

STATE OF MINNESOTA

DEPARTMENT.

Faribault \_\_\_\_\_ State \_\_\_\_\_ Hospital office Memorandum

TO : Y. Anderson, G. Crosby, E. Errickson, R. Johnson DATE: March 27, 1969

FROM 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 exercise activities, and possibly assisting on the ward. The basic method employed is to positively reinforce patients for engaging in adaptive behaviors, and not 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 cue 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 whistle alone	appear on name & whistle	do not Participate
appear in line_____	~7330	64 64_____'	
wash face and hands			
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.

It is worth mentioning in passing that some of the technicians have remarked to me that the method hasn't been working well. On the past two occasions I have visited the ward, (which were admittedly for short periods), I saw no patients without shirts or trousers, and very soiled patients. It appears there is a discrepancy between some of the technicians' subjective evaluations of how the technique is working: and their own data regarding the effectiveness of the method.

the plan for the foreseeable future includes the following: (1) train patients to lineup 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 Horse (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\*

<u>Patient</u>	<u>Behavior Problem</u>	<u>number of half-hour intervals</u>		<u>percent change</u>
		<u>before program</u>	<u>after program</u>	
W.	clothing off	108	53	51
G.	fecal smearing	25	12	52
S.	clothing tearing	96	48	50
M.	fecal smearing	48	27 (13)	43 (73)
P.	self-abuse	12	1	91
J.	fecal smearing	33	4	88
V.	clothing off	108	46	35*

six of the seven patients treated show improvements ranging from 43% to 91%. The seventh patient showed a 35% deterioration under the behavior modification program. 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.

#### Problems to be solved

There were initially major difficulties in coordinating the activities of the various members of the therapeutic team, each with their own ideas regarding appropriate treatment methods. If a behavior modification program is to be effective, we must have relatively good control of activities on the ward, and we must have sufficient staff cooperation, to assure continuity from one shift to the next and from one day to the next. Some of these problems have been eliminated or reduced, but it still remains unclear exactly when janitorial activities will supersede patient therapy in priority and the exact way in which the rehabilitation program can be integrated with the existing program. The creation of the day activity centers should be of considerable assistance, however scheduling of interventions on the ward is a must if the program is to be of genuine assistance in modifying the patients' behaviors.. Careful advanced planning and coordination should go into the day activity centers. If the decision as to which kinds of behaviors should be strengthened so! which eliminated the left up to the technician in charge of each activity center, it is highly likely that a lot of our time and effort for the past two months will have been wasted. Efforts should be made to provide continuity with individual programs if prior training is to serve as an effective behavioral foundation for subsequent behavior change.

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