

be given to the use of specific and rational therapy whenever possible.

Indications

Although acceptable indications for use of placebos are controversial, some of the suggestions from the literature include 1) patients with degenerative, malignant, or incurable diseases for which specific treatment is unavailable; 2) patients hospitalized for prolonged investigation who become impatient while undergoing tests; 3) patients with a confusing clinical course, as a substitute for drugs which may contribute obfuscating symptoms; 4) weaning postoperative patients from narcotics to prevent habituation; 5) elderly or chronic patients who have become accustomed to taking medication of questionable value; and 6) to differentiate psychologic from nonpsychologic side effects in psychochemotherapy. The least controversial use of placebos is as a control in research. However, some investigators question the ethics and legality of using placebos even here (9).

Precautions

The indications for the use of placebos should be carefully considered. The physician should be cautious about their use if he is aware of hostile, contemptuous, or other negative feelings toward demanding and difficult patients. They should be used cautiously when the physician can think of nothing else to give. Patients may sense the underlying attitude of the doctor, and their response to treatment may vary accordingly. Patient disappointment about therapy may be expressed as hostility, non-compliance with therapeutic regimens, and dropping out of treatment. The credibility of physicians can be severely undermined when patients are aware that they have been deceived.

Inactive vs Active Placebos

Opinions differ about whether to use inert substances such as lactose (inactive placebos) or active drugs at subpharmacologic doses as placebos (active placebos). Active drugs sometimes cause serious consequences despite placebo dosages. If an impure placebo is used, it should always be a safe drug. However, one should avoid attributing favorable results to an active drug used as a placebo.

Evaluation of Therapies

Recognition and study of the placebo effect has contributed to improvement in the methodology of evaluating therapy. Although many of the difficulties about evaluation remain unsolved, major advances have been achieved.

Single-Blind Procedure

Methods of clinical evaluation have had a varied and checkered history. One of the earliest techniques has been referred to as the single-blind procedure. In this method, the physician or investigator knows that control substances are being used and which patients are receiving them. The patient alone is unaware. The control is usually a placebo.

Double-Blind Procedure

Single-blind studies frequently produce spurious results because of bias that occurs when physicians or investigators know whether patients have been assigned to placebo or drug groups. To avoid these problems, the double-blind procedure, in which neither the patient nor the physician (or others treating or evaluating patients) know which group of patients have been assigned to receive active or inactive medication, was evolved. Although the earliest use of this procedure dates back to the beginning of the 20th century, it became popular only recently. Since 1960, the double-blind procedure has been the norm for most well-designed studies.

Exact Placebos. It is important that a placebo control have all the physical characteristics of the experimental substance. Patients, physicians, or investigators may uncover the code if the placebo does not resemble the experimental drug or have the same taste or consistency. Capsules, rather than tablets, should be used so that the medication placebo can more closely resemble the active drug under investigation.

Active Placebos. The use of active placebos which mimic the telltale side effects of the experimental substance has been recommended when feasible. Without an active placebo, physician and staff may be able to distinguish between experimental and control groups, in which case the double-blind procedure then actually would become a single-blind procedure.