TO: Psychiatric Technicians in Dakota Building

FROM : Dr. T. Thompson

SUBJECT: Preliminary progress report on Behavior Modification Program in Dakota Building

The behavior modification program in Dakota Building consists of two components,, A general ward management program was initiated on the north ward and several individual behavior modification programs have been undertaken by psychiatric technicians on both the north and west wards.

Ward Management Program

The goals of the ward management program are: (1) to teach the patients self-care skills, such as keeping clothing on, use of the toilet, and self feeding (2) elimination of maladaptive behaviors, such as voiding in clothing, feces smearing, self-abuse and destructive behaviors directed toward others (3) to strengthen adaptive behaviors, such as engaging in recreational and physical excercise activities, and possibly assisting on the ward. The basic method employed is to positively reinforce patients for engaging in adaptive behaviors, and rot reinforcing them when maladaptive behaviors occur, No time out or other punishment procedures have been employed. Since it is not feasible to work with 43 individual patients (Dakota North), it was necessary to divide the patients into three groups. Patients were initially taught to approach a particular place in the room following an auditory signal (whistle). On appearing at the appropriate place, indicated by a colored line and stand on the same color, the patients were provided with food reinforcement, or the opportunity to exercise. After they had been trained to line up, they were then required to be clothed, and subsequently to have unsoiled clothing as well, At different times during the day the patients were required to wash their hands and face (a highly successful program previously initiated by Mr. Chavie), or brush their teeth.

Our initial efforts to train the patients to approach the appropriate line were largely unsuccessful due to insufficient reinforcement, and too much distraction on the ward. With modification of the procedure and increased size of food reinforcement, the patients began to approach the appropriate area and the technician. It was initially necessary to physically lead each patient to the appropriate place in the room, however after one day this was discontinued. Patients were not coerced or in any way forced to participate in the program. If the patients did not come when the whistle was blown, their names were called. In principle, the names were to be called only once, though some of the technicians repeatedly called some patients.

The results of the ward-wide management program are generally favorable, despite several problems, Of the four activities required of the patients, all occur with high frequency, as indicated below:

	(Percent of Patients)		
	appear on	appear on	do not
	whistle alone	name & whistle	participate
appear in line	30	64	6
wash face and hands	24	65	11
brush teeth	16	81	3
exercise	10	83	6

The averages for all activities are 20% on whistle alone, 74% for whistle plus name, and 6% not participating.

The plan for the forseeable future includes the following: (1) train patients to line up outside the toilet area, then one at a time, provide the opportunity to urinate and/or defecate in the toilet, followed by food reinforcement. Training periods will be 15-30 minutes after meals, (2) Initiate more constructive activity training on the ward or in day-activity-centers. The goal is to progressively occupy more of the waking time with normal activities, thereby reducing the amount of time available for maladaptive behavior.

Individual Behavior Modification Program

Five lectures were presented to Dakota and Hickory Building technicians on the basic principles of conditioning as they apply to modification of human behavior. During the third lecture each technician in Hickory and Dakota buildings were instructed to select one patient and begin recording baseline rates of some maladaptive behavior. A time sampling method was used in which the presence or absence of the behavior in question was recorded once each half hour from 6:30 a.m. to 7:30 p.m. After two weeks of baseline recording (approximately), each technician was to initiate a behavior modification program to improve the behavior of the patient he had been recording. Technicians were required to describe the proposed program on a sheet provided, and the Building Coordinator or Superintendent and the Building Nurse (Mrs. Crosby) was required to approve each program in writing. This report will only present data from the Dakota Building, and a later report will present similar results from Hickory Building.

Sufficient data has been gathered on 7 patients to begin to meaningfully assess the effectiveness of the individual behavior modification programs. The maladaptive behaviors which have been subjected to modification include: taking clothing off, self abuse, clothing tearing and smearing feces. The following table shows the number of half-hour intervals during two weeks before the initiation of the behavior modification program, and the number of half-hour periods during the last two weeks of recording after initiation of the program. In several cases, the program had only been in effect for 14-16 days, in which case the first few days on the program represent acquisition. It should be kept in mind that during acquisition, the performance is generally near or slightly above the baseline level.

	number of half -hour intervals				
Patient	Behavi <u>or Pro</u> blem	before program	after program	change	
W,	clothing off	108	53	51	
G.s.	fecal smearing	25	12	52	
3.	Clothing tearing	96	48	50	
Μ.	fecal smearing	48	27 (23)	43 (73)	
P.	self-abuse	12	1	91	
J.	fecal smearing	33	4	88	
W.	clothing off	10g	146	35*	

Six of the seven patients treated show improvements ranging from 43% to 91%. The seventh $\frac{\text{patient}}{\text{M.}}$ () showed a 35% deterioration under the behavior modification program. M. M. () **would** show greater improvement, (73%) except for one day's radical disruption, in which nearly 50% of the maladaptive behavior instances occurred (13 of 27 instances), These results give us some reason for encouragement.