

Section 5

THE PLACEBO RESPONSE

Louis A. Morris and Arthur K. Shapiro

Psychologic factors have been recognized as important in the etiology of disease since the time of Hippocrates. Galen estimated that 60% of patients had symptoms which were emotional in origin. This figure is in close agreement with contemporary estimates of 50% to 80%. Despite Galen's and Hippocrates' acumen, none of the drugs they administered produced therapeutic effects by virtue of their pharmacologic actions (1).

Treatment was not only primitive, unscientific, and essentially ineffective: it was often shocking and dangerous. Patients were given almost every known organic and inorganic substance, including crocodile dung, teeth of swine, hooves of asses, spermatic fluid of frogs, eunuch fat, fly specks, lozenges of dried vipers, moss scraped from the skull of a victim of a violent death, oil of ants, and numerous other equally ineffective nostrums. Blood from almost every animal, prepared and administered in many ways, was used to treat every conceivable symptom and disease. Nearly all human and animal excretions were employed in some manner.

Although medicine has held a place in the finest scientific, religious, cultural, and ethical traditions throughout history, one wonders how physicians maintained their position of honor and respect. Useful drugs or procedures appeared infrequently and were usually forgotten by succeeding generations. For thousands of years, physicians prescribed what we know were use-

less and often dangerous medications. This would have been impossible were it not for the fact that physicians did help their patients.

Today, we know that the effectiveness of these procedures and medications was due to psychologic factors often referred to as the "placebo effect." Since almost all medications until recently were placebos, the history of medical treatment can be characterized largely as the history of the placebo effect (2).

Medicine no longer relies chiefly on placebo effects. Today there is an increasing number of specific and predictable therapies. However, the results of any treatment are due to both the specific actions of the treatment and its nonspecific, placebo effect, influences. The relative contribution of placebo and nonplacebo components vary, depending on factors such as the potency and specificity of treatment, psychologic and physical state of the patient, and methods of administering and evaluating treatment effects. Although psychologic factors may be minimized, they cannot be excluded. It is true that if the dosage of a drug is too high, all the patients will react with toxicity or even death, regardless of psychologic factors. However, this predictability is of little consequence because the majority of clinically useful drugs are prescribed in dosages which are far below the toxic level, ie, in a range in which placebo effects are important.

The incidence of placebo reactions approaches 100% in some studies. Placebos can mimic the effects of active drugs, have profound effects on organic illnesses, and can be more powerful than or reverse the action of potent active drugs. Drugs are reported effective four or five times more frequently in uncontrolled studies than in

Some of the topical material presented in this chapter will be presented in Masserman JH (ed): *Current Psychiatric Therapies* (Vol. 17). New York: Grune & Stratton.

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