Placebo treatment: is it ethical?

In 2006 in Boston 82 healthy paid volunteers were recruited by means of an online advertisement. [1] Each participant was informed by brochure about a new opioid analgesic, but it was actually a placebo pill. After randomization, half of the participants were informed that the drug had a regular price of $2.50 per pill and half that the price had been discounted to $0.10 per pill (no reason for the discount was mentioned). All participants received identical placebo containing pills.

Electrical shocks to the wrist were calibrated to each participant's pain tolerance. Visual analog scale ratings for pain were converted to a 100-point scale, the post-pill score for each voltage was subtracted from the pre-pill score, and the mean of these differences was calculated for each participant. Considering all voltages tested, pain reduction was greater for the regular-priced pill. The study shows that patients' expectations can influence treatment outcome. In this experiment the price of the drug influenced expectations. There are numerous examples of physician related factors influencing outcome. I recommend you do take a look at the You Tube movie "The Strange Powers of the Placebo effect".[2]

In daily practice I sometimes see patients complaining of headache, dizziness or abdominal pain, for which no clear cause can be identified. I never prescribe placebo treatment, but I do occasionally initiate treatment with drugs that in my view have a rather low intrinsic therapeutic effect. What I typically explain the patients is that it is my intention to try out the treatment for a defined period of time, that I have seen stunning successes in previously treated patients with similar symptoms and that I am eager to see the effects. I am convinced that the expectations that I raise positively do influence outcome. In complementary medicine a large proportion of the treatment effect is based on the patient-doctor interaction, and traditional medicine can learn a lot from complementary medicine on how to use this determinant of outcome to the advantage of the patient.

In this issue of EJM Nico Jansen discusses the use of placebos in the management of medically unexplained symptoms. [3] While use of placebos in (double-blind) clinical trials is generally accepted, for patient care such placebos are more controversial, and for patients with medically unexplained symptoms this is also the case. Patients may interpret prescription of a placebo as a fake treatment, and as a sign that their doctor thinks their symptoms are deliberately faked as well. In the past in patients with medically unexplained symptoms trials have been performed with tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs). These drugs with substantial side-effects at best were effective in small proportions of patients only. Assuming a better adverse event profile for placebos it is tempting to investigate the added value of placebos in the treatment of medically unexplained symptoms, but in such trials ethical and psychological considerations should not be forgotten.

[1]. Waber RL, Shiv B, Carmon Z, Ariely D. Commercial features of placebo and therapeutic efficacy. JAMA 2008;299:1016-7.
[2]. http://www.youtube.com/watch?v=yfRVCaA5o18
[3]. Jansen N. Placebos in clinical practice: management of medically unexplained symptoms. EJM 2013; 3:57-59.

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In the supermarket are the sirens of 'sugar, salt and saturated fat' enchanting: 'take me home, eat me'

In this issue of Erasmus Journal of Medicine, Roth and Bessems discuss the scientific and ethical grounds of unwillingness of orthopedic surgeons to operate on morbid obese patients. We all have heard about the global catastrophe of the 'obesity epidemic'. This is certainly not hot news. We see obese people every day, everywhere. In Europe, according to the WHO, obesity is one of the greatest public health challenges of the 21st century. Its prevalence has tripled in many European countries since the 1980s, and the numbers of those affected continue to rise, particularly among children. But who is to blame? The patients? The big food companies? The governments? McDonalds? The gnomes?

Stephen Sanger, CEO of General Mills, one of America's largest food industries says in 1999: 'Don't talk to me about nutrition. Talk to me about taste, and if this stuff tastes better, don't run around trying to sell stuff that doesn't taste good'. Sanger is cited in 'Salt, sugar, Fat: How the Food Giants Hooked us' by Michael Moss. Virtually everything you can buy in a supermarket that is not an outer-aisle pure food has been fiddled with sugar, salt or saturated fat. Almost everything! Why is that? Because we like it. And because we like it, the big food companies add it to our food. In substantial quantities. We choose our food on taste, not on ingredients. That sells! Food scientists use cutting-edge technology to calculate the 'bliss point' of sugary beverages or enhance the 'mouthfeel' of fat by manipulating its chemical structure. The food companies' marketing campaigns are designed to redirect concerns about the health risks of the processed products (just like the tobacco companies did, and still do). Consumption of food that is rich in added high fructose corn syrup (HFCS) results in increased visceral adiposity, lipid dysregulation and decreased insulin sensitivity. This results in the metabolic syndrome, increased risk for cardiovascular disease and type-2 diabetes. And every day almost everyone is eating food with added HFCS, mostly without knowing it. All those added sweeteners pose serious dangers to our health.

I think the food companies are not to blame. Without sugar, salt and saturated fat, the companies cease to exist. Their millions of users are addicted to the taste of their products, silently making them obese and sick. In the supermarket are the Sirens of sugar, salt and saturated fat enchanting: 'take me home, eat me'.

When the food companies are not to blame, who then is responsible for obesity and its devastating consequences? The individuals buying the food? Yes certainly, as it is a personal choice where you stick your fork in. But I would also put responsibility on the shoulders of the governments who allows the food companies to add sugar, salt and fat in sick making quantities. Governments should act in the same way as they (should) do in accordance with tobacco and alcohol. Telling that HFCS will kill you and regulate it.

What should health care providers do in this epidemic? First prevention. But only telling that eating all that processed sweet food makes us thick and sick does not work as we can obviously see. Physicians provide treatment. Mostly symptomatic treatment of the effects of obesity; treating high blood sugars, insulin resistance, hypertension, coronary heart disease and osteoarthritis with pharmaceuticals, stents, bariatric surgery and…orthopedic interventions.

We do not refuse a second coronary stent or third CABG as symptomatic treatment. We treat patients with multiple comorbidities. But, let us be honest, this is not curative medicine, this is palliative medicine. The palliative treatment of diseases resulting from overeating is core business of modern medicine. And as long as governments allow the food industries to add sick making large amounts of sugar, salt and fat to our food, the patients are not primarily to blamed and health care providers should provide palliative measures for the symptoms. Because that is what we do everyday. Maybe we should see knee replacement in obese patients only as a palliative measure and don't be idealistic about changing the lifestyle of our patients. Or we should give more sound arguments why we are resistant to provide palliative treatment in general to the enormous numbers of overweight people addicted to sweet taste.

1. Roth KC, Bessems, JHJM. Sorry, but you will have to lose weight before receiving your knee replacement. Erasmus J Med 2013;6:54-57.

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