

## Nonalcoholic fatty liver disease: One more reason to strengthen public health

*Q: How do you eat an elephant?*

*A: One bite at a time.*

Our public health challenges—particularly noncommunicable diseases—are indeed an elephant, and a very big one. Many countries around the globe have been plagued by an epidemic of obesity, diabetes, and hyperlipidemia, affecting all age groups. The Arabian Gulf countries have seen a particularly rapid increase. In a national survey of over 10,000 Saudis, 28.7% were obese (body mass index  $\geq 30$  kg/m),<sup>[1]</sup> 8.5% had hypercholesterolemia, and another 19.6% had borderline hypercholesterolemia.<sup>[2]</sup> The Saudi Ministry of Health (MOH) will issue its most recent survey this year, which has included over 100,000 individuals,<sup>[3]</sup> and the figures around those diseases are not expected to be much prettier.

In addition to the usual complications that are associated with diabetes and obesity, such as heart, brain, and degenerative bone disease, we have started to know recently about a myriad of health issues that are also associated, such as cancers,<sup>[4]</sup> cognitive impairment,<sup>[5]</sup> renal stones,<sup>[6]</sup> and others.

Another interesting associated disease is nonalcoholic fatty liver disease (NAFLD), which until not so long ago was believed to be a benign and innocent bystander, where nonalcoholics were reassured if they had a “fatty appearing liver” on imaging. This has changed significantly when this pathology was discovered to be not that benign after all,<sup>[7]</sup> as it carries a significant risk of progression to cirrhosis and/or cancer. It is emerging as one of the leading causes of chronic liver diseases and has a 10-year economic burden in the United States alone of \$908 billion.<sup>[8]</sup>

In this issue, Alswat *et al.*<sup>[9]</sup> shed light on this very important aspect, using models to estimate the disease burden of NAFLD and nonalcoholic steatohepatitis in the KSA and the UAE in the period extending to the year 2030, along with the resulting complications and mortality.

While the study has some expected limitations, inherent in a modeling process, as well as from the lack of robust current data at the time of the publication, the authors properly acknowledge those limitations, which are unlikely to affect the significance of this well-done study.

Many important messages are derived from this paper, such as the risk the two countries (and likely the region) face when it comes to liver disease and its complications in the near future, unless drastic public health measures are implemented to offset the increasing levels of obesity. It is interesting to know that NAFLD may very well be the leading indication for liver transplantation in Saudi Arabia, especially with the ongoing ambitious MOH-led efforts of hepatitis C virus eradication.<sup>[3,10]</sup> Another important message is the need to expand proactively in the field of liver transplantation, as well as the unique opportunity to actively engage in medical research in the field of NAFLD in Saudi Arabia, which continues to be incompletely understood in terms of progression and treatment.

However, it is not all bad news. The first step in solving a problem is acknowledging that it exists, and I believe that with such efforts to identify such challenges and anticipate their burden we are indeed on the right path, keeping in mind that the world has seen many remarkable success stories when it comes to public health.<sup>[11]</sup>

Moreover, Saudi Arabia has recently witnessed unprecedented attention to public health. It is indeed very exciting, and an enormous source of pride, when as a citizen of Saudi Arabia, one knows about the future health direction of the country that has been adapted at the highest possible level. In 2017, The Custodian of the Two Holy Mosques, King Salman ibn Abdulaziz, issued a royal decree that has included public health as a priority in all rules and regulations, to prevent and control diseases.<sup>[12]</sup> One should certainly feel very optimistic, given this very strong position of the Kingdom; it also puts a great deal of responsibility on all those who are involved in healthcare. This kind of attention and responsibility is likely to have a huge positive impact, and result in a healthier nation.

Dr. W. J. Mayo has very wisely said:

*“The aim of medicine is to prevent disease and prolong life, the ideal of medicine is to eliminate the need of a physician.”*

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