

The Powerful Placebo Effect: Fact or Fiction?

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Abstract

In 1955, Henry K. Beecher published the classic work entitled "The Powerful Placebo." Since that time, 40 years ago, the placebo effect has been considered a scientific fact. Beecher was the first scientist to quantify the placebo effect. He claimed that in 15 trials with different diseases, 35% of 1082 patients were satisfactorily relieved by a placebo alone. This publication is still the most frequently cited placebo reference.

Recently Beecher's article was reanalyzed with surprising results: In contrast to his claim, no evidence was found of any placebo effect in any of the studies cited by him. There were many other factors that could account for the reported improvements in patients in these trials, but most likely there was no placebo effect whatsoever.

False impressions of placebo effects can be produced in various ways. Spontaneous improvement, fluctuation of symptoms, regression to the mean, additional treatment, conditional switching of placebo treatment, scaling bias, irrelevant response variables, answers of politeness, experimental subordination, conditioned answers, neurotic or psychotic misjudgment, psychosomatic phenomena, misquotation, etc.

These factors are still prevalent in modern placebo literature. The placebo topic seems to invite sloppy methodological thinking. Therefore awareness of Beecher's mistakes and misinterpretations is essential for an appropriate interpretation of current placebo literature.

