BRIEF TECHNICAL REPORT

*A BEHAVIORAL PROBE INTO SOCIAL CONTINGENCIES
ON A PSYCHOSOMATIC WARD*

The treatment of patients, in a psychosomatic unit, who exhibit "chronic illness behavior" is generally agreed to be difficult. Chronic illness behavior may be defined as disability disproportionate to known organic deficits, entailing full enactment of the role of a severely ill person, and a continuing search for care from physicians, family, and friends. Component behaviors such as protests of helplessness, demands for care, threats, hostility, and excessive compliancy may be learned ways of influencing others to assume responsibility and provide care (Blackwell, Wooley, and Whitehead, 1974; Wooley, Blackwell, Glaudin, and Lipkin, 1973).

As a first step toward modifying this behavior, a procedure to record the social contingencies that may support illness behavior is described. This procedure can measure baseline behavior as reported here, and be used to assess effects of treatment programs aimed at reinforcing independent behavior and lessening the patient's tendency to elicit caretaking behaviors from others.

METHOD

Subjects

The staff and patients of a 12-bed psychosomatic unit in a teaching hospital specializing in the treatment of chronic illness behavior as defined above served as subjects. The patient sample consisted of all patients on the unit at the time of the study; *i.e.*, two men and six women ranging in age from 13 to 44 yr, with the following diagnoses: epilepsy, headaches and vomiting, obesity, phobia, compulsive eating, depression, and asthma. All had extensive prior medical treatment for the presenting somatic symptoms. The staff sample consisted of all members of the staff—nine men and four women—including attendants, orderlies, nurses, clerk, secretary, medical students, medical resident, psychiatry resident, social worker, psychologist, and staff psychiatrist.

Procedure

Social reward systems within the patient group and within the staff group were studied through the use of "do-it-yourself tokens". "Tokens" were blank forms that could be used "to reward" any behavior specified by the giver, or as a "request for alternate

behavior", in which case the unwanted behavior and an acceptable substitute were recorded. Figure 1 shows a token filled in by a patient for use as a "positive reinforcer".

The pattern of token distribution among staff was studied first. The staff were not aware that they were participating in a study. The idea of using tokens was introduced in a staff interaction group and was agreed upon as a possible way of altering behavior within the group. Ten blank tokens were given to each staff member and all were asked to distribute them to other staff members within a week. Although the system was perpetuated for some time by the group, only the first week's data were analyzed for this study. At the end of this week, staff were asked if they would volunteer to turn in the tokens they had received for possible study; all elected to do so. One person subsequently reported that he had lost his tokens.

The token exchange was suggested to the patient group several weeks later in the context of a similar group meeting. Patients were asked to distribute 10 tokens to other patients within a week, rewarding "whatever behaviors you think should be encouraged" in order to "see what happens and whether a system like this might be helpful". At the end of the week, patients were asked to turn in the tokens they had received "so the staff could get some idea how the system was working". All patients agreed and to the best of the staff's knowledge, handed in all the tokens received.

Data Analysis

For the purpose of this study, the following categories were devised: (1) *care-taking* behaviors (kindnesses, sympathy, support, favors); (2) *sociability* (taking part in social activities, being nice or friendly without implication of meeting needs); (3) *communication* (clarifying and transmitting information, giving feedback, establishing communication lines); (4) *achievement* (showing interest in or achieving relevant goals), and; (5) *other*.

Tokens were coded by two raters. The largest difference in percentages of tokens assigned to any category was 4%. Interrater agreement was calculated by counting the number of tokens coded identically

TO: *Pat*FROM: *Candy*DATE: *2-5-74* TIME: *8:00 P.M.*

CHECK ONE ONLY:

☒ POSITIVE REINFORCEMENT FOR
(NAME BEHAVIOR)

Thank you for helping me this afternoon. There wasn't really anything anyone can say to make me feel better but it was nice to have someone who let me cry on their shoulder.

☐ REQUEST FOR SUBSTITUTE BEHAVIOR
(NAME BEHAVIOR)

WOULD PREFER
(NAME BEHAVIOR)

Fig. 1. A "blank token" filled out by a patient for use as a "reinforcer".

by the judges. Some tokens listed more than one behavior. In these instances, each behavior cited was coded separately and the judges had to code all behaviors in the same way to score an agreement. By this conservative method of calculation, interrater agreement was 77%.

RESULTS

Figure 2 shows the average values obtained by the raters. Seventy per cent of tokens given by patients were for caretaking behaviors, 22% for sociability. Only 5% of the tokens were given for communication and 3% for achievement. The pattern of token distribution by staff is nearly a mirror image of the patients' token exchange.

Examples of responses by patients rated as rewards for caretaking behavior are:

"For helping me with my knitting and for being there when I needed someone the other day (when I was sick and couldn't lay down). I appreciate it."

"Thanks for helping or rather taking over my bottle-making project for me. I appreciate it and Mr. Murray, you've gained all my love and respect."

Fig. 2. Distribution of tokens into content categories of behavior rewarded. Comparison of tokens given within patient peer group and within staff peer group.

Only 6% of token used by patients requested behavior change, and all were requests for better care for themselves or others. For example:

"Harriet and you are running down the hall carrying on and I don't think you realize there are patients down the hall that need the rest and quiet. They're *sicker* than we are, you know. There's a place and time to be silly. In the hall isn't one of these places."

Twenty-four per cent of tokens used by staff requested behavior change; of these, 63% were for changes in communication, 23% for changes in task performance.

DISCUSSION

The probe revealed clear-cut differences in reward systems of two peer groups that appear consistent with expectations. The findings illustrate not only the motivation of chronically ill patients to be cared for, but also suggest that patients will consistently reward others for giving them care. They may be "teaching" those around them to treat them as sick people, facilitating perpetuation of the problem. In addition, patients demonstrated a reluctance to request behavior change, which may reflect an unwillingness to risk alienating possible sources of support.

These and related observations have encouraged the development of treatment strategies aimed at reducing care-taking and dependent behavior while increasing independent behavior. For example, patients have been involved in setting their own behavioral goals, designing treatment programs, and keeping records of progress. At the same time, complaints of pain or helplessness are discouraged by

agreement to restrict their discussion to specific occasions. Use of the behavioral probe will permit assessment of the effectiveness of these interventions. Additionally, it may be possible to influence social contingencies by having patients distribute tokens "earmarked" for preset categories reflective of treatment goals, such as assertiveness or activity.

The method described provides a simple, flexible means of sampling naturally occurring social contingencies that may serve as a diagnostic tool for groups or individuals. Use for this purpose would require further validation against direct behavioral observations. Additionally, procedural modifications such as changes in the number of tokens to be given, instructions for distribution, and public discussion of results may result in new ways to modify peer-group influences.

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Received 10 October 1974.
(Final acceptance 11 February 1975.)