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Oil prices, climate change—health challenges in Saudi Arabia

In December, 2015, Saudi Arabia reported a US$98 billion budget deficit (about 15% of gross domestic product [GDP]) in 2015 with no improvement projected for 2016.1 Saudi Arabia has been resilient during oil price fluctuations in the past, so the new government budget came as a surprise. The new spending plan reflects several measures to curb subsidies, raise revenue, and improve healthy lifestyles.1

Health and social affairs consume about a fifth ($45 billion, 5% of GDP) of Saudi Arabian Government spending.1,2 There are not many relevant examples of the health effects of recession and structural adjustments for countries with a similar development trajectory of Saudi Arabia. Economic growth in Saudi Arabia (19th highest GDP worldwide) contrasts with its position on the Human Development Index (39th in the world);2 this gap indicates substantial development challenges. Further, the economic changes are occurring amid other challenges unique to the region.

First, along with the rising oil revenues in recent decades, Saudi Arabia has seen a rapid epidemiological transition in the population (table).3 The uptake of some health-promoting behaviours has been limited by Saudia Arabia’s unemployment rate (11.7% in 2014), moderate

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levels of education, and climatic and sociocultural conditions. The high burden of undiagnosed and uncontrolled diabetes and hypertension, will consume a large proportion of the health budget.

Second, future temperature in the region is projected to increase consistently and exceed the threshold deemed unsuitable for human adaptability. This changing climate will have an effect on the promotion of some healthy lifestyle habits, the country’s production of fresh fruits and vegetables, and micronutrient deficiencies. For example, vitamin D deficiency from inadequate exposure to sun and limited intake of enriched products is common in Saudi Arabia.

Finally, there is a need for sustained investment in the control of emerging infectious diseases in the region. Such control efforts are important given the risk of emerging diseases within Saudi Arabia, such as Middle East respiratory syndrome, and as a result of disease importation through the large expatriate workforce and the 2-3 million pilgrims for Hajj and 5-6 million pilgrims for Umrah who come to Saudi Arabia each year from more than 180 countries.

Although economic recession is often feared as a “health tragedy”, evidence from high-income countries is mixed and related to variations in social and political contexts. In high-income countries, some health indices showed counter-cyclical effects with economic contractions (e.g., increases in suicides, depression, and anxiety disorders and worsening reproductive health outcomes). However, mortality is shown to be pro-cyclical and it decreases during rapid economic contractions. In high-income countries, there are generally slower declines in mortality during periods of economic growth and greater declines in mortality during recessions. In low-income countries, economic growth seems to improve health through improvements in basic services, until a country reaches $5000–10 000 GDP per person. Declines in mortality in high-income countries during recession could be related to decline in excess mortality from modifiable causes of death, such as those arising from alcohol abuse and motor vehicle accidents. Given that Saudi Arabia has one of the highest rates of traffic-related deaths globally, the country might benefit from the austerity measures in this regard. If Saudi Arabia maintains increased relief spending on child health, improvements in access to nutrition and health, and strong infectious diseases control then these approaches can also help reduce mortality.

Since Saudi Arabia’s sociodemographic and geopolitical foundation is different from that of the case studies available thus far, it is difficult to predict potential health effects of the present economic recession and newly proposed health-sector reforms. Saudi nationals (and pilgrims coming to Mecca for the Hajj) are entitled to free health care and the government accounted for 66% of health care spending in 2012 (about 5% of GDP). The expatriate workforce of Saudi Arabia, which accounts for 56% of the total population and about 86% of the private sector workforce, are not covered by the government health-care system. The proposed nationalisation process to reduce the expatriate workforce by employing more Saudi nationals in the employment sector could adversely affect the health-care workforce since about 77% of physicians and 63% of nursing staff in Saudi Arabia are expatriates. A much needed boost in the country’s health promotion portfolio would require expertise in various public health disciplines that are currently in short supply in Saudi Arabia.

The greatest burden of economic recession generally falls on the unemployed. About a third of the 30 million population of Saudi Arabia are younger than 15 years, and the child dependency ratio is 44% (ratio of people below working age to workforce). In 2013, the rate of unemployment in Saudi Arabian nationals was 28.4% for people aged 15–29 years (men 17.5%, women 60.3%). A recent emphasis on privatisation of health and preventive care, or even cost sharing of preventive care, could lead to an increase in overall health-care costs if people forego essential medications, immunisations, or routine clinic visits such as antenatal care.
We do not know how long the current economic downturn will last in Saudi Arabia. Anticipating potential effects of recession at an early stage of the crisis can inform health-sector reforms to diminish or avoid its harmful consequences on nation’s health. Despite Saudi Arabia’s unique challenges, the Ministry of Health has so far been successful in providing state-of-the-art medical services to its citizens. For example, Saudi Arabia’s premarital sickle cell screening is a unique initiative. Despite free health care, Saudi Arabia’s shortcomings are in the control of non-communicable diseases and mitigation of risk factors for disease. Only 23% of Saudi adults have had a preventive care visit. There is a need to consider multipronged approaches to health promotion and avoidance of risk factors, including those that fall outside the services of health ministry (eg, enforcement of motor vehicle accident prevention advisories, point of sale restrictions on tobacco). By training primary care providers to serve as advocates for health promotion, each encounter between the provider and patient can be used as an opportunity to educate patients about a set of prevention messages. Informed personal decision making is important to increase the uptake of healthy lifestyles and prevention recommendations; this is a process achieved through education and a sense of personal empowerment that comes with employment. Outreach to civic organisations for partnerships in health promotion initiatives can help increase visibility and uptake.

Beyond the immediate effects of the current economic crisis, Saudi Arabia needs to target its policies to mitigate the effects of climate change. Agricultural approaches such as hydroponics, vertical farming, and landscaping with food-producing plants can increase food production, enable healthy eating habits, and improve air quality. Additionally, enrichment of food products (vitamin D, folic acid, iodine) is an easy and cheaper alternative to promotion of supplement use by individuals. The transition in the country’s health-care delivery to the private sector and cost-sharing should be implemented without compromising services for the unemployed and uninsured. Similarly, efforts to nationalise the health labour force should consider continuity in essential service delivery.

Saudi Arabia’s religious leadership can encourage the population to adhere to guidance on health promotion, which is particularly important for mental health where health-care infrastructure is not adequate. Health security cannot be achieved by focused efforts from the health ministry alone; nations that offer greater social safety nets are better positioned to diminish the health effects of economic recession. Finally, implementation of evidence from case studies on the health effects of the economic crisis are useful and can contribute to the emerging body of literature on economics and health. Health-care reform was long overdue in Saudi Arabia and the current crisis affords the country an opportunity to do it right. Saudi Arabia’s future health security will rely on the choices made today by its health policy makers.