Research in the Delivery of Mental Health

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Background

Through the impetus of a hospital improvement grant from the National Institute of Mental Health, a long term treatment service for selected patients was converted into a community service. The project began operation in February 1965, as the Washington Heights Community Service of the New York State Psychiatric Institute.

Prior to the inauguration of the Service, psychiatric care for residents of the Washington Heights Health District was inadequate and fragmented. Patients from the area were admitted to Bellevue, an overcrowded city hospital, and if continued hospitalization was indicated, they were transferred to a state hospital. Upon discharge, only inadequate follow-up care was available.

The Washington Heights Community Service was established on the sixth floor of the N. Y. Psychiatric Institute and offered inpatient, day and night hospitalization, home care, outpatient after-care, and a halfway house located in the local community. In addition, a close collaboration was initiated with the 24 hour emergency service and outpatient department of the Columbia-Presbyterian Hospital.

The catchment area covers a population of approximately 75,000 and extends from 158th to 181st Street river to river. All residents of the catchment area above 13 years in need of psychiatric hospitalization are admitted to the Service. The ward has 55 beds and has an open door policy except for a small 8-bed intensive care unit which permits appropriate observation and control for severely disturbed patients. Inpatients, day and night patients are all treated in the same program. In order to insure continuity of care, a team approach is utilized, with the same staff following the patient through all phases of his treatment, including any subsequent readmissions. A full range of psychiatric treatments are available, including individual psychotherapy, group, family, milieu, and somatic therapy.

Regarding Washington Heights as a whole, there are two dominant population trends in evidence. 1) There is an exodus of older white families of European extraction, and 2) there is an influx of younger black, Puerto Rican, and other Latin American groups. The numerical drop in the white population from 1950 to 1965 was 52,000, while the non-white gain was about 11,000 and Puerto Rican gain about 24,000.

Program Evaluation

Soon after inception of the Service, a collaboration was established with Drs. Robert Spitzer and Jean Endicott of the Evaluation Section of Biometrics Research. Through this collaboration, program evaluation was built into the program from almost its very beginning. Routine scales of demographic and psychopathological data are filled out by the psychiatric residents and research interviewers on all patients admitted to the Service. This type of data, for example, the Psychiatric Status Schedule, the Psychiatric Evaluation Form, and Social Background Record devised by Spitzer, Endicott, et al., are useful in various ways: first, for research studies that are being carried out; secondly, for planning and evaluation of treatment services, and thirdly, for providing material for reporting of services.

Less than 10% of the patients treated on the Community Service have been transferred to state hospitals for further care. Last year the figure was 17 patients from the catchment area. Prior to inception of the Service, over 40% of the patients admitted to Bellevue Hospital from Washington Heights were transferred to Rockland State Hospital. Of course, Bellevue was not attempting to offer definitive treatment to all admissions.

Another major function of the Service is education, and it is the main resource within the Columbia Presbyterian Medical Center for the teaching of community psychiatry in a clinical setting. The Service continues to train large numbers of psychiatric residents, trainees in community psychiatry, and allied professions—psychology interns, medical students, students of social work, nursing, occupational therapy, and foreign students on fellowships. Prior to July 1, 1970, half the second year residents spent a year on the Service. Beginning July 1, 1970, all the first year residents were assigned to the Service for the major portion of the year.

Research

While the routine collection of psychological and demographic data is useful, it is not helpful in evaluating the efficacy of alternative modalities of treatment available in community mental health programs. A decision was made to commit the Service to conduct controlled studies relevant to the delivery of mental health services, because there is an urgent need to provide guidelines for optimal patient care which are based on “hard” research data and not on rhetoric.

The first major research project conducted on the Washington Heights Community Service was a joint endeavor conducted by the clinical staff and the Evaluation Section of Biometrics Research. It was a study of the efficacy of inpatient versus day hospitalization for newly admitted patients. The study began in the spring of 1967 and was completed on July 1, 1969. Acutely ill patients were being admitted to our hospital service for care from the emergency room and were treated in the traditional manner as inpatients. The use of our day hospital had been extremely limited until the time of the study. There had been a great deal of controversy in the literature regarding the presumed positive versus the deleterious effects of hospitalization. Zwerling and Wilder had demonstrated that day hospitalization was a feasible alternative to inpatient care. They found that about two thirds of newly admitted inpatients could be treated in a day hospital. Their report was not designed to answer the next logical question: Should an acutely ill patient be treated in a day hospital rather than on an inpatient service? When this project was first presented to the clinical staff, there was a good deal of resistance to carrying it out. There was much anxiety and anger voiced because staff members were afraid of the consequences of having seriously disturbed patients go home at night and on weekends and many quite frankly thought it would increase their work load.

There were 424 unselected patients admitted to the inpatient service of the Washington Heights Community Service during the study period who were screened with their families within the first few days for inclusion in the study. If there were no contra-indications to either day or inpatient care, patients were randomly assigned to either day or inpatient status; 22% of the patients were randomized and by chance there were 45 in each group. An interesting finding was that 20% were rejected from the study because they were considered psychiatrically too healthy for inpatient care and were usually sent home with appropriate follow-up; 31% were rejected as being “too psychiatrically ill for day hospitalization.” Study patients were evaluated on various rating scales devised by Spitzer, Endicott, et al. to measure psychopathology and role functioning by both the therapist and an independent research interviewer on admission, at two, and four weeks after entering the study. The final follow-up evaluation was begun five months after the last patient entered the study to determine if there were any long term differences between the two treatment groups. The results of the study were as follows:

The average length of stay for day patients was approximately 48 days and for inpatients, 119 days. Although day patients were discharged earlier, their readmission rate was approximately half that of the inpatients at 3 and 9 months. On measurements of psychopathology, at two weeks there was essentially no difference between the groups; both improved. At four weeks, however, the day patients had made more improvement than inpatients on 5 of the 20 test scales: agitation-excitement; inappropriate affect, appearance,
and behavior; suicide-self-mutilation; grandiosity; and suspicion-persecution. The inpatient group showed more improvement on only one scale, retardation-lack of emotion. The differences, while statistically significant, were not of great magnitude. At the long term evaluation, the only notable differences were that day patients showed more improvement on scales evaluating daily routine-leisure time impairment, and housekeeper role impairment.

Thus results showed that on virtually every measure used to evaluate outcome, day care was superior. We can only speculate as to why day care proved superior to inpatient care. Day care does seem to reduce the regression associated with total institutionalization. These patients had a greater opportunity to maintain healthy areas of functioning, including the preservation of social and instrumental roles. Perhaps another major factor is that the powerful therapeutic effect of psychotropic drugs makes it unnecessary to subject the patient to the stress of complete separation from familiar ties in order to effect a remission of the illness.

A major limitation of the “Day Study” was that families and utilization of community agencies were not systematically evaluated. No systematic effort was made to determine the impact of having a seriously ill member of the family at home. It may well be that a treatment plan which is desirable for a patient, such as early hospital release, may create serious problems for the family or the community agencies which take care of him. Secondly, when the study was formulated, the major interest was in day care as an immediate alternative to inpatient care. Almost a third of the admissions were judged clinically to be too psychiatically ill for immediate day care. Within a week, many of these patients probably would have been suitable for day care but the design of the study did not allow for their inclusion. Clearly, for many acutely disturbed psychiatric patients, the pertinent clinical issue is not to completely avoid hospitalization but to reduce the length of stay. The conclusion was reached that a more inclusive design would be to study the effects of brief hospitalization rather than immediate day care as an alternative to inpatient care for acute patients. Thirdly, since many of the patients in the day care group very quickly became outpatients, the question arose whether the day patients would have done just as well if they had merely been discharged directly to outpatient care without the use of a transitional day facility. A report by the Joint Information Service, “Partial Hospitalization for the Mentally Ill,” states, “A search of the literature revealed that there was not a single controlled study of a day program as a means of smoothing the patient’s transition from inpatient care to release from the hospital, with the possible added advantage of shortening the inpatient stay.”

Taking the findings and limitations of the “Day Study” into account, a new study was designed, “Brief Hospitalization: The Effects on Patient and Family.” Newly admitted inpatients are randomly assigned to one of three treatment programs: 1) standard inpatient care with discharge at the therapist’s discretion, 2) brief hospitalization, generally less than one week, followed by transitional day care, and 3) brief hospitalization with discharge to the community. Out patient therapy is offered to individuals in all groups if indicated. The differential effects of these three treatment programs on patients and their families and community is being investigated by cross sectional evaluations on admission, at two weeks, four weeks, and at 3, 6, 12, 18, and 24 months after admission. Evaluation of the patients includes manifest psychopathology and role functioning, amount of time spent in the community, and readmission rate. The evaluation of the families includes measures of both objective and subjective burden as well as positive effects of having a patient either at home or in the hospital. Use of social agencies and staff time is recorded.

Regarding the families, there has been considerable discussion in the psychiatric literature of the ways in which a family reacts to having a member who is mentally ill. Unfortunately, there have been few studies which evaluated the effects of alternative treatment modalities on the families themselves. In addition, there have been few attempts to develop and use systematic procedures for
measuring some of the dimensions that are involved. Furthermore, most of the reported systematic evaluations ignore any positive impact that a patient may have on his family. In England, Sainsbury and Grad\(^7\) compared the effects on patients' families of community care (Chichester) versus traditional hospital based care (Salisbury). Results showed that both services were equally effective in relieving severe burden on the families during the two year follow-up period whether or not the patients were hospitalized.\(^8\) For the patients under 65 who caused some burden to the families and among whom there was at least one admission, traditional care (Salisbury) was apparently more effective. Grad and Sainsbury attribute this result to the more active social case work offered to families in Salisbury.

They report their feeling that perhaps the most ominous finding of the study was that the social cost of psychiatric care in the community service was higher in terms of its effect on the mental health of family members. They did not assess the positive gains to the family of having the patient continue to reside in the home. Sainsbury and Grad described a home visit schedule used by a social worker in interviewing members of the patient's family in their study. In a study of the use of home care treatment in the prevention of hospitalization of a group of schizophrenics, Pasamanick et al.\(^9\) used a subset of the items developed by Sainsbury. Two treatment groups (placebo and drug) were compared and found to differ on the frequency of individual items as well as on total score. The families of the placebo group reported more troublesome behavior than did the families of the drug group.

Drs. Spitzer and Endicott evaluated these forms as well as others used in their studies of families. They found that there was no comprehensive form which could evaluate both the positive and negative effects of having the patient at home or in the hospital. Since this area of study is a crucial one regarding the optimal treatment of the psychotic patient, they began work on a new instrument. This instrument, the Family Evaluation Form, is currently being used in the Brief Hospitalization project.

The subject of after care for psychiatric patients has long been a problem for psychiatry. How can we maintain patients in the community and prevent rehospitalization? The Washington Heights Community Service was faced with a growing roll of after care patients and insufficient staff to deal with these patients in the ordinary clinical way. It was decided to conduct a study utilizing alternative methods of after care treatment. Each psychiatric resident was assigned about 15 after care patients, and these patients were followed either in group or individual therapy. The basic purpose of this study was to determine: If a psychiatric resident allocates 1½ hours per week to the treatment of a cohort of patients, which treatment would be more effective, seeing each patient individually for a short time or seeing the patients as a group for the full 1½ hours each week? Not only the patients, but in addition residents were randomized into group or individual therapy cohorts. The study began July 1, 1971, and is planned to terminate on June 30, 1972. Measures of psychopathology and role functioning have been carried out periodically and in addition data regarding readmission rates to the hospital were collected. Preliminary results indicate that there are no clear cut differences on any of the measures between individual and group therapy. There was a definite shift in residents' preferences from individual to group therapy as the study progressed.

Finally, what about the effects of research activities on the Service? In our opinion, clinical research conducted on a psychiatric service is bound to enrich the environment both educationally for the staff and clinically for the patients. This occurs when the research staff is viewed as an integral part of the service and not as a foreign body impinging on clinical operations. Certainly at the New York State Psychiatric Institute, our educational goals include more than the training of individuals to be competent clinicians. In addition, we hope to be able to stimulate their curiosity and teach them methods of research to further knowledge in psychiatry. Clinically, the Service undoubtedly has profited. Prior to
the "Day Study," clinical practice was in many ways similar to the way things were when the Service had been devoted to long term psychotherapy of selected patients. As a result of the "Day Study," newly admitted inpatients were evaluated immediately and no longer waited from one to two weeks for an admission conference. Use of partial hospitalization has increased greatly and length of inpatient stay has been shortened considerably. Finally, another benefit for the Service has been the attendance of research personnel at staff meetings and rounds because of this questioning attitude toward routine clinical practices.

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REFERENCES