

Obesonomics

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Abstract

Economic and commercial determinants of health, as well as health-related determinants of economy, are gradually being understood by researchers and public health specialists. One condition which is influenced by economic factors, and which also impacts economic health, is obesity. In this opinion piece, we conceptualize obesonomics as the bidirectional relationship between obesity and economic health. We explore the scope and spectrum of obesonomics, and utilize it to suggest a pragmatic framework for mitigation of obesity as well as its associated financial factors.

Keywords: Commercial determinants, economic determinants, health economics, medical anthropology, medical sociology, obesity, overweight.

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Economic Determinants of Obesity

Economic and commercial determinant of health (CDH) are a well-established aspects of public health.¹ There is ample data to support the impact of economic and financial factors on obesity. Low- and middle-income countries (LMICs) will be home to 79% of all adults, and 88% of all children, living with overweight and obesity. The impact of the downstream consequences of obesity, such as diabetes and heart disease, is more pronounced in low-income populations as well. Of the deaths attributed to high body mass index (BMI), 78% occur in adults of LMICs. If disability-adjusted life years (DALYs) due to obesity are taken as a measure of impact, 80% of these are encountered in LMICs.²

Obesity experiences a double whammy from economic factors. On one hand, low income leads to limited consumption of healthy foods and limited scope of

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Table: Spectrum of Obesonomics.

Economic determinants of obesity
Commercial determinants of obesity
Effect of obesity on economy
Effect of obesity on demand for products and services
Effect of obesity on social mores

salutogenic behaviours and practices. Simultaneously, enhanced affluence in some communities has increased indulgence in unhealthy activities, including screen time exposure, as well as sugary beverages and calorie-dense ultra-processed meals.³

High gross domestic product (GDP) per capita is associated with higher prevalence of overweight and obesity. There is also a positive correlation between annualized growth of GDP and annualized growth of obesity/overweight prevalence.

This association extends to the environmental implications of rising economic prosperity. As the use of fossil fuels, greenhouse gas emissions and urbanization increases, so does the prevalence of obesity. There is also a link of obesity with the use of ultra-processed and plastic-packaged foods.

Obesotropic Determinants of Economy

Obesity also has a significant impact on economic health of individuals, families, and nations alike. Obesity, through its demands on the food production chain, has led to environmental damage as well. Food production is the cause of 29% of human caused greenhouse gas emissions. The production of animal protein has a disproportionately higher burden of greenhouse gas emission. It is noteworthy that obesity prevalence rates are highest in countries that are particularly vulnerable to climate change and global warming, such as the Pacific Island states. This calls for the study of a novel syndemic, that may be termed 'obeso-climatic syndrome'.

The economic impact of overweight and obesity is projected to cross USD 4 trillion by 2035. This is equal to 3 % of global GDP. This impact will affect LMICs to a greater extent.²

Another aspect of obesonomics is the bidirectional link of consumer choices on obesity as well as industry and services sector. While unhealthy consumer choices, such as buying large sized servings of snacks and sugary items, fuel

weight gain, obesity also influences our consumption habits. A greater need for large-sized garments, furniture and other appliances is associated with higher financial cost as well. Health care facilities report an increasing demand for out-sized chairs, beds, weighing machines and blood pressure cuffs, for example.

Health Care and Health Care Services

The most striking impact of obesonomics, however, is noted with respect to the pharmaceutical industry. The rapidly rising prevalence of obesity has been accompanied by ample investment in research and development. Newer anti-obesity drugs are useful for persons living with the syndrome.⁴ Their commercial success has had a multilayered economic influence, increasing spending on them. As health care budgets are finite, this may have a deleterious impact on other fields of health. While obesity management certainly does reduce the health care expenditure on its complication and co-morbidities, it may lead to “financial catastrophes” in health care systems as well as individuals who have to pay from pocket.

The other side of the coin is that obesity has become a major driver for the financial success of manufacturers of diagnostics, drugs and devices for the disease. The need for obesity friendly health care services⁵ and products, has gone up, and will continue to do so, in the face of the obesity pandemic. This, too, has economic implications.

Summary

Obesonomics is a rapidly growing field, which connects the disciplines of bariatrics and health economics. It includes economic determinants, and economic implications, of obesity, under one umbrella. Not only that, it includes medical sociology and anthropology in its ambit, as it studies the bidirectional influence of consumer choices and weight control on each other. This comprehensive understanding is important for policymakers, planners, physicians, and the public, alike.

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