

The Role of Education in the Treatment of Obesity

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“The first step toward finding a cure is knowledge of the disease.”

Ancient Proverb

From the medical perspective, obesity was considered for many years as a minor problem; it was mostly viewed as a condition that represented physical and economic well-being, or as an esthetical problem, which needed to be addressed for reasons of vanity and beauty, and not for medical reasons. In the past decades, it was recognized that obesity along with other chronic illnesses (diabetes, hyperlipidemia, hypertension, etc.), constitute a severe public health concern due to their high prevalence¹. Furthermore, because they are deeply embedded as risk factors in the leading causes of mortality among the general population. For these reasons, obesity has become the target of multiple research studies that have been performed by scientists across the globe and that have demonstrated, that this condition is a real chronic illness, incurable, highly complex, and in which there is a convergence of genetic and external factors that are not well understood.

If we carefully analyze the lists of the leading causes of mortality among the general population, we can appreciate that as years go by, the diseases that top these lists have changed, a phenomenon known as epidemiological transition. At the beginning of the 20th century, the leading causes of mortality were malnutrition and infectious diseases such as diarrheas and pneumonia. However, during the last decades of the 20th century and the 1st years of the new millennium, due to

scientific and technological advances that have achieved control, in a good proportion of cases, of the illness that previously leads the mortality lists. Today, the leading causes of death are heart disease, cancer, accidents, stroke, and diabetes mellitus.

It should raise our attention that these lists have never been consigned to conditions such as dyslipidemias, hypertension, sedentarism, and smoking; but it is well known that all these factors play a decisive role in the development and progression of the above-mentioned leading causes of death. This same situation applies to obesity, which undoubtedly contributes to the appearance of chronic diseases, and therefore, it could be considered as a cause of death by itself².

In accordance with current medical knowledge, we know that these disorders have multiple, diverse, and complex etiopathogenic relationships. One of the best-known relationships is insulin resistance, which frequently constitutes a common denominator for all of them, and that explains to a certain degree the series of pathophysiological alterations that lead to the development of the metabolic disorders previously mentioned². It is not well known with certainty the cause for the appearance of insulin resistance, but once present and as a compensatory mechanism, an increase in the pancreatic secretion of insulin occurs with the resulting hyperinsulinemia. From then on, a cascade of events takes place which culminates with the production of alterations in the carbohydrate and lipid metabolism, as well as weight gain and an increase in arterial blood pressure; producing what we know as metabolic syndrome.

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Therefore, the chronic illnesses that constitute the metabolic syndrome have an etiopathogenic common denominator, but besides this, they share other similarities. All of them, at least at the beginning, are asymptomatic and a certain period of time has to elapse before the affected individual realizes of its presence. On the other hand, the initial treatment for all of them should be based on lifestyle changes and nonpharmacologic measures such as increasing physical activity³ and dietary changes. Only when these measures fail it is justified to start pharmacotherapy; nonetheless, pharmacotherapy is frequently necessary as lifestyle changes are usually difficult to implement^{4,5}.

With everything mentioned previously, it is easy to realize that to successfully treat obesity we must first have in depth knowledge of multiple factors. Such as its cause, which is complex, and its implications in the organism, which are multiple. Furthermore, its complications, which reflect the functionality of our organ systems, and might lead to physical incapacity and even death. Finally, its treatment, which is not simple. In summary, this knowledge must comprise clear, complete and updated information on the subject. In other words, EDUCATION⁶.

Obesity education is needed in every level, not only for patients but also for their family members who might require the right knowledge to be able to contribute in the treatment of their loved ones and in that way increase the chances of success. Obesity education is also needed for the community as a whole, mainly so that adequate preventive measures are undertaken with the objective of avoiding this public health problem. More importantly, obesity education is urgently needed for health professionals, who in one way or another are obliged to take care of obese patients without the required scientific knowledge. It is notorious and preoccupying the lack of an established nutrition curriculum in medical schools across the country.

In first world countries, they have been conscious for many years about the tremendous public health threat that obesity represents. This is in part due to the fact that its prevalence has risen dramatically⁷, which continues to happen even when multiple education campaigns against obesity have been implemented in the communities, schools, universities, and mass media⁸.

What would be expected of us, who do not possess the amount of economic resources that are available for first world countries? In the upcoming years, we will surely witness a continuous rise in the prevalence of obesity. It is, therefore, imperative that adequate measures be undertaken now to try and stop this problem. We believe that education at every level is the solution

to the problem, but this educational effort must be serious, responsible and energetic. In that sense, the federal government must be involved to make and implement the appropriate legislations that will allow the essential changes to occur. In the meanwhile, it is important that every one of us participate using the resources at our disposal to offer education to the society about the health risks associated with obesity.

The severity of the problem, the lack of efficient treatments, the ignorance that exists on the subject by the community in general and by a good proportion of health professionals. Also combined with the presence of people with low morals has generated the multiplication of businesses that deceive the public by promising "miraculous cures" and that advertise themselves using mass media. This creates false expectations, which leads to a waste of resources and more importantly, it exposes people to potentially hazardous treatments.

Several research studies in different parts of the world have clearly demonstrated, with impeccable scientific methodology, that the implementation of lifestyle changes, with appropriate dietary changes, with regular physical activity and weight loss, are capable of notably diminishing the incidence of diabetes in patients who already have glucose intolerance^{9,10}. This is proof, that if through education we can provide the necessary information to patients and motivate them to use that information along their lifetime, it is possible to achieve meaningful weight reduction which will allow for metabolic improvements and decrease the risk of developing other chronic diseases, and therefore, decrease their risk of death.

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