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ARTÍCULO

Weight bias and weight stigma in the healthcare system: hypothetical case

Discriminación y estigma por peso en el sistema de salud: caso hipotético

Discriminació i estigma per pes en el sistema de salut: cas hipotètic

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Abstract

Obesity is considered as one of the most concerning nutritional diseases. Scientific evidence demonstrates that weight is determined by a complex interaction of internal and external factors, many of which are not controllable by individuals. In this article, causes, consequences of obesity and how low self-esteem in patients with excess weight could affect loss weight, as well as weight bias, and weight stigma in the healthcare system are discussed. Beauchamp and Childress' principles of biomedical ethics are used through a clinical case to consider ethical dilemmas treating obese patients. It is imperative for physicians to consider the complex etiology of obesity when treating obese patients because false assumptions about obesity personal causes can promote weight bias.

Keywords: obesity; excess weight; low self-esteem; weight bias; weight stigma; principles of biomedical ethics; autonomy; non-maleficence; beneficence; justice.

Resumen

La obesidad es considerada como una de las enfermedades nutricionales más preocupantes. La evidencia científica demuestra que el peso está determinado por una interacción compleja de factores internos y externos, muchos de los cuales no son controlables por los individuos. En este artículo, se discuten las causas y las consecuencias de la obesidad y cómo la baja autoestima en pacientes con exceso de peso podría afectar la pérdida de peso, así como también la discriminación y el estigma por exceso de peso en el sistema de salud. Se utilizan los principios de ética biomédica de Beauchamp y Childress a través de un caso clínico para considerar dilemas éticos que conciernen a pacientes obesos. Es imperativo que los médicos consideren la etiología compleja de la obesidad al tratar a pacientes obesos porque las suposiciones falsas sobre las causas personales de la obesidad pueden promover la discriminación y el estigma por peso.

Palabras clave: obesidad; sobrepeso; baja autoestima; discriminación por peso; estigma de peso; principios de ética biomédica; autonomía; no maleficencia; beneficencia; justicia.

Resum

L'obesitat és considera una de les malalties nutricionals més preocupants. L'evidència científica demostra que el pes està determinat per una interacció complexa de factors interns i externs, molts dels quals no són controlables pels individus. En aquest article es discuteixen les causes i les conseqüències de l'obesitat i com la baixa autoestima en pacients amb excés de pes podria afectar la pèrdua de pes, així com també la discriminació i l'estigma per excés de pes en el sistema de salut. S'utilitzen els principis d'ètica biomèdica de Beauchamp i Childress mitjançant un cas clínic a fi d'analitzar els dilemes ètics que concerneixen pacients obesos. És imperatiu que els metges considerin l'etiologia complexa de l'obesitat en tractar els pacients obesos, perquè les suposicions falses sobre les causes personals de l'obesitat poden promoure la discriminació i l'estigma per pes.

Paraules clau: obesitat; sobrepès; baixa autoestima; discriminació per pes; estigma per pes; principis d'ètica biomèdica; autonomia; no maleficència; beneficència; justícia.

1. Introduction

Obesity and overweight are defined as excess or excessive accumulation of fat, which is identified by a significant increase in weight and may affect health. Body mass index (BMI) is a simple index of weight-for-height that is commonly used to classify overweight and obesity in adults. It is defined as "a person's weight in kilograms divided by the square of his height in meters (kg/m²)"1.

Obesity is considered as one of the most concerning nutritional diseases. A high percentage of the world population is overweight, in fact, 69.2%² of Americans adults are overweight or obese. In Spain, 37% of people over 18 years old are overweight, and 17% are obese³. In June 2013, the American Medical Association declared obesity a disease requiring treatment⁴.

Those who are overweight and obese have an increased risk for suffering cardiovascular diseases, diabetes, anxiety, depression and low self-esteem⁵.

The obesity rate is rising fast in developed and non-developed countries. According to World Health Organization, at least 300 million people in the world suffer from obesity. This complex condition can result in social and psychological issues, affecting all ages and social stratums⁶.

¹ WHO: "Obesity: preventing and managing the global epidemic. Report of a WHO Consultation", WHO Technical Report Series 894, World Health Organization Ed. Geneva, 2000.

² FASTSTATS: "Overweight Prevalence" [Internet]. [Access date July 2016]. Retreived from:

http://www.cdc.gov/nchs/fastats/overwt.htm.

³ Instituto Nacional de Estadística: "Encuesta nacional de Salud 2011-2012". [Internet]. [Access date September 2016]. Available from: http://www.ine.es.

⁴ Article by Top News, Latest headlines, World News & U.S. News: "AMA declares obesity a disease needing treatment", 2012. [Internet]. [Access date September 2016]. Available from:

 $http://www.upi.com/Health_News/2013/06/19/AMA-declares-obesity-a-disease-needing-treatment/UPI-69931371621725/.$

⁵ IRUARRIZAGA, I., ROMERO, N., CAMUÑAS, N., RUBIO, M.A. Y CABRERIZO, L.: "Entrenamiento en control emocional en obesidad mórbida", 2001. [Internet]. [Access date September 2016]. Available from:

http://www.psiquiatria.com/revistas/index.php/psicologiacom.

⁶ WORLD HEALTH ORGANISATION (WHO): "Obesidad WHO" [Internet]. [Access date September 2016]. Available from: http://www.who.int/topics/obesity/es/.

2. Causes and consequences of obesity

Scientific evidence demonstrates that weight is determined by a complex interaction of internal and external factors, many of which are not controllable by individuals⁷.

Among the causes of obesity, studies found genetics and emotional states, like boredom, fatigue, anger or sadness lead some people to eat food to comfort their state of unhappiness, which refers to both feeding habits and physical activity. In contrast, the International Council of Nurses and Seijas & Feuchrmann mention that Obesity can not only be explained by genetics or because discipline or rigor has failed in personal or psychological education, but is related to the adoption of a particular lifestyle in developed countries and in many undeveloped countries^{8,9}. This lifestyle encourages the population to have an intake of high fat and unhealthy foods, as well as sedentary lifestyle¹⁰. For every 10 percent increase in food advertisements, the likelihood of being obese increased by 5 percent; for example, areas with more outdoor food ads have a higher proportion of obese people than those with fewer ads¹¹.

It is also essential to know the consequences of obesity, and those may be physical or psychological. Epidemiological studies conducted in Australia and various countries in America and Europe show that the main risks are, cardiovascular diseases, diabetes mellitus, hypertension, and glucose intolerance^{12, 13}. Moreover, concerning the psychological implications, Iruarrizaga et al. (2003) listed major emotional disorders, high levels of anxiety, and depression as consequences. Furthermore, Calva (2003) mentions that obese people show fear and personal insecurity, loss of self-esteem, eating disorders, body image distortion, frigidity and impotence, emotional

⁷ WHO: "Obesity: preventing and managing the global epidemic. Report of a WHO Consultation", WHO Technical Report Series 894, World Health Organization Ed., Geneva, 2000.

⁸ Consejo Internacional de Enfermeras: "El CIE ante el problema de la obesidad: crear conciencia pública de una enfermedad social y ambiental, 2004 [Internet]. [Access date September 2016]. Available from: http://www.icn.ch/matters_obe-sitysp.htm.

⁹ SEIJAS, D. & FEUCHRMANN, CH.: "Obesidad: factores psiquiátricos y psicológicos", Boletín de la Escuela de Medicina de la Universidad Católica de Chile, Vol. 26(1), 1997.

¹⁰ Jebb S.A., Moore M.S.: "Contribution of a sedentary lifestyle and inactivity to the etiology of overweight and obesity: current evidence and research issues". Medicine & Science in Sports & Exercise, vol. 1, supplement 1, Nov 1999, S534.

¹¹ Article by The New York Times: "Does this ad make me fat?" [Internet]. [Access date September 2016]. Available from: http://www.nytimes.com/2013/03/10/opinion/sunday.htm.

¹² BJÖRNTORP P.: "Body fat distribution, insulin resistance, and metabolic diseases", Nutrition vol. 13(9), Sept 1997, pp. 795–803.

¹³ LAZAR M.: "Resistin- and Obesity-associated Metabolic Diseases", Hormone and Metabolic Research, vol. 39(10), Oct 2007, pp. 710–6.

disturbance, bad drinking habits, as well as sadness, unhappiness, and depression¹⁴. Related to the latter, Mahoney and Mahoney (1999) argue that the problem of obesity is a critical threat to the health and happiness of the individual, both in daily life and throughout their entire life¹⁵.

3. Low self-esteem in patients with excess weight

Self-esteem is a term used in psychology to reflect a person's overall "emotional evaluation of his or her own worth. It is a judgment of oneself as well as an attitude toward the self. Self-esteem encompasses beliefs and emotions, such as: triumph, despair, pride, and shame"¹⁶.

Trust, appreciation, and respect for oneself, are psychological responses that are typically described as affective nature or based on negative versus positive feeling, or acceptance versus rejection.

Self-esteem is divided into low self-esteem and high self-esteem. Low self-esteem refers to those who show insecurity, distrust of his/her powers and may need the approval of others because they usually have different complexes, all leading to a feeling of inferiority and shyness in their interpersonal relationships¹⁷. Also, it is possible to find negative thoughts, which can lead to depression. On the other hand, high self-esteem is a characteristic of those who have a good acceptance of themselves and good emotional balance, who are able to enjoy social situations but also times of solitude, who have high self-confidence, less fear of failure, and few negative thoughts¹⁸.

Related to this, Goldberg (2002) mentions that one of the main psychological consequences of obesity, considered by some the most important, is the loss of self-esteem; which can lead a person to present symptoms of depression; thus, some people try to compensate the symptoms using food to alleviate them¹⁹. Álvarez (1998) in his book addresses obesity, self-esteem,

¹⁴ CALVA M.: "Obesidad", Universidad Tijuana, Baja California. [Internet]. [Access date March 2016]. Available from: http://www.monografias.com/trabajos15/obesidad/obesidad.shtml.

¹⁵ Mahoney, M. & Mahoney, K.: "Control permanente de peso". Pegaso, México, 1999.

¹⁶ НЕWITT, JOHN Р.: "Oxford Handbook of Positive Psychology". Oxford University Press, 2009, pp. 217–224.

¹⁷ Kernis, M.H., Cornell, D.P., Sun, C-R., Berry, A., Harlow, T.: "There's more to self-esteem than whether it is high or low: The importance of stability of self-esteem", Journal of Personality and Social Psychology, vol. 65(6), 1993, pp. 1190–204.

¹⁸ Greenberg, J.: "Understanding the vital human quest for self-esteem". Perspectives on Psychological Science, vol. 3, 2008, pp. 48-55.

¹⁹ GOLDBERG, A.: "Secuelas de obesidad en la salud", Obesidad.net, 2002. [Internet]. [Access date July 2016]. Available from: http://www.obesidad.net/spanish2002/secuela3.shtml.

depression and lack of self-esteem in obese patients, and says that these problems impede loss weight²⁰. Furthermore, Beato and Rodríguez (2004) suggest that self-esteem is considered an essential factor in the prognosis of eating behavior disorders, and establish that an improvement of self-esteem in obese patients provides insurance to the ability of more ways to face conflicts and to lose weight²¹.

4. Weight bias and weight stigma in the healthcare system

Many factors in our environment contribute to weight stigma. Cultural values in Western society, such as thinness and the representation of people with excess weight in the media, create conditions that internalize weight bias. Weight stigma sets perceptions of personal responsibility for health, which most of the time results in blaming individuals for their excess weight.

Weight bias tends to be expressed when "obese people are blamed for their weight because of personally controllable factors such as overeating or sedentary behavior" (Yale Rudd Center for food policy and obesity, n.d.). Furthermore, when obesity is perceived as a result of causes outside of personal control, like a thyroid disease, weight bias is less probable²².

For this reason, it is imperative for physicians to consider the complex etiology of obesity when treating their obese patients. False assumptions about obesity personal causes can promote weight bias and could interfere with scientifically based efforts to prevent and treat obesity.

Exposing the next case example, weight bias and weight stigma in the health care system will be more understandable 23 :

Tom is 47 years old and weighs 162 kilograms. He arrives at the office, and after checking in with the receptionist, he looks for a place to sit in the waiting room.

²⁰ ÁLVAREZ, R.: "Obesidad y autoestima", McGraw-Hill Interamericana, México, 1998.

²¹ BEATO, L. & RODRIGUEZ, T.: "Relación de las fases del cambio con la autoestima en pacientes con trastornos de la conducta alimentaria: seguimiento a un año", Psiquiatría.com. [Internet]. [Access date July 2016]. Available from: http://www.psiquiatria.com/articulos/tralimentacion/14883.

²² YALE RUDD CENTER FOR FOOD POLICY AND OBESITY: "What we do?" [Internet]. [Access date March 2016]. Available from: http://www.yaleruddcenter.org/what_we_do.aspx?id=10.

²³ Yale Rudd Center For Food Policy And Obesity: "Weight Bias in Clinical Settings: Improving Health Care Delivery for Obese Patients", On-line course. [Internet]. [Access date March 2016]. Available from: http://learn.yale.edu/rudd/weightbias/login.asp?ec=60852.

He notices that all the chairs in the office are narrow and have armrests. His knees are hurting him, and he can't continue to stand, so he awkwardly squeezes himself into the nearest chair.

When the nurse calls his name, she leads him to a scale in the hallway and asks him to get on it. Tom hesitates – he is ashamed of his weight and doesn't feel comfortable being weighed where others might pass by. Not wanting to draw attention to himself, he reluctantly steps on the scale. To his humiliation, the scale only weighs up to 150 kg. The nurse shakes her head and notes 150+ kg. on his chart.

The nurse then leads him into a small exam room where he struggles to take a seat on the narrow table. She reaches for the blood pressure cuff, then realizing her mistake, says, "One moment, I have to go get the big cuff."

When she returns and takes his blood pressure, it is 160/90mmHg. She comments, "Your pressure is too high, you're going to have to do something about that."

By the time the doctor arrives to see him, Tom is feeling anxious and frustrated, wishing he was someplace else. He tells the doctor the reason for his visit – he is experiencing worsening knee and back pain. The doctor begins to discuss a plan for addressing his pain and his elevated blood pressure, including losing weight through diet and exercise. But Tom doesn't want to listen. He asks his doctor for a prescription and leaves the office as quickly as possible (Extract from Weight Bias in Clinical Settings: Improving Health Care Delivery for Obese Patients. On-line course. Yale Rudd Center for food policy and obesity, 2013).

5. Ethical dilemmas when treating patients

In order to introduce discrimination in obesity and its treatment from the perspective of bioethics, I will mention how it should comply with the principles of non-maleficence, beneficence, respect for autonomy, and justice, and the approach to the principles that would be suitable to be developed by health professionals.

5.1 Principle of non-maleficence

In this case example, we could deduce that Tom is not feeling good about the treatment he is having at the doctor's office. Caregivers-patients relationship starts when patients arrives to the doctor's office. In this example we could assume that Tom's situation is not taking into consideration, since obese people are not expected to come to this office, as its environment is not prepared for them (chairs, scale, privacy space for weigh on the scale, etc.).

Good medical practice must be based on the latest scientific knowledge and technical skills as well as good interpersonal relationships. Professional practice requires sufficient technical competence appropriate for the correct diagnosis and to compare the possible diagnostic and treatment alternatives. Not only must the caregivers possess the knowledge and skills of the profession, but also, they must have skills to communicate with patients, understanding them, their values, desires, etc. As it was mentioned before, psychological implications play an essential role in overweight and obesity. Thus, the non-maleficence principle has to be considered as a protection for the person, physically but also and mainly mentally when obesity is considered in order to avoid harm to the patient. A bad communication between patients and caregivers, as well as a hostile environment could cause an emotional distress that would create the feeling of "run away" as Tom did.

5.2 Principle of beneficence

This principle postulates that caregivers must do some good for the patient in his view, his values, and preferences. Moreover, weighting the alternative benefits to damage, as well as the individualization of therapy (as set in the obese treatment at risk). In this way, a beneficial treatment for obesity would be a long-term therapy with facilitators to adhering that treatment. Paternalistic model of treatment proposes to maximize this principle and caregivers would give advice or directives to patients about what they should do. Today, perspectives in care are different, and we should consider building a treatment plan between caregivers and patients, giving an active role to them. For this it is extremely important the caregiver-patient relationship: good communication skills would help to build a strong relationship, based on confidence, respect and trust; which allows caregivers to be aware about patient's needs and fears in order to create a safe environment to start a long-term treatment. A simple gesture, as having a bench at the office would make a huge difference for Tom.

5.3 Principle of autonomy

The principle of autonomy indicates that one should respect the decisions that the patient may have about his life and his health. The patient must be given the highest level of autonomy, and any violation of this maxim must be rationally justified.

Patients should inform the doctor of decisions about what concerns them. This is a process that, if enforced effectively, the proper caregiver-patient relationship is realized.

Respect for patient autonomy, like self-government, requires knowledge and understanding of what the patient decides. The patient's decisions must be consistent with their values and beliefs. The autonomous choice should not be under subjection, coercion, or manipulation in the reporting procedures that follow.

The information given to the patients must be provided in a comprehensible and appropriate language, in order to help them to decide and act. That information must be truthful and should not be manipulated. Healthcare professionals should assess the patient's capacity or competence to make decisions: the patient should not be subjected to situations of distress, anxiety or depression.

For example, being dominated by certain psychological situations, such as depression, low self-esteem caused by their obesity or anxiety, couldn't allow them to make a proper assessment of the situation that is proposed, the benefits of a given treatment or the risks of not assume.

In the subject matter below there are significant difficulties since the recommended alternatives are introduced in very personal aspects of the people's lives: recommend lifestyle changes (as eating behaviors, exercise, inhibition of abnormal behavior, positive behavioral stimulation, rehabilitation and acquisition of new habits).

Once again, building a treatment program together, in a reciprocal way, would enforce caregivers-patients relationship and valorize respect for autonomy.

5.4 Principle of Justice

This principle involves the whole society and goes beyond the plane of the caregiver-patient relationship, aimed at the distribution of resources as guided by a sense of equity, indicating that people should have equal opportunities.

Society has an obligation to distribute equitably and according to the criteria of distributive justice, as well as health resources it generates.

To comply with this principle, the society should avoid discrimination by certain social situations; obesity is increasing in the most vulnerable social strata²⁴. Obese patients suffer social discrimination, at various levels, as in labor and the health system.

The government should make education plans to target citizens who may be more vulnerable to weight bias and to tailor the plans to the audience for them to be effective. In this way, all people will have the opportunity to know what must be done to achieve a proper healthy life.

Some ads that promote specific standards of beauty linked to the achievement of a social success must be the subject of a severe and responsible criticism.

The principle of justice leads us to promote the duty of the scientific societies and the specialists in the field of obesity in assuming the role of disseminators of scientific truths within the population. National healthcare systems should encourage proper education on the management and treatment of obesity, informing the public, the media and the authorities to increase awareness of the importance of the problem of obesity in the population, and the possibility of prevention.

There is, therefore, an inescapable social responsibility from professionals who know in depth the consequences of obesity and ways to avoid them.

To comply with the four fundamental principles of bioethics, health workers must adopt virtues such as benevolence, fidelity to truth, understanding with patients, professional integrity and honesty. Moreover, "prudence," understood as the ability of wisdom placed where circumstances discern what moral choice or course of action leads to the greater good²⁵. Prudence in the practice of medicine is trying to make the balance right and to guide the course of action in respect of all the virtues.

²⁴ CAPRIO, S., DANIELS, S.R., DREWNOWSKI, A., KAUFMAN, F.R., PALINKAS, L.A., ROSENBLOOM, A.L., ET AL.: "Influence of Race, Ethnicity, and Culture on Childhood Obesity: Implications for Prevention and Treatment", Diabetes Care vol. 31(11), Nov 2008, pp. 2211–21.

²⁵ BEAUCHAMP T.L. & CHILDRESS J.: "Principles of biomedical ethics", Oxford University Press, NewYork, 1979.

6. Treating obesity

The criteria of therapeutic success must contemplate not only the reduction of weight as the end goal, but as a continuous process with positive results in the quality of life, less sedentary style of living, actively integrating the exercise, a more significant acceptance of their corporal image and a change of feeding habits. Along with a conscience of disease that leads to an avoidance of the relapses, so frequent in this process, but that obligatorily does not mean an absolute failure of the treatment.

The importance of intervening in the problems of obesity suggests that weight loss achieved exclusively through hypocaloric diets shows a high rate of failure, because of the difficulties of treatment adherence, as well as the recovery of weight once the weight goal has been achieved. The objective of any intervention for obesity treatment must go beyond the mere weight reduction; through the implementation, by a specialist, of a low-calorie diet that patients should continue with willpower. It is necessary to introduce different techniques whose main aim is the modification of eating habits and allow greater adherence to treatment and a change of attitude towards the problem.

Psychiatrist, psychologist, and therapist must be taken into consideration when creating national programs for treating obesity and overweight, but also in the small-scale like clinics or private physicians.

Bibliography

- ÁLVAREZ, R.: Obesidad y autoestima, McGraw-Hill Interamericana, México, 1998.
- ♦ BEATO, L. & RODRÍGUEZ, T.: "Relación de las fases del cambio con la autoestima en pacientes con trastornos de la conducta alimentaria: seguimiento a un año", Psiquiatría.com. [Internet]. [Access date July 2016]. Available:
 - http://www.psiquiatria.com/articulos/tralimentacion/14883.
- BEAUCHAMP T.L. & CHILDRESS J.: Principles of biomedical ethics, Oxford University Press, New York, 1979.
- BJÖRNTORP P.: "Body fat distribution, insulin resistance, and metabolic diseases", *Nutrition* vol. 13(9), Sept 1997, pp. 795-803.

- CALVA M.: "Obesidad", Universidad Tijuana, Baja California. [Internet]. [Access date March 2016]. Available from: http://www.monografias.com/trabajos15/obesidad/obesidad.shtml.
- CHABRIS, C.F.; SIMONS, D.J.: "Does this ad make me fat?", The New York Times, Opinion 8/03/2013 [Access date September 2016]. URL: http://www.nytimes.com/2013/03/10/opinion/sunday.htm.
- CAPRIO, S., DANIELS, S.R., DREWNOWSKI, A., KAUFMAN, F.R., PALINKAS, L.A., ROSENBLOOM, A.L., ET AL.: "Influence of Race, Ethnicity, and Culture on Childhood Obesity: Implications for Prevention and Treatment", *Diabetes Care* vol. 31(11), Nov 2008, pp. 2211–21.
- CONSEJO INTERNACIONAL DE ENFERMERAS: "El CIE ante el problema de la obesidad: crear conciencia pública de una enfermedad social y ambiental", 2004 [Internet]. [Access date September 2016]. Available from: http://www.icn.ch/matters_obe-sitysp.htm.
- GAFO, J.: Diez palabras clave en Bioética, 4a.ed., Verbo Divino, Estella (Navarra), 1998.
- GOLDBERG, A.: "Secuelas de obesidad en la salud", Obesidad.net, 2002. [Internet]. [Access date July 2016]. Available from: http://www.obesidad.net/spanish2002/secuela3.shtml
- GOODMAN E., SLAP G.B., HUANG B.: "The Public Health Impact of Socioeconomic Status on Adolescent Depression and Obesity", *Am J Public Health*, vol. 93(11), Nov 2003, pp. 1844–50.
- GREENBERG, J.: "Understanding the vital human quest for self-esteem". *Perspectives on Psychological Science*, vol. 3, 2008, pp. 48-55.
- INSTITUTO NACIONAL DE ESTADÍSTICA: "Encuesta nacional de Salud 2011-2012". [Internet]. [Access date September 2016]. Available from: http://www.ine.es.
- IRUARRIZAGA, I., ROMERO, N., CAMUÑAS, N., RUBIO, M.A. Y CABRERIZO, L.: "Entrenamiento en control emocional en obesidad mórbida", 2001. [Internet]. [Access date September 2016]. Available from: http://www.psiquiatria.com/revistas/index.php/psicologiacom.
- JEBB S.A., MOORE M.S.: "Contribution of a sedentary lifestyle and inactivity to the etiology of overweight and obesity: current evidence and research issues". *Medicine & Science in Sports & Exercise*, vol. 1, supplement 1, Nov 1999, S534.
- KERNIS, M.H., CORNELL, D.P., SUN, C-R., BERRY, A., HARLOW, T.: "There's more to self-esteem than whether it is high or low: The importance of stability of self-esteem", *Journal of Personality and Social Psychology*, vol. 65(6), 1993, pp. 1190–204.
- ◆ LAZAR M.: "Resistin- and Obesity-associated Metabolic Diseases", *Hormone and Metabolic Research*, vol. 39(10), Oct 2007, pp. 710–6.

- MACÍAS, D.; MÉNDEZ, F.: Aplicaciones clínicas de la evaluación y modificación de conducta. Estudio de casos. Pirámide, México, 1997.
- MAHONEY, M. & MAHONEY, K.: Control permanente de peso. Pegaso, México, 1999.
- HEWITT, JOHN P.: Oxford Handbook of Positive Psychology. Oxford University Press, 2009, pp. 217–224.
- SEIJAS, D.; FEUCHRMANN, CH.: "Obesidad: factores psiquiátricos y psicológicos", *Boletín de la Escuela de Medicina de la Universidad Católica de Chile*, Vol. 26(1), 1997.
- WORLD HEALTH ORGANISATION (WHO): "Obesidad WHO" [Internet]. [Access date September 2016]. Available from: http://www.who.int/topics/obesity/es/.
- —— "Obesity: preventing and managing the global epidemic. Report of a WHO Consultation", WHO Technical Report Series 894, World Health Organization Ed., Geneva, 2000.
- YALE RUDD CENTER FOR FOOD POLICY AND OBESITY: "What we do?" [Internet]. [Access date March 2016]. Available from: http://www.yaleruddcenter.org/what_we_do.aspx?id=10.
- —— "Weight Bias in Clinical Settings: Improving Health Care Delivery for Obese Patients", Online course. [Internet]. [Access date March 2016]. Available from: http://learn.yale.edu/rudd/weightbias/login.asp?ec=60852.

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