

A LINE ON LIFE

3/27/94

Doubling the Power of the Placebo *

David A. Gershaw, Ph.D.

In the media, miraculous treatments for various problems are claimed by individuals who have achieved wondrous results.

"I lost 65 pounds in one year by putting staples in my ears."

"I graduated with honors, because I listened to tapes while I was asleep."

With any new successful treatment, it is hard to know whether the treatment caused the change, or if changes are caused by the **placebo effect** – merely believing that the treatment will work.

A **placebo** is any drug or treatment that has only inactive ingredients in relation to the problem being treated, such as a "sugar pill" for chronic pain. Placebo literally means, "I will please." Its power comes from the belief of the client that the treatment will work. Typically the placebo effect is noted in about one-third of the people who receive placebos.

*"If a doctor believes in what he's doing
and lets the patient know that,
that's good medicine."*

Recently, some studies demonstrated a doubling of the placebo effect. Over 6,000 patients were given experimental treatments for asthma, ulcers or herpes. Rather than one-third, *two-thirds* of the patients demonstrated at least temporary improvement. Later, under more critical testing in which control groups were used, the treatments were found to be useless, and they were abandoned. This suggests that the placebo effect is twice as powerful as we previously thought. First, the patient needs to believe in the curing power of the inactive ingredients. To get the doubling, a trusted professional must also be enthusiastic about this new therapy.

A patient's response to any disorder is related to the stress experienced. With reduced stress, that patient can show improvement. Researchers have found this to be true with herpes.

"We've found herpes viruses are responsive to stress, improving or worsening depending on the patient's emotional state. Since the herpes virus is quite responsive to psychological influences, the first wave of physicians' enthusiasm could well have a beneficial medical effect."

However, this makes it more difficult to judge the effectiveness of any new treatment. To deal with this, a more rigorous double blind experimental design is used. Neither patients nor physicians know who is getting the new treatment or the placebo. In other words, both the patients and the physicians are "blind" to the treatment being given. A third party determines who gets what, and this information is not revealed until after the treatment effects have been measured.

Unfortunately, even the double-blind process has problems. Often the medication has side effects not seen in the placebo. These side effects might cue patients as to who is getting the real treatment. If you think you're getting the "real thing," then your confidence can add a placebo effect to the treatment.

"In instances when researchers have asked patients and physicians to guess whether they were getting the active medicine or the placebo, the results were sobering – in one such study, 78 percent of patients and 87 percent of their physicians could tell. This means that the so-called 'double-blind' is not really blind."

However, even this problem can be reduced. Beside the medicine being tested and the usual inert placebo, a third group could get an "active" placebo. This third drug would have no real medical effect on the disorder, but it would cause similar side effects. Thus it is more likely to be confused with the real drug and allow us a better estimate of the placebo effect.

With people complaining about the lack of development of new drugs – especially for AIDS – I hope this article gives you some small idea of how difficult it is to accurately test new medications. (On the other hand, does this mean – if we really believe *and* have an enthusiastic physician – that we only need to use a half placebo rather than a whole one?)

* Adapted from Daniel Goleman's "Placebo Effect Is Shown to be Twice as Powerful as Expected," *The New York Times*, August 17, 1993. Reprinted in *Themes of the Times*, Prentice Hall, 1993, pages 1, 3.