

Carta al Editor / Letter to Editor

Inactividad física y obesidad ¿Cuál es su repercusión en el gasto económico de diabetes mellitus 2 en Chile?

Physical inactivity and obesity: What are the implications for diabetes expenditures in Chile?

Dear Editor,

More than 387 million people type 2 diabetes (T2D) in the world, a figure that is expected to increase to 592 million by the year 2035. In Chile, the prevalence of diabetes increased by 3% between 1980 and 2014 (from 7.8% to 10.8% in women and from 7.2% to 10.2% in men)^{1,2}. At a global level, the economic costs associated with the care of patients with T2D was 612 billion dollars in 2014, corresponding to 11% of total health spending worldwide. In Chile, it is estimated that 21.2 billion dollars were spent on medical care in the same year, of which 10.2% (equivalent to 2.1 billion dollars) corresponded to expenses associated with T2D, that is, an average of \$ 1,427 per person with diabetes. The cost of this pathology is not only economic, as it is estimated that in Chile 25 people die each day from causes associated with this pathology¹⁻³.

The increase in T2D observed in Chile is attributed, among other causes, to the ageing of the population, urbanization, and changes in the lifestyles of people that directly affect their development; among them, obesity, and consumption of processed foods, physical inactivity and sedentary behaviours. As a country, the biggest challenge we must face is to correctly determine the guidelines to stop the incidence of this pathology and to face, in a timely and effective way, the associated reversible risk factors. Through the National Health Survey 2009-2010 we know that 27.4% of the population is obese, 19.8% is inactive and 35.9% present sedentary risk behaviours (> 4 hours per day sitting)⁴. The biggest problem we face is that a large part of our population has not only one, but two or more risk factors, which, when united, present a synergistic increase in the possible development of diabetes. It has been determined that people who are obese and sedentary are 3 times more likely to be diabetic; and those who are obese and inactive are 6 times more likely to develop this disease when compared with people with a normal body mass index (BMI), who are active and with low sedentary behavior^{5,6}.

Ding et al.⁷ reported that in 2013 the total cost associated with physical inactivity in Chile was 103 million dollars per year, estimating 69.2 million in direct costs and 34.1

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million dollars in indirect costs; equivalent to 0.23% of the total budget associated with medical care in our country. Of the total direct cost associated with physical inactivity; 50.6 million dollars corresponded to expenses in T2D⁷. On the other hand, the economic cost associated with obesity in Chile corresponds to 2.2% of total health expenditures; it is estimated that this expense will increase to 4% in the

year 2030. In turn, for direct costs associated with obesity, 9.5% are for T2D expenses, which is one of the main pathologies where resources are directed⁸. If we add to the costs mentioned above, the social and economic expenses and the repercussions at the individual and family level associated with diabetes, such as premature death, ocular, renal or cardiovascular complications; we must ask ourselves, what are the total costs that we are assuming for this disease? We know that the consequences of non-communicable diseases and their risk factors are distributed unequally, generating a greater impact in the most vulnerable groups of society⁹. This only increases the gaps in life expectancy and quality of life of the population. T2D, therefore, not only generates a great cost for society as a whole, but those costs are distributed unequally.

Healthy eating habits, physical activity and decreasing sitting time, should not be a task or a sacrifice that must be made. Adopting healthy lifestyles should be part of the daily life of everyone, like waking up, going to work or doing household chores. Thus, it is necessary to modify the environments in which people's lives take place, facilitating the adoption of healthier lifestyles.

It is clear that there are many challenges and pending tasks, but investing in prevention could have a high impact in reducing the economic cost associated with T2D and other pathologies in Chile. A recent study estimated that for every dollar invested in prevention programs, the government saves \$14 in direct and indirect costs associated with health expenditures¹⁰. Given the evidence, it is clear how essential it is to invest in promotion and prevention, since it is one of the most feasible ways to reduce the economic costs associated with chronic noncommunicable diseases such as T2D.

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