

# The World Health Report –Health systems Empowering Citizens and Improving Performance

Issa Al Salmi and Suad Hannawi

Issa Al Salmi, MD, FRCPI, MRCP (UK), FRCP, MIPH, PhD, FASN: Royal Hospital, Muscat, Oman, PO Box 1331, code 111

Suad Hannawi, B.Sc, MBBS, MRCP (UK), FRCP, MIPH, PhD: Al Baraha hospital, Dubai, MOH, UAE, PO Box 65522.

## Abstract

**Background:** Oman is a Middle Eastern country bordering the Arabian Sea, Sea of Oman and the Persian Gulf. It has a population of about four million people, about 50% of whom are expatriates. The WHO report is the first international assessment of Oman's health system (HS). More, the WHO report is the first-ever comprehensive assessment of the world's health systems.

**Purpose of the study:** To discuss the WHO report assessment of Oman's health system. In addition, we will explore how a small country with relatively a young health system could, achieve such a high ranking where others with high financial capacity and well mature health system fail to achieve a good ranking by the WHO standard.

**Methods:** The study utilises WHO report that relies on the following major components: (1) goal attainment (effectiveness), (2) health expenditures per-capita, and (3) efficiency and the overall level of health performance. Its analysis identifies the key outcomes in terms of three main goals for HS: to improve health; to improve the responsiveness of the HS to people's legitimate expectations of being treated with dignity and autonomy and due care; and to encourage, the third component, the HS to be fairly financed.

**Results:** Oman was ranked highly by the WHO report. Its success is very impressive compared to many countries that are well advanced and have a better health finance system. WHO used five performance indicators to measure HS in 191 member states, it finds that France provides the best overall health care followed among major countries by Italy, Spain, Oman, Austria and Japan.

### **Conclusions, brief summary and potential implications:**

This highly innovative study has been criticised for its choice of objectives and advocate a case for omitting the equity of financing from the list and replacing it with an index of access, both financial and geographical. The weights attached to the system objectives have not been validated. However, it is highly unlikely that a single set of weights or a single set of objectives can be obtained which are valid reflections of the aspirations of every country in the world.

**Key words:** World Health Organization, health report, health system, Oman, health system, effectiveness, health expenditures, efficiency, health performance, dignity and autonomy.

## 1. Introduction:

The World Health Organisation (WHO) has carried out the first ever analysis of the world's health systems (HS)(1). WHO used five performance indicators to measure HS in 191 member states, it finds that France provides the best overall health care followed among major countries by Italy, Spain, Oman, Austria and Japan. The HS of a nation comprises those activities that aim to improve the health of the population, either by providing personal services to the individual or non-personal interventions to organization (1). It consists of all actors, institutions and resources that undertake health actions- where the primary intent of a health action is to achieve health. The WHO defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity(1). Therefore, many other areas of human and social activity contribute indirectly to the health and well-being of the nation, including education as well as environmental and social infrastructure(2). In this paper, we shall discuss the WHO report and its various methodology indicators and Oman ranking. Then will discuss what Oman has done to achieve such a level. Finally, we will touch upon the criticisms of the report in general and specifically to Oman situation.

## 2. Methodology of WHO Report 2000

The WHO report is the first-ever comprehensive assessment of the world's health systems. Its analysis identifies the key outcomes in terms of three main goals for HS: to improve health; to improve the responsiveness of the HS to people's legitimate expectations of being treated with dignity and autonomy and due care; also the third component is that HS is fairly financed(1). The WHO report relies on the following major components: (1) goal

attainment (effectiveness), (2) health expenditures per-capita, and (3) efficiency and the overall level of health performance(1).

The first component, goal attainment (effectiveness), has 5 subcomponents (respective weights in parentheses): level of health (25%), distribution of health (25%), level of responsiveness (12.5%), distribution of responsiveness (12.5 %), and fairness of financial contribution (25%)(1).

The first of these subcomponents is reported in terms of disability-adjusted life expectancy (DALE), for which life tables are used to calculate the average number of healthy years of life for a population.

The second subcomponent measures the equality of child survival for a population.

The third subcomponent measures the level of system responsiveness; it is based on surveys of approximately 2000 key informants from selected countries about the performance of their health system in terms of such concerns as access to social services and choice of provider(1).

The fourth subcomponent is the distribution-of-responsiveness variable, that measures the proportion of the population judged by the 2000 key informants to be part of a disadvantaged group (e.g., racially disadvantaged, indigenous, elderly, or poor)(1). On this measure, a country that has greater equality would score higher than one with more inequality.

The fifth subcomponent measures the equality of household contributions to the financing of the health system, based on the proportion of permanent income above subsistence level spent as out-of-pocket outlays. The 5 subcomponents were weighted as specified above to produce one overall measure constructed on a scale of 0 to 100(1).

The second component, health expenditure per-capita, is a variable considered in both efficiency and performance measures. The WHO actually does not define level of health expenditure as one of the goals of the HS. This component is determined a social choice, and there is no right level and it does not specify that countries should necessarily spend more, although it does find that at very low levels of expenditure it seems impossible to get good performance(1).

The third component measures performance of HS, including efficiency. Efficiency has been defined as follows:  $HSE = (DALEO - DALEWO) / (DALEM - DALEWO)$ , where HSE is the efficiency performance of the HS; DALEO is the observed DALE; DALEWO is the DALE without a “functioning modern HS” given the non-health attributes that affect health, represented by education; and DALEM is the maximum DALE given the level of expenditure per-capita. A frontier production model was used to estimate maximum DALE levels. A similar model was used to produce an overall indicator of performance, but in this model a measure of composite HS attainment was used in place of life expectancy(1).

The following points are the main results of our review.

### **3. Results:**

WHO used five performance indicators to measure HS in 191 member states, it finds that France provides the best overall health care followed among major countries by Italy, Spain, Oman, Austria and Japan.

The first component: On this overall goal attainment measure, Japan ranked 1<sup>st</sup>, Australia 12<sup>th</sup> and Oman 59<sup>th</sup>.

The first subcomponent result showed that Japan ranked 1<sup>st</sup> on this measure, Australia 2<sup>nd</sup>, and Oman 72<sup>nd</sup>. The second subcomponent revealed that Chile ranked 1<sup>st</sup> on this measure, Australia 17<sup>th</sup> and Oman 59<sup>th</sup>. The third subcomponent approved that the United States ranked 1<sup>st</sup> on this measure, Australia 12-13 and Oman 83<sup>rd</sup>.

The fourth subcomponent results ranked the United Arab Emirates at the top place and ranked 1<sup>st</sup>, Australia fell into a group of countries that were tied for 3<sup>rd</sup> to 38<sup>th</sup> place and Oman 49<sup>th</sup>. The fifth subcomponent revealed that Colombia ranked 1<sup>st</sup>, Australia tied at 26-29 and Oman was tied with Iraq for 56<sup>th</sup> and 57<sup>th</sup> place.

The second component, health expenditure per-capita: the United States ranked 1<sup>st</sup> in health expenditure per capita, Australia 17<sup>th</sup> and Oman 62<sup>nd</sup>.

The third component measures performance of HS, including efficiency: Oman was ranked 1<sup>st</sup>, Australia 39<sup>th</sup> and the United States 72<sup>nd</sup> in terms of HSE. France was ranked 1<sup>st</sup>, Australia 32<sup>nd</sup> and Oman 8<sup>th</sup> in the overall HS performance.

The main factors behind Oman high level ranking by the report is as follow.

#### **4. Discussion**

Oman was ranked highly by the WHO report. Its success is very impressive compared to many countries that are well advanced and better health finance system(1).

Oman is a Middle Eastern country bordering the Arabian Sea, Gulf of Oman and the Persian Gulf(3). It has a population of 2.7 million people, about 20% of whom are expatriates(4). The country has a monarchy government and is ruled by a Sultan, through a Council of Ministers(3). Thus the official name of the country is the Sultanate of Oman(3). The Ministry of Health (MOH) is responsible for the provision, coordination and stewardship of the health sector(5). It develops health-related policies and programs, which are implemented in coordination with other related ministries and health services institution established by both the government and private sector(5, 6).

##### **4.1. Factors behind Oman high level ranking by the report**

The MOH is the main health care provider (80%) and health care services are provided free to all national by law(6). The private sector represents 12% of the total health care and less than 10% by other social sectors(6). Health care financing comes from the revenues of oil and gas production and other natural resources. As of 2002, the MOH accounted for 5.75% of total government expenditures of health care(5, 6). Sixty percent of total MOH budget is allocated to acute care services and tertiary treatment and one third is allotted to primary healthcare(5, 6). The MOH operates hospitals and health centres at national, regional, sub-regional and local levels that act as a continuum(5, 6). It provides primary medical care through local health centres, extended health centres and local hospitals. The regional referral hospitals mainly provide secondary medical care, whereas 13 national referral hospitals provide tertiary care(5, 6).

The Expanded Program of Immunization (EPI) established 1981 has shown a substantial progress(7). The UNICEF has acknowledged the Omani health care achievements in child health and has ranked the Sultanate among one of the leading country in the whole World in controlling childhood diseases(8). The "Human Development Report" issued by United Nations Development Program has ranked the Sultanate number one country for its achievement in reducing under age of 5 years mortalities (< 10/1000) and increasing immunization coverage to 99% of the targeted population during three decades(7). Oman now has a crude birth rate of 26/1000 population and a crude death rate of 3/1000 with a total fertility of 3.6%(5). The morbidity pattern in the country is shifting from communicable diseases that affected the developing communities to health problems related to modern lifestyle and aging population(5, 6, 9).

Oman recognized that most of the achievements in health were the result of personal decisions e.g. accepting immunization and changes in life styles(5, 6). Therefore, since the declaration of Alma-Ata in 1979, which considered community participation in planning and provision of health services as a right for the community, there is wide consensus in Oman that participation of communities is an important factor in improving health outcomes, sustaining health and in the effective performance of health systems(10). The MOH promotes community involvement through cooperation and collaboration with other social and economic sectors in order to increase health improvements to attain the highest possible level of health. In 1998, central committees were established to strengthen Community Participation to Promote Primary Health Care (6).

Decentralization of planning, management, and budgeting within Oman's health system is one of the most important factors in achieving community involvement in health. This gives the regions the administrative and financial autonomy in making decisions. It has increased health services development as well the development of local resources. In 1992, the MOH decided to develop the "District Health System" which allowed further decentralization to the lowest community level(11). The district is the most peripheral unit and the closest to the community. This allows for the identification of local needs and the proper management of local resources(11). Recently the MOH adopted the idea of hospital autonomy which will further decentralize the health services(12).

Following the WHO report, Oman advances the recommendations of the WHO report. It invested into human resources planning(5, 13), cost effectiveness of its health sector(14), enhancing revenues for health services(15) and cooperation strategies with WHO(16).

But, what are the main critical analyses of the WHO report? How could small countries achieve such a high ranking!

#### 4.2. Critical analysis

Well, one of the great contributions of the WHO study is that it makes explicit the existence of multiple objectives rather than the two-health outcome and 'equity'-acknowledged in most economic analyses(17). While conceptually appealing, the definition of the HS cannot be easily measured as many of the people and actions that are dedicated to health are outside the cash economy(18). The costs of health services, as reported in the national accounts and collected by the WHO, are used in the measures of health and systemic performance proposed in the report[11].

The health of the population is measured by the DALE from birth as generated by the Global Burden of Disease Study undertaken by the WHO. Another problem is the amount of disability due to a particular disease is not measured, but assumed equal to the mortality and average disability rates in the sample countries used in the production of norms(19). The report assumes that the same loss of DALYs occurs for the same disease in every country(19). The distribution of DALEs is not used in the analysis and instead, small area variation in childhood mortality is used as a proxy for distribution of population health(19).

The responsiveness of HS to their clients is measured using a questionnaire that inquires about the degree of respect for persons and client orientation. The initial country estimates, and the distribution of the responsiveness within countries, were derived from convenience samples and best guesses by respondents(1). It should be noted that one of the primary functions of the health system is to respond to health problems as identified by the users of the system(20). Political system can influence people in their attempt to answer the questionnaire. In many countries, especially in the third world, where there are no political parties and not much freedom of press, people are unconsciously try to please their political system in fear of prosecution. Equity is not usually present in these countries at any level, let alone they score high level of achievement. This could indicate that the reliability of these data is questionable. Countries that have no democratic process of governance and no freedom of press should not be given the same weight as other countries and there should be a system for demerits points or discounting for their poor political system or freedom of press.

Furthermore, a number of authors have contested the selection and treatment of objectives with respect to the measurement and inclusion of the fairness of financing in the composite index and the assumption of universally applicable weights(19, 21, 22). The WHO methodology imposes the same objectives upon all countries(22). Few authors argued that it is unfair and misleading to describe a county's health systems as inefficient because it did not perform well when judged by objectives which were not their own(22-24). Blendon et al showed that for 17 industrialised countries the WHO ranking of performance does not correspond with a ranking based upon consumer satisfaction(21). Evans et al claim that panel data estimation is more efficient than models using cross-sectional data in extracting information on inefficiencies(25). They also claim that panel data estimation is preferable to stochastic frontier techniques because there is no need to specify the distribution of the inefficiency terms(25). Evans et al (2000) criticise and disregard alternative methods for quantifying efficiency because they cannot differentiate between errors and true efficiency(25). They recommend the use of panel data because it can overcome this problem.

Certainly there are areas of the world and there are components of this data where the estimates are quite uncertain(26). What WHO has done, and again this is breaking new ground for any sort of international report, is to estimate the level of uncertainty of every estimate in the report(23, 26). Responding to criticisms, the WHO has held many regional and technical consultations on how to measure performance. It has set up an advisory group and a scientific peer review group to assess the methods to be used in an updated report. This will inspire fresh thinking and a more open scientific debate, leading to an evidence-based framework for assessing and improving HS performance(23).

#### 5. Conclusions

The purpose of WHO report is to help Member-States to monitor and evaluate their own performance and to build the evidence base on the relationship between the structure, organization and content of HS(1). The WHO framework on HS performance assessment is an attempt to accelerate the development of an evidence base on the outcome of HS and of the determinants of these outcomes(27).

This highly innovative study has been criticised by a number of authors for its choice of objectives and advocate a case for omitting the equity of financing from the list and replacing it with an index of access, both financial and geographical(19-23). The weights attached to the system objectives have not been validated(23). However, it

is highly unlikely that a single set of weights or a single set of objectives can be obtained which are valid reflections of the aspirations of every country in the world(19-23).

Despite the criticisms, the WHO study represents a landmark for the evaluation of HS. It is the most sophisticated cross-national assessment of system performance to date. Further, it has defended a set of importance weights which dramatically states the importance of system objectives other than health outcome. This report main message is that a country that does well has a strong MOH that is providing stewardship for the whole of the HS, public and private, that's not just regulatory, it's also setting a vision in terms of where the HS, public and private, should be going in terms of what goals it should be achieving, what things it should be doing; and also providing an intelligence function, so that the people as a whole can improve the responsiveness of the HS(26). Stewardship makes sure that HS are treating people with dignity and have a client orientation and to extend health insurance to as large a percentage of the population as possible.

There is no doubt that community involvement and participation is vital to sustain HS reforms in Oman. The important question is to what degree and at what level should people participate in their health? But before this question can be answered it is necessary to determine if the infrastructure exists to implement such initiatives, and if people in the communities have the basic knowledge and skills to actively and effectively participate in the HS.

Future directions dictate that there is a need to follow up this success and to see the effect of political transition towards improvement in freedom of speech and elections of representative in the government system and the empowerment of women in all aspects of life in the country.

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