

2 Comparison of Two Five-Year Follow-Up Studies: 1947 to 1952 and 1967 to 1972

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Results of a 5-year follow-up of 100 randomly selected patients committed to a community-oriented mental hospital in 1947 are compared with those of a 5-year follow-up of 100 randomly selected patients admitted to a community-based mental health center in 1967. The data show that both programs were successful in keeping patients with histories of long-standing mental illness in the community, even though the 1947 group did not receive any modern psychotropic medication. One unexpected finding of the comparison is the suggestion that these drugs might not be indispensable; in fact, they might actually prolong the social dependency of some discharged patients.

WE HAVE HAD a long-standing interest in the history and social outcome of major mental illness and an extensive association with the development of alternatives to institutional confinement of patients with major illnesses. These have combined to present a somewhat unusual opportunity to observe the similarities and differences between two community-oriented programs that share a common philosophy of patient care but are separated by a time interval of two decades and by their separate locations in two quite different urban communities.

This opportunity was further strengthened by the fact that rather detailed data are available in a 5-year follow-up study, which we prepared in the early 1950s (1), of 100 patients committed to the Boston Psychopathic Hospital. We found that a review of this paper suggested that interesting and perhaps worthwhile data might be brought to light by applying in full detail the method of approach of this study to the first 100 admissions to the inpatient service of the Dr. Harry C. Solomon Mental Health Center in Lowell, Mass., which was established in 1967.

The central feature of the Boston Psychopathic Hospital study was the presentation of time the patients spent in and out of state, private, and Veterans Administration

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mental hospitals during a period of 5 years. A single measure, number of weeks spent in mental hospitals during a 5-year period following admission, provided a basis for comparing outcome of the various diagnostic categories and social conditions. We considered this measure to be especially useful as a basis for reflecting changes in outcome that might have occurred over the 25 years between the time the Boston Psychopathic Hospital initiated its intensive treatment and community care program and the Solomon Mental Health Center completed its first 5 years of operation as Massachusetts' first community mental health center. (Both facilities are part of the Massachusetts Department of Mental Health; the Boston Psychopathic Hospital is now the Massachusetts Mental Health Center.)

The two groups of patients were not selected as matched groups to compare point-for-point effectiveness of therapeutic programs. They were selected as random samplings of admissions from their respective communities so that we could learn from their similarities and differences what new perspectives their outcomes might suggest for community psychiatry.

As mentioned above, Boston Psychopathic and Solomon Center share a common philosophy of clinical and social management. This philosophy is based on the idea that the majority of mental illnesses, especially the most severe, are largely self-limiting in nature if the patient is not subjected to demeaning experiences or loss of rights and liberties. Therapeutic management consists first and foremost of removing these negative influences and replacing them with a positive attitude of respect for the patient's needs for human companionship and interest-holding activity. Somatic treatments are prescribed in this context to relieve specific kinds of suffering and thereby to expedite the spontaneous healing process.

METHOD

In both follow-up studies the names of 100 patients successively admitted or committed to each hospital were traced in the file of the Massachusetts Department of Mental Health. Each discharge to the community, each transfer from one hospital to another, and each readmission to a public or private mental hospital in Massachusetts was recorded. Each patient's sex, diagnosis, admission status (i.e., whether first or subsequent admission), and treatment were also recorded.

One major difference between the two studies is that the names of the first 100 patients committed to Boston Psychopathic were selected, while the names of the first

patients admitted to Solomon Center, irrespective of commitment status, were selected. The reason for latter criterion of selection is that changes in the laws governing commitment and changes in administrative policy in regard to voluntary admission of psychotic patients rendered application of the criterion of commitment at Solomon Center both artificial and useless. The criterion would have reduced the size of the sample to too few patients. Observation of both groups of patients does not suggest, however, that Solomon Center patients suffered from milder or less tenacious disorders than those at Boston Psychopathic.

Another major difference between the two studies is that the Boston Psychopathic follow-up period (1947 to 1952) preceded the introduction of psychotropic drugs. The Solomon Center patients, on the other hand, who were followed from 1967 to 1972, were treated with psychotropic drugs when indicated, on admission, and during aftercare following discharge from the inpatient serv-

Another difference between these studies is that no organized day program was available to patients discharged from Boston Psychopathic Hospital during the follow-up period. At Solomon Center, on the other hand, two types of day programs were available to discharged patients. One was a recreation club located outside of the center, and the other was a more structured program at the center. Outpatient services were available to the patients of both facilities.

Location of Patients

It can be seen in table 1 that the great majority of patients of both Boston Psychopathic Hospital and Solomon Center were in the community at the end of each follow-up year for 5 successive years. The data presented also suggest a tendency for more patients rather than fewer to be in the community each year. The difference between the number of Boston Psychopathic Hospital patients and Solomon Center patients who were in the community at each admission anniversary would not seem to be of particular importance because the two groups of patients were not originally selected as matched groups to compare effectiveness of therapeutic programs.

A major difference between the groups of patients, as

mentioned above, is that the Boston Psychopathic patients were committed by a court, while almost all of the Solomon Center patients were voluntary. The Solomon Center patients also included more readmissions than the Boston Psychopathic group (66 versus 44). Many of the readmissions to Solomon Center were former patients of Worcester State Hospital with histories of long-standing mental illness. This is mentioned to point out that an important contribution of the present-day community mental health center is providing care for former state mental hospital patients in varying stages of convalescence from major mental illness.

Readmissions and Discharges

Table 2 presents a further subdivision of the patients who were in the community or in a mental hospital to identify and separate patients who did or did not relapse and whose illness did or did not remit. A notable datum in this table is the figure 45 for the number of Boston Psychopathic patients who had no relapse during the 5 years of follow-up. This is an especially high figure in light of the fact that none of our present-day psychotropic drugs were available during these years. This figure can be attributed to Boston Psychopathic's aftercare program for discharged inpatients, which was carried out by its social service department and outpatient clinic, the Southard Clinic.

Solomon Center's nonrelapse figure of 31 appears substantially smaller in comparison, surprisingly so in view of the fact that the center's policies, including its aftercare program, were modeled after those of Boston Psychopathic. Although important as an indicator of clinical effectiveness, the nonrelapse figure does not tell the whole story. The figure for total number of patients in the community at the fifth anniversary is also important. Solomon Center had 87 patients in the community in 1972, and Boston Psychopathic had 76 in 1952. This difference does not appear to be especially important until the factor of time spent in mental hospitals is introduced (see table 3).

Time Spent in Mental Hospitals

Table 3 presents the special feature of this study, namely, the comparison of clinical results in terms of time spent in mental hospitals during the 5-year follow-

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TABLE 1
Status of Boston Psychopathic Hospital Patients (N=100) and Solomon Mental Health Center Patients (N=100) at Admission Anniversaries

Admission Anniversary	In the Community		In a Mental Hospital		Deceased		Unknown*	
	Boston Psychopathic	Solomon Center	Boston Psychopathic	Solomon Center	Boston Psychopathic	Solomon Center	Boston Psychopathic	Solomon Center
1st	72	87	20	13	4	—	4	0
2nd	76	93	13	7	7	—	4	0
3rd	76	93	12	7	8	—	4	0
4th	77	90	11	10	8	—	4	0
5th	76	87	12	10	8	3	4	0

*These patients had moved out of Massachusetts.

TABLE 2
Readmissions and Discharges of Boston Psychopathic Hospital Patients (N=100) and Solomon Mental Health Center Patients (N=100) at Admission Anniversaries

Admission Anniversary	Discharged Patients in the Community				Patients in a Mental Hospital			
	Never Readmitted		Readmitted		Discharged and Readmitted		Never Discharged	
	Boston Psychopathic	Solomon Center	Boston Psychopathic	Solomon Center	Boston Psychopathic	Solomon Center	Boston Psychopathic	Solomon Center
First	54	58	18	29	13	13	7	0
Second	51	45	25	48	8	7	5	0
Third	49	37	27	56	9	7	3	0
Fourth	46	33	31	57	8	10	3	0
Fifth	45	31	31	56	10	10	2	0

TABLE 3
Status of Boston Psychopathic Hospital Patients (N=100) and Solomon Mental Health Center Patients (N=100) at Fifth Admission Anniversary by Time Spent in Mental Hospitals

Status	Boston Psychopathic		Solomon Center	
	N	Average Time in Hospitals (in weeks)	N	Average Time in Hospitals (in weeks)
In the community	76	29	87	18
In a mental hospital	12	197	10	136
Deceased	8	42	3	15
Unknown (moved out of state)	4	16	0	—

up periods. With this measure, interesting differences emerge: the average number of weeks Boston Psychopathic Hospital patients spent in mental hospitals was nearly 50 percent greater than the average number for Solomon Center patients (47 weeks versus 32 weeks, respectively). The difference holds true for patients in the community and for patients in a mental hospital at the end of the follow-up periods.

These differences are substantial enough to warrant explanation. Two factors may be offered to explain the differences. The first is the difference between the catchment areas of the two facilities. Boston Psychopathic Hospital, located in Boston, drew its patients largely from the entire urban population of eastern Massachusetts. Solomon Mental Health Center draws its patients from a compact area made up of the city of Lowell and eight surrounding towns. The nearness of the homes of Solomon Center patients favors early and frequent release on trial periods at home. The presence of a day program at Solomon Center further facilitates release of patients to live at home. Thus it can be said that Solomon Center carries out to a fuller extent in the 1960s and 1970s what Boston Psychopathic had demonstrated in the 1940s and 1950s: patients with major mental illness can be given better care outside of the confinement of a hospital.

The second factor that may explain the reduction in time spent in mental hospitals by Solomon Center

patients is the use of psychotropic drugs. It is highly probable that the majority of Solomon Center patients were maintained on these drugs for at least part of the follow-up period. The actual utilization rates of these drugs during this period has not been documented.

Previous Admissions

Table 4 shows that a greater proportion of Boston Psychopathic Hospital patients who had one or more previous admissions than of those who had no previous admissions were in the community after 5 years (82 and 71 percent, respectively). In the case of Solomon Center patients the opposite was true: a greater proportion of patients who had no previous admissions were in the community after 5 years (94 percent), compared with those who had one or more previous admissions (83 percent).

The importance of these trends in opposite directions for the two groups of patients is strengthened by the finding that all of the Boston Psychopathic patients who had one or more previous admissions spent less time in mental hospitals (average, 36 weeks) than patients who had no previous admissions (average, 55 weeks), while all of the Solomon Center patients who had no previous admissions spent less time in mental hospitals (average, 17 weeks) than those who had previous admissions (average, 27 weeks).

It is also noteworthy that the contrast between Boston Psychopathic and Solomon Center is greatest in the case of patients who had no previous admissions in regard to both the proportion of patients in the community at the fifth admission anniversary (71 percent of Boston Psychopathic patients, 94 percent of Solomon Center patients) and average time spent in mental hospitals (36 weeks and 17 weeks, respectively).

It is of interest to recall that for decades the statistical reports of mental hospitals routinely showed lower charge rates for first admissions than for readmissions. This was expected because first admissions would involve more patients with less potential for early total recovery. The reason for this derived from the generally conservative clinical administrative practice of not discharging patients who were less than totally recovered to the

