

Implicações Políticas do Crescimento da epidemia de diabetes no México

Policy Implications for the Growing Diabetes Epidemic in Mexico

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RESUMO

O aumento nas taxas de diabetes no México levaram as autoridades mexicanas a declarar estado de emergência. Estima-se que em 2017 aproximadamente 13 milhões ou 10% das pessoas no México tenham diabetes mellitus, sendo a diabetes tipo II a causa líder de morte e incapacidade associadas no referido país. Na verdade, se as taxas continuarem a aumentar dessa forma, um efeito adverso na redução da expectativa de vida do país é esperado. O objetivo desse artigo é discutir a necessidade de expandir as políticas de saúde em relação à alimentação e consumo de calorias inúteis para combater a epidemia de diabetes no México, bem como discutir a importância do exercício, promoção de saúde e educação em saúde em relação a doenças não comunicáveis, detecção de diabetes e cobertura de serviços de saúde.

Descritores: México; Políticas de Saúde; Diabetes; Nutrição.

ABSTRACT

Increasing rates of diabetes in Mexico have lead health authorities to declare a state of emergency. It is estimated that in 2017 some 13 million, or 10% of people in Mexico have diabetes mellitus, with Type 2 diabetes being the leading cause of death and disability combined in that country. In fact, if rates continue to increase unabated, it is expected to have an adverse impact on the life expectancy of the country. The aim of this paper is to discuss the necessity of expanding health care policy regarding nutrition and the consumption of empty calories to combat the diabetes epidemic in Mexico as well as discussing the importance of exercise, health promotion and health education regarding non-communicable diseases, diabetes detection, and health coverage.

Descriptors: Mexico; Health care policy; Diabetes; Nutrition

THEORETICAL
REFLECTION

Introduction

Chronic conditions have replaced infectious diseases as leading morbidity and mortality indicators worldwide.¹ Discussing the changing nature of disease, whereby 30 years ago, the main causes of death were infectious diseases, "Now the main causes of death are non-communicable diseases, such as heart disease, stroke and diabetes, but the system hasn't transformed into a proactive system that encourages people to come forward regularly for check-ups".^{1,28}

According to the World Health Organization (WHO), global *diabetes mellitus* – a condition where the body does not produce enough or cannot effectively use insulin -- rates have quadrupled since 1980.²⁻⁴ In fact, data from the WHO indicated that diabetes rates have increased to epidemic levels in the last two decades with some 422 million cases worldwide and 1.6 million deaths directly attributed to diabetes. According to the WHO, that increase has been linked to sedentary lifestyles, poor nutrition habits, and lack of leisure time physical activity, and smoking.⁴

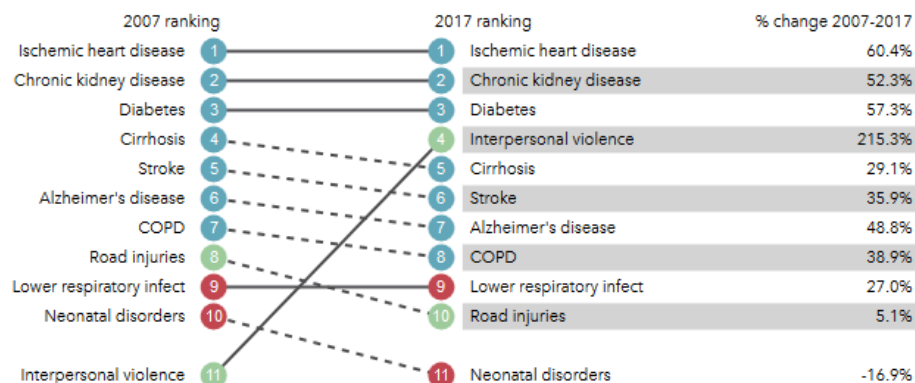
Increasing rates of diabetes mellitus impacts not only the health of individuals, but also has a direct link to economic issues including higher numbers of potential years of life lost, decreased productivity at work, and decreased work output. In addition to its economic impact, higher rates of diabetes mellitus result in increased hospitalization rates due to the disease itself or its comorbidity factors (e.g., renal failure, cardiovascular disease, hypertension), and longer and costlier hospital stays.⁴

Not surprisingly, diabetes rates seem to have a higher impact in low- and middle-income countries which are more likely to be classified as medically underserved, have fewer resources dedicated to education and prevention programs, and as a whole receive fewer resources to address health disparities. Estimated that 79% of individuals with diabetes live in low- and middle-income countries.⁵ Increasing diabetes rates are further complicated by the lack of comprehensive surveillance programs in some of those countries as concluded "There is a huge dearth of prospective epidemiological data in low- and middle-income countries and a lack of intervention studies in these settings, and we need to invest in understanding the biology across the populations that are most affected".^{6,27}

Mexico's 123 million inhabitants in 2017 ranks it 11th worldwide in terms of population.⁷⁻⁸ The life expectancy in Mexico was 77 in 2016 with women having a higher life expectancy (79) than men (74).⁸⁻⁹ Health care expenditures accounted for 6.3% of GDP ranking it 100 worldwide.¹⁰ Data from the Institute for Health Metrics and Evaluation suggest chronic diseases, heart disease, interpersonal violence, and diabetes are among the leading causes of death in the country.^{11,29}

Figure 1-Leading Causes of Death in Mexico

What causes the most deaths?



Top 10 causes of death in 2017 and percent change, 2007-2017, all ages, number

Source: Institute for Health Metrics and Evaluation.

The diabetes prevalence rate for *adults* in Mexico in 2017 was 14.8%, with the total cases of diabetes in that population group being 12,030,100.¹² Data showed that in 2017, diabetes was among the leading causes of death and disability combined in Mexico with some 80,000 lives lost each year to this condition.¹ Similarly, data from the IHME indicated that in 2017, ischemic heart disease, chronic kidney disease and diabetes were the top 3 causes of death, and diabetes was listed as the fourth cause for premature deaths in the country.¹¹ Increasing diabetes rates have led the country to declare a national emergency for the current epidemic as the health problem is expected to get worse in the decades to come.^{1,13}

Increasing Prevalence of Diabetes Related to Lifestyle

Asserted that the main behavioral and biological determinants of diabetes are diets of processed sugars and fats, low physical exercise levels, and overweight and obesity.¹⁴ Unfortunately, the data shows Mexico suffers from each of these conditions.

Stated that Type 2 diabetes is oftentimes considered a lifestyle, as it is much more likely to develop in people who are overweight.¹³ Mexico's population is considered to be among the heaviest in the world with almost 65% being considered overweight or obese.^{4,15} Researchers have concluded that "Mexico has seen a rapid increase in obesity, with the number of people categorized as overweight and obese tripling over the last four decades".¹³

There is an association between the increasing prevalence of type 2 diabetes and several lifestyle factors, including insufficient physical activity, higher levels of urbanization, obesity, aging populations, and higher levels of intake of unhealthy food.^{5,16} "...many countries subsidize the wrong foods, such as refined grains and highly processed foods, and while they recommend five portions of fruit and vegetables a day, the global supply of fruit and vegetables is currently unable to provide this".²⁷

In Mexico, point to changes resulting from the 1994 free trade agreement with the United States and Canada and concluded that “At a stroke, Mexico became a tariff-free dumping ground for soft drinks and junk food imported from the US”.¹⁷ Which has contributed to the health status of the Mexican consumer. According to data, Mexico is among the world’s leading consumer of soda with a per capita consumption of over 100 liters per person.¹⁸

Exercise and eating healthfully are critical components to improving self-care, and also in managing diabetes. Balancing healthy eating and physical activity are the “key to managing diabetes”.¹⁹ Moderately physically active individuals (150 minutes per week) have a 26% lower risk of developing type 2 diabetes than inactive individuals, and a higher physical activity level is associated with even greater risk reduction levels. The American Diabetes Association lists the following benefits of physical activity:

- Helps lower your blood glucose, blood pressure, HDL cholesterol and triglycerides
- Lowers your risk for prediabetes, type 2 diabetes, heart disease and stroke
- Relieves stress
- Strengthens your heart, muscles and bones
- Improves your blood circulation and tones your muscles
- Keeps your body and joints flexible

*Source: American Diabetes Association.*²⁰

The data shows Mexico is currently experiencing an epidemic resulting from increasing diabetes rates among its population. The data also shows that global changes, lifestyle factors, and policies contribute to adverse effects resulting from increasing diabetes rates. The aim of this paper is to discuss the necessity of expanding health care policy regarding nutrition and the consumption of empty calories to combat the diabetes epidemic in Mexico as well as discussing the importance of exercise, health promotion and health education regarding non-communicable diseases, diabetes detection, and health coverage.

Addressing Diabetes in Mexico

Discussed the disease burden of diabetes, stating that diabetes is “the leading cause of years of healthy life lost in Mexico: the increased mortality from 1990 to 2010 was 82%. Diabetes has become the main health problem in Mexico”.²¹ The financial burden of the disease will continue to increase, due to the early onset, resulting in both loss of productivity and extended utilization of health care services. The authors continued to discuss the burden of chronic diseases in Mexico, and posited, “From a government perspective, designing interventions to address the high costs associated with these conditions has been a priority in recent years”.

Currently, the Mexican government is implementing a number of initiatives designed to decrease the negative impact of the growing rates of diabetes in the country. Mexico’s National Strategy for the Prevention and Control of Overweight, Obesity and Diabetes focused its efforts on addressing

the diabetes and obesity epidemic in three primary areas: public health, including “epidemiologic surveillance, health promotion, and prevention,” medical care, including “quality and effective access,” and fiscal and regulatory policies, including “labelling, advertising, and fiscal measures”.²²

Other initiatives include those proposed by the Organisation for Economic Co-operation and Development (OECD) and the National Agreement for Healthy Nutrition (ANSA).²³ The proposed four general policy areas to address the obesity epidemic in Mexico and its comorbidity diabetes (see Table 1).²³ These policy recommendations are based on extensive literature that not only documents their negative impact on health issues, but also in the benefits of altered lifestyles.

Table 1 – OECD Recommendations

OECD Recommendations
<ul style="list-style-type: none"> • Help consumers make informed choices through compulsory food labelling (using front-of-package guidelines). • Support worksite and school-based health promotion programmes targeting different age groups and determinants of obesity. • Encourage intensive counselling of individuals at risk in primary care. • Promote active traveling alternatives like walking, bicycling and mobilization by public transport to increase physical activity.

Source: OECD, 2016

The National Agreement for Healthy Nutrition (ANSA) in 2010 led to initiatives regulating unhealthy foods and banning soda in schools, in addition to proposed implementation of front-of-package labeling systems on food packages.²⁴ One of the challenges of ANSA has been “the lack of harmonization between industry interests and public health objectives and effective accountability and monitoring mechanisms to assess implementation across government sectors”.²⁴ While taxes have increased on processed foods and sugar-sweetened drinks, as well as regulation of food advertising to children, soft drinks are about the same price or less than bottled water.^{17,23} Stated that the National Strategy for the Prevention and Control of Overweight, Obesity and Diabetes of 2013 has been “fighting the epidemic on three fronts: public health, medical care, and fiscal and regulatory policies”.¹ Mexico’s Undersecretary of Prevention and Health Promotion, posited that “tracking progress towards the goals of the national strategy is essential for improving the quality of care for people with chronic conditions.”¹

The Need to Expand Policy Base

Numerous studies have made the link between socioeconomic status and low levels of physical activity, poor nutritional habits, and lack of access to health care services. These studies have shown that low-income populations tend to be most affected by these factors. Public health officials in Mexico have recognized the need to control the diabetes epidemic in the country and the initiatives described above have made some impact in addressing the negative

health impact of diabetes in Mexican populations. Unfortunately, current efforts have not been enough and require a reallocation of emphasis and resources to achieve the goal of decreasing diabetes rates in the country. The following policy recommendations are presented to elected officials and public health practitioners in effort to curb the national emergency presented by diabetes.

Table 2- Policy Recommendations

Help consumers make informed choices through better food labeling.
Education regarding the actual reading and understanding of food labels is necessary. This education should be included in age appropriate school health education, in worksite promotion programs, and through community health promotion and health education programs. Similar recommendations are being implemented in other countries with good results. ²⁵⁻²⁶
Increase front of package black label nutrition information.
Chile has become a pioneer in including this type of educational information in food packages with promising early results.
Focus on health literacy
Health education related to nutritional facts is useless if consumers cannot understand the information being presented. Increasing health literacy to ensure consumers actually understand the information on the front-of-package guidelines and food and nutrition labels is imperative.
Invest more in early diabetes detection, annual checkups and counseling.
Timely detection of diabetes is critical, as many patients are not diagnosed until their condition has reached advanced stages. ¹ The also stated the importance of counseling at-risk individuals in primary care. ²³
Increase leisure time physical activity opportunities.
○ Encourage physical exercise in the school/work day by providing adequate time and access for physical exercise. Posited that interventions of lifestyle targeting physical activity and weight loss through diet “remain the gold standard” for prevention among those with diabetes risk. ²⁷ Asserted that addressing the issues involved in the rise of diabetes in LMICs and HICs, including providing safe, affordable, and convenient spaces for physical activity, and allowing time for exercise and food preparation are necessary components in health promotion. ¹⁴ Allowing the use of schools as safe places for community physical activity, promoting community wide activities as those promoted in Bogota, Colombia on Sundays, and offering physical activity classes in parks as those offered in San Francisco, CA are good beginnings to the implementation of this recommendation.
Increase the number of healthy schools.
School age children spend a significant part of their day in school. Schools combining academic learning and health issues have been shown to promote higher graduation rates and better learning. The Centers for Disease Control and Prevention provide a model for a healthy school at https://www.cdc.gov/healthyschools/vhs/index.html#!/scene/1
Address the accessibility of clean water and healthy food.
The government of Mexico has declared the lack of clean water a national

security issue.¹⁰ In addition, stated, “The number of Mexicans living in food poverty – the inability to purchase basic items of food – rose from 18 million in 2008 to 20 million by late 2010”.¹⁷

Conclusion

Mexico has declared a national emergency regarding the epidemic of diabetes. The rise in diabetes poses a burden on those affected, as well as on Mexico’s health care facilities. Posited that the rise in diabetes threatens the stability of the public health care system of Mexico.¹³ Adequate health care education, health promotion, and additional health care policy initiatives are necessary to mitigate the growing health care concerns of the diabetes epidemic in Mexico. The health initiatives outlined above address the need to provide a concentrated, comprehensive, and integrated approach to health care, health promotion, health education, and health care policy in Mexico.

In discussing the need to study the effectiveness of current policies that work, and implement them.²⁷ Stated, “We are not going to win the war on diabetes without more research and better data systems in the countries where many people have diabetes and where the diabetes epidemic is growing fast.”⁶ Given the increasing rates of diabetes in the world’s 11th largest population, these recommendations are more important than ever.

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