rahim Yar Khan model, in which the basic health units are handed over to a nongovernmental organization that has expertise in rural development, has demonstrated that it can increase utilization rates for health facilities, but correcting any inequities is not usually on the agenda of the nongovernmental organization. Moreover, the outreach services for immunization from the same facilities have not been given to the nongovernmental organization. This fragmentation of health services is not likely to address health inequities, as different agencies focus only on their tasks, and thereby overlook the interconnectedness of social sector development and health outcomes.

Out-of-pocket health expenditure in Pakistan, at 71% of total health expenditure, is the highest in the Eastern Mediterranean Region, is a burden especially for the poor [1].

The unregulated private sector delivers a high proportion of health services. There is a great discrepancy in the quality of services, with those who can only afford to pay a little usually getting the poorest quality services. In rural areas, the very poor women and men access government services, for that is all they can afford. They visit private doctors as a last resort, and sometimes because of a referral made by the government doctor.

In terms of policy direction, Pakistan needs to decide whether it will take a poverty approach or an equity approach. The former will continue to see the poor as a marginal group which needs special attention, with two systems emerging, with talk of safety nets, and of mechanisms for reaching the poor. If an equity approach is taken, Pakistan would strive to build one system which would be fair, as it monitors inequities and strives to reduce them.

Gender reforms and health

Policies for women include the following.

- The National Plan for Action (NPA) was developed by the Ministry of Women's Development in 1998 after consultative meetings and workshops at the provincial and national levels involving government and nongovernmental organizations. The

importance of intersectoral action was stressed, and monitoring and evaluation conducted by a gender development management information system. Shortcomings in the functioning of government departments in respect of the National Plan for Action are being monitored by various women's groups.

- The National Policy for the Development and Empowerment of Women was developed by the Ministries of Women's Development, Social Welfare and Special Education in 2002. The policy is guided by the principle of gender equity, and aims to give priority to the poorest of the poor, and enhance the value of women's work; it is rooted in the belief in intersectoral action. Health provisions focus on the provision of primary care and emergency obstetric care. Unfortunately the original budgetary allocations for this programme have been cut, and responsibility for implementation split between two ministries.
- A Gender Reform Action Plan was developed by a number of ministries in May 2004. Unfortunately the gender reform issues are defined in such a way that there will be no space for discussions of religion and family institutions, or land and economic reforms that affect women.

National level reforms include the following.

- The Lady Health Worker programme was launched in April 1994. By 2004 there were 70 000 LHWs and 2300 supervisors. Lady health workers, serving in their own districts, provide promotional, preventive, curative and rehabilitative services. An evaluation showed the rates of immunization, use of contraception and of iron tablets by pregnant women had increased in areas where lady health workers worked. However, these women share the difficulties faced by all female health workers in Pakistan in general, and especially in rural areas. These include: abuse of power, disrespect from male colleagues and sexual harassment, lack of sensitivity to women's gender-based cultural constraints, lack of support from communities and families, and the cultural unacceptability of women working [8].
- Allocation of 30% of seats in the elected councils at the local, provincial and national level has increased women's political participation. However, given the constant tussle between the military and elected representatives, issues of poverty and inequity generally remain peripheral to the national debates of politicians.
- The Tawana Project was initiated by several ministries in 2000, focusing on nutrition and basic education in rural areas. The project was implemented in 29 districts, and resulted in improved nutritional status for girls aged 5–12 and an increase in the enrolment of girls in primary schools. Women were enabled to plan and manage a feeding programme and manage funds for the development of government primary schools. The project also strengthened participating nongovernmental organizations. The Tawana project was requested to wrap up its activities in July 2005, by which

time 4674 School Tawana Committees had been formed and 4383 community organizers and 4336 teachers had been trained.

Assessing commitment to health

The military budget continues to take the lion's share of the available wealth of Pakistan. Sixty four per cent (64%) of Pakistan's national budget goes into defence and debt servicing, compared to 2.6% for health [1]. Every year witnesses an increase in the defence budget and an increase in cost of living and especially of health care, substantially increasing the burden of poverty for the poor. Yet, the total health budget is only about 3.9 % of the gross domestic product (GDP), and the government share is a mere 0.86%. If Pakistan is to comply with the recommendations of the WHO Commission on Macroeconomics and Health to increase spending on health by 1% of GDP by 2007 and by 2% by 2015, the country would need to increase its health budget by 143% and 285%, respectively. Financial allocation is a good indicator of the government's commitment to that area of concern. The more adequate the resource allocation, the greater is the commitment to the life of the ordinary people.

In Pakistan, inadequate budgetary allocation for health, and other social sectors, is not the result of inadequate resources, but the inequitable distribution of resources. In a country that commits resources to become a nuclear power, where its armed forces provide free medical care to all its employees, their families and those who have retired, and where the elite indulge in a lifestyle comparable to the 'rich' in the developed world, there can be no excuse for the poor health care of the vulnerable groups.

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2.7 Occupied Palestinian territory

In the occupied Palestinian territory, as of April 2006, three major social determinants of health were identified:

- the political conflict and occupation
- poverty
- gender inequity.

The discussion does not take into account the sharp decline in security and health experienced in both the Gaza Strip and the West Bank since then, and especially since the war of July–August 2006.

Introduction

The concept of the social determinants of health appeared in the late 1980s within the context of social action involving, among other things, the recognition of health as a basic human and civil right for Palestinians under the occupation. Civil society organizations, which formed the backbone professional infrastructure for the struggle for justice and freedom, were instrumental in forming the social understanding of health in its social and political context. Three determinants of health addressed in this paper exist in a dynamic interrelation and interdependence: the political conflict and occupation, poverty and gender inequity. The paper focuses on the period since the beginning of the second *intifada* in September 2000, until April 2006, describing the impact of the emergency on the health of Palestinians and the response of the health system to the situation.

Conflict as a major social determinant of health

The Israeli-Arab conflict about Palestine has been a chronic political problem since 1948 and the occupation of the West Bank and Gaza Strip in 1967. Failure to reach an agreement on the issues posed by the Oslo agreement of 1993 resulted in the near collapse of the peace process and a massive uprising in September 2000 known as the second (or Al-Aqsa) *intifada*. This significantly changed the political picture of the area and began a new era in the conflict.

Since then, two particular impediments have had a wide impact on the health and well-being of Palestinians.

- Closures: The Israeli internal closure policy created 763 military checkpoints, roadblocks and physical barriers. These divided the West Bank into 300 isolated locations and the Gaza Strip into four almost completely isolated areas. Curfews were imposed on many of the Palestinian communities, lasting in some areas for more than 80% of days in 2002/2003 and severely restricting the mobility of people seeking work and medical and social services.
- The separation wall: When completed, the 622 kilometre-long West Bank wall will directly affect about 750 000 people in 40% of the Palestinian communities, including Jerusalem.

Poverty

The years of the second *intifada*, 2000 to 2005/2006, marked a sustained decline in economic indicators, and an increase in unemployment and poverty [1], as shown in Table 2.14. By July 2005, household income had dropped by 50%, compared to the beginning of the second *intifada*; during the first quarter of 2005 35% of Palestinian families received social assistance. Increasing poverty was directly linked to closures, unemployment and the destruction of economic assets. The decline in income was felt equally by people in Gaza and the West Bank. However, the much higher density of population in Gaza, 3853 people per square kilometre compared to 428 in the West Bank, accentuated the adverse impact of this dramatic drop in income, with average income in Gaza a little less than 60% of that in the West Bank.

Not all population groups experienced a similar decline in income. The richest 10% of the population did not suffer, as they depended largely on resources not affected by the political situation, such as external investments and remittances. The middle class moved down the economic scale. The poorest 10% of the population survived as they benefited from formal and informal emergency assistance. The difficulty Palestinians experienced in accessing basic assets, such as food, affected their health and nutritional status. Households in rural Gaza reported the largest reduction in the quality and quantity of food [2].

Poverty is a significant determinant of malnutrition. The level of stunting of children in households of low socioeconomic status was higher (9.8%) than among children from high social status households. Mothers' education was a major social factor affecting nutritional status, probably because of the ability of educated mothers to earn an income.

A high prevalence of iron-deficiency anemia was detected among children under 5, with significantly higher rates in the Gaza Strip and among children living in poverty. Anaemia among pregnant women reached 49%, again following the geographical

Table 2.14 Basic economic indicators, 1999–2004, occupied Palestinian territory

Indicator	1999 ^a	2000	2001	2002	2003	2004
GDP per capita (US\$)	1617	1466	1311	1203	1184	1217
GNI per capita (US\$)	1934	1722	1460	1319	1291	NA
Unemployment rate (%)	11.8	14.1	25.5	31.3	25.6	26.8
Poverty rate (%)	21	32	44	60	72	61

^a 1999 represents the period prior to the start of *intifada*.

distribution of poverty in the occupied Palestinian territory. Rates of vitamin A deficiency among children under 5 years were correlated with income, and with mothers' education, as was infestation with intestinal parasites [2,3].

Gender as a determinant of health

At first sight, the basic indicators of well-being for males and females in 2004/2005 suggest little gender inequity, as shown in Table 2.15. However, national level figures mask significant gender-based differences, especially in rural areas and among different social groups.

Education for women is a crucial determinant for the health and survival of their children in all countries. School enrolment rates for girls are similar to those for boys at kindergarten (29-30%) and elementary level (93%), and higher at secondary level (77% compared to 67% for boys). Palestinian authorities and communities have tried to maintain the education system as schools are seen as a safe place for children and adolescents, where they are less involved in or affected by the clashes outside. Education has become an important social investment, a way of coping with frustration and a window of opportunity for young people to achieve a better future, with 60% of the Palestinian youth reporting that education is the first priority in their life [6].

Among women over 15 the illiteracy level is markedly higher than for men: 12% compared to 3.5%. This is likely to have an adverse effect on child health, as illiterate women have children whose health status and survival rates are, on average, lower than those of children of educated women. Early marriage of females is a public health issue,

Table 2.15 Distribution of selected indicators according to gender, occupied Palestinian territory

Indicator	Males	Females	Total
Infant mortality rate (per 1000 live births)	26.6	21.6	
Life expectancy at birth (years)	71.1	74.1	72.6
Literacy rate above 15 years	96%	86%	91%
Enrolment in basic education F/M ratio			98/100
Enrolment in higher education F/M ratio			98.4/100
Unemployment rate	26.9%	18.6%	
F/M wage ratio			82.7/100
Average age of first marriage	24.6	19.4	

Source: [4,5]

especially in rural areas; a recent study found that 55% of females had married before the age of 18 (Yameen K et al., unpublished data, 2005).

Ten per cent (10%) of elderly males in the Palestinian community are widowers, while 55.5% of the female elderly are widows. This is a gender issue as the society encourages the marriage of the male widower and discourages the remarriage of widows, who may live in poverty and experience poor health.

Gender-based violence is a social phenomenon that is growing and needs further specialized research and action. In a survey of married women, 23% reported that at least once during 2005 they had been subjected to gender-based violence, 10% had been subjected to sexual violence, and 62% to psychological violence [7]. A 2006 UNFPA study concluded that women's political, social, legal and economic rights are influenced by the occupation and the patriarchal culture of the Palestinian community. It noted high rates of physical, psychological and sexual abuse of women, with severe cultural and political barriers preventing rigorous interventions to prevent, uncover and address this phenomenon [8].

Deterioration in health during the second intifada

Deaths and injuries resulting from the *intifada* during the period 29 September 2000 to 31 December 2005 were as follows: number of people killed 3844, number injured 45 548. Eighty per cent (80%) of those killed were civilians, 359 were children under 14 years and 204 were female. Around one in five (18%) of those injured acquired a life-long disability [9].

The mental health impact of the conflict has been considerable, with symptoms of psychological distress occurring increasingly among children, as well as among women and men. A 2004 study showed that 100% of 3415 school students survey had psychosomatic complaints, and about 50% reported one or more severe psychological symptoms, such as loss of appetite, unexplained fear, loss of concentration, decreased ability to perform daily routine activities, insomnia, nightmares or episodes of crying. In about one quarter of cases, trauma resulted in behavioral distress such as increased aggression and increased use of swear words (R. Giacaman et al., unpublished 2004). Although this study only involved one of the groups exposed to trauma, it is highly indicative of the severe negative effect of occupation and its practices on the mental health status of Palestinians.

Access to health care during the second intifada

Access to health care has been severely disrupted since the beginning of the second *intifada* by closures, checkpoints and the construction of the separation wall. During the times of strict closures in 2003–2003, the proportion of deliveries at home reached 30% in

rural areas, compared to 5% before 2000. Between September 2005 and the end of 2005, the combined impact of closures (checkpoints, road blocks and the wall) resulted in the death at checkpoints of 129 people denied access to hospitals, and at least 67 deliveries at checkpoints resulting in the death of 36 newborns and five mothers [9]. Chronically ill people faced difficulties in accessing their health facilities and patients with cancer, renal failure and diabetes witnessed severe deterioration of their health conditions, with many failing to survive [10]. Two thirds of respondents in a health care survey reported that closures were making it difficult for them to access health services [11].

The completion of the separation wall will further disrupt the health care services network, affect utilization and hinder referrals. When complete, the wall will isolate 71 primary health care clinics, disrupting the provision of primary health care services, emergency care and referrals to secondary care facilities. In addition to routine primary and secondary services affected, 17 510 disabled people will be prevented from reaching specialized health care in central cities such as Ramallah and Jerusalem.

Health systems during the second intifada

During the period of Israeli occupation in the West Bank and Gaza Strip after 1967, the Israeli Civil Administration assumed control over health services. During this period, severe budgetary restrictions hindered attempts to upgrade services and improve access.

In the period 1994–2000, under the Palestinian Authority, health care services expanded, with higher coverage and improved coordination between various primary health care providers, including nongovernmental organizations.

The general policies adopted by the Ministry of Health are governed by the fundamental goal of health for all regardless of place of residence or social status, and are stated clearly in the National Strategic Health Plan for 1999–2003. However, implementation of this plan came to a halt with eruption of the second *intifada* in September 2000. At the same time, with the deepening of poverty, an increasing proportion of the population came to depend on the public health care system.

In response to the second *intifada*, the highly centralized Palestinian Ministry of Health began to decentralize. This enabled the primary health care directorates and regional hospitals to make decisions and allocate staff and resources in response to local emergency conditions. Thus, the Ministry of Health was able to support basic health services, in collaboration with other Palestinian social organizations. For example, the overall vaccination coverage remained high, except during periods of incursion, major military operations and closures.

Collaboration between the Ministry of Health and other health providers was essential to rationalize service provision in the fragmented territories. The various international organizations also collaborated with the Ministry of Health, after 2000,

to establish an emergency response agency, Health Inforum, hosted by WHO and supported by USAID. It is hoped that these models of cooperation will contribute to the development of a harmonized health care system in the West Bank and Gaza during the post-conflict period.

The Palestinian Authority, as a response to steadily increased poverty, has opened enrolment into the governmental insurance system to a broader population, especially to the 60% of households living in poverty. Thus, enrolment increased from 50% of the population at the start of the second *intifada* to 78% by 2004. However, as resources are not available to cope with this expanded scheme, international support will be needed to sustain the initiative.

The deteriorating health status of children was a moving force behind new programmes in support of child health. An immuno-surveillance survey indicated serious shortage in immunological protection of measles vaccines (probably occurring as a result of cold chain disruptions). Therefore, the Ministry of Health, WHO and UNICEF conducted a re-vaccination campaign for all children under 5 years old. The Ministry of Health and a number of national and international organizations launched a programme of flour fortification, and the supply and distribution of vitamins A and D in well-baby clinics, and are developing interventions for supporting healthful practices related to child nutrition.

Mobile clinics operated by Palestinian health nongovernmental organizations, the Ministry of Health and UNRWA serve small and remote communities in Gaza and the West Bank isolated by the wall. They provide the full package of primary health care services including vaccination, antenatal care and care for the chronically ill. Crucial support for these clinics is provided by funds from international agencies, especially the European Union and European Commission Humanitarian Office. These clinics continue to be operated on an emergency basis, which may not be sustainable. However, they are a creative response to coping with the closure and isolation policy.

Policies and programmes addressing poverty

The Palestinian Authority is introducing a new poverty programme to offset the recent dramatic increase in poverty in the West Bank and Gaza. The policy, implemented through the Ministry of Social Affairs and the Ministries of Health and Education, in coordination with international organizations and nongovernmental organizations, will provide the poorest of the poor with conditional cash assistance and programmes to improve their health, education and economic status. Within target communities, families eligible for cash or in-kind aid will be provided with health insurance coverage, and family members will be eligible for additional payment based on their use of preventive health services. Incentives will be provided to keep children in school, and those of post-school age will be provided with vocational training. These provisions are designed to

lift families out of the poverty trap that sustains the generation to generation transmission of poverty.

Emergency assistance programmes also help people to deal with the current crisis, focusing on food assistance. These programmes have significantly helped to reduce the burden of poverty by helping the poorest to maintain basic survival levels and those non-poor to preserve some of their savings. Over half the families in Gaza and over 20% of those in the West Bank were receiving assistance in early 2005. However, these programmes have, to a certain extent, deepened inequalities because ineffective targeting provided assistance for many non-needy individuals while neglecting some of those in greatest need.

Policies and programmes addressing gender inequity

The role of women in the political struggle against occupation has strengthened their position in society. Their efforts have been strongly supported by civil society organizations, and by the Palestine Authority. Thus, women in Palestine have achieved a relatively good position in comparison with other societies in the Region. For example, 17 members of the elected Palestinian Legislative Council are women, comprising 13% of the members of the council.

Since its creation, the Palestinian Authority has addressed the role of women and followed policies and programmes aimed at women's empowerment. The basic law of the Palestinian Authority stresses the legitimate right of women to protection and social support. Gender considerations are also included in the labour law, the civil services law and higher education law. Special departments for women's issues have been set up in all ministries, and a special unit for women's statistics has been created at the Palestinian Central Bureau of Statistics. The creation of the Ministry of Women's Affairs is the highest level political action to support the role of Palestinian women.

In spite of these developments, existing laws provide limited if any protection to women subjected to violence or family honour-related crimes. This failure has led to the utilization of traditional, tribal mechanisms to solve these disputes resulting in further inequitable treatment of women.

Other programme interventions

The Gaza Community Mental Health Programme was initiated in 1990 in response to the difficulties of the first *intifada*. The second *intifada* resulted in a growing need for mental health assistance, when acts of violence increasingly disturbed families, especially children, and entire communities, neighbourhoods and schools. The programme focuses on a community orientation that directly addresses dysfunctions in the social environment, moving away from the institutional therapeutic approaches then

available through the Ministry of Health, and recognizing the human rights of community members. The programme aims to change the stigma of mental health through training and awareness activities with the population, and with the staff members of many public authorities. Despite the climate of violence, project staff believe that they have provided many residents with a foundation for understanding, coping, prioritizing and working with mental health issues. Including mental health concerns on the agenda of general health intervention has also been a great achievement (I. Sarraj, personal communication, 2005).

The Palestinian Medical Relief Society supports a programme for targeted populations living in extreme poverty, who suffer from a lack of food and economic resources due to closures and the restricted mobility of people and goods. Programme staff first screen families and provide health care. Following the organization's principles of empowerment and community development, it provides job creation programmes that develop community assets by building schools, clinics and kindergartens. Support for female headed households is also provided, for example by providing sheep and goats, which can supply the household with nutritious milk and cheese. It also assists women to enter the market and sell their products (J. Mashal, personal communication, 2005).

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Chapter 3

Building a knowledge base: the way forward

3.1 Introduction

This concluding section begins by presenting the major themes which emerge from the country summaries on social determinants and the ways these factors impact on health in the Region. This is followed by a strategic framework for moving from policy to action, within which countries could adapt their own findings to the local policy and social environment. The section concludes with some “promising practices” to tackle social inequities through social determinants at the local and national level.

3.2 Major findings

The country summaries provide a fascinating insight into the wide range of social determinants that have an adverse affect on health and influence health outcomes in the countries of the Region. Some determinants, such as those relating to gender, education, employment and health systems, recur in most of the country studies. Others, such as situations of crisis and conflict, including occupation by a foreign power, may be unique to specific countries. However, recognizing a particular set of determinants as affecting health outcomes is not enough. It is important to trace how and why these determinants affect health in order to tackle them effectively. In all countries, these linkages are complex and multi-layered, presenting a challenge in identifying the “causal pathways” through which these determinants affect health outcomes. As this review has shown, fuller information is urgently needed about many areas of concern.

Gender discrimination as a determinant of health is a complex and cross-cutting issue, and continues in spite of some improvement in the status of women in the Region in recent decades. Low levels of literacy and informal employment combine to perpetuate the low status and poor health of rural women in Egypt, Morocco and Pakistan. The plight of working children and the high, but perhaps declining, level of female genital mutilation were mentioned in the Egypt study. In the occupied Palestinian territory,

gender inequity and gender-based violence are exacerbated by the occupation, and by increasing poverty; yet the gender difference in adult literacy and school enrolment are relatively small by regional standards.

Early child development links the health and well-being of the pregnant woman, with the health and survival of her offspring, and also the social environment that supports, or hinders, the social and physical development of the child during the first crucial years of life. In Egypt, Islamic Republic of Iran and Morocco, as elsewhere, the mother's education has a positive effect on the survival of her children; lower death rates and levels of use of health services are found among children in rural than in urban areas and in families of low socioeconomic status. A social security system providing for basic household needs, such as mentioned in the Islamic Republic of Iran, would be likely to contribute to improving child nutrition and the social and developmental environment for balanced child development.

Rural/urban and/or regional discrepancies in health indicators and access to care were noted in all countries. In general, the health of rural people, and their access to health services, remains poorer than for urban residents. In Islamic Republic of Iran, Morocco, Oman and Pakistan widely dispersed rural populations living in a semi-arid or arid environment often have a lower health status and suffer from poorer access to health care and other facilities, such as education and a safe water supply, than populations in urban areas.

Urban settings are certainly responsible for poor health but we know little about health differentials within rapidly expanding urban areas, between areas of informal housing and those areas with better quality housing and greater access to services. Cairo is certainly not the only large city in the Region where many poorer inhabitants experience problems accessing a sustainable supply of safe water and a safe sanitation system.

Health systems in the Region have widely differing capacities to respond to people's needs. These are, as would be expected, largely a reflection of the overall income level in the country, but also of the distribution of health and other social spending over geographical areas and the extent to which health is prioritized compared to other government expenditures. For example, Oman, a high income country, provides good quality health care and other social services for all citizens, and average health indicators are good. In Pakistan, a low-income country, the low proportion of government spending on health and a low per capita expenditure combine to produce a health service that is failing many poor people.

Some countries could distribute health resources more equitably. In Egypt government expenditures are unequally distributed geographically, with rural areas and some poorer governorates receiving lower financial allocations per capita; although primary health care centres are within reach of everyone, not all have the capacity to

deliver adequate care. Except for Oman, which provides free care to citizens, the other country reviews found low levels of insurance coverage, which leave families unable to afford health care and drugs, and at risk of impoverishment if one of their members falls sick. Improvements to the existing low insurance coverage in Jordan, a middle-income country with a highly developed health system, are in the pipeline.

Lifestyles and behaviour, associated mostly with an increase in noncommunicable diseases and accidents, were noted largely, but not exclusively, in high and middle-income countries which have completed the epidemiological transition and have a higher proportion of the population at risk of obesity. In the Islamic Republic of Iran, mortality and morbidity due to traffic accidents was highlighted, based on a 2003 burden of disease study.

Social exclusion is reflected in systematic differentials in health status and access to care for females. The elderly, a growing proportion of the population in many of the countries studied, have greater needs for health care but are likely to be less able to access it and to have lower levels of health insurance coverage than younger, better educated and employed cohorts. In Jordan, the elderly and non-citizens are excluded due to lower levels of health insurance coverage. In Oman non-citizen workers may not be able to claim their rights to health care.

Structural determinants related to globalization affect countries in conflict in the Region. In the occupied Palestinian territory, the political conflict and occupation have caused growing poverty (including food security and unemployment) and exacerbated gender inequity. The Israeli internal closure policy has created over 700 military check points and barriers in Gaza and the West Bank, as well as the separation wall around the West Bank. These isolate populations, hindering access to work, health services and schools, as well as day-to-day sociability. The situation has deteriorated sharply since this review was conducted.

3.3 From knowledge to action: a strategic framework

These summaries can help to prepare the groundwork for a national debate on social determinants and health inequity. Such a debate would be likely to include many issues not covered here, which have not yet been adequately recognized by policy-makers, or aired in public debate. Policy options and strategic directions for country level activities have been identified [1] by the Regional Office which can, on request, provide support to ministries of health, via the WHO country office. While the following activities will overlap within a time-frame, they are generally seen as moving from knowledge to action:

- developing a solid evidence base to be used in advocacy and policy-making;
- advocating the inclusion of social determinants of health in national policies and programmes;

- improving health systems to make them more equitable;
- fostering intersectoral collaboration;
- expanding partnerships with stakeholders.

Developing a solid evidence base

A framework is needed for exploring the social determinants of health in the Region and within countries, for promoting appropriate research and for identifying gaps in our knowledge of the causal pathways through which social determinants have an impact on health and well-being. This is necessary because the original impetus for the social determinants of health programme was based on the experience of affluent countries in western Europe in which inequalities and inequities in health persisted in spite of the provision of sophisticated health care for all, available at little or no direct cost [2].

Development of a regional framework should take account of local conditions and knowledge. For example, when considering “employment” as a social determinant of women’s health, women’s work-related activities should include their informal sector activities, rarely identified by women or men in the Region as “work”, yet vitally important for household survival and for women’s self-respect and self-image. The final report of the global Commission, due in mid 2008, and the knowledge network reports will provide a global perspective within which to explore local evidence.

Statistical data and other evidence from government and development project reports, projects by nongovernmental organizations and academic research need to be collated and made publicly available in order to illuminate the central problem of health differentials between social groups. To this end, data need to clearly identify inequities in health outcomes for various social groupings, for example, disaggregating data by gender in order to highlight those indicators that demonstrate the greatest gender inequities. Information also needs to be widely shared among stakeholders. Currently this is often inhibited by a restricted bureaucratic climate and the widespread belief that “knowledge is power” and therefore should not be shared. This is now being challenged by a growing trend towards academic collaboration, and region-wide and country level research projects. The sharing of knowledge also responds to the demands of the public and various stakeholders for a better understanding of the basis on which health and welfare policies are formulated, and which they can use when raising their own concerns about policy and programming in the health arena.

A number of initiatives have taken place to improve the knowledge base in the Region. Following the inclusion of civil society organizations in the Commission on Social Determinants of Health, the civil society regional facilitator organization in the Region, the Association for Environment, Health and Development (AHED) based in Cairo, has provided a grassroots perspective on social determinants of health and health equity issues in the Region, especially in those countries affected by conflict.

Partnerships with academia have involved social scientists in health issues and helped to orient health professionals to social science disciplines and community-based research. Researchers from countries in the Region have met at workshops and seminars on social determinants of health and on the measurement of equity hosted by the Social Research Center of the American University in Cairo, with support from the Regional Office. Future activities could involve training for health personnel, including insights from the social sciences, and upgrading the medical curricula to align more closely with current policy concerns for health equity and primary health care.

The Regional Office already hosts a Regional Health Systems Observatory [3] containing regional health and socioeconomic data for all countries in the Region. When the planned health equity indicators are added, countries will be able to access data to build a case for tackling health inequities and the health determinants which have especially adverse impacts on health status. Based on this model, countries could also establish their own databases for the various administrative areas. A policy of decentralization requires disaggregated data at the regional or governorate level in order to identify inequities in distribution of resources for health and in health and social outcomes.

Advocating the inclusion of social determinants of health in national policies and programmes

The preparation of country level studies on social determinants and how they affect health is a first stage in the process of prioritizing these issues on the health agenda. This should be followed by the dissemination of information and advocacy. Alternative approaches that extend the definition of advocacy beyond “social marketing” to promote sustainable behavior change and involve new actors are possible. Advocacy should also involve documenting and disseminating the results of studies of the health effects of social deprivation and exclusion and examples of effective interventions to address these problems. Actors at the local level, whose voices are rarely heard outside their own communities, could also act as advocates; they act in settings where health is most clearly linked to other social development issues, and respond to local concerns, such as water and sanitation, education, employment, housing and other environmental issues. Lessons learned from such experiences could identify feasible alternative strategies. They could also help to initiate a dialogue about long-term policy and structural changes in social and power relations that would improve health equity.

Improving health systems to make them more equitable

Improving population health in developing countries calls for programmes and strategies designed to strengthen health systems to be linked to wider action on the social determinants of health. National health policies lean heavily towards the delivery of health care; thus ministries of health are in danger of becoming “ministries of disease”, and overlooking the holistic dimensions of health. For both communicable

and noncommunicable diseases, successful disease control measures must grasp the pathways by which economic conditions and social patterns systematically translate into heightened risk. For example, a major task for HIV/AIDS and tuberculosis control is to understand and address stigma, the negative attitudes of both patients and providers that result in discrimination against people with these diseases. When tackling changing lifestyles and behaviour that result in obesity, smoking and traffic accidents, there is a need to explore ways to create social environments conducive to healthier and safer living. At the same time, it is important to recognize that for disadvantaged groups, lifestyles are not usually a matter of choice but of necessity, and what they can do with the resources available.

While health systems have financing, organizational and service delivery functions, they also have an important social dimension, which is to provide for accessible and equitable services, doing what they can to ensure “the right to the highest attainable level of health”. To achieve equitable and fair outcomes, strategies are required to engage both health providers and those whom they should be serving. In short, strategies are needed to make health systems work for the disadvantaged, as well as those better placed in society.

Fairness in the provision and utilization of health services can be identified by addressing the following issues:

- Do health policies and systems target the poor, the vulnerable and the marginalized and are equity concerns high on the agenda?
- Are there geographical, financial or social barriers in accessing health services? For example, do health facilities charge user fees that deter the poor from seeking care?
- Are health systems sensitive to the health-care seeking behaviour of specific vulnerable population groups, such as women, nomadic populations or minority ethnic or religious groups?
- Are health systems responsive to the non-medical expectations of their users, do they provide freedom to choose a provider, dignity and respect for the patient, confidentiality of information, individual consent, short waiting times etc?

Health systems are social determinants of health in so far as they can both help and hinder equitable access and treatment for all social groups. These summaries suggest that health systems can fail their users in a number of ways; specifically, resources are maldistributed to favour certain geographical areas and social groups. Available data, in countries of the Region, as elsewhere, are a poor indicator of the sensitiveness of the system to the medical and non-medical needs of specific groups of users. However, at the country level, there are a number of initiatives exploring fairness in financing, and provider satisfaction. Furthermore, the Regional Office is the global hub for work on good governance in health systems, including issues such as transparency and

accountability, which are central components of equitable health systems. As a leader in this area, the Regional Office has already produced a number of country studies on governance in health.

Fostering intersectoral collaboration

WHO works through its regional and country offices to provide technical support to ministries of health. This includes advising on issues related to health policy and implementation, and on the oversight and delivery of health care. Because of the importance of social determinants in health outcomes, ministries of health should recognize that they cannot act alone to achieve this objective. While the ministry should take the lead in recognizing and acting on social determinants of health, collaboration with other ministries is essential.

The country studies discussed in this paper provide examples of social determinants and health inequities that could be targeted by ministries of health in collaboration with other ministries. Within the Region, the division of tasks between different line ministries will differ from country to country. However, it is possible to identify general areas covered by various ministries, and identify some common concerns that could be the basis for collaboration with ministries of health. These include the following.

- **Labour and employment:** Issues that are likely to have an adverse impact on health include: high rates of unemployment; the large proportion of the working population not receiving a living wage; and those working in the informal sector with very limited social protection.
- **Child welfare:** A vital shared task is to ensure health and well-being during the crucial first years of life, and to protect the growing number of working children and street children.
- **Education:** The role of women's education, at the primary and also the secondary level, in contributing to an improvement in the survival and health of their children is well documented [4].
- **Women's affairs:** Demographic and family health surveys in the Region and elsewhere have demonstrated the association between gender discrimination, poverty and low socioeconomic status, and poor health outcomes for women; and between high-risk pregnancies, antenatal, delivery and post-natal care, and low access to care for women and their young daughters.
- **Social welfare:** Policies and interventions have the potential to improve health outcomes through: the provision of adequate social protection for all; protection for vulnerable groups such as the elderly, the disabled, and the developmentally and mentally disadvantaged; and poverty alleviation programmes that generate sufficient resources for people to live in dignity.

- **Water and sanitation:** The absence of access to safe water and sanitation and associated poor hygiene behaviours are directly responsible for a wide range of water-related diseases that are primarily socially determined. These include childhood diarrhoea (still responsible for high child death rates in the poorer countries of the Region), cholera, schistosomiasis, trachoma, lymphatic filariasis and soil-transmitted helminths.
- **Housing:** Poor housing conditions and overcrowding, especially in the burgeoning informal housing areas of large cities, are associated with respiratory infections.
- **Public information:** Collaboration is needed to ensure rapid dissemination of relevant health information and feasible activities so that members of the public can protect themselves and their communities against health risks
- **Finance:** Financial disbursements need to be flexible enough to prevent disputes over financial allocation from impeding intersectoral collaboration.

Ideally, representatives of all line ministries should be able to meet to discuss common policy and strategies to tackle social determinants of health. They could begin with informal, exploratory meetings, and graduate to a formal organization. This organization might operate almost entirely within a ministry of health, such as the Social Determinants of Health Secretariat in the Islamic Republic of Iran, or, on a broader basis, as does the Brazil Commission on the Social Determinants of Health, which was created by a Presidential Act, and includes many members from outside government [5]. The Regional Office has recently embarked on a pilot programme of intersectoral action to tackle social determinants and health inequity in a number of countries, to explore mechanisms to facilitate collaboration and work towards setting up a sustainable institutional base for such activities.

New social welfare reform programmes in Islamic Republic of Iran and Morocco are based on a series of objectives, policies and programmes which, as government-supported programmes, require an intersectoral approach. Beyond the Region, especially in a growing number of Latin American countries, conditional cash transfers provide basic family needs for the very poor, under the terms of a family contract to send children to school, bring infants to primary health care centres for immunizations etc., and in a few cases to receive small loans for economic enterprises. If these programmes were considered for the Eastern Mediterranean Region they would need to take account of prevailing family dynamics and gender relations, which are different from those in Latin America, and of the capability of health and educational systems to provide the required services for the participating families.

Expanding partnerships with stakeholders

A major objective of the programme on social determinants of health in the Region is to foster collaboration among a wide range of stakeholders and organizations that have an interest in activities directed towards improving health outcomes and health

equity through tackling the social determinants of health. These stakeholders include civil society, academia, the media and national and international agencies. This will also involve building on activities undertaken with the various ministries, as mentioned above.

Civil society institutions, especially nongovernmental organizations, are becoming key players in the development and advocacy of new policies and strategies on social determinants of health and health equity. They have experience in working with local communities and through local government authorities, and as independent advocates for social change. The incorporation of civil society in the Commission on Social Determinants of Health is a pioneering initiative, based on the recognition that nongovernmental organizations can act as a grassroots link between communities and primary health care and other local services. In the Region they provide health services, either on contract from ministries or with donor and community support, as well as being active in poverty alleviation programmes. The objective of involving civil society is to enhance sustainability by increasing the sense of local “ownership” in health and development-related programmes, and to create a demand for services from the people who should be using them; a demand to which ministries should be able to respond and be held accountable.

Academia, including government-run and independent research centres and universities, play an important role in applied health research that can produce results useful for health policy and programming. In identifying appropriate research, academic institutions and staff need to take account of competing interests that are likely to affect their priorities. These include those within the broad sphere of biomedical research: basic research, clinical research and epidemiology. Medical research organizations and schools of medicine also need to seriously examine the extent to which they are willing and able to join hands with social researchers, including those who conduct qualitative as well as quantitative research. For such collaboration to be effective, both training and joint activities will need to be carefully nurtured as there are few schools of public health in the Region, and even fewer social research centres, which could be potential partners. Furthermore, all such institutions need to consider how they should respond to the needs of “clients”, be they communities and local people, governments and ministries of health, or pharmaceutical companies and other commercial interests.

Media, which in the Region includes state-controlled media as well as burgeoning private television and print media, have a huge potential value in spreading awareness about health and health equity. The challenge here is to find ways to encourage the media to provide carefully evaluated and balanced health information. As recent events have shown, the media too often engage in repeating rumours at the expense of serious analysis. Also, many of the new, private for-profit television stations appear to be most concerned with attracting audiences and thus advertising revenue. Media personalities and other celebrities could help to promote social determinants of health and health equity

issues, following the example of the Brazilian Commission on Social Determinants of Health which includes prominent entertainers and public personalities. In addition, the rapidly growing band of users of the world wide web offer an opportunity to initiate a dialogue that includes informed voices outside formal government and nongovernmental organizations.

Large donors, including bilateral aid agencies, UN agencies and private foundations play a major role in disease control in poor countries, either singly or in collaboration. The solutions offered by some of these groups, such as the Bill and Melinda Gates Foundation and the Global Fund for Tuberculosis, AIDS and Malaria, have recently begun to move towards improving health systems, rather than, as previously, focusing almost exclusively on technical solutions, and on medicines and vaccines. Medicines and vaccines require functioning health systems for effective delivery. However, it is also important to improve preventive strategies and focus on health delivery that makes special efforts to target the disadvantaged. The activities of research-based nongovernmental organizations and of organizations such as the Carter Center in Atlanta have long been concerned with addressing health issues via preventive strategies and social activities at the grassroots level.

3.4 “Promising practices” to tackle social determinants and health inequities in the Region

Local level initiatives

The WHO Regional Office for the Eastern Mediterranean supports a community-based initiatives programme in most countries of the Region, and some of these programmes are being incorporated into the government structure of Member States. The core concept of the programme is a strategy to facilitate equitable health development using an integrated bottom-up socioeconomic development model. This relies on community involvement at all stages, as shown in Figure 1. As such, it can be considered as an “asset model” that draws on existing local knowledge and skills to build sustainable community-owned activities that improve health and well-being, rather than starting from a set of externally derived assumptions about what should be done.

The basic development needs programme is a component of the community-based initiatives programme. It focuses on fostering community action in the poorest areas and hence directly addresses health and social inequity. By improving access to basic physical and social needs such as safe water, sanitation, nutrition, shelter, empowerment and access to health services, it contributes to poverty reduction and improved health outcomes (Figure 3.1). It combines more conventional child health programmes, such as the promotion of breastfeeding, safe motherhood and diarrhoea control, with social

programmes such as literacy, vocational training, food and nutrition, youth development, water and sanitation and income generating projects. These programmes now cover a population of almost three million in over 250 sites, supporting community development in 12 of the 22 countries in the Region: Afghanistan, Djibouti, Egypt, Iraq, Lebanon, Oman, Pakistan, Somalia, Sudan, and Yemen, and receiving high priority in the Islamic Republic of Iran and Morocco, as mentioned in the summaries [6].

Gender in health and development is a regional programme for the integration of gender perspectives in national health policies and programmes, and building an evidence base on gender and health. It also addresses the productive involvement of women and girls with the objective of improving health outcomes. An example of local action in impoverished communities is the piloting of a WHO combined curricula covering literacy, vocational skills and health for men, women and youth to address poverty and health and the transformation of gender norms [7].

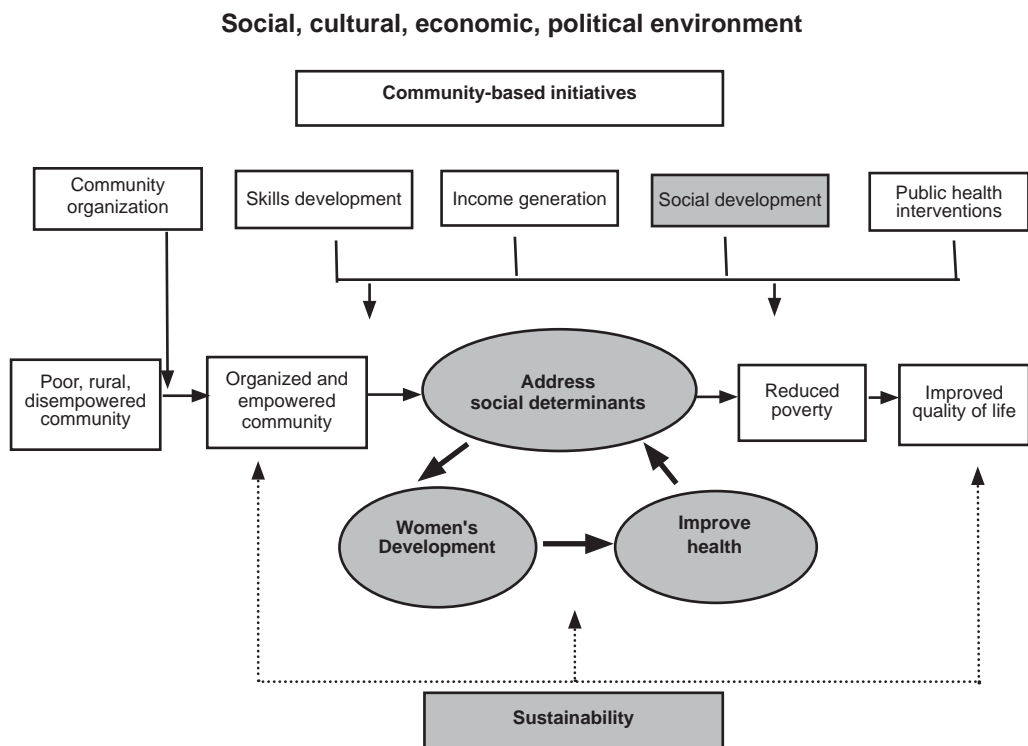


Figure 3.1. Tackling the social determinants of health through the basic development needs component of community-based initiatives

Local level initiatives mentioned in the summaries include the success of female social workers, *raidat refiat*, in Egypt, and, in Pakistan, lady health workers and the involvement of village women to provide nutritional meals to schoolgirls. Nongovernmental organizations in the occupied Palestinian territory focused on neglected health determinants, such as mental health, and on conditional cash assistance and emergency food assistance for those caught up in the conflict.

National initiatives

Tackling structural determinants of health requires both international and national level commitment to policies that are pro-poor and address issues of health inequity. To a certain extent global initiatives such as Poverty Reduction Strategy Papers, Millennium Development Goals, and disease-based initiatives on tuberculosis, malaria and HIV/AIDS address health inequity. Yet they are tempted to see results in terms of “average” improvements as these can be achieved more easily than those which target the least healthy and most disadvantaged groups, which are the most difficult and expensive to reach.

Some countries of the Region have a long-standing commitment to social welfare and health equity issues, while others are launching initiatives in an attempt to redress the adverse health and welfare impacts of global and national policies pursued during the 1980s and 1990s. Most countries in the Region, including those reviewed here, have a stated commitment to providing “health for all” in their national constitution and/or in current development plans. Within this framework, there is plenty of scope to match pronouncements to action within the Region, and the Regional Office is ready to support them.

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The WHO Global Commission on Social Determinants of Health was launched in 2005 with the aim of identifying and tackling the persistent and growing inequalities in health, both within and between countries. These inequalities are caused by what we now term social determinants, defined as the way people live, work and age in a society. In the Eastern Mediterranean Region the knowledge base on social determinants and how these influence health is sparse. This publication reviews the social determinants of health in seven countries of the Region and represents a first step towards building a knowledge base that can inform policy and strategies related to social determinants and the health inequities arising from them. The publication also discusses some of the strategies that could be adopted to forward the agenda on social determinants of health and health equity in individual countries.

