procedures) and a placebo test (which utilizes a clinical setting) may account for the lack of association. In a study by Frank et al. (1957) tests of suggestibility administered in a clinical setting were positively correlated with placebo reaction. It seems likely that if both placebo and suggestibility procedures are viewed as therapy, rather than one as a treatment and the other as a gullibility test, results would have greater concordance (Barber & Calvery, 1964).

Persuasion

Following the general model advanced by Hovland, Janis, and Kelley (1953), Liberman (1961) conceptualized the placebo effect as a function of the persuasive influence of a therapist who is perceived by the patient as expert and trustworthy. In addition, certain personality characteristics may predispose patients to placebo reactions. Some of the characteristics are related to placebo reaction only under certain circumstances while other traits are not situation bound. Finally, the observed placebo effect is measured both as a "true" response reflecting actual therapeutic change and as an "artifactual" response such as a faked or spontaneous change.

Both suggestibility and persuasion are general models of social influence. The persuasibility model views the placebo reactor as a rational individual rather than a gulliable patient. The power of the physician's arguments, rather than the yielding of the patient, is stressed.

Transference

In the suggestion and persuasion paradigms, no distinction is made between the therapeutic and nontherapeutic environments. In the transference model, the placebo response is viewed as an outgrowth of the patient-therapist relationship. Although transference-type relationships may occur in experiments, they are apt to be qualitatively different from ones that could occur with a therapist. A classical definition of transference is that feelings, such as love, hatred, trust, and distrust, which the patient attached to significant persons in the past, are unknowingly displaced onto the therapist. Positive placebo effects stem from a positive transference caused by satisfactory early experiences with parents or parent surrogates, or by individuals who expect succor and comfort from the therapist despite unsatisfactory early relationships. A patient's dependent relationship on the therapist may be made acceptable by the placebo, which presents a socially permissible vehicle for patient's regressions (Kast & Loesch, 1959). Negative placebo effects can result from a patient's unsatisfactory transference relationship with the therapist, and the doctor's countertransference relationship with the patient. Patients' hostility may be manifested by the report of negative side effects (Downing & Rickels, 1967). Dramatic symptom relief may be the manifestation of a positive transference relationship.

The transference paradigm views the patient as an active communicator who has established a special relationship with the therapist. Placebo effects are patient communications that have symbolic meaning and may predict ultimate treatment response.

Role Demands

Pressures to behave in certain prescribed manners are inherent in the role of a patient or experimental subject. In a clinical situation, positive placebo reactions may reflect the role of a "good patient." A patient who reacts positively would justify the therapist's initial concern and subsequent interest, care, and attention (Goldstein, Rosnow, Goodstadt, & Suls, 1972).

The subject may pick up subtle cues in an experimental trial (Rosenthal & Rosnow, 1969), integrate hints from the experimental procedure to guess the true nature of the experimental hypothesis (Orne, 1970), or model his or her behavior after the experimenter (Chaves, & Barber, 1974). Subjects may then behave in a fashion that will confirm the hypothesis. Even under postexperimental questioning, subjects may not divulge their awareness of the true hypothesis in an attempt to satisfy the experimenter.

Mutual or congruent therapist-patient role expectations can have a positive effect on treatment outcome, whereas discrepant role expectancies can lead to the failure of treatment (Goldstein, 1962). In addition to the therapist, other patients may communicate normative influences about