

Obesity and COVID-19: A renewed call to address a growing crisis

CHRISTOPHER H. HERBST

REEM F. ALSUKAIT

MEERA SHEKAR

SAMEH EL-SAHARTY

REKHA MENON

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[Being obese, defined as having a body mass index of over 30, increases the risk of premature death by almost 50%. It also doubles the risk of hospitalization from COVID-19 and could reduce the effectiveness of a COVID-19 vaccine.](#)

These are the central findings of a new study produced in part by the Saudi Health Council under the **World Bank's Reimbursable Advisory Services Support (RAS) Program** in the Kingdom of Saudi Arabia (KSA), and was recently published in [Obesity Reviews](#).

The study, a collaborative effort between researchers from the **Saudi Health Council**, the **University of North Carolina at Chapel Hill** and the **World Bank**, found that obesity increases the risk of death from the virus by 48%, the risk of hospitalization by 113%, and of needing intensive care by 74%. The study also highlights the concern that a coronavirus vaccine may not be as effective in obese people, given that flu vaccines don't work as well in those with a body mass index (BMI) of over 30.

“The findings came as a surprise to us and have big implications for Saudi Arabia and the wider region” says Mohammed Alluhidan, Head of Health Economics at the Saudi Health Council, and one of the researchers of the study.

Obesity in the Gulf states

With some of the highest obesity rates in the world, the study's findings are of particular concern for Saudi Arabia and the wider Gulf Cooperation Council (GCC) states as they grapple with coronavirus outbreaks. In Saudi Arabia, nearly 70% of the population is overweight, 35% of which are obese. As of 2016, more than 40% of women were obese, and 37% of male and 32% of female children were overweight (defined as having a BMI greater than 25). This is far higher than the OECD average of 26% in boys and 24% in girls.

One of the main drivers of overweight and obesity include a shift toward processed foods and beverages high in fat, salt, and added sugar. In Saudi Arabia, less than 20% of the population meets international physical activity guidelines. From 2013 to 2019, the observed rate of insufficient physical activity, the consumption of processed foods, and insufficient fruit and vegetable intake increased for both men and women.

Other more recent drivers for overweight and obesity in the region are likely the COVID-19 quarantine policies themselves. While it is absolutely necessary and critical to contain COVID-19, telework arrangements and social distancing requirements have likely worsened food consumption habits and further decreased physical activity, exacerbating current trends in overweight and obesity.

Obesity, NCDs and Human Capital

The rising prevalence of obesity and non-communicable diseases (NCDs - also known as chronic diseases, tend to be of long duration and are the result of genetic, physiological, environmental and behaviors factors; they typically include cardiovascular diseases, cancers, and diabetes), as evidenced in countries such as Saudi Arabia and the wider region, negatively affects economic growth through its impact on human capital.

Human capital refers to the knowledge, skills, and health that people accumulate throughout their lives, enabling them to realize their potential as productive members of society. Elevated BMI is a top risk factor for NCD-related death and disability, and negatively affects adult survival rate – a key indicator in the [Human Capital Index \(HCI\)](#). [In addition to increased risk of premature death, obesity and NCDs can be linked to lower skill attainment, poor social competency, and poorer labor outcomes.](#)

The most common impact of obesity and NCDs on human capital is direct, for example, by causing early retirement (or complete drop out from the labour market) or increasing the productivity loss (as workers with chronic illnesses tend to be absent or not as productive when present). In addition, there is a longer-term direct effect on human capital, mainly through education, as obesity and related chronic illnesses impact academic achievement and educational attainment, which in turn feeds into the NCDs/labour market nexus.

The indirect impact of obesity on human capital, is effectuated by two channels: (i) first, the presence of obesity and related complications in a household tends to reduce education investment in the next generation as resources are diverted away from education and towards treatment of the chronic illness; and (ii) by performing unpaid work (caring for the chronically ill) many caregivers forgo investing in their education/human capital.

Promising interventions

[Now more than ever, there is an urgent need for action to address the growing obesity crisis in the GCC region, as well as globally.](#) COVID-19 offers an opportunity to raise this issue with policy makers and step up engagement that will require a comprehensive and invested approach from governments and development partners. As highlighted in a [recent publication, obesity has huge potential negative economic and health impacts, especially for the poor.](#)

Interventions such as taxes on unhealthy foods like sugar-sweetened beverages and ultra-processed foods could potentially reduce consumption, especially when accompanied by complementary efforts such as front of package food labeling, and marketing regulations, especially for children.

These promising interventions have been rolled out successfully in several countries such as Chile and Mexico, but they require country-specific adaptations to fit each country's needs. Without the implementation of a cross-sectoral and targeted approach, cost-effective policies, and continuous monitoring, the obesity crisis will continue to present a formidable challenge to eradicating COVID-19.

The World Bank has the technical skills across a range of sectors – from health, to macro-fiscal policy, to governance. Leveraging the World Bank's expertise could help GCC states and other countries mitigate the human, societal, and economic consequences obesity and other related complications pose to human capital. It could also help reduce the double burden of increased mortality and diminished immunity to COVID-19 on the health care system, both during and after the pandemic. Let us act now before it is too late.