A LINE ON LIFE

11/23/88

Power of the Placebo *

David A. Gershaw, Ph.D.

A **placebo** is an inert substance — one that is known to have no pharmacological effect — which is used instead of an active drug. You are probably most aware of the example of a *sugar pill*. Placeboes can be very powerful.



To demonstrate the power of placeboes, psychologists and others have performed experiments. Experiments using placeboes usually use the double blind method. Neither the subjects nor the experimenter know who is getting the actual treatment and who is getting the placebo. (Essentially both the subjects and the experimenter are "blind" as to who receives what.) The experimenters are

told who receives what only *after* they have evaluated the results. This minimizes bias on the part of the experimenter. If both the groups with the drug and the placebo show the same changes, then the changes cannot be attributed solely to the drug itself.

In treating psychological disorders, placeboes are often as effective as medication. A review was made of many psychological studies, which involved giving either an antianxiety drug or a placebo to mental patients. They found that improvement rates were usually as good as — and often better than — improvement rates for those getting the actual drug.

If you believe that something will help you, it is more likely that it will.

Centuries before modern scientific medicine, it is likely that most medications worked through the **placebo effect** — by merely thinking that you are getting something that will help. Patients have been given every conceivable substance — from crocodile dung to the semen of frogs. They have been purged, leached and bled. Since healers traditionally held positions of honor and respect, these "treatments" must have worked with at least some patients.

Even current medical treatments involve the placebo effect. Patients with *angina pectoris* — a painful heart disorder – were given only a diagnostic procedure, but they thought it was an operation to cure them. Forty percent reported marked relief from their painful symptoms.

Some psychologists say that this is the way that psychotherapy works. If the therapist convinces the client that it will work, it probably will. Although this may lead some to view the therapists as quacks or charlatans, this really is not the case. However, if you believe that something will help you, it is very likely that it will.

Although placeboes may play a role in psychotherapy, changes due to psychotherapy are not *all* placebo effect. In an experiment done to demonstrate this, three groups were used to try to reduce anxiety about public speaking. One group was given a type of behavioral psychotherapy *called systematic desensitization*. The results were compared to two other groups — an untreated group and an "*attention-placebo*" group.

The attention-placebo group met with a sympathetic therapist who led them to believe that a pill — the placebo — would reduce their overall sensitivity to stress. To convince them, researchers had them repeatedly listen to a "stress tape" — presumably one used to train astronauts to function under stress — after taking the pill. In reality, the tape contained material that was merely boring rather than stressful. Since the tape did not seem stressful as expected, subjects thought their anxiety would be reduced by the pill.

As you might guess, the psychotherapy group improved more than both the untreated group and the attention-placebo group. Even though the attention-placebo group did show more improvement than the untreated group, the experiment demonstrated that psychotherapy is more than just a placebo effect.

We still don't know what causes the placebo effect. It may be due to the influence of the therapist or healer, the need to play the role of a "good patient" and/or the expectation that something will work. Some researchers believe that these feelings may cause our bodies to release chemical "endorphins" that reduce pain and make us generally feel better.

If you want to be more philosophical, the expectation of getting better and the desire to see it happen are both essential ingredients of **hope**. If we want to improve our lives, we all need some hope.

^{*} Adapted from Atkinson, Atkinson, Smith and Hilgard's Introduction to Psychology, 1987, pages 552-553.