

World Health Organization Survey on Health Status of Saudi Arabia: A Review

Aslam Pathan^{1*}, Abdulrahman Alshahrani¹, Feras Al-Marshad¹

Abstract: The large size of the Saudi Arabia country and scattered population pose challenges to health care service delivery including health facility planning and distribution of health workforce. Health Status information was collected from World Health Organization Survey. Prematurity was the most probable reason for maternal and child death in 2000 and 2010 which was found to be 24% and 30% respectively. The total number of HIV positive cases in 2008 was 13926, of which 3538 (25.4%) were among Saudis and 10388 (74.6%) were among non-Saudis. The cancer incidence rate was 52.3 per 100000 population, with 78.3% Saudi. Early teenage marriage, found in 27.2% of Saudi Arabian women, may be a factor in maternal mortality. Non-communicable diseases account for 71% of all mortality in Saudi Arabia, with cardiovascular the leading cause of mortality. The most common cancers was colorectal in male and breast cancer in females.

INTRODUCTION

Saudi Arabia is experiencing epidemiological and demographic transition, represented by a growing burden of chronic noncommunicable diseases, while population expectations for quality care services are expanding. There has been an alarming increase in the prevalence of chronic diseases, such as diabetes, heart diseases and cancer, for which the treatment is costly. Population growth and fertility rates are relatively high, leading to increasing demand for social services including health care. Urbanization is increasing and lifestyle-related noncommunicable disease risk factors, including unhealthy eating habits, tobacco consumption and limited physical activities are rising. ^[1]

MATERNAL AND CHILD HEALTH

Prevailing social conventions in Saudi Arabia have affected the health of women (Table 1). For example, social encouragement of high fertility rates has led to a high prevalence of low bone density and osteoporosis among postmenopausal Saudi Arabian women. Early teenage marriage, found in 27.2% of Saudi Arabian women, may be a factor in maternal mortality. ^[1,2]

PREVENTION OF GENETIC DISORDERS

Saudi Arabia ranks among the leading countries in the prevalence of birth defects. ^[3] The high prevalence of birth defects can be attributed to high rates of consanguineous marriage, which account for more than 50% of all marriages in the country. ^[4] Roughly 1.5 million Saudi Arabians have or are carriers of inherited blood diseases. As shown in Table 1, 23% mortality is due to congenital anomalies. As termination of pregnancy is not permitted unless there is imminent danger to the mother continuing the pregnancy, primary prevention programmes such as premarital genetic screening tests are the only practical option to reduce the incidence of genetic haematological disease. In one study, a majority of Saudi Arabian mothers were unaware of the increased risks of haemoglobinopathies from consanguinity. ^[4]

¹College of Medicine, Shaqra University, Ministry of Higher Education, Shaqra, Kingdom of Saudi Arabia.
E-mail: dr.aslampathan@gmail.com

*Corresponding author

COMMUNICABLE DISEASES

Communicable diseases have ceased to be the leading cause of mortality in the country, in fact the rates of malaria and tuberculosis are negligible according to the World Health Report 2012. The malaria cases reported are primarily due to the country's southern border with Yemen, where the disease is still prevalent. WHO is assisting a joint Saudi-Yemeni coordination committee for malaria/vector control to monitor and control the situation. Saudi Arabia has a national tuberculosis control programme but DOTS treatment is only available in the public sector. The prevention and treatment of HIV/AIDS has become a priority. The first case of HIV was diagnosed in Saudi Arabia in 1984. During the same year the national AIDS control programme was established. Nationals and stakeholders working in the programme agree that the true prevalence of HIV is probably much higher than the reported cases, given the underreporting and the difficulty in reaching high-risk groups. The total number of HIV positive cases in 2008 was 13926, of which 3538 (25.4%) were among Saudis and 10388 (74.6%) were among non-Saudis. ^[5] The full range of treatment is available in eight specialist centers and the Ministry of Health is planning to establish a further eight centers. HIV coordinators, present in every regional directorate, coordinate Ministry of Health prevention, treatment and care programmes, focusing on developing dialogue with schools, religious leaders and the general public, introducing syndromic management for sexually transmitted diseases into primary health care facilities and working with vulnerable groups. ^[5]

NONCOMMUNICABLE DISEASES

Noncommunicable diseases account for 71% of all mortality in Saudi Arabia, with cardiovascular the leading cause of mortality. ^[6] An alarmingly high rate of physical inactivity among the Saudi population has been reported, predisposing them to health problems. Saudi youth are also affected by the global epidemic of obesity. centre for noncommunicable diseases has been established and is instituting a number of programmes for prevention of the most common noncommunicable diseases, including programmes for diabetes prevention, healthy diet and physical activity, early examination of newborn children, addressing unhealthy behaviours and osteoporosis

Table 1: Causes of Death among Children under 5 Year Age

Cause of Death	Year 2000 (%)	Year 2010 (%)
Diarrhoea	4	2
Pneumonia	11	7
Prematurity	24	30
Birth asphyxia	12	8
Neonatal Sepsis	5	2
Congenital anomalies	21	23
Injuries	10	13
Other diseases	13	15

Table 2: Prevalence of Metabolic Risk Factors in Saudi Arabia, 2008

Metabolic Risk Factor	Male	Female
Raised fasting blood glucose among adults aged ≥ 25 years	21.7	22.0
Raised blood pressure among adults aged ≥ 25 years	28.7	32.9
Adults aged ≥ 20 years who are obese	43.5	29.5
Smoking any tobacco product among adults aged ≥ 15 years	1.0	24.0
Current tobacco use among adolescents aged 13–15 years	9.0	21.0

Table 3: Ten Most Common Cancers in Saudi Arabia, 2007

Top Ten Cancers in Male	%	Top Ten Cancers in Female	%
Colo-rectal	11.2	Breast	26.0
Non Hodgkin lymphoma	9.6	Thyroid	9.9
Leukaemia	7.7	Colo-rectal	8.8
Lung	7.4	Non Hodgkin lymphoma	6.0
Liver	7.2	Leukaemia	4.8
Prostate	6.0	Corpus uteri	4.0
Hodgkin Disease	4.1	Ovary	3.1
Stomach	4.0	Hodgkin disease	2.7
Bladder	3.9	Stomach	2.6
Skin	3.7	Skin	2.5

screening. Advocacy campaigns are being used to raise awareness. [7]

DIABETES MELLITUS

The prevalence of diabetes mellitus has been on the rise in the past decade, globally and in the Region. Saudi Arabia ranks high in diabetes prevalence against both the global and regional average. As of 2008, a staggering 20% of nationals over the age of 20 suffered from type 2 diabetes, brought on by poor diet and sedentary lifestyles. This is one of the highest rates in the world. Although mortality attributed to diabetes is 6%, temporary and permanent disabilities caused by complications of diabetes include blindness, amputations, kidney failure and cardiovascular disease. Consequently, diabetes is an important economic burden due to the cost of treatment and the loss of productivity. [1]

CARDIOVASCULAR DISEASE

Cardiovascular disease is the leading cause of mortality in Saudi Arabia, accounting for 42% of all deaths. There is a high prevalence of metabolic risk factors such as high blood pressure, raised blood glucose and obesity among its population (Table 2). In the Heart Ejection Registry Trial (HEARTS), a multicentre national quality improvement initiative in the Arab population to study the clinical features, management and outcomes of inpatients admitted

with acute heart failure and outpatients with high-risk chronic heart failure, one of the key findings was that patients with heart failure present at much younger age than the global average and are more likely to have developed diabetes mellitus. [8] In addition, a study carried out on patients who had undergone cardiovascular surgery found that the female sex is an independent and strong predictor of adverse outcome after bypass surgery compared to males due to significantly higher comorbidities and more acute presentation; and independent of their peri-operative management. Female coronary artery disease patients should therefore be recognized as a higher risk subset of patients. [9]

CANCER

In 1992 the Saudi Cancer Registry was established under the jurisdiction of the Ministry of Health. According to the registry, there were 12 309 cases of cancer in 2007, affecting 5982 (48.6%) males and 6321 (51.4%) females with a male to female ratio of 95:100. The cancer incidence rate was 52.3 per 100 000 population, with 78.3% Saudi. [1] The ten most common cancers are shown in Table 3.

CONCLUSION

Early teenage marriage, found in 27.2% of Saudi Arabian women, may be a factor in maternal mortality.

Noncommunicable diseases account for 71% of all mortality in Saudi Arabia, with cardiovascular the leading cause of mortality. The most common cancers was colorectal in male and breast cancer in females. As of 2008, a staggering 20% of nationals over the age of 20 suffered from type 2 diabetes, brought on by poor diet and sedentary lifestyles. The total number of HIV positive cases in 2008 was 13926, of which 3538 (25.4%) were among Saudis and 10388 (74.6%) were among non-Saudis. The rates of malaria and tuberculosis are negligible according to the World Health Report 2012.

REFERENCES

1. Country Cooperation Strategy for WHO and Saudi Arabia, 2012-2016.
2. Economist Intelligence Unit: Industry Report, Healthcare Saudi Arabia, February 2012.
3. Christianson A, Howson C P, Modell B. Global report on birth defects: the hidden toll of dying and disabled children. March of Dimes Birth Defects Foundation, New York, 2006.
4. Mobaraki A E H, Soderfeldt B. Gender inequity in Saudi Arabia and its role in public health. *Eastern Mediterranean Health Journal*, 16(1):113-8, 2010.
5. UNGASS country progress report 2010, Saudi Arabia Ministry of Health, 2010.
6. Noncommunicable diseases country profiles, 2011. World Health Organization, Geneva, 2011.
7. Al-Nuaim A A. The prevalence of physical activity and sedentary behaviours relative to obesity among adolescents from Al-Ahsa, Saudi Arabia: rural versus urban variations. *Journal of Nutrition and Metabolism*, 417-589, 2012.
8. Al Habib K F. Design and preliminary results of the heart function assessment registry trial in Saudi Arabia (HEARTS) in patients with acute and chronic heart failure. *European Journal of Heart Failure*, 13:1178-84, 2011.
9. Ahmad M. Gender differences in the surgical management and early clinical outcome of coronary artery disease: Single centre experience. *Journal of the Saudi Heart Association*, 22(2):47-53, 2010.

Cite this article as: Aslam Pathan, Abdulrahman Alshahrani, Feras Al-Marshad *et al.* World Health Organization Survey on Health Status of Saudi Arabia: A Review. **Inventi Impact: Pharmacy Practice, 2015(3):102-104, 2015.**