

## Citation

## Published Version

## Accessed
November 29, 2017 7:35:24 AM EST

## Citable Link
http://nrs.harvard.edu/urn-3:HUL.InstRepos:30802941

## Terms of Use
This article was downloaded from Harvard University's DASH repository, and is made available under the terms and conditions applicable to Open Access Policy Articles, as set forth at http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#OAP

(Article begins on next page)
Talking Placebos:

Modern perspectives on placebos in society

Preface by Anne Harrington

After decades of suspect status, the placebo effect seems finally to have become scientifically respectable. Recent high-profile brain imaging studies (looking at pain, Parkinson’s disease, and depression) promise to cast direct light on at least some of the neurological mechanisms involved in the effect. Harvard University now supports an entire research center dedicated to the placebo effect and the doctor-patient relationship. While one meta-analysis of several decades of past clinical trials proposed that the placebo effect was more hype than reality (Hróbjartsson and Grotzsche 2001), its criticisms have not stuck; indeed, the backlash against that article has instead had the effect of clarifying “best practice” methods of statistical analysis for the future. Meanwhile, television, radio, the internet, and the print media -- interested in the potential practical implications of all of this scientific work -- have put the placebo effect in the public eye as never before.

It is an astonishing – and also astonishingly rapid – turnaround for a phenomenon that, for so long, had been so marginalized. Back in our grandparents’ day, placebos were understood to provide a kind of cheap psychotherapy in pill form. They belonged in this sense to the art rather than the science of medicine; they were a bit of benevolent deception that doctors would play on patients who they didn’t believe had anything seriously wrong, or whose symptoms the doctors
believed were really “just in the mind.” And all of their effects – relief of anxiety, the disappearance of one or another psychosomatic symptom -- were also believed to happen “in the mind.”

By the 1950s, it is true, people like Harvard medical professor Henry Beecher had begun to argue that the placebo effect was actually so “powerful” in many patients that methods needed to be developed to protect clinicians seeking to test the efficacy of new drugs from being misled by it (Beecher 1955). The randomized, placebo controlled clinical trial is a partial response to concerns like these. In such trials, patients in both the experimental and the control group often claim to feel better, and sometimes even show objective signs of improvement. The assumption remained, though, that whatever happened in the placebo group – however striking -- was noise in the system, some kind of bodily theatrics rather than true physiological change with clinical interest in its own right.

Then, in the 1970s, two events happened that began to change things. The first of these was an outgrowth of the discovery of endorphins. The word “endorphin” is an abbreviation of “endogenous morphine-like substance.” Endorphins were understood to be substances in the brain that are stereochemically similar to morphine, and function as the brain's own natural “painkillers.” In 1978, it was reported that giving an experimental subject a placebo version of morphine or some other alleged pain killer – creating a situation in which the patient believed that he or she was going to experience pain relief --- actually had the effect of stimulating the release of endorphins (Levine et al. 1978). In other words, the subject created the biochemical conditions that allowed his or her
expectation to come true. This was confirmed by showing that administration of naloxone, an opioid receptor blocker, abolished the placebo pain relief. This result implied that placebo pain relief works through a known bodily biochemistry. There was flesh and substance to the whole thing after all!

The second thing that began to change the fortunes of the placebo effect was an experiment that also helped to catalyze a new field of research known as psychoneuroimmunology. In 1975, University of Rochester psychologist Robert Ader put a powerful immune-suppressing drug, cyclophosphamide, in saccharine water and fed it to rats. (His goal was to create a state of nausea in the rats and condition them to associate it with the sweet taste of the water; at the outset, he had not realized that the drug also suppressed the immune system.) When his rats grew ill and began to die, he stopped offering them the tainted water and just fed them plain saccharine water. Nevertheless, the rats continued to grow ill and die. In the end, Ader concluded that the rats had been conditioned; that is, the experimental treatment had created an association between the taste of the saccharine water and the biochemical action of cyclophosphamide. As a result, on switching from cyclophosphamide-tainted saccharine water and “placebo” saccharine water, the rats’ immune systems continued to act “as if” they were still being suppressed by the drug. In effect, Ader concluded, he had unwittingly demonstrated the potency of placebos, even in non-human experimental subjects (Ader 1975).

These two findings appeared to demonstrate that the placebo effect might, after all, be “real.” But at first, no one really paid much attention. The 1970s was a time of new medical consumerism and interest in “holistic treatments”, both in the
United States and in Europe. These movements were aimed at empowering patients in face of what was perceived to be a patronizing medical establishment; and in this context, the long-standing association of placebos with deception and paternalism made them seem part of the “bad old past” rather than the “bright new future” (Bok 1974). Holistic medicine was fascinated in other ways by the potential of the so-called mind-body connection, but placebos were not part of its original toolbox.

It was not until the 1990s, and against a backdrop of new questions and new concerns (ranging from the decay of the doctor-patient relationship under managed care to the power of Big Pharma) that people began to take a renewed interest in the power of the placebo. Returning to the suggestive work that had been done in the 1970s, some suggested that the doctor-patient relationship is a more important factor in the clinical equation than people had thought; or that our bodies have their “internal medicine cabinet”, or innate capacity for healing that implies we should take fewer drugs and seek ways to cultivate that ability naturally. Helping all of these new conversations along in the 1990s were new forms of brain imaging technologies that allowed scientists to create bold colorful images of the living brain in action. In fact, nothing has helped make the placebo effect feel real and relevant more than the fact that we now have technologies that appear to let us watch the effect in action inside people’s brains (Petrovic 2002).

If we are now taking the placebo effect seriously, what sorts of conversations are we having about it? Here lies the interest and importance of this volume, Talking Placebos. This is one of the first books on the placebo effect in which the focus is no longer on making the case for taking the placebo effect seriously: that
argument has now been won. Instead, the editors have reached out to scholars and researchers who collectively give us a sense of how we might begin to leverage what we know about the placebo effect in order to make progress on other important topics and questions. The placebo effect appears in this volume, less as a cool phenomenon whose reality we can capture in brain scans and probe in experimental studies, and more as a lens we can train onto phenomenon as apparently diverse as the nature of false memory, the psychology and culture of dietetics, and what should be included in effective medical education.

Particularly welcome is the degree to which *Talking Placebos* aims to provide knowledge and perspectives that will be useful to people. The placebo effect that emerges in the majority of essays in this volume is not the abstraction that exists only in the airy realm of philosophy. Nor is it even the carefully controlled phenomenon found only in the laboratory. It is instead a phenomenon grounded in the rich world of human collective experiences, cultural norms, and social institutions. This too strikes me as highly significant. No longer needing to justify our interest in the placebo effect, we find ourselves liberated to begin to identify a whole new set of questions and opportunities for new kinds of scholarly inquiry. In this sense, *Talking Placebos* represents an important milestone moment in this process of the placebo’s coming-of-age.

References


