Sociopsychological Aspects of Psychiatric Treatment

A Report of Treatment in Three Voluntary Hospitals

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IN THEIR STUDIES of the New Haven psychiatric patient population, Hollingshead and Redlich reported significant relationships between an individual's position in the social-class structure and the incidence of treated illness, types of diagnosed disorders, and kinds and duration of psychiatric treatment administered.[1] The influence of the economic status of the patient on the availability of treating personnel, however, was not excluded.

Studies of the role of social factors in the treatment of hospitalized patients independent of their financial status and the availability of treatments were undertaken at Hillside Hospital in 1957. In this hospital, a variety of treatment modes, including individual psychotherapy, pharmacotherapy, and convulsive therapies were available to all patients regardless of their ability to pay. In our surveys [2,3] we observed that patients hospitalized for the shortest periods were older, had less education, and were more often of foreign birth. These older, less-educated patients were predominantly treated by convulsive therapy and received more favorable clinical discharge ratings. In contrast, younger, native-born, more-educated patients were hospitalized for longer periods, treated primarily by psychotherapy, and received poorer discharge ratings. These clinical factors were also related to a measure of stereotypy, the California F scale.[4,5] Higher F scores, ie, greater stereotypy, were often found in patients diagnosed as involutional psychosis who were referred for convulsive therapy, hospitalized for shorter periods, and were more often rated as much improved or recovered.

It was suggested that differences in psychiatric treatment among hospitals should reflect a similar influence of social factors as noted for patients within Hillside Hospital. To test this suggestion it was decided to employ the procedures of the 1957 Hillside study in three institutions—Hillside Hospital, the C. F. Menninger Memorial Hospital, Topeka, Kan, and the Massachusetts Mental Health Center, Boston. These institutions were selected with the expectation that diverse treatment modalities were equally available to populations of different social classes. Each provided short-term treatment of voluntary patients and did not provide custodial care. Each is a residency training center with a full-time supervisory staff and active research units, emphasizing psychoanalytically-oriented psychotherapy.

This study was designed to determine the population characteristics of the three institutions with respect to social class, age, education, and F score; and to relate these characteristics to treatment variables of type of treatment, duration of hospitalization,

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diagnosis, and discharge evaluation among the institutions.

Method

A census of all voluntary, adult patients in residence in the institutions was undertaken in January 1959. While Menninger and Hillside Hospitals had voluntary patients only, a small number of those at the Massachusetts Mental Health Center (MMHC) were assigned by the courts for psychiatric evaluation or were members of a chronic schizophrenic state hospital group transferred for a specific research project. These patients were excluded from the study because of their nonvoluntary status.

The California F scale was scored for each patient on the census day.

Eighteen months later the records of discharged patients were examined to determine the social and psychiatric factors of the study. For a measure of social class, the Hollingshead two-factor index—a weighted score of education and occupation—was used.[2,3,6] The study population consisted of 173 patients at Hillside, 100 at Menninger, and 95 at the Massachusetts Mental Health Center.

The study included examination of the relations of the social to the psychiatric variables within each institution as well as between institutions. These comparisons were difficult, however, because of various methodological differences discussed below. These difficulties were most marked in the intrahospital comparisons and accordingly, in the analyses of psychiatric variables emphasis will be placed on the differences between institutions with citation of intrainstitutional trends. These difficulties also led to missing information for some data, reflected in the tables by the varying population sample sizes.

Results

I. *Methodological Problems.*—When reporting studies from one institution, the structure of the hospital is taken for granted and either ignored or mentioned briefly. In gathering comparable data from multiple institutions, however, the differences between institutions are accentuated. While these institutions were selected as comparable in teaching, research, and treatment programs, they were functionally unlike in ways which influenced the data of the study. Specific differences were prominent in the designation of type of treatment, diagnostic classifications, and the evaluation of treatment outcome.

1. Designation of Type of Treatment: The criteria for designating that a patient received "psychotherapy" differed among the institutions, making comparisons difficult.

At Menninger Hospital psychotherapy was designated as treatment administered on a prescription basis by a staff psychiatrist for which the patient was charged a fee. Sessions with a psychiatric resident physician were considered part of routine administrative patient care.

At Hillside Hospital psychotherapy was defined as treatment sessions with a psychiatric resident. Staff psychiatrists did not treat patients, but restricted their activities to supervising resident physicians. No additional fees were charged.

At the Massachusetts Mental Health Center psychotherapy was designated as the activity of many disciplines—psychiatric residents, psychologists, social workers, nurses, and medical students. Formal records of such sessions were not routinely included in the patient's record and to ascertain which patients received psychotherapy it was necessary for members of the study team to interview the resident physician responsible for each case.

2. Diagnosis: Individual institutional diagnostic styles made comparisons difficult. At Menninger Hospital diagnoses employed the multiple evaluative scheme recommended by the American Psychiatric Association, while both Hillside and MMHC followed different unitary systems. Several examples of diagnoses from Menninger are listed in Table 1, with our suggested conversions into categories comparable to that of the other two institutions. These conversions provide a source of distortion.

TABLE 1.—*Redesignation of Discharge Diagnoses*

Menninger Discharge Diagnoses	General Classification
Depressive reaction, narcissistic personality	Psychoneurosis
Anxiety reaction, narcissistic personality	Psychoneurosis
Narcissistic personality	Personality trait disturbance
Narcissistic personality, alcoholism, chronic infantile personality	Sociopathic personality disturbance
Passive aggressive personality, alcoholism	Sociopathic personality disturbance
Infantile personality, schizophrenic reaction, schizoaffective type	Schizophrenic psychosis

3. Discharge Ratings of Improvement: Ratings of improvement at the three hospitals varied in format and detail. The discharge rating at Menninger Hospital was tripartite with a separate evaluation for social, characterological, and syndrome changes. Hillside Hospital and Massachusetts Mental Health Center had global ratings making it difficult to assess the contribution of each factor of the Menninger system (Table 2). For this study the Menninger syndrome rating was compared to the global ratings of the other institutions.

TABLE 2.—*Comparative Ratings of Clinical Condition at Time of Hospital Discharge*

Menninger Hospital	Hillside Hospital	MM HC
Social adjustment	Recovered	Recovered
Improved	Much improved	Markedly improved
Unimproved	Improved	Moderately improved
Character structure	Unimproved	Slightly improved
Improved		Unimproved
Unimproved		
Syndrome		
Complete remission		
Improved		
Unchanged (or worse)		

II. *Interhospital Comparisons.*—1. Sociopsychological Variables: The distribution of the variables of social class, age, education, and California F scale score among the three institutions is presented in Table 3.

A. Social Class. The anticipated difference in social class composition of the three institutions was observed. At Menninger Hospital the population was predominantly upper class; at Hillside Hospital, middle class; and at Massachusetts Mental Health Center, predominantly lower class.

B. Age. There were no differences in age distribution in the institutional populations.

C. Education. The populations also differed in educational attainment, with patients having more years of education at Menninger Hospital than at Massachusetts Mental Health Center. While 41% of the patients at MMHC had not completed high school, only 32% at Hillside and 23% at Menninger did not graduate.

D. F Score. Differences in the distribution of scores on the California F scale were also observed. Fifty-one percent of Menninger patients had F scores below 30, and only 8% with scores of 50 or above—the higher F scores being associated with higher degrees of stereotypy. In contrast, at Hillside 31% of the patients had F scores below 30 while at MMHC only 20% were below 30.

Thus, differences in social class, educational attainment, and performance on the F scale were observed. These differences permit a test of the hypotheses relating sociopsychological factors to the treatment variables among these institutions.

2. Psychiatric Treatment Variables: A. Selection of Treatment. Among the institutions, significantly fewer patients at Menninger Hospital (43%) received somatic therapy than at Hillside (64%) or MMHC (68%) (Table 4).

B. Duration of Hospitalization. The three institutions differed with regard to patient's length of stay (Table 4). Patients at Menninger Hospital were hospitalized longest, with 65% of the patients remaining for 12 months or more, compared to 31% of the Hillside patients and only 5% at the Massachusetts Mental Health Center. The modal stay of the Hillside group was be-

TABLE 3.—*Interhospital Comparisons for Sociopsychological Variables*

		Menninger Hospital	Hillside Hospital	MMHC
Social class	*N*	87	133	72
	I	31%	7%	3%
	II	51	20	28
	III	17	34	13
	IV	1	34	28
	V	0	5	28
	$\chi^2 = 121.5$, df = 8, $P < 0.001$.			
Age	*N*	100	173	95
	<20	19%	19%	15%
	20-39	59	58	52
	40+	22	23	33
	$\chi^2 = 3.9$, df = 4, $P = NS$			
Years of education	*N*	100	173	91
	<12	23%	32%	41%
	12-15	54	51	49
	16+	23	17	10
	$\chi^2 = 9.7$, df = 4, $P < 0.05$			
F score	*N*	92	163	76
	10-29	51%	33%	20%
	30-49	41	50	38
	50-70	8	17	42
	$\chi^2 = 39.2$, df = 4, $P < 0.001$			

TABLE 4.—*Interhospital Differences in Treatment Variables*

		Menninger Hospital	Hillside Hospital	MMHC
Type of treatment	*N*	100	173	89
	Psychotherapy	21%	36%	24%
	Somatic	43	64	68
	Other	36	—	8
	$\chi^2 = 82.8$, df = 4, $P < 0.001$			
Duration of hospitalization	*N*	100	173	95
	<7 Mo	22%	27%	67%
	7-11 Mo	13	42	27
	>11 Mo	65	31	5
	$\chi^2 = 90.6$, df = 4, $P < 0.001$			
Discharge evaluation	*N*	99	172	88
	Recovered, much improved	1%	23%	28%
	Improved	80	62	61
	Unimproved	19	15	10
	$\chi^2 = 29.3$, df = 4, $P < 0.001$			
Discharge diagnosis	*N*	95	171	85
	Schizophrenia	43%	52%	54%
	Affective psychosis	5	22	17
	Psychoneurosis & personality disorder	52	26	29
	$\chi^2 = 23.8$, df = 4, $P < 0.001$			

tween 7 and 11 months while two thirds of the MMHC patients were discharged within six months of hospitalization.

C. Discharge Evaluation. In each hospital, most patients were evaluated at the time of discharge as "improved" (Table 4). At Menninger Hospital, however, a higher percentage (19%) of patients were rated as "unimproved" and only a single patient was scored "recovered" or "much improved." The highest percentage of "recovered" or "much improved" ratings (28%) and the lowest proportion of "unimproved" (10%) were found at the Massachusetts Mental Health Center.

D. Diagnosis. For statistical analysis three diagnostic groupings were made: schizophrenia, affective disorders, and psychoneurosis and personality disorders (Table 4). The diagnostic proportions of patients within these groups were similar for Hillside and MMHC, as slightly more than half were diagnosed as schizophrenia and one quarter as psychoneurosis or affective disorder. In contrast, at Menninger Hospital psychoneurosis and personality disorder accounted for more than 50% of the population.

TABLE 5.—*Duration of Hospitalization, by Age*

Age	Percentage of Age Group Staying Over One Year: Menninger	Hillside	MMHC
Below 20	81	42	14
20-29	73	36	6
30-39	61	30	6
40-49	30	20	0
50+	36	0	0

III. *Intrahospital Comparisons.*—The lack of meaningful criteria for the subdivision of populations, their homogeneity within each institution, and the limited sample size (several groupings were obtained which had fewer than five cases) precluded significant intrahospital comparisons. However, the trends appeared similar to those found in the earlier study. Age and F score were found related to the selection of treatment at Menninger Hospital (older and higher F score patients more frequently receiving somatic therapy), and F score alone at Hillside. Length of hospitalization and chronological age were related at both the Menninger and Hillside Hospitals—the younger patients remaining for the longest periods. While such relationships were significant in these two hospitals, a similar trend was noted at the MMHC (Table 5) where no patients over 40, but 14% of patients under the age of 20 remained longer than a year.

Comment

The patients of three voluntary psychiatric hospitals exhibited significant interinstitutional differences in social class and years of education, but not age; in distribution of California F Scale scores; and in each of the treatment variables—duration of hospitalization, selection of treatments, and distributions of diagnoses and discharge evaluations.[7] Expectations based on our earlier intra-Hillside Hospital study were confirmed. The institution serving upper-class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the

three institutions. Similarly, the institution serving lower-class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

It is our impression that these differences in psychiatric treatment are related more to differences in staff attitudes and social class variables than psychiatric differences in populations. The contrasts between institutions in duration of hospitalization are great, as are the complexity of diagnostic formulations, discharge evaluations, definitions of psychotherapy, and the details and amount of recorded data. While these stylistic differences may be dismissed as idiosyncratic, they follow a pattern related to social differences, and their consistency with expectations suggests a greater dependence on social class variables than ordinarily acknowledged.

Such population and treatment variable relationships are interactive processes, determined both by the attitude of the physician and the administrative staff and by the constellation of symptoms or history which patients present. Such relationships are marked most in those psychiatric conditions where diagnostic criteria are least specific, ie, where objective criteria defining diseases of known etiology are absent, as in schizophrenia, psychoneurosis, personality and behavior disorders. Under these conditions of perceptual and situational ambiguity, the observer's attitudes and expectations become significant aspects of his perceptions, classifications, and decisions. A similar situation was clearly documented by Pasamanick et al[7] in their study of variations in diagnosis within a single institution. They observed that patients assigned at random to different wards did not differ in type of admission, marital status, education, age, or residence. Significant differences did occur, however, in the incidence of various diagnostic classifications among the three wards and among three administrators on one ward. As no differences in the populations were demonstrated, we believe the different incidence of diagnoses reflect the attitudes of the examiners.

Present psychiatric concepts of diagnosis and clinical evaluation have little meaning when transferred from one institution to another. Literal adherence to these concepts produces paradoxical results. For example, Menninger Hospital with more highly trained personnel conducting treatment, keeps its patients for the longest time, has the fewest patients diagnosed as schizophrenia, and yet, reports the poorest treatment results. At MMHC, in contrast, which is most inclusive in defining a therapist, keeps patients for the shortest periods, and has a higher proportion of the population classed as schizophrenia, reports the best treatment results.

In the absence of independent criteria for the quality of care or the assessment of comparability of populations for degree of illness among the institutions, these findings do not reflect the relative therapeutic efficacy of the institutions. Since the evaluations are based on the institution's own ratings, we believe that the differences reflect variations in the criteria used for evaluation of improvement rather than intrinsic psychiatric characteristics.

In our initial Hillside study[3] it was postulated that different criteria of improvement were utilized for persons of different social background. It was suggested that the higher the person's social background the more complex the criteria employed. This has been literally confirmed in the present study, with the staff of Menninger Hospital using a tripartite rating compared to the global rating of the other two institutions. Even considering the syndrome rating on which our comparative statistical analyses were based, it is our contention that for lower-class persons we are apt to assess improvement in relation to symptom relief or the patient's capacity to resume work, while for upper-class persons the criteria emphasize such complex intangibles as "developing insight," or "working through one's problems."

While these investigations have again demonstrated the role of social factors in psychiatric treatment, we have been greatly impressed by the methodological problems of studies across institutions. These institutions

were selected for their educational leadership and the expectation that the recorded variables would be clearly defined. But differences in institutional style made it difficult to obtain comparable data. This experience is a cue to the problems of the conventional use of comparative statistics, especially in the evaluation of psychiatric therapies. The use of discharge ratings, diagnostic classifications, or length of hospitalization as criteria in therapeutic evaluations or the identification of comparable populations are subject to extensive error unless the institutions are clearly matched for staff attitudes and style as well as social class patterns in patient populations. These difficulties also extend to the failures of scientists to confirm clinical or laboratory observations made in other laboratories, for the lack of confirmation may reflect differences in populations and psychiatric criteria as much as errors in the original hypotheses. The use of the terms "schizophrenia" or "psychoneurosis" to explore changes in psychological and biological features of mental illness has led to a science burdened by negative results. Even were a valid observation to be reported from one laboratory today, we do not have the methods to describe psychiatric populations adequately for a satisfactory test of the hypothesis. Increased attention must be paid to the classification of subjects by "objective" criteria rather than our present methods, so highly dependent on institutional and observer attitudes and the sociopsychological aspects of the therapist-patient interaction.

Summary

Population characteristics, defined by social class, age, education, and F score, were related to treatment variables in three voluntary teaching hospitals. Treatment variables included type of treatment, duration of hospitalization, diagnosis, and discharge evaluation. Interinstitutional differences were observed in patient social class, years of education, and distribution of California F scores, but not age.

The variations in treatment characteristics among institutions were significantly different in the predicted direction. The institution serving upper-class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses, and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower-class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

These variations in psychiatric practices followed a pattern consistent with the social class differences among the institutions and are not regarded as idiosyncratic.

Such differences in institutional style make comparisons of diagnoses, duration of hospitalization, and treatment results between institutions difficult and tenuous, and the need for more objective criteria for the classification of psychiatric populations is emphasized.

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Families of Children With Early Childhood Schizophrenia

Selected Demographic Information

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PREVIOUS STUDIES regarding the etiological importance of family background in childhood schizophrenia have produced diverse findings and impressions. Kanner [4] has stated that autistic children are usually found to have intelligent, sophisticated parents who have attained a high educational level. In his population of autistic patients, 94% of the parents were high school graduates, while 74% of the fathers and 49% of the mothers had completed college. In another publication,[3] he remarked on a low incidence of divorce among these families. Bender,[1] on the other hand, has noted that no such trends exist among the parents of schizophrenic children seen at Bellevue, but rather that these children come from a wide variety of backgrounds.

It has also been reported that a fairly high ratio of boys to girls is common in a schizophrenic population, and that these children are frequently the firstborn in their sibling group. Bender [2] lists the male-female ratio as 2:1 in a group of 142 schizophrenic children under 7 years of age. Phillips,[6] with a population of 27 autistic children, noted that 23 were boys, which is a male-female ratio of nearly 6:1. He also presents data on ordinal position of autistic children. In the general population, the expected rate of firstborn children is 44.12%.[6] In a group of 635 disturbed (but nonautistic) children, Phillips found that 76.38% were firstborn, while of the 27 autistic children, 81.5% were firstborn. Phillips interprets these data to suggest that autistic children differ from the normal population in matters of sexual ratio and ordinal position as do lesser disturbed children. He points out the suggestion of a continuum, with more severe childhood disturbances appearing concomitantly with a higher ratio of boys to girls, and with a higher proportion of firstborn children. It should be noted that any data on ordinal position can be understood better when viewed in conjunction with maternal age at the birth of the child.

Discrepancies among these various reports of data may be due to disparities in patient populations from which samples were drawn. Bender and Kanner, however, drew their patient sample from different population groups with respect to socioeconomic status. Kanner's probably came largely from people in higher socioeconomic groups in a university community while Bender had a wider population to draw from in New York city. Since this potential error is compounded by the relatively low incidence of childhood schizophrenia in the general population, it would seem useful to compile relevant information from many treatment centers.

The purpose of the present paper is to make available pertinent information collected between 1955 and 1963 in the Children's Service of LaRue D. Carter Memorial Hospital, Indianapolis. The data on schizophrenic children is compared with that obtained on disturbed children given diagnoses other than childhood schizophrenia. Since LaRue Carter Hospital is the only residential treatment unit for disturbed youngsters in the state of Indiana, the patient population is probably representative of all geographic areas of the state as well as a variety of socioeconomic backgrounds.

Method

Subjects.—Included in the study were the children whose preadmission diagnosis was one of emotional disturbance, whether or not the child was admitted

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Studies of the role of social factors in the treatment of hospitalized patients independent of their financial status and the availability of treatments were undertaken at Hillside Hospital in 1957. In this hospital, a variety of treatment modes, including individual psychotherapy, pharmacotherapy and convulsive therapies were available to all patients regardless of their ability to pay. In these surveys (3,4) we observed that patients hospitalized for the shortest periods were older, had less education and were more often of foreign birth. These older, less educated patients were predominantly treated by convulsive therapy and received more favorable clinical discharge ratings. In contrast, younger, native born and more educated patients were hospitalized for longer periods, treated primarily by psychotherapy and received poorer discharge ratings. These clinical factors were also related to a measure of stereotypy, the California F Scale (1,5). Higher F scores, i.e., greater stereotypy, were often found in patients diagnosed as involutional psychosis, who were referred for convulsive therapy, hospitalized for shorter periods, and more often were rated as much improved or recovered.

In the survey reported here, it was suggested that differences in psychiatric treatment among hospitals should reflect the influence of social factors as noted for the patients within Hillside Hospital. To test this suggestion it was decided to employ the procedures of the 1957 Hillside study in three institutions -- Hillside Hospital, the C. F. Menninger Memorial Hospital in Topeka and the Massachusetts Mental Health Center in Boston. These institutions were selected with the expectation that they had diverse treatment modalities equally available, yet served patients of different social classes. Each provided short-term treatment of voluntary patients and did not provide custodial care. Each is a residency training center with a full time supervisory staff and active research units, emphasizing psychoanalytically-oriented psychotherapy.

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METHOD

A census of all voluntary, adult patients in residence in the institutions was undertaken in January, 1959. While Menninger and Hillside Hospitals had voluntary patients only, a small number of those at the Massachusetts Mental Health Center (MMHC) were assigned by the courts for psychiatric evaluation or were members of a chronic schizophrenic state hospital group transferred for a specific research project. These patients were excluded from the study because of their non-voluntary status. The California F scale was scored for each patient on the census day.

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RESULTS

A. Methodological Problems

When reporting studies from one institution, the structure of the hospital may be taken for granted and either ignored or mentioned briefly. In gathering comparable data from multiple institutions, however, the many differences between institutions are accentuated. While these institutions were selected as comparable in teaching, research and treatment programs, they were functionally unlike in ways which influenced the data of the study. Specific differences were prominent in the designation of type of treatment, diagnostic classifications, and the evaluation of treatment outcome.

1. Designation of Type of Treatment: The criteria for designating that a patient received "psychotherapy" differed among the institutions, making comparisons difficult.

At Menninger Hospital psychotherapy was designated as treatment administered on a prescription basis by a staff psychiatrist for which the patient was charged a fee. Sessions with the psychiatric resident were considered part of routine administrative patient care.

At Hillside Hospital psychotherapy was defined as treatment sessions with a psychiatric resident. Staff psychiatrists did not treat patients, but restricted their activities to supervising resident physicians. No additional fees were charged.

At the Massachusetts Mental Health Center psychotherapy was designated as the activity of many disciplines -- psychiatric residents, psychologists, social workers, nurses and medical students. Formal records of such sessions were not routinely included in the patient's record and to ascertain which patients received psychotherapy it was necessary for members of the study team to interview the resident responsible for each case.

2. Diagnosis: Individual institutional diagnostic styles made comparisons difficult. At Menninger Hospital diagnoses employed the multiple evaluative scheme recommended by the American Psychiatric Association, while both Hillside and MMHC followed different unitary systems. Several examples of diagnoses from Menninger are listed in Table I, with our suggested conversions into categories comparable to that of the other two institutions. These conversions provide a source of distortion.

Table I

3. Discharge Ratings of Improvement: Ratings of improvement at the three hospitals varied in format and detail. The discharge rating at Menninger Hospital was tripartite with a separate evaluation for social, characterological and syndrome changes. Hillside Hospital and Massachusetts Mental Health Center had global ratings making it difficult to assess the contribution of each factor of the Menninger system (Table II). For this study the Menninger syndrome rating was compared to the global ratings of the other institutions.

Table II

B. Inter-hospital Comparison

1. Sociopsychological Variables

The distribution of the variables of social class, age, education and California F Scale score among the three institutions is presented in Table III.

Table III

a) Social Class: The anticipated difference in social class composition of the three institutions was observed. At Menninger Hospital the population was predominantly upper class; At Hillside Hospital, middle class; and at Massachusetts Mental Health Center, predominantly lower class.

b) Age: There were no differences in age distribution in the institutional populations.

c) Education: The populations also differed in educational attainment, with patients having more years of education at Menninger Hospital than at Massachusetts Mental Health Center. While 41 per cent of the patients at MMHC had not completed high school, only 32 per cent at Hillside and 23 per cent at Menninger did not graduate.

d) F Score: Differences in the distribution of scores on the California F Scale were also observed. Fifty-one per cent of Menninger patients had F scores below 30, and only eight per-cent with scores of 50 or above -- the higher F scores being associated with higher degrees of stereotypy. In contrast, at Hillside thirty-one per cent of the patients had F scores below 30 while at MMHC only twenty per cent were below 30.

Thus, differences in social class, educational attainment and performance on the F Scale were observed. These differences permit a test of the hypotheses relating sociopsychological factors to the treatment variables among these institutions.

2. Psychiatric Treatment Variables

a) Selection of Treatment: Among the institutions, significantly fewer patients at Menninger Hospital (43%) received somatic therapy than at Hillside (64%) or MMHC (68%) (Table IV).

b) Duration of Hospitalization: The three institutions differed with regard to patient's length of stay (Table IV). Patients at Menninger Hospital were hospitalized longest, with 65% of patients remaining for twelve months or more, compared to 31 per-cent of the Hillside patients and only 5 per-cent at the Massachusetts Mental Health Center. The modal stay of the Hillside group was between seven and eleven months while two-thirds of the MMHC patients were discharged within six months of hospitalization.

c) Discharge Evaluation: In each hospital, most patients were evaluated at the time of discharge as "improved" (Table IV). At Menninger Hospital, however, a higher percentage (19%) of patients were rated as "unimproved" and only a single patient was scored "recovered" or "much improved". The highest percentage of "recovered" or "much improved" ratings (28%) and the lowest proportion of "unimproved" (10%) were found at the Massachusetts Mental Health Center.

d) Diagnosis: For statistical analysis three diagnostic groupings were made: schizophrenia, affective disorders, and

psychoneurosis and personality disorders (Table IV). The diagnostic proportions of patients within these groups were similar for Hillside and MMHC, as slightly more than half were diagnosed as schizophrenia and one-quarter as psychoneurosis or affective disorder. In contrast, at Menninger Hospital psychoneurosis and personality disorder accounted for more than fifty per-cent of the population.

Table IV

C. Intra-Hospital Comparisons

The lack of meaningful criteria for the subdivision of populations, their homogeneity within each institution, and the limited sample size (several groupings were obtained which had fewer than five cases) precluded significant intra-hospital comparisons. However, the trends appeared similar to those found in the earlier study. Age and F score were found related to the selection of treatment at Menninger Hospital (older and higher F score patients more frequently receiving somatic therapy), and F score alone at Hillside. Length of hospitalization and chronological age were related at both the Menninger and Hillside Hospitals - the younger patients remaining for the longest periods. While such relationships were significant in these two hospitals, a similar trend was noted at the MMHC (Table V) where no patients over 40, but 14% of patients under the age of 20 remained longer than a year.

Table V

DISCUSSION

The patients of three voluntary psychiatric hospitals exhibited significant inter-institutional differences in social class and years of education, but not age; in distribution of California F Scale scores; and in each of the treatment variables -- duration of hospitalization, selection of treatments and distributions of diagnoses and discharge evaluations (7). Expectations based on our earlier intra-Hillside Hospital were confirmed. The institution serving upper class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

It is our impression that these differences in psychiatric treatment are related more to differences in staff attitudes and social class variables than psychiatric differences in populations. The contrasts between institutions in duration of hospitalization are great, as are the complexity of diagnostic formulations, discharge evaluations, definitions of psychotherapy, and the details and amount of recorded data. While these stylistic differences may be dismissed as idiosyncratic, they follow a pattern related to social differences, and their consistency with expectations suggests a greater dependence on social class variables than ordinarily acknowledged.

Such population and treatment variable relationships are interactive processes, determined both by the attitude of the physician and the administrative staff and by the constellation of symptoms or history which patients present. Such relationships are marked most in those psychiatric conditions where diagnostic criteria are least specific, i.e., where objective criteria defining diseases of known etiology are absent, as in schizophrenia, psychoneurosis, personality and behavior disorders. Under these conditions of perceptual and situational ambiguity, the observer's attitudes and expectations become significant aspects of his perceptions, classifications, and decisions. A similar situation was clearly documented by Pasamanick, Dinitz and Lefton (6) in their study of variations in diagnosis within a single institution. They observed that patients assigned at random to different wards did not differ in type of admission, marital status, education, age or residence. Significant differences did occur, however, in

the incidence of various diagnostic classifications among the three wards and among three administrators on one ward. As no differences in the populations were demonstrated, we believe the different incidence of diagnoses reflect the attitudes of the examiners.

Present psychiatric concepts of diagnosis and clinical evaluation have little meaning when transferred from one institution to another. Literal adherance to these concepts produces paradoxical results. For example, Menninger Hospital with the more highly trained personnel conducting treatment, keeps its patients for the longest time, has the fewest patients diagnosed as schizophrenia, and yet, reports the poorest treatment results. At MMHC, in contrast, which is most inclusive in defining a therapist, keeps patients for the shortest periods, and has a higher proportion of the population classed as schizophrenia, reports the best treatment results.

In the absence of independent criteria for the quality of care or the assessment of comparability of populations for degree of illness among the institutions, these findings do not reflect the relative therapeutic efficacy of the institutions. Since the evaluations are based on the institution's own ratings, we believe that the differences reflect variations in the criteria used for evaluation of improvement rather than intrinsic psychiatric characteristics.

In our initial Hillside study (4) it was postulated that different criteria of improvement were utilized for persons of different social background. It was suggested that the higher the person's social background the more complex the criteria employed. This has been literally confirmed in the present study, with the staff of Menninger Hospital using a tripartite rating compared to the global rating of the other two institutions. Even considering the syndrome rating on which our comparative statistical analyses were based, it is our contention that for lower class persons we are apt to assess improvement in relation to symptom relief or the patient's capacity to resume work, while for upper class persons the criteria emphasize such complex intangibles as "developing insight," or "working through one's problems."

While these investigations have again demonstrated the role of social factors in psychiatric treatment, we have been greatly impressed by the methodological problems of studies across institutions. These institutions were selected for their educational

leadership and the expectation that the recorded variables would be clearly defined. But differences in institutional style made it difficult to obtain comparable data. This experience is a cue to the problems of the conventional use of comparative statistics, especially in the evaluation of psychiatric therapies. The use of discharge ratings, diagnostic classifications or length of hospitalization as criteria in therapeutic evaluations or the identification of comparable populations are subject to extensive error unless the institutions are clearly matched for staff attitudes and style as well as social class patterns in patient populations. These difficulties also extend to the failures of scientists to confirm clinical or laboratory observations made in other laboratories, for the lack of confirmation may reflect differences in populations and psychiatric criteria as much as errors in the original hypotheses. The use of the terms "schizophrenia" or "psychoneurosis" to explore changes in psychological and biological features of mental illness has led to a science burdened by negative results. Even were a valid observation to be reported from one laboratory today, we do not have the methods to describe psychiatric populations adequately for a satisfactory test of the hypothesis. Increased attention must be paid to the classification of subjects by "objective" criteria rather than our present methods, so highly dependent on institutional and observer attitudes and the socio-psychological aspects of the therapist-patient interaction.

SUMMARY AND CONCLUSION

Population characteristics, defined by social class, age, education and F score, were related to treatment variables in three voluntary teaching hospitals. Treatment variables included type of treatment, duration of hospitalization, diagnosis and discharge evaluation. Inter-institutional differences were observed in patient social class, years of education and distribution of California F scores, but not age.

The variations in treatment characteristics among institutions were significantly different in the predicted direction. The institution serving upper class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

These variations in psychiatric practices followed a pattern consistent with the social class differences among the institutions and are not regarded as idiosyncratic.

Such differences in institutional style make comparisons of diagnoses, duration of hospitalization and treatment results between institutions difficult and tenuous, and the need for more objective criteria for the classification of psychiatric populations is emphasized.

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TABLE I

Redesignation of Discharge Diagnoses

Menninger Discharge Diagnoses	General Classification
Depressive Reaction Narcissistic Personality	Psychoneurosis
Anxiety Reaction Narcissistic Personality	Psychoneurosis
Narcissistic Personality	Personality Trait Disturbance
Narcissistic Personality Alcoholism, Chronic Infantile Personality	Sociopathic Personality Disturbance
Passive Aggressive Personality Alcoholism	Sociopathic Personality Disturbance
Infantile Personality Schizophrenic Reaction, Schizo-Affective Type	Schizophrenic Psychosis

TABLE II

Comparative Ratings of Clinical

Condition At Time of Hospital Discharge

MENNINGER HOSPITAL	HILLSIDE HOSPITAL	MASSACHUSETTS MENTAL HEALTH CENTER
Social Adjustment	Recovered	Recovered
Improved	Much Improved	Markedly Improved
Unimproved	Improved	Moderately Improved
Character Structure	Unimproved	Slightly Improved
Improved		Unimproved
Unimproved		
Syndrome		
Complete Remission		
Improved		
Unchanged (or worse)		

TABLE III

Interhospital Comparisons for Sociopsychological Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
	N	(87)	(133)	(72)
Social Class	I	31%	7%	3%
	II	51	20	28
	III	17	34	13
	IV	1	34	28
	V	0	5	28
		$X^2 = 121.5$; df=8: $p < .001$		
Age	N	(100)	(173)	(95)
	<20	19%	19%	15%
	20-39	59	58	52
	40 +	22	23	33
		$X^2 = 3.9$; df=4; p=n.s.		
Years of Education	N	(100)	(173)	(91)
	<12	23%	32%	41%
	12-15	54	51	49
	16+	23	17	10
		$X^2 = 9.7$; df=4; $p<.05$		
F Score	N	(92)	(163)	(76)
	10-29	51%	33%	20%
	30-49	41	50	38
	50-70	8	17	42
		$X^2 = 39.2$; df=4; $p<.001$		

TABLE IV

Interhospital Differences in Treatment Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
Type of Treatment	N	(100)	(173)	(89)
	Psychotherapy	21%	36%	24%
	Somatic	43	64	68
	Other	36	--	8
	$X^2 = 82.8$; df=4; $p<.001$			
Duration of Hospitalization	N	(100)	(173)	(95)
	<7 months	22%	27%	67%
	7-11 months	13	42	27
	>11 months	65	31	5
	$X^2 = 90.6$; df=4; $p<.001$			
Discharge Evaluation	N	(99)	(172)	(88)
	Recovered, Much Improved	1%	23%	28%
	Improved	80	62	61
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	$X^2 = 29.3$; df=4; $p<.001$			
Discharge Diagnosis	N	(95)	(171)	(85)
	Schizophrenia	43%	52%	54%
	Affective Psychosis	5	22	17
	Psychoneurosis and Personality Disorder	52	26	29
	$X^2 = 23.8$; df=4; $p<.001$			

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Duration of Hospitalization

By Age

PERCENTAGE OF AGE GROUP STAYING OVER ONE YEAR

Age	Menninger	Hillside	MMHC
Below 20	81	42	14
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50+	36	0	0

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SUMMARY and CONCLUSION

1. In three psychotherapeutic-oriented teaching hospitals, population characteristics were related to treatment variables. Populations were defined by social class, age, education and *F* score, and were related to type of treatment, duration of hospitalization, diagnosis and discharge evaluation.

2. Significant interinstitutional differences were observed in characteristics of patient social class, years of education and distribution of California *F* scores, but not age.

3. The variations in treatment characteristics among institutions were found to be significantly different in the predicted direction.

4. These variations in psychiatric practices follow a pattern consistent with social class differences among institutions and are not regarded as being idiosyncratic.

5. The differences in institutional style make comparisons of diagnoses, duration of hospitalization, and treatment results between institutions difficult and tenuous, and the need for more objective criteria of classification of populations is emphasized.

hospitalization as criteria in therapeutic evaluations or the identification of comparable populations are subject to considerable error unless the institutions are clearly matched for social class patterns in patient population and for staff attitudes and style. These difficulties may also extend to the failures of scientists to confirm observations made in other laboratories, for the lack of confirmation may be as much a reflection of differences in populations and psychiatric criteria as to errors in the original hypotheses. The widespread use of such terms as "schizophrenia" or "psychoneurosis" to explore the changes in psychological or biological features with mental illness has led to a science burdened by negative results. Even were a valid observation to be reported from one laboratory, we do not have methods available to describe populations adequately to provide a sound confirmation. Increased attention must be paid to the methodological problems of classifying subjects by "objective" criteria rather than the present methods which appear to be so highly dependent on institutional and observer attitudes and the sociopsychological aspects of the therapist-patient interaction.

Sociopsychological Aspects of Psychiatric Treatment in Three Voluntary Hospitals

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7/13/62

Recent community studies have demonstrated a relationship between social factors and psychiatric treatment. In their study of the New Haven psychiatric patient population, Hollingshead and Redlich reported significant relationships between an individual's position in the social class structure and the prevalence of treated illness, types of diagnosed disorders and kinds and duration of psychiatric treatment administered (3). The influence of patient economic status upon the availability of treating personnel, however, was not excluded in these studies. To test the role of social factors in the treatment of hospitalised patients independent of patient's finances and availability of treatments, a survey was undertaken at Hillside Hospital in 1957. In this hospital, a variety of treatment modes, including individual psychotherapy and organic therapies are available to all patients regardless of their ability to pay.

In the Hillside studies (4,5) it was observed that patients hospitalized for the shortest period were the oldest, had the least education and were most likely to have been foreign born. The older, less educated patients were predominantly treated by convulsive therapy and received the more favorable discharge ratings. Younger, native born and more educated patients were hospitalised the longest, treated primarily by psychotherapy and generally received the poorer discharge ratings. The clinical factors were also related

to a measure of stereotypy, the California F Scale (1,6). Higher F scores, i.e., greater stereotypy, were often found in patients diagnosed as involutional psychosis who were referred for somatic therapy, hospitalized for a shorter period, and more often were rated as much improved or recovered.

Another hypothesis developed at this time was that differences in various aspects of psychiatric treatment among hospitals should show the same relationship to social factors as noted within Hillside Hospital. To test this suggestion it was decided to employ the procedures of the 1957 Hillside study in three institutions -- Hillside Hospital, the C.F. Menninger Memorial Hospital of Topeka and the Massachusetts Mental Health Center of Boston. These institutions were selected with the expectation that they served patients of different social classes. It was anticipated that in these hospitals there would be a similarity in attitude towards treatment and education. Each is a teaching hospital with a full time supervisory staff and active research departments. They emphasize psychoanalytically-oriented psychotherapy but provide other treatments such as somatic therapies and active programs of milieu therapy. Each stresses short-term treatment of voluntary patients and does not provide custodial care.

The specific aims of this study were to determine the

population characteristics of the three institutions with respect to social class, age, education and F score; and to relate these characteristics to the treatment variables of type of treatment, duration of hospitalisation, diagnosis and discharge evaluation among the institutions.

METHOD

A census of all voluntary, adult patients in residence in these institutions was undertaken in January, 1959. While Menninger and Hillside Hospitals had voluntary patients only, a small number of those at the Massachusetts Mental Health Center (MMHC) were assigned by the courts for psychiatric evaluation or were members of a chronic schizophrenic state hospital group transferred for a specific research project. These patients were excluded from the study because of their non-voluntary status. Each patient was given the California F scale on the census day. Eighteen months later the records of discharged patients were examined to determine the social and psychiatric factors of the study. For a measure of social class, the Hollingshead 2-factor index - a weighted score of education and occupation - was used (2). The study population consisted of 173 patients at Hillside, 100 at Menninger and 95 at the Massachusetts Mental Health Center.

The study included examination of the relations of the social to the psychiatric variables within each institution as well as between institutions. These comparisons were difficult however, because of various methodological differences discussed below. These difficulties were most marked in the intrahospital comparisons, and accordingly, in the analyses of psychiatric variables emphasis will be placed on the differences between institutions with citation of intra-institutional trends.

RESULTS

A. Inter-hospital Comparisons

1. Methodological Problems

When reporting studies from a home institution, the structure of the hospital is taken for granted and either ignored or mentioned briefly. However, in studying a strange institution and attempting to gather comparable data one is made aware of the many differences between institutions. While we selected these institutions as comparable in teaching, research and treatment programs, we found that they were unlike structurally in ways which influenced the data of the study. Specific problems were noted in the designation of type of treatment, diagnostic classes and the evaluation of treatment outcome.

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Thus, the anticipated differences in the social class of the populations were observed, as well as significant differences in educational attainment and performance on the F Scale. These differences permit testing the hypothesis concerning the relation of sociopsychological factors to the treatment variables among the institutions.

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Table XV

B. Intra-Hospital Comparisons

1. Methodological Problems

The intra-hospital statistical comparisons were limited by a variety of methodological problems. Most prominent was the lack of meaningful statistical cut-off criteria for the subdivision of populations, in part due to the homogeneity of the population within each institution and to the sample size. In the statistical analyses within a single institution several cells were obtained which had either none or fewer than five cases, thus not permitting a satisfactory intrahospital test of the hypothesis.

2. Intra-hospital Comparison

With this methodological limitation some trends similar to that found in the earlier study were observed, although few were of statistical significance. With regard to selection of treatment, for example, age and *F* score were found related at Menninger Hospital (older and higher *F* score patients more frequently receiving somatic therapy), and *F* score alone at Hillside.

Length of hospitalization and chronological age were related at both the Menninger and Hillside Hospitals - the

younger patients remaining for the longest period. While such relationships are significant in these two hospitals, a similar trend is noted at the MMHC (Table V) where no patients over 40, but 18% of patients under the age of 20 remained longer than a year.

Table V

DISCUSSION

In this comparison of three voluntary psychiatric hospitals we have observed significant interinstitutional differences of patients in the social variables of years of education and social class, but not age; in distribution of California F Scale scores; and in each of the treatment variables -- duration of hospitalization, selection of treatments and distributions of diagnoses and discharge evaluations. The expectation that the institution serving upper class patients would have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, lower proportion of patients receiving organic forms of therapy, and poorest discharge ratings were each confirmed. Similarly, the institution serving lower class patients evinced shorter periods of hospitalization, low proportions of psychoneurotic diagnoses, and better discharge evaluations.

It is our impression that these differences in psychiatric treatment are more related to differences in staff attitudes than to differences in population samples. The contrasts between institutions in duration of hospitalization are great, as are the complexity of diagnostic formulations, discharge evaluations, definitions of psychotherapy, and the details and amount of recorded data. These stylistic

we believe they are largely reflections of the attitudes of the examiners.

It is clear that many of the present psychiatric concepts of diagnosis or clinical evaluation have relatively little meaning when transferred from one institution to another. If these concepts are taken literally the results become paradoxical. For example, Menninger Hospital has the most highly trained personnel conducting treatment, keeps its patients for the longest time and has fewest patients diagnosed as schizophrenia. And yet, despite these resources and favorable factors, it reports the poorest treatment results. At MMHC, in contrast, which is most inclusive in defining a therapist, which keeps patients for the shortest periods, and which has a higher proportion of the population classed as schizophrenia, the reported treatment results are the best.

It is probable that this study does not reflect the relative therapeutic efficacy of the institutions. Our data furnishes no independent criteria for determining which hospital provides the better care; nor for assessing the comparability of the population in the degree of illness. Since the evaluations are based on the institution's own ratings, we believe that the differences reflect variations in the criteria used for evaluation of improvement rather than any intrinsic psychiatric characteristics.

In our initial Hillside study (5) it was postulated that different criteria of improvement were utilized for persons of different social background. It was suggested that the higher the person's social background the more complex the criteria employed. This has been literally confirmed in the present study, with Menninger's using a tripartite rating compared to the global rating of the other two institutions. Even considering the syndrome rating on which our comparative statistical analysis were based, it is our contention that for lower class persons we are apt to assess improvement in relation to symptom relief or the patient's capacity to resume work, while for upper class persons the criteria stress such complex intangibles as "developing insight", or "working through one's problems".

While these investigations have again demonstrated the role of social factors in psychiatric treatment, we have been considerably impressed by the methodological problems of studies across institutions. These institutions were selected for their educational leadership and the expectation that the recorded variables would be clearly defined. But the differences in institutional style making it difficult to obtain comparable data are important cues to the problem of the conventional use of comparative statistics, especially in the evaluation of psychiatric therapies. The use of discharge ratings, diagnostic classifications or length of

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Sociopsychological Aspects of Psychiatric Treatment in Three Voluntary Hospitals

Robert L. Kahn, Ph.D.*, Max Pollack, Ph.D.

Nathaniel Siegel, Ph.D.**

and

Max Fink, M.D.***

This study was done when the authors were associated at the Department of Experimental Psychiatry, Hillside Hospital, Glen Oaks, L.I., N.Y., 1959-62.

The cooperation of the staffs of the Massachusetts Mental Health Center and the C.F. Menninger Memorial Hospital is gratefully acknowledged.

Aided, in part, by grants MY-2092 and MY-2715, of the National Institute of Mental Health, U.S. Public Health Service; and the Nassau County Mental Health Board.

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In their studies of the New Haven psychiatric patient population, Hollingshead and Redlich have reported significant relationships between an individual's position in the social class structure and the prevalence of treated illness, types of diagnosed disorders and kinds and duration of psychiatric treatment administered (3). The influence of the economic status of the patient on the availability of treating personnel, however, was not excluded.

Studies of the role of social factors in the treatment of hospitalized patients independent of patient's finances and the availability of treatments were undertaken at Hillside Hospital in 1957. In this hospital, a variety of treatment modes, including individual psychotherapy, pharmacotherapy and convulsive therapies were available to all patients regardless of their ability to pay. In these surveys (4, 5) we observed that patients hospitalized for the shortest periods were older, had less education and were more often of foreign birth. These older, less educated patients were predominantly treated by convulsive therapy and received more favorable clinical discharge ratings. In contrast, younger, native born and more educated patients were hospitalized for longer periods, treated primarily by psychotherapy and received poorer discharge ratings. These clinical factors were also related to a measure of stereotypy, the California F Scale (1,6). Higher F scores, i.e., greater stereotypy, were often found in patients diagnosed as involutional psychosis, who were referred for convulsive therapy, hospitalized for shorter periods, and more often were rated as much improved or recovered.

In this survey, it was suggested that differences in psychiatric treatment among hospitals should reflect the influence of social factors as noted for the patients within Hillside Hospital. To test this suggestion it was

decided to employ the procedures of the 1957 Hillside study in three institutions -- Hillside Hospital, the C.F. Menninger Memorial Hospital in Topeka and the Massachusetts Mental Health Center in Boston. These institutions were selected with the expectation that they served patients of different social classes and that the staff would exhibit similar attitudes toward treatment and education. They provide for the short-term treatment of voluntary patients, and do not provide custodial care. Each is a residency training center with a full time supervisory staff and active research units. They emphasize psychoanalytically-oriented psychotherapy but actively provide convulsive drug and milieu therapies.

This study was designed to determine the population characteristics of the three institutions with respect to social class, age, education and F score; and to relate these characteristics to treatment variables of type of treatment, duration of hospitalization, diagnosis and discharge evaluation among the institutions.

METHOD

A census of all voluntary, adult patients in residence in the institutions was undertaken in January, 1959. While Menninger and Hillside Hospitals had voluntary patients only, a small number of those at the Massachusetts Mental Health Center (MMHC) were assigned by the courts for psychiatric evaluation or were members of a chronic schizophrenic state hospital group transferred for a specific research project. These patients were excluded from the study because of their non-voluntary status. The California F scale was scored for each patient on the census day.

Eighteen months later the records of discharged patients were examined to determine the social and psychiatric factors of the study. For a measure of social class, the Hollingshead 2-factor index - a weighted score of education and occupation - was used (2,8). The study population consisted of 173 patients at Hillside, 100 at Menninger and 95 at the Massachusetts Mental Health Center.

The study included examination of the relations of the social to the psychiatric variables within each institution as well as between institutions. These comparisons were difficult however, because of various methodological differences discussed below. These difficulties were most marked in the intra-hospital comparisons, and accordingly, in the analyses of psychiatric variables emphasis will be placed on the differences between institutions with citation of intrainstitutional trends. These difficulties also led to missing information for some data, which is reflected in the varying population sample sizes in the tables.

RESULTS

A. Inter-hospital Comparisons

1. Methodological Problems

When reporting studies from one institution, the structure of the hospital may be taken for granted and either ignored or mentioned briefly. The many differences between institutions are accentuated in gathering comparable data from multiple institutions. While these institutions were selected as comparable in teaching, research and treatment programs, they were functionally unlike in ways which influenced the data of the study. Specific problems were prominent in the designation of type of treatment, diagnostic classifications, and the evaluation of treatment outcome.

a) Designation of Type of Treatment: The criteria for designating that a patient received "psychotherapy" differed among the institutions, making comparability difficult.

At Menninger Hospital psychotherapy was designated as treatment administered on a prescription basis by a staff psychiatrist for which the patient was charged a fee. Sessions with the psychiatric resident were considered part of routine administrative patient care.

At Hillside Hospital psychotherapy was defined as treatment sessions with a psychiatric resident. Staff psychiatrists did not treat patients, but restricted their activities to supervising resident physicians. No additional fees were charged.

At the Massachusetts Mental Health Center psychotherapy was designated as the function of many disciplines -- psychiatric residents, psychologists, social workers, nurses and medical students. Formal records of such sessions

were not routinely included in the patient's record and to ascertain which patients received psychotherapy it was necessary for members of the study team to interview the resident responsible for each case.

b) Diagnosis: Individual institutional diagnostic styles made comparisons difficult. At Menninger Hospital diagnoses employed the multiple evaluative data scheme recommended by the American Psychiatric Association while both Hillside and MMHC followed different unitary systems. Several examples of diagnoses from Menninger are listed in Table I, with our suggested conversions into categories comparable to that of the other two institutions. These conversions provide a source of distortion.

Table I

---

c) Discharge Ratings of Improvement: Ratings of improvement at the three hospitals varied in format and detail. The discharge rating at Menninger Hospital was tripartite with a separate evaluation for social, characterological and syndrome changes. Hillside Hospital and Massachusetts Mental Health Center had global ratings making it difficult to assess the contribution of each factor of the Menninger system (Table II). For this study the Menninger syndrome rating was compared to the global ratings of the other institutions.

Table II

---

2. Sociopsychological Variables

The distribution of the variables of social class, age, education

and California F Scale score among the three institutions is presented in Table III.

TABLE III

---

a) Social Class: The anticipated difference in social class composition of the three institutions was observed. At Menninger Hospital the population was predominantly upper class; at Hillside Hospital, middle class; and at Massachusetts Mental Health Center, predominantly lower class.

b) Age: There were no differences in age distribution in the institutional populations.

c) Education: The populations also differed in educational attainment, with patients having more years of education at Menninger Hospital than at Massachusetts Mental Health Center. While 41 per cent of the patients at MMHC had not completed high school, only 32 per cent at Hillside and 23 per cent at Menninger did not graduate.

d) F Score: Differences in the distribution of scores on the California F Scale were also observed. Fifty-one per cent of Menninger patients had F scores below 30, and only eight per cent with scores of 50 or above -- the higher F scores being associated with higher degrees of stereotypy. In contrast, at Hillside thirty-one per cent of the patients had F scores below 30 while at MMHC only twenty per cent were below 30.

Thus, the expected differences in social class, educational attainment and performance on the F Scale were observed. These differences permit a test of hypotheses concerning the relation of sociopsychological factors to the treatment variables among these institutions.

3. Psychiatric Treatment Variables

a) Selection of Treatment: Among institutions, significantly fewer patients at Menninger Hospital (43%) received somatic therapy than at Hillside (64%) or MMHC (68%) (Table IV).

b) Duration of Hospitalization: The three institutions differed with regard to patient's length of stay (Table IV). Patients at Menninger Hospital were hospitalized longest, with 65% of patients remaining for twelve months or more, compared to 31 per cent of the Hillside patients and only 5 per cent at the Massachusetts Mental Health Center. The modal stay of the Hillside group was between seven and eleven months while two-thirds of the MMHC patients were discharged within six months of hospitalization.

c) Discharge Evaluation: In each hospital, most patients were evaluated at the time of discharge as "improved" (Table IV). At Menninger Hospital, however, a higher percentage (19%) of patients were rated as "unimproved" and only a single patient was scored "recovered" or "much improved". The highest percentage of "recovered" or "much improved" ratings (28%) and the lowest proportion of "unimproved" (10%) were found at the Massachusetts Mental Health Center.

d) Diagnosis: For statistical analysis three diagnostic groupings were made: schizophrenia, affective disorders, and psychoneurosis and personality disorders (Table IV). The diagnostic proportions of patients within these groups were similar for Hillside and MMHC,

as slightly more than half were diagnosed as schizophrenia and one-quarter as psychoneurosis or affective disorder. In contrast, at Menninger Hospital psychoneurosis and personality disorder accounted for more than fifty per cent of the population.

Table IV

B. Intra-Hospital Comparisons

The lack of meaningful criteria for the subdivision of populations due to their homogeneity within each institution and to the sample size precluded adequate intra-hospital comparisons. Several groupings were obtained which had fewer than five cases, not permitting a satisfactory intrahospital test of the hypothesis.

Within this limitation, the trends appeared similar to those found in the earlier study. Age and F score were found related to the selection of treatment at Menninger Hospital (older and higher F score patients more frequently receiving somatic therapy), and F score alone at Hillside. Length of hospitalization and chronological age were related at both the Menninger and Hillside Hospitals - the younger patients remaining for the longest period. While such relationships were significant in these two hospitals, a similar trend was noted at the MMHC (Table V) where no patients over 40, but 14% of patients under the age of 20 remained longer than a year.

Table V

DISCUSSION

The patients of three voluntary psychiatric hospitals exhibited significant interinstitutional differences in the social variables of years of education and social class, but not age; in distribution of California F Scale scores; and in each of the treatment variables -- duration of hospitalization, selection of treatments and distributions of diagnoses and discharge evaluations.[8] The expectation that the institution serving upper class patients would have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, lower proportion of patients receiving somatic forms of therapy, and poorest discharge ratings were each confirmed. Similarly, the institution serving lower class patients evinced shorter periods of hospitalization, low proportions of psychoneurotic diagnoses, and better discharge evaluations.

It is our impression that these differences in psychiatric treatment are more related to differences in staff attitudes than to differences in populations. The contrasts between institutions in duration of hospitalization are great, as are the complexity of diagnostic formulations, discharge evaluations, definitions of psychotherapy, and the details and amount of recorded data. These stylistic differences cannot be dismissed as merely idiosyncratic since they follow a pattern related to social differences consistent with previous findings.

Such population and treatment variable relationships are interactive processes, determined both by the attitude of the physician and the administrative staff and by the constellation of symptoms or history which patients present. Such relationships are marked most in those psychiatric conditions where diagnostic criteria are least specific, i.e., where objective criteria defining diseases of known etiology are absent, as in schizophrenia, psychoneurosis and personality and behavior disorders. Under these conditions of perceptual or situational ambiguity the observer's attitudes and expectations become the basis for his perception and classification. This situation was clearly demonstrated by Pasamanick, Dinitz and Lefton (7) in their study of variations in diagnosis within a single institution. They observed that patients randomly assigned to different wards did not differ in type of admission, marital status, education, age or resisdence. Significant differences did occur, however, in the incidence of various diagnoses among the three wards and among three administrators on one ward. As it is unlikely that these differences were inherent in the populations, we believe they reflect the attitudes of the examiners.

Present psychiatric concepts of diagnosis or clinical evaluation have little meaning when transferred from one institution to another. Literal adherance to these concepts produces paradoxical results. For example, Menninger Hospital has the most highly trained personnel conducting treatment, keeps its patients for the longest time and has fewest patients diagnosed as schizophrenia. And yet, it reports the poorest

treatment results. At MMHC, in contrast, which is most inclusive in defining a therapist, which keeps patients for the shortest periods, and which has a higher proportion of the population classed as schizophrenia, the reported treatment results are the best.

These findings do not reflect the relative therapeutic efficacy of the institutions. We do not have independent criteria for the quality of care, nor the assessment of comparability of populations for degree of illness among the institutions. Since the evaluations are based on the institution's own ratings, we believe that the differences reflect variations in the criteria used for evaluation of improvement rather than any intrinsic psychiatric characteristics.

In our initial Hillside study (5) it was postulated that different criteria of improvement were utilized for persons of different social background. It was suggested that the higher the person's social background the more complex the criteria employed. This has been literally confirmed in the present study, with Menninger's using a tripartite rating compared to the global rating of the other two institutions. Even considering the syndrome rating on which our comparative statistical analyses were based, it is our contention that for lower class persons we are apt to assess improvement in relation to symptom relief or the patient's capacity to resume work, while for upper class persons the criteria emphasize such complex intangibles as "developing insight", or "working through one's problems."

While these investigations have again demonstrated the role of social factors in psychiatric treatment, we have been greatly impressed by the methodological problems of studies across institutions. These institutions were selected for their educational leadership and the expectation that the recorded variables would be clearly defined. But differences in institutional style made it difficult to obtain comparable data. This experience is a cue to the problems of the conventional use of comparative statistics, especially in the evaluation of psychiatric therapies. The use of discharge ratings, diagnostic classifications or length of hospitalization as criteria in therapeutic evaluations or the identification of comparable populations are subject to extensive error unless the institutions are clearly matched for staff attitudes and style as well as social class patterns in patient populations. We believe these difficulties also extend to the failures of scientists to confirm clinical or laboratory observations made in other laboratories, for the lack of confirmation may reflect differences in populations and psychiatric criteria as much as errors in the original hypotheses. The use of the terms "schizophrenia" or "psychoneurosis" to explore changes in psychological and biological features of mental illness has led to our present day science burdened by negative results. Were a valid observation to be reported from one laboratory, the methods are not available today to adequately describe psychiatric populations for an adequate confirmation.

Increased attention must be paid to the methodological problems of classifying subjects by "objective" criteria rather than the present methods, so highly dependent on institutional and observer attitudes and the sociopsychological aspects of the therapist-patient interaction.

SUMMARY and CONCLUSION

1. In three psychotherapeutic-oriented teaching hospitals, population characteristics were related to treatment variables. Populations were defined by social class, age, education and F score, and were related to type of treatment, duration of hospitalization, diagnosis and discharge evaluation.

2. Significant interinstitutional differences were observed in characteristics of patient social class, years of education and distribution of California F scores, but not age.

3. The variations in treatment characteristics among institutions were found to be significantly different in the predicted direction.

4. These variations in psychiatric practices follow a pattern consistent with social class differences among institutions and are not regarded as idiosyncratic.

5. The differences in institutional style make comparisons of diagnoses, duration of hospitalization, and treatment results between institutions difficult and tenuous, and the need for more objective criteria of classification of pppulations is emphasized.

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TABLE I

Redesignation of Discharge Diagnoses

Menninger Discharge Diagnoses	General Classification
Depressive reaction Narcissistic Personality	Psychoneurosis
Anxiety reaction Narcissistic Personality	Psychoneurosis
Narcissistic Personality	Personality Trait Disturbance
Narcissistic Personality Alcoholism, Chronic Infantile Personality	Sociopathic Personality Disturbance
Passive Aggressive Personality Alcoholism	Sociopathic Personality Disturbance
Infantile Personality Schizophrenic Reaction, Schizo-Affective Type	Schizophrenic Psychosis

TABLE II

Comparative Ratings of Clinical Condition

At Time of Hospital Discharge

MENNINGER HOSPITAL	HILLSIDE HOSPITAL	MASSACHUSETTS MENTAL HEALTH CENTER
Social Adjustment		
Improved	Recovered	Recovered
Unimproved	Much Improved	Markedly Improved
	Improved	Moderately Improved
Character Structure	Unimproved	Slightly Improved
Improved		Unimproved
Unimproved		
Syndrome		
Complete Remission		
Improved		
Unchanged (or worse)		

TABLE III

Interhospital Comparisons for Sociopsychological Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
Social Class	N	(87)	(133)	(72)
	I	31%	7%	3%
	II	51	20	28
	III	17	34	13
	IV	1	34	28
	V	0	5	28
		χ^2=121.5; df=8: p<.001		
Age	N	(100)	(173)	(95)
	<20	19%	19%	15%
	20-39	59	58	52
	40 +	22	23	33
		χ^2=3.9; df=4; p=n.s.		
Years of Education	N	(100)	(173)	(91)
	<12	23%	32%	41%
	12-15	54	51	49
	16 +	23	17	10
		χ^2=9.7; df=4; p<.05		
F Score	N	(92)	(163)	(76)
	10-29	51%	33%	20%
	30-49	41	50	38
	50-70	8	17	42
		χ^2=39.2; df=4; p<.001		

TABLE IV

Interhospital Differences in Treatment Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
	N	(100)	(173)	(89)
Type of Treatment	Psychotherapy	21%	36%	24%
	Somatic	43	64	68
	Other	36	--	8
		$\chi^2=82.8$; df=4; $p<.001$		
	N	(100)	(173)	(95)
Duration of Hospitalization	<7 months	22%	27%	67%
	7-11 months	13	42	27
	>11 months	65	31	5
		$\chi^2=90.6$; df=4; $p<.001$		
	N	(99)	(172)	(88)
Discharge Evaluation	Recovered, Much Improved	1%	23%	28%
	Improved	80	62	61
	Unimproved	19	15	10
		$\chi^2=29.3$; df=4; $p<.001$		
	N	(95)	(171)	(85)
Discharge Diagnosis	Schizophrenia	43%	52%	54%
	Affective Psychosis	5	22	17
	Psychoneurosis and Personality Disorder	52	26	29
		$\chi^2=23.8$; df=4; $p<.001$		

TABLE V

Duration of Hospitalization By Age

PERCENTAGE OF AGE GROUP STAYING OVER ONE YEAR

Age	Menninger	Hillside	MMHC
Below 20	81	42	14
20-29	73	36	6
30-39	61	30	6
40-49	30	20	0
50 +	36	0	0

December 21, 1964

Max Pollack, Ph.D.
Hillside Hospital
P. O. Box 38
Glen Oaks, New York

Nathaniel Siegel, Ph.D.
National Institute of Mental Health
Bethesda, Maryland

Dear Max and Nat:

The enclosed draft was stimulated by a telephone call by Nat some months ago and meeting Bob in New York last week. I know that there are problems with it, but I would like very much to submit this for publication. Insofar as the last draft was found acceptable, and submitted to a journal, I would like to assume and hope that this one will also be acceptable to ourselves. If so, I should like to submit it to one of the journals listed in my note to Bob.

Would you please respond to my questions and I hope that we can agree to submit this to one of the journals suggested.

My best regards.

Sincerely yours,

Max Fink, M.D.

mf:dk
Enclosures

for
psychiatric treatment,
training
and
research

HILLSIDE HOSPITAL / *75-59 263rd Street, Glen Oaks, New York* / *Fieldstone 3-7800*

December 24, 1964

Dr. Max Fink
Missouri Institute of Psychiatry
5400 Arsenal St.
St. Louis, Missouri

Dear Max:

In reply to your letter of the 21st, I have reread the paper on sociological aspects and my original objections to this paper are in no way altered. I feel it skirts the whole problem of diagnosis which Nat in a previous paper has shown to be more important than social class, and which I in the VA paper showed to be a crucial variable. True, within the same institution younger more severely disturbed patients are treated and kept for a longer period of time and all this is relative to the philosophy of the institution. This viewpoint is not at all reported in the paper. (1)

I am not in favor of publishing it in its present form. Should you have some specific need for seeing it published, I would have no objection providing my name was removed. (/)

Speaking of authormanship, should you want to collaborate on the EEG findings and psychiatric and psychological variables I would have no objection. (2)

My best wishes to you, Martha and the kids for a Joyous New Year.

Please give my regards to Turan and tell him I have ordered a copy of his book.

Sincerely yours,

Max

Max Pollack, Ph.D.
Senior Research Associate

MP:gp

WE ARE A BENEFICIARY OF FEDERATION JEWISH PHILANTHROPIES OF NEW YORK

December 21, 1964

Robert L. Kahn, Ph.D.
Department of Psychiatry
Montefiore Hospital
Bainbridge & Gun Hill Roads
Bronx 57, New York

Dear Bob:

It was a pleasure talking to you in New York and your questions, following as they do the telephone call by Nat, stimulated me to take pencil in hand and review the last draft of the tri-hospital study. Enclosed is a draft copy of my effort. I am taking the liberty of sending a copy to Nat and Max as well with the enclosed notes. Would you please edit this draft and I will assume the responsibility for making a final copy and submitting it for publication.

As I think of the various journals, I believe I would like to send this first to the Archives of General Psychiatry; and failing that either to the Journal of Psychiatric Research or the British Journal of Psychiatry. Next in sequence would be the yellow journal Psychiatry. Is this agreeable to you.

I think this article is a good one and I would very much like to see it appear in press. If this draft is unsuitable, would you accept the responsibility to submit a better one for our consideration in the near future?

My best regards for the New Year.

Sincerely yours,

Max Fink, M.D.

mf:dk
Enclosures

cc: Max Pollack, Ph.D.
Nathaniel Siegel, Ph.D.

MONTEFIORE HOSPITAL AND MEDICAL CENTER

111 EAST 210TH STREET, BRONX, NEW YORK 10467, TELEPHONE: 212/TU 1-1000

January 19, 1965

Max Fink, M.D.
Director
Missouri Institute of Psychiatry
5400 Arsenal Street
St. Louis, Missouri 63139

Dear Max:

I think the paper is fine, and would touch it as little as possible. Your choice of journal is excellent. For my part, go ahead and submit it. The only change concerns the revised name here - "Montefiore Hospital and Medical Center" and the revised address as shown on this letter.

It was good to see you and I am pleased that you are doing well.

Best regards to Martha.

Sincerely,

Robert L. Kahn, Ph.D.
Head, Section on Psyology
Division of Psychiatry

RLK:FB

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
BETHESDA, MD. 20014

NATIONAL INSTITUTES OF HEALTH
AREA CODE 301 TEL: 656-4000

December 31, 1964

In reply refer to:
M-TMR-SS

AIRMAIL

Dr. Max Fink, Director
Missouri Institute of Psychiatry
5400 Arsenal Street
St. Louis, Missouri 63139

Dear Max:

I was pleasantly surprised to see the paper on "Sociosociological Aspects of Psychiatric Treatment in Three Voluntary Hospitals" again. I was really delighted that you resurrected it and have taken responsibility of submitting it to one of the journals that you listed. I have no real preference for one of various journals that you mentioned. I would think it would be most unlikely to be published in Psychiatry, but I am sure you share this opinion since you listed it last in your order.

In all honesty, in rereading the manuscript, I found it to be much better than I remember it. Most of my comments are of a stylistic nature. Here, however, I would bow to you as the collator of the document to use the style that you prefer. My own penciled comments are, however, on the paper.

I think the main contribution that this paper has to make, and should make, has to do with the methodological problems that are involved in doing cross-hospital studies or in doing hospital studies within the same institution over a period of time. As you indicate in the paper, on page 4, that when one reports studies from one institution, the structure of the hospital is either taken for granted or ignored. Certainly, we should be elaborating on this in great detail, and the methodological aspects of doing a study, such as the one we have done, should occupy a major area of the report in its own right. For this reason, I am not sure I would report methodological problems as we have done on page 4. I think that it should either occupy a place of its own in the discussion or might indeed exchange status with "A" Interhospital Comparisons on page 4, and become the "A" category, or interchange and make Interhospital Comparisons the "#1" category. Most of the things that we want to say are in the paper but, as I have indicated, I am a

little unhappy about interweaving our "findings" with the "methodological difficulties"...the latter not being our intent in the original investigation ...and, yet, I think being the more important in the report. I, also, believe that you should be senior author of the paper. I would try to spotlight the methodological problems and give it autonomy in its own right whether this be done in the "Results Section" or in the "Discussion Section."

Please let us know when you will be visiting with Jonathan Cole in Washington again. I certainly want to plan on us spending the evening together, and if we have a little advance notice on this I will schedule my time accordingly.

My best to you and your family for a most happy 1965.

Sincerely,

Nathaniel H. Siegel, Ph. D.
Acting Chief, Social Sciences Section
Training and Manpower Resources Branch
National Institute of Mental Health

Enclosure

Sociopsychological Aspects of Psychiatric Treatment in Three Voluntary Hospitals

Robert L. Kahn, Ph.D.*, Max Pollack, Ph.D.

Nathaniel Siegel, Ph.D.**

and

Max Fink, M.D.***

This study was done when the authors were associated at the Department of Experimental Psychiatry, Hillside Hospital, Glen Oaks, L.I., N.Y., 1959-62.

The cooperation of the staffs of the Massachusetts Mental Health Center and the C.F. Menninger Memorial Hospital is gratefully acknowledged.

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In their studies of the New Haven psychiatric patient population, Hollingshead and Redlich have reported significant relationships between an individual's position in the social class structure, and the ~~prevalence~~ incidence of treated illness, types of diagnosed disorders and kinds and duration of psychiatric treatment administered (3). The influence of the patient's economic status ~~of the patient~~ a controlled factor. on the availability of treating personnel, however, was not ~~excluded~~.

Studies of the role of social factors in the treatment of hospitalized patients, independent of patient's finances, and the availability of treatments were undertaken at Hillside Hospital in 1957. In this hospital, a variety of treatment modes, including individual psychotherapy, pharmacotherapy and convulsive therapies were available to all patients regardless of their ability to pay. In these surveys (4, 5), we observed that patients hospitalized for the shortest periods were older, had less education ~~and~~ were higher proportions ~~more often~~ of foreign birth. These older, less educated patients were predominantly treated by convulsive therapy and received proportionately more favorable clinical discharge ratings. In contrast, younger, native born and more educated patients were hospitalized for longer periods, treated primarily by psychotherapy and received poorer discharge ratings. These clinical factors were also related to a measure of stereotypy, the California F Scale (1,6). Higher F scores, i.e., greater stereotypy, were significantly often found in patients diagnosed as involutional psychosis, who were referred for convulsive therapy, hospitalized for shorter periods, and more often were rated as much improved or recovered.

In ~~this~~ the survey (reported here) it was suggested that differences in psychiatric treatment among hospitals should reflect the influence of social factors ~~as~~ noted for the patients within Hillside Hospital. To test this suggestion it was

decided to employ the procedures of the 1957 Hillside study in three institutions -- Hillside Hospital, the C.F. Menninger Memorial Hospital in Topeka and the Massachusetts Mental Health Center in Boston. These institutions were selected with the expectation that they served patients of different social classes and that their staffs would ~~exhibit similar attitudes toward treatment and education.~~ have at their disposal diverse treatment modalities. They provide for the short-term treatment of voluntary patients, and do not provide custodial care. Each is a residency training center with a full time supervisory staff and active research units. They emphasize psychoanalytically-oriented psychotherapy but actively provide convulsive drug and milieu therapies.

This study was designed to determine the population characteristics of the three institutions with respect to social class, age, education and F score; and to relate these characteristics to treatment variables of type of treatment, duration of hospitalization, diagnosis and discharge evaluation ~~among~~ within the institutions.

METHOD

A census of all voluntary, adult patients in residence in the institutions was undertaken in January, 1959. While Menninger and Hillside Hospitals had voluntary patients only, a small number of those at the Massachusetts Mental Health Center (MMHC) were assigned by the courts for psychiatric evaluation or were members of a chronic schizophrenic state hospital group transferred for a specific research project. These patients were excluded from the study because of their non-voluntary status. The California F scale was scored for each patient on the census day.

Eighteen months later the records of discharged patients were examined to determine the social and psychiatric factors of the study. For a measure of social class, the Hollingshead 2-factor index - a weighted score of education and occupation - was used (2,8). The study population consisted of 173 patients at Hillside, 100 at Manninger and 95 at the Massachusetts Mental Health Center.

The study included examination of the relations of the social to the psychiatric variables within each institution as well as between institutions. These comparisons were difficult, however, because of various methodological differences discussed below. These difficulties were most marked in the intra-hospital comparisons, and accordingly, in the analyses of psychiatric variables emphasis will be placed on the differences between institutions with citation of intrainstitutional trends. These difficulties also led to missing information for some data, which is reflected in the varying ~~population~~ sample sizes tables by the ~~in the tables~~.

RESULTS

A. Inter-hospital Comparisons

1. Methodological Problems

When reporting studies from one institution, the structure of the hospital may be taken for granted and either ignored or mentioned briefly. The many differences between institutions are accentuated in gathering comparable data from multiple institutions. While these institutions were selected as comparable in teaching, research and treatment programs, they were functionally unlike in ways which influenced the data of the study. Specific problems were prominent in the designation of type of treatment, diagnostic classifications, and the evaluation of treatment outcome.

a) Designation of Type of Treatment: The criteria for designating that a patient received "psychotherapy" differed among the institutions, making comparability difficult.

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were not routinely included in the patient's record and to ascertain which patients received psychotherapy it was necessary for members of the study team to interview the resident responsible for each case.

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Table I

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c) Discharge Ratings of Improvement: Ratings of improvement at the three hospitals varied in format and detail. The discharge rating at Menninger Hospital was tripartite with a separate evaluation for social, characterological and syndrome changes. Hillside Hospital and Massachusetts Mental Health Center had global ratings making it difficult to assess the contribution of each factor of the Menninger system (Table II). For this study the Menninger syndrome rating was compared to the global ratings of the other institutions.

Table II

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2. Sociopsychological Variables

The distribution of the variables of social class, age, education

and California F Scale score among the three institutions is presented in Table III.

TABLE III

This sort of catches you by surprise! We did not previously say that we picked hospitals which treated predominately dependent clients - which does seem to affect how patients are treated and may explain some of the under these circumstances.

a) Social Class: The anticipated difference in social class composition of the three institutions was observed. At Menninger Hospital the population was predominantly upper class; at Hillside Hospital, middle class; and at Massachusetts Mental Health Center, predominantly lower class.

b) Age: There were no differences in age distribution in the institutional populations.

c) Education: The populations also differed in educational attainment, with patients having more years of education at Menninger Hospital than at Massachusetts Mental Health Center. While 41 per cent of the patients at MMHC had not completed high school, only 32 per cent at Hillside and 23 per cent at Menninger did not graduate.

d) F Score: Differences in the distribution of scores on the California F Scale were also observed. Fifty-one per cent of Menninger patients had F scores below 30, and only eight per cent with scores of 50 or above -- the higher F scores being associated with higher degrees of stereotypy. In contrast, at Hillside thirty-one per cent of the patients had F scores below 30 while at MMHC only twenty per cent were below 30.

Expected - why? No groundwork laid for this.

Thus, the expected differences in social class, educational attainment and performance on the F Scale were observed. These differences permit a test of hypotheses concerning the relation of sociopsychological factors to the treatment variables among these institutions.

3. Psychiatric Treatment Variables

a) Selection of Treatment: Among institutions, significantly fewer patients at Menninger Hospital (43%) received somatic therapy than at Hillside (64%) or MMHC (68%) (Table IV).

b) Duration of Hospitalization: The three institutions differed with regard to patient's length of stay (Table IV). Patients at Menninger Hospital were hospitalized longest, with 65% of patients remaining for twelve months or more, compared to 31 per cent of the Hillside patients and only 5 per cent at the Massachusetts Mental Health Center. The modal stay of the Hillside group was between seven and eleven months while two-thirds of the MMHC patients were discharged within six months of hospitalization.

c) Discharge Evaluation: In each hospital, most patients were evaluated at the time of discharge as "improved" (Table IV). At Menninger Hospital, however, a higher percentage (19%) of patients were rated as "unimproved" and only a single patient was scored "recovered" or "much improved". The highest percentage of "recovered" or "much improved" ratings (28%) and the lowest proportion of "unimproved" (10%) were found at the Massachusetts Mental Health Center.

d) Diagnosis: For statistical analysis three diagnostic groupings were made: schizophrenia, affective disorders, and psychoneurosis and personality disorders (Table IV). The diagnostic proportions of patients within these groups were similar for Hillside and MMHC,

as slightly more than half were diagnosed as schizophrenia and one-quarter as psychoneurosis or affective disorder. In contrast, at Menninger Hospital psychoneurosis and personality disorder accounted for more than fifty per cent of the population.

Table IV

B. Intra-Hospital Comparisons

The lack of meaningful criteria for the subdivision of populations due to their homogeneity within each institution and to the sample size precluded adequate intra-hospital comparisons. Several groupings were obtained which had fewer than five cases, not permitting a satisfactory intrahospital test of the hypothesis.

Within this limitation, the trends appeared similar to those found in the earlier study. Age and F score were found related to the selection of treatment at Menninger Hospital (older and higher F score patients more frequently receiving somatic therapy), and F score alone at Hillside. Length of hospitalization and chronological age were related at both the Menninger and Hillside Hospitals - the younger patients remaining for the longest period. While such relationships were significant in these two hospitals, a similar trend was noted at the MMHC (Table V) where no patients over 40, but 14% of patients under the age of 20 remained longer than a year.

Table V

DISCUSSION

The patients of three voluntary psychiatric hospitals exhibited significant interinstitutional differences in the social variables of years of education and social class, but not age; in distribution of California F Scale scores; and in each of the treatment variables -- duration of hospitalization, selection of treatments and distributions of diagnoses and discharge evaluations.[8] The expectations that the institution serving upper class patients would have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, lower proportion of patients receiving somatic forms of therapy, and poorest discharge ratings were each confirmed. Similarly, the institution serving lower class patients evinced shorter periods of hospitalization, low proportions of psychoneurotic diagnoses, and better discharge evaluations.

It is our impression that these differences in psychiatric treatment are more related to differences in staff attitudes than to differences in populations. The contrasts between institutions in duration of hospitalization are great, as are the complexity of diagnostic formulations, discharge evaluations, definitions of psychotherapy, and the details and amount of recorded data. These stylistic differences cannot be dismissed as merely idiosyncratic since they follow a pattern related to social differences consistent with previous findings.

Amplify? Expand, since on p 2 we say that picked hospitals which had staffs with familiar attitudes.

Such population and treatment variable relationships are interactive processes, determined both by the attitude of the physician and the administrative staff and by the constellation of symptoms or history which patients present. Such relationships are marked most in those psychiatric conditions where diagnostic criteria are least specific, i.e., where objective criteria defining diseases of known etiology are absent, as in schizophrenia, psychoneurosis and personality and behavior disorders. Under these conditions of perceptual or situational ambiguity the observer's attitudes and expectations become the basis for his perception and classification. This situation was clearly demonstrated by Pasamanick, Dinitz and Lefton (7) in their study of variations in diagnosis within a single institution. They observed that patients randomly assigned to different wards did not differ in type of admission, marital status, education, age or residence. Significant differences did occur, however, in the incidence of various diagnoses among the three wards and among three administrators on one ward. As it is unlikely that these differences were inherent in the populations, we believe they reflect the attitudes of the examiners.

Present psychiatric concepts of diagnosis or clinical evaluation have little meaning when transferred from one institution to another. Literal adherance to these concepts produces paradoxical results. For example, Menninger Hospital has the most highly trained personnel conducting treatment, keeps its patients for the longest time and has fewest patients diagnosed as schizophrenia. And yet, it reports the poorest

treatment results. At MMHC, in contrast, which is most inclusive in defining a therapist, which keeps patients for the shortest periods, and which has a higher proportion of the population classed as schizophrenia, the reported treatment results are the best.

These findings do not reflect the relative therapeutic efficacy of the institutions. We do not have independent criteria for the quality of care, nor the assessment of comparability of populations for degree of illness among the institutions. Since the evaluations are based on the institution's own ratings, we believe that the differences reflect variations in the criteria used for evaluation of improvement rather than any intrinsic psychiatric characteristics.

In our initial Hillside study (5), it was postulated that different criteria of improvement were utilized for persons of different social background. It was suggested that the higher the person's social background the more complex the criteria employed. This has been literally confirmed in the present study, with Menninger's using a tripartite rating compared to the global rating of the other two institutions. Even considering the syndrome rating on which our comparative statistical analyses were based, it is our contention that for lower class persons we are apt to assess improvement in relation to symptom relief or the patient's capacity to resume work, while for upper class persons the criteria emphasize such complex intangibles as "developing insight", or "working through one's problems."

While these investigations have again demonstrated the role of social factors in psychiatric treatment, we have been greatly impressed by the methodological problems of studies across institutions. These institutions were selected for their educational leadership and the expectation that the recorded variables would be clearly defined. But differences in institutional style made it difficult to obtain comparable data. This experience is a cue to the problems of the conventional use of comparative statistics, especially in the evaluation of psychiatric therapies. The use of discharge ratings, diagnostic classifications or length of hospitalization as criteria in therapeutic evaluations or the identification of comparable populations are subject to extensive error unless the institutions are clearly matched for staff attitudes and style as well as social class patterns in patient populations. We believe these difficulties also extend to the failures of scientists to confirm clinical or laboratory observations made in other laboratories, for the lack of confirmation may reflect differences in populations and psychiatric criteria as much as errors in the original hypotheses. The use of the terms "schizophrenia" or "psychoneurosis" to explore changes in psychological and biological features of mental illness has led to our present day science burdened by negative results. Were a valid observation to be reported from one laboratory, the methods are not available today to adequately describe psychiatric populations for an adequate confirmation.

Increased attention must be paid to the methodological problems of classifying subjects by "objective" criteria rather than the present methods, so highly dependent on institutional and observer attitudes and the sociopsychological aspects of the therapist-patient interaction.

SUMMARY and CONCLUSION

1. In three psychotherapeutic-oriented teaching hospitals, population characteristics were related to treatment variables. Populations were defined by social class, age, education and F score, and were related to type of treatment, duration of hospitalization, diagnosis and discharge evaluation.

2. Significant interinstitutional differences were observed in characteristics of patient social class, years of education and distribution of California F scores, but not age.

3. The variations in treatment characteristics among institutions were found to be significantly different in the predicted direction.

4. These variations in psychiatric practices follow a pattern consistent with social class differences among institutions and are not regarded as idiosyncratic.

5. The differences in institutional style make comparisons of diagnoses, duration of hospitalization, and treatment results between institutions difficult and tenuous, and the need for more objective criteria of classification of ppulations is emphasized.

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TABLE I

Redesignation of Discharge Diagnoses

Menninger Discharge Diagnoses	General Classification
Depressive reaction Narcissistic Personality	Psychoneurosis
Anxiety reaction Narcissistic Personality	Psychoneurosis
Narcissistic Personality	Personality Trait Disturbance
Narcissistic Personality Alcoholism, Chronic Infantile Personality	Sociopathic Personality Disturbance
Passive Aggressive Personality Alcoholism	Sociopathic Personality Disturbance
Infantile Personality Schizophrenic Reaction, Schizo-Affective Type	Schizophrenic Psychosis

TABLE II

Comparative Ratings of Clinical Condition

At Time of Hospital Discharge

MENNINGER HOSPITAL	HILLSIDE HOSPITAL	MASSACHUSETTS MENTAL HEALTH CENTER
Social Adjustment		
Improved	Recovered	Recovered
Unimproved	Much Improved	Markedly Improved
	Improved	Moderately Improved
Character Structure	Unimproved	Slightly Improved
Improved		Unimproved
Unimproved		
Syndrome		
Complete Remission		
Improved		
Unchanged (or worse)		

TABLE III

Interhospital Comparisons for Sociopsychological Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
	N	(87)	(133)	(72)
Social Class	I	31%	7%	3%
	II	51	20	28
	III	17	34	13
	IV	1	34	28
	V	0	5	28
		χ^2=121.5; df=8: p<.001		
Age	N	(100)	(173)	(95)
	<20	19%	19%	15%
	20-39	59	58	52
	40 +	22	23	33
		χ^2=3.9; df=4; p=n.s.		
Years of Education	N	(100)	(173)	(91)
	<12	23%	32%	41%
	12-15	54	51	49
	16 +	23	17	10
		χ^2=9.7; df=4; p<.05		
F Score	N	(92)	(163)	(76)
	10-29	51%	33%	20%
	30-49	41	50	38
	50-70	8	17	42
		χ^2=39.2; df=4; p<.001		

TABLE IV

Interhospital Differences in Treatment Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
Type of Treatment	N	(100)	(173)	(89)
	Psychotherapy	21%	36%	24%
	Somatic	43	64	68
	Other	36	--	8
		$\chi^2=82.8$; df=4; $p<.001$		
Duration of Hospitalization	N	(100)	(173)	(95)
	<7 months	22%	27%	67%
	7-11 months	13	42	27
	>11 months	65	31	5
		$\chi^2=90.6$; df=4; $p<.001$		
Discharge Evaluation	N	(99)	(172)	(88)
	Recovered, Much Improved	1%	23%	28%
	Improved	80	62	61
	Unimproved	19	15	10
		$\chi^2=29.3$; df=4; $p<.001$		
Discharge Diagnosis	N	(95)	(171)	(85)
	Schizophrenia	43%	52%	54%
	Affective Psychosis	5	22	17
	Psychoneurosis and Personality Disorder	52	26	29
		$\chi^2=23.8$; df=4; $p<.001$		

TABLE V

Duration of Hospitalization By Age

PERCENTAGE OF AGE GROUP STAYING OVER ONE YEAR

Age	Menninger	Hillside	MMHC
Below 20	81	42	14
20-29	73	36	6
30-39	61	30	6
40-49	30	20	0
50 +	36	0	0

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The patients of three voluntary psychiatric hospitals exhibited significant interinstitutional differences in ~~the~~ social class and years of education, ~~and social class,~~ but not age; in distribution of California F Scale scores; and in each of the treatment variables -- duration of hospitalization, selection of treatments and distributions of diagnoses and discharge evaluations. (7) Expectations based on our earlier institutional ~~The expectation that the~~ institution serving upper class patients did have ~~would have~~ the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions ~~were each confirmed~~. Similarly, the institution serving lower class patients did have the ~~evinced~~ shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

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It is our impression that these differences in psychiatric treatment are ~~more~~ related more to differences in staff attitudes and social class variables ~~than to~~ than psychiatric differences in populations. The contrasts between institutions in duration of hospitalization are great, as are the complexity of diagnostic formulations, discharge evaluations, definitions of psychotherapy, and the details and amount of recorded data. While these stylistic differences ~~cannot be~~ may be dismissed as ~~merely~~ idiosyncratic, ~~since~~ they follow a pattern related to social differences, and their consistency with ~~previous findings~~ Expectations suggests a greater dependence on social class variables than ordinarily acknowledged.

Such population and treatment variable relationships are interactive processes, determined both by the attitude of the physician and the administrative staff and by the constellation of symptoms or history which patients present. Such relationships are marked most in those psychiatric conditions where diagnostic criteria are least specific, i.e., where objective criteria defining diseases of known etiology are absent, as in schizophrenia, psychoneurosis, and personality and behavior disorders. Under these conditions of perceptual ~~or~~ and situational ambiguity, the observer's attitudes and expectations become significant aspects of ~~the basis for~~ his perception, ~~and~~ classification, and decisions. ~~This~~ A similar situation was clearly ~~demonstrated~~ documented by Pasamanick, Dinitz and Lefton (6) in their study of variations in diagnosis within a single institution. They observed that patients ~~randomly~~ at random assigned to different wards did not differ in type of admission, marital status, education, age or residence. Significant differences did occur, however, in the incidence of various diagnostic classifications among the three wards and among three administrators on one ward. As ~~it is unlikely that those~~ no differences ~~were inherent~~ in the populations, we believe they reflect the attitudes of the examiners. different incidence of diagnoses were demonstrated,

Present psychiatric concepts of diagnosis ~~or~~ and clinical evaluation have little meaning when transferred from one institution to another. Literal adherance to these concepts produces paradoxical results. For example, Menninger Hospital ~~has the most~~ with the more highly trained personnel conducting treatment, keeps its patients for the longest time, ~~and~~ has the fewest patients diagnosed as schizophrenia, And yet, ~~it~~ reports the poorest

treatment results. ~~At~~ MMHC, in contrast, which is most inclusive in defining a therapist, ~~which~~ keeps patients for the shortest periods, and ~~which~~ has a higher proportion of the population classed as schizophrenia, ~~the~~ reported treatment results, ~~are~~ the best.

These findings do not reflect the relative therapeutic efficacy of the institutions. ~~We do not have~~ In the absence of independent criteria for the quality of care ~~nor~~ or the assessment of comparability of populations for degree of illness among the institutions, Since the evaluations are based on the institution's own ratings, we believe that the differences reflect variations in the criteria used for evaluation of improvement rather than ~~any~~ intrinsic psychiatric characteristics.

In our initial Hillside study (4) it was postulated that different criteria of improvement were utilized for persons of different social background. It was suggested that the higher the person's social background the more complex the criteria employed. This has been literally confirmed in the present study, with Menninger the staff / Hospital using a tripartite rating compared to the global rating of the other two institutions. Even considering the syndrome rating on which our comparative statistical analyses were based, it is our contention that for lower class persons we are apt to assess improvement in relation to symptom relief or the patient's capacity to resume work, while for upper class persons the criteria emphasize such complex intangibles as "developing insight", or "working through one's problems."

While these investigations have again demonstrated the role of social factors in psychiatric treatment, we have been greatly impressed by the methodological problems of studies across institutions. These institutions were selected for their educational leadership and the expectation that the recorded variables would be clearly defined. But differences in institutional style made it difficult to obtain comparable data. This experience is a cue to the problems of the conventional use of comparative statistics, especially in the evaluation of psychiatric therapies. The use of discharge ratings, diagnostic classifications or length of hospitalization as criteria in therapeutic evaluations or the identification of comparable populations are subject to extensive error unless the institutions are clearly matched for staff attitudes and style as well as social class patterns in patient populations. ~~We believe~~ These difficulties also extend to the failures of scientists to confirm clinical or laboratory observations made in other laboratories, for the lack of confirmation may reflect differences in populations and psychiatric criteria as much as errors in the original hypotheses. The use of the terms "schizophrenia" or "psychoneurosis" to explore changes in psychological and biological features of mental illness has led to ~~our present day~~ a science burdened by negative results. Every Were a valid observation to be reported from one laboratory, today, we do not have the methods ~~are not available today~~ to adequately describe psychiatric populations for ~~an adequate confirmation~~ a satisfactory test of the hypothesis.

Increased attention must be paid to ~~the methodological problems of~~ the classifi~~ying~~cation of subjects by "objective" criteria rather than ~~the~~ our present methods, so highly dependent on institutional and observer attitudes and the sociopsychological aspects of the therapist-patient interaction.

SUMMARY and CONCLUSION

In three ~~psychotherapeutic oriented~~ VOLUNTARY teaching hospitals, population characteristics were related to treatment variables.

~~Populations were~~ defined by social class, age, education and F score, Treatment variables included and ~~were related to~~ type of treatment, duration of hospitalization, diagnosis and discharge evaluation.

~~Significant~~ interinstitutional differences were observed in ~~the characteristics of~~ patient social class, years of education and distribution of California F scores, but not age.

The variations in treatment characteristics among institutions were ~~found to be~~ significantly different in the predicted direction. ←(14A)

These variations in psychiatric practices follow^ed a pattern consistent with the social class differences among the institutions and are not regarded as idiosyncratic.

~~The~~ Such differences in institutional style make comparisons of diagnoses, duration of hospitalization, and treatment results between institutions difficult and tenuous, and the need for more objective criteria ~~of~~ for the classification of PSYCHIATRIC populations is emphasized.

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TABLE I

Redesignation of Discharge Diagnoses

Menninger Discharge Diagnoses	General Classification
Depressive reaction Narcissistic Personality	Psychoneurosis
Anxiety reaction Narcissistic Personality	Psychoneurosis
Narcissistic Personality	Personality Trait Disturbance
Narcissistic Personality Alcoholism, Chronic Infantile Personality	Sociopathic Personality Disturbance
Passive Aggressive Personality Alcoholism	Sociopathic Personality Disturbance
Infantile Personality Schizophrenic Reaction, Schizo-Affective Type	Schizophrenic Psychosis

TABLE II

Comparative Ratings of Clinical Condition

At Time of Hospital Discharge

MENNINGER HOSPITAL	HILLSIDE HOSPITAL	MASSACHUSETTS MENTAL HEALTH CENTER
Social Adjustment		
Improved	Recovered	Recovered
Unimproved	Much Improved	Markedly Improved
	Improved	Moderately Improved
Character Structure	Unimproved	Slightly Improved
Improved		Unimproved
Unimproved		
Syndrome		
Complete Remission		
Improved		
Unchanged (or worse)		

TABLE III

Interhospital Comparisons for Sociopsychological Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
	N	(87)	(133)	(72)
Social Class	I	31%	7%	3%
	II	51	20	28
	III	17	34	13
	IV	1	34	28
	V	0	5	28
		χ^2=121.5; df=8: p<.001		
Age	N	(100)	(173)	(95)
	<20	19%	19%	15%
	20-39	59	58	52
	40 +	22	23	33
		χ^2=3.9; df=4; p=n.s.		
Years of Education	N	(100)	(173)	(91)
	<12	23%	32%	41%
	12-15	54	51	49
	16 +	23	17	10
		χ^2=9.7; df=4; p<.05		
F Score	N	(92)	(163)	(76)
	10-29	51%	33%	20%
	30-49	41	50	38
	50-70	8	17	42
		χ^2=39.2; df=4; p<.001		

TABLE IV

Interhospital Differences in Treatment Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
	N	(100)	(173)	(89)
Type of Treatment	Psychotherapy	21%	36%	24%
	Somatic	43	64	68
	Other	36	--	8
		$\chi^2=82.8$; df=4; $p<.001$		
Duration of Hospitalization	N	(100)	(173)	(95)
	<7 months	22%	27%	67%
	7-11 months	13	42	27
	>11 months	65	31	5
		$\chi^2=90.6$; df=4; $p<.001$		
Discharge Evaluation	N	(99)	(172)	(88)
	Recovered, Much Improved	1%	23%	28%
	Improved	80	62	61
	Unimproved	19	15	10
		$\chi^2=29.3$; df=4; $p<.001$		
Discharge Diagnosis	N	(95)	(171)	(85)
	Schizophrenia	43%	52%	54%
	Affective Psychosis	5	22	17
	Psychoneurosis and Personality Disorder	52	26	29
		$\chi^2=23.8$; df=4; $p<.001$		

TABLE V

Duration of Hospitalization By Age

PERCENTAGE OF AGE GROUP STAYING OVER ONE YEAR

Age	Menninger	Hillside	MMHC
Below 20	81	42	14
20-29	73	36	6
30-39	61	30	6
40-49	30	20	0
50 +	36	0	0

Sociopsychological Aspects of

Psychiatric Treatment in Three Voluntary Hospitals

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MIP 2/1/65

In their studies of the New Haven psychiatric patient population, Hollingshead and Redlich have reported significant relationships between an individual's position in the social class structure and the incidence of treated illness, types of diagnosed disorders and kinds and duration of psychiatric treatment administered (2). The influence of the economic status of the patient on the availability of treating personnel, however, was not excluded.

Studies of the role of social factors in the treatment of hospitalized patients independent of their financial status and the availability of treatments were undertaken at Hillside Hospital in 1957. In this hospital, a variety of treatment modes, including individual psychotherapy, pharmacotherapy and convulsive therapies were available to all patients regardless of their ability to pay. In these surveys (3,4) we observed that patients hospitalized for the shortest periods were older, had less education and were more often of foreign birth. These older, less educated patients were predominantly treated by convulsive therapy and received more favorable clinical discharge ratings. In contrast, younger, native born and more educated patients were hospitalized for longer periods, treated primarily by psychotherapy and received poorer discharge ratings. These clinical factors were also related to a measure of stereotypy, the California F Scale (1,5). Higher F scores, i.e., greater stereotypy, were often found in patients diagnosed as involutional psychosis, who were referred for convulsive therapy, hospitalized for shorter periods, and more often were rated as much improved or recovered.

In the survey reported here, it was suggested that differences in psychiatric treatment among hospitals should reflect the influence of social factors as noted for the patients within Hillside Hospital. To test this suggestion it was decided to employ the procedures of the 1957 Hillside study in three institutions -- Hillside Hospital, the C. F. Menninger Memorial Hospital in Topeka and the Massachusetts Mental Health Center in Boston. These institutions were selected with the expectation that they had diverse treatment modalities equally available, yet served patients of different social classes. Each provided short-term treatment of voluntary patients and did not provide custodial care. Each is a residency training center with a full time supervisory staff and active research units, emphasizing psychoanalytically-oriented psychotherapy.

This study was designed to determine the population characteristics of the three institutions with respect to social class, age, education and F score; and to relate these characteristics to treatment variables of type of treatment, duration of hospitalization, diagnosis and discharge evaluation among the institutions.

METHOD

A census of all voluntary, adult patients in residence in the institutions was undertaken in January, 1959. While Menninger and Hillside Hospitals had voluntary patients only, a small number of those at the Massachusetts Mental Health Center (MMHC) were assigned by the courts for psychiatric evaluation or were members of a chronic schizophrenic state hospital group transferred for a specific research project. These patients were excluded from the study because of their non-voluntary status. The California F scale was scored for each patient on the census day.

Eighteen months later the records of discharged patients were examined to determine the social and psychiatric factors of the study. For a measure of social class, the Hollingshead 2-factor index - a weighted score of education and occupation - was used (3,4,7). The study population consisted of 173 patients at Hillside, 100 at Menninger and 95 at the Massachusetts Mental Health Center.

The study included examination of the relations of the social to the psychiatric variables within each institution as well as between institutions. These comparisons were difficult however, because of various methodological differences discussed below. These difficulties were most marked in the intra-hospital comparisons, and accordingly, in the analyses of psychiatric variables emphasis will be placed on the differences between institutions with citation of intra-institutional trends. These difficulties also led to missing information for some data, which is reflected in the tables by the varying population sample sizes.

RESULTS

A. Methodological Problems

When reporting studies from one institution, the structure of the hospital may be taken for granted and either ignored or mentioned briefly. In gathering comparable data from multiple institutions, however, the many differences between institutions are accentuated. While these institutions were selected as comparable in teaching, research and treatment programs, they were functionally unlike in ways which influenced the data of the study. Specific differences were prominent in the designation of type of treatment, diagnostic classifications, and the evaluation of treatment outcome.

1. Designation of Type of Treatment: The criteria for designating that a patient received "psychotherapy" differed among the institutions, making comparisons difficult.

At Menninger Hospital psychotherapy was designated as treatment administered on a prescription basis by a staff psychiatrist for which the patient was charged a fee. Sessions with the psychiatric resident were considered part of routine administrative patient care.

At Hillside Hospital psychotherapy was defined as treatment sessions with a psychiatric resident. Staff psychiatrists did not treat patients, but restricted their activities to supervising resident physicians. No additional fees were charged.

At the Massachusetts Mental Health Center psychotherapy was designated as the activity of many disciplines -- psychiatric residents, psychologists, social workers, nurses and medical students. Formal records of such sessions were not routinely included in the patient's record and to ascertain which patients received psychotherapy it was necessary for members of the study team to interview the resident responsible for each case.

2. Diagnosis: Individual institutional diagnostic styles made comparisons difficult. At Menninger Hospital diagnoses employed the multiple evaluative scheme recommended by the American Psychiatric Association, while both Hillside and MMHC followed different unitary systems. Several examples of diagnoses from Menninger are listed in Table I, with our suggested conversions into categories comparable to that of the other two institutions. These conversions provide a source of distortion.

Table I

3. Discharge Ratings of Improvement: Ratings of improvement at the three hospitals varied in format and detail. The discharge rating at Menninger Hospital was tripartite with a separate evaluation for social, characterological and syndrome changes. Hillside Hospital and Massachusetts Mental Health Center had global ratings making it difficult to assess the contribution of each factor of the Menninger system (Table II). For this study the Menninger syndrome rating was compared to the global ratings of the other institutions.

Table II

B. Inter-hospital Comparison

1. Sociopsychological Variables

The distribution of the variables of social class, age, education and California F Scale score among the three institutions is presented in Table III.

Table III

a) Social Class: The anticipated difference in social class composition of the three institutions was observed. At Menninger Hospital the population was predominantly upper class; At Hillside Hospital, middle class; and at Massachusetts Mental Health Center, predominantly lower class.

b) Age: There were no differences in age distribution in the institutional populations.

c) Education: The populations also differed in educational attainment, with patients having more years of education at Menninger Hospital than at Massachusetts Mental Health Center. While 41 per cent of the patients at MMHC had not completed high school, only 32 per cent at Hillside and 23 per cent at Menninger did not graduate.

d) F Score: Differences in the distribution of scores on the California F Scale were also observed. Fifty-one per cent of Menninger patients had F scores below 30, and only eight per-cent with scores of 50 or above -- the higher F scores being associated with higher degrees of stereotypy. In contrast, at Hillside thirty-one per cent of the patients had F scores below 30 while at MMHC only twenty per cent were below 30.

Thus, differences in social class, educational attainment and performance on the F Scale were observed. These differences permit a test of the hypotheses relating sociopsychological factors to the treatment variables among these institutions.

2. Psychiatric Treatment Variables

a) Selection of Treatment: Among the institutions, significantly fewer patients at Menninger Hospital (43%) received somatic therapy than at Hillside (64%) or MMHC (68%) (Table IV).

b) Duration of Hospitalization: The three institutions differed with regard to patient's length of stay (Table IV). Patients at Menninger Hospital were hospitalized longest, with 65% of patients remaining for twelve months or more, compared to 31 per-cent of the Hillside patients and only 5 per-cent at the Massachusetts Mental Health Center. The modal stay of the Hillside group was between seven and eleven months while two-thirds of the MMHC patients were discharged within six months of hospitalization.

c) Discharge Evaluation: In each hospital, most patients were evaluated at the time of discharge as "improved" (Table IV). At Menninger Hospital, however, a higher percentage (19%) of patients were rated as "unimproved" and only a single patient was scored "recovered" or "much improved". The highest percentage of "recovered" or "much improved" ratings (28%) and the lowest proportion of "unimproved" (10%) were found at the Massachusetts Mental Health Center.

d) Diagnosis: For statistical analysis three diagnostic groupings were made: schizophrenia, affective disorders, and

psychoneurosis and personality disorders (Table IV). The diagnostic proportions of patients within these groups were similar for Hillside and MMHC, as slightly more than half were diagnosed as schizophrenia and one-quarter as psychoneurosis or affective disorder. In contrast, at Menninger Hospital psychoneurosis and personality disorder accounted for more than fifty per-cent of the population.

Table IV

C. Intra-Hospital Comparisons

The lack of meaningful criteria for the subdivision of populations, their homogeneity within each institution, and the limited sample size (several groupings were obtained which had fewer than five cases) precluded significant intra-hospital comparisons. However, the trends appeared similar to those found in the earlier study. Age and F score were found related to the selection of treatment at Menninger Hospital (older and higher F score patients more frequently receiving somatic therapy), and F score alone at Hillside. Length of hospitalization and chronological age were related at both the Menninger and Hillside Hospitals - the younger patients remaining for the longest periods. While such relationships were significant in these two hospitals, a similar trend was noted at the MMHC (Table V) where no patients over 40, but 14% of patients under the age of 20 remained longer than a year.

Table V

the incidence of various diagnostic classifications among the three wards and among three administrators on one ward. As no differences in the populations were demonstrated, we believe the different incidence of diagnoses reflect the attitudes of the examiners.

Present psychiatric concepts of diagnosis and clinical evaluation have little meaning when transferred from one institution to another. Literal adherance to these concepts produces paradoxical results. For example, Menninger Hospital with the more highly trained personnel conducting treatment, keeps its patients for the longest time, has the fewest patients diagnosed as schizophrenia, and yet, reports the poorest treatment results. At MMHC, in contrast, which is most inclusive in defining a therapist, keeps patients for the shortest periods, and has a higher proportion of the population classed as schizophrenia, reports the best treatment results.

In the absence of independent criteria for the quality of care or the assessment of comparability of populations for degree of illness among the institutions, these findings do not reflect the relative therapeutic efficacy of the institutions. Since the evaluations are based on the institution's own ratings, we believe that the differences reflect variations in the criteria used for evaluation of improvement rather than intrinsic psychiatric characteristics.

In our initial Hillside study (4) it was postulated that different criteria of improvement were utilized for persons of different social background. It was suggested that the higher the person's social background the more complex the criteria employed. This has been literally confirmed in the present study, with the staff of Menninger Hospital using a tripartite rating compared to the global rating of the other two institutions. Even considering the syndrome rating on which our comparative statistical analyses were based, it is our contention that for lower class persons we are apt to assess improvement in relation to symptom relief or the patient's capacity to resume work, while for upper class persons the criteria emphasize such complex intangibles as "developing insight," or "working through one's problems."

While these investigations have again demonstrated the role of social factors in psychiatric treatment, we have been greatly impressed by the methodological problems of studies across institutions. These institutions were selected for their educational

leadership and the expectation that the recorded variables would be clearly defined. But differences in institutional style made it difficult to obtain comparable data. This experience is a cue to the problems of the conventional use of comparative statistics, especially in the evaluation of psychiatric therapies. The use of discharge ratings, diagnostic classifications or length of hospitalization as criteria in therapeutic evaluations or the identification of comparable populations are subject to extensive error unless the institutions are clearly matched for staff attitudes and style as well as social class patterns in patient populations. These difficulties also extend to the failures of scientists to confirm clinical or laboratory observations made in other laboratories, for the lack of confirmation may reflect differences in populations and psychiatric criteria as much as errors in the original hypotheses. The use of the terms "schizophrenia" or "psychoneurosis" to explore changes in psychological and biological features of mental illness has led to a science burdened by negative results. Even were a valid observation to be reported from one laboratory today, we do not have the methods to describe psychiatric populations adequately for a satisfactory test of the hypothesis. Increased attention must be paid to the classification of subjects by "objective" criteria rather than our present methods, so highly dependent on institutional and observer attitudes and the socio-psychological aspects of the therapist-patient interaction.

SUMMARY AND CONCLUSION

Population characteristics, defined by social class, age, education and F score, were related to treatment variables in three voluntary teaching hospitals. Treatment variables included type of treatment, duration of hospitalization, diagnosis and discharge evaluation. Inter-institutional differences were observed in patient social class, years of education and distribution of California F scores, but not age.

The variations in treatment characteristics among institutions were significantly different in the predicted direction. The institution serving upper class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

These variations in psychiatric practices followed a pattern consistent with the social class differences among the institutions and are not regarded as idiosyncratic.

Such differences in institutional style make comparisons of diagnoses, duration of hospitalization and treatment results between institutions difficult and tenuous, and the need for more objective criteria for the classification of psychiatric populations is emphasized.

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Passive Aggressive Personality Alcoholism	Sociopathic Personality Disturbance
Infantile Personality Schizophrenic Reaction, Schizo-Affective Type	Schizophrenic Psychosis

TABLE II

Comparative Ratings of Clinical

Condition At Time of Hospital Discharge

MENNINGER HOSPITAL	HILLSIDE HOSPITAL	MASSACHUSETTS MENTAL HEALTH CENTER
Social Adjustment		
Improved	Recovered	Recovered
Unimproved	Much Improved	Markedly Improved
	Improved	Moderately Improved
Character Structure	Unimproved	Slightly Improved
Improved		Unimproved
Unimproved		
Syndrome		
Complete Remission		
Improved		
Unchanged (or worse)		

TABLE III

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		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
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Interhospital Differences in Treatment Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
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Duration of Hospitalization	N	(100)	(173)	(95)
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Discharge Evaluation	N	(99)	(172)	(88)
	Recovered, Much Improved	1%	23%	28%
	Improved	80	62	61
	Unimproved	19	15	10
	$X^2 = 29.3$; df=4; $p<.001$			
Discharge Diagnosis	N	(95)	(171)	(85)
	Schizophrenia	43%	52%	54%
	Affective Psychosis	5	22	17
	Psychoneurosis and Personality Disorder	52	26	29
	$X^2 = 23.8$; df=4; $p<.001$			

TABLE V

Duration of Hospitalization

By Age

PERCENTAGE OF AGE GROUP STAYING OVER ONE YEAR

Age	Menninger	Hillside	MMHC
Below 20	81	42	14
20-29	73	36	6
30-39	61	30	6
40-49	30	20	0
50+	36	0	0

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Aided, in part, by grants My-2092 and MY-2715, of the National Institute of Mental Health, U.S. Public Health Service; and the Nassau County Mental Health Board.

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** Present Address: Department of Psychiatry at the Missouri Institute of Psychiatry, School of Medicine, University of Missouri, 5400 Arsenal Street, St. Louis, Missouri 63139

*** Present Address: National Institute of Mental Health, Bethesda, Maryland

MIP 2/1/65

In their studies of the New Haven psychiatric patient population, Hollingshead and Redlich have reported significant relationships between an individual's position in the social class structure and the incidence of treated illness, types of diagnosed disorders and kinds and duration of psychiatric treatment administered (2). The influence of the economic status of the patient on the availability of treating personnel, however, was not excluded.

Studies of the role of social factors in the treatment of hospitalized patients independent of their financial status and the availability of treatments were undertaken at Hillside Hospital in 1957. In this hospital, a variety of treatment modes, including individual psychotherapy, pharmacotherapy and convulsive therapies were available to all patients regardless of their ability to pay. In these surveys (3,4) we observed that patients hospitalized for the shortest periods were older, had less education and were more often of foreign birth. These older, less educated patients were predominantly treated by convulsive therapy and received more favorable clinical discharge ratings. In contrast, younger, native born and more educated patients were hospitalized for longer periods, treated primarily by psychotherapy and received poorer discharge ratings. These clinical factors were also related to a measure of stereotypy, the California F Scale (1,5). Higher F scores, i.e., greater stereotypy, were often found in patients diagnosed as involutional psychosis, who were referred for convulsive therapy, hospitalized for shorter periods, and more often were rated as much improved or recovered.

In the survey reported here, it was suggested that differences in psychiatric treatment among hospitals should reflect the influence of social factors as noted for the patients within Hillside Hospital. To test this suggestion it was decided to employ the procedures of the 1957 Hillside study in three institutions -- Hillside Hospital, the C. F. Menninger Memorial Hospital in Topeka and the Massachusetts Mental Health Center in Boston. These institutions were selected with the expectation that they had diverse treatment modalities equally available, yet served patients of different social classes. Each provided short-term treatment of voluntary patients and did not provide custodial care. Each is a residency training center with a full time supervisory staff and active research units, emphasizing psychoanalytically-oriented psychotherapy.

This study was designed to determine the population characteristics of the three institutions with respect to social class, age, education and F score; and to relate these characteristics to treatment variables of type of treatment, duration of hospitalization, diagnosis and discharge evaluation among the institutions.

METHOD

A census of all voluntary, adult patients in residence in the institutions was undertaken in January, 1959. While Menninger and Hillside Hospitals had voluntary patients only, a small number of those at the Massachusetts Mental Health Center (MMHC) were assigned by the courts for psychiatric evaluation or were members of a chronic schizophrenic state hospital group transferred for a specific research project. These patients were excluded from the study because of their non-voluntary status. The California F scale was scored for each patient on the census day.

Eighteen months later the records of discharged patients were examined to determine the social and psychiatric factors of the study. For a measure of social class, the Hollingshead 2-factor index - a weighted score of education and occupation - was used (3,4,7). The study population consisted of 173 patients at Hillside, 100 at Menninger and 95 at the Massachusetts Mental Health Center.

The study included examination of the relations of the social to the psychiatric variables within each institution as well as between institutions. These comparisons were difficult however, because of various methodological differences discussed below. These difficulties were most marked in the intra-hospital comparisons, and accordingly, in the analyses of psychiatric variables emphasis will be placed on the differences between institutions with citation of intra-institutional trends. These difficulties also led to missing information for some data, which is reflected in the tables by the varying population sample sizes.

RESULTS

A. Methodological Problems

When reporting studies from one institution, the structure of the hospital may be taken for granted and either ignored or mentioned briefly. In gathering comparable data from multiple institutions, however, the many differences between institutions are accentuated. While these institutions were selected as comparable in teaching, research and treatment programs, they were functionally unlike in ways which influenced the data of the study. Specific differences were prominent in the designation of type of treatment, diagnostic classifications, and the evaluation of treatment outcome.

1. Designation of Type of Treatment: The criteria for designating that a patient received "psychotherapy" differed among the institutions, making comparisons difficult.

At Menninger Hospital psychotherapy was designated as treatment administered on a prescription basis by a staff psychiatrist for which the patient was charged a fee. Sessions with the psychiatric resident were considered part of routine administrative patient care.

At Hillside Hospital psychotherapy was defined as treatment sessions with a psychiatric resident. Staff psychiatrists did not treat patients, but restricted their activities to supervising resident physicians. No additional fees were charged.

At the Massachusetts Mental Health Center psychotherapy was designated as the activity of many disciplines -- psychiatric residents, psychologists, social workers, nurses and medical students. Formal records of such sessions were not routinely included in the patient's record and to ascertain which patients received psychotherapy it was necessary for members of the study team to interview the resident responsible for each case.

2. Diagnosis: Individual institutional diagnostic styles made comparisons difficult. At Menninger Hospital diagnoses employed the multiple evaluative scheme recommended by the American Psychiatric Association, while both Hillside and MMHC followed different unitary systems. Several examples of diagnoses from Menninger are listed in Table I, with our suggested conversions into categories comparable to that of the other two institutions. These conversions provide a source of distortion.

Table I

3. Discharge Ratings of Improvement: Ratings of improvement at the three hospitals varied in format and detail. The discharge rating at Menninger Hospital was tripartite with a separate evaluation for social, characterological and syndrome changes. Hillside Hospital and Massachusetts Mental Health Center had global ratings making it difficult to assess the contribution of each factor of the Menninger system (Table II). For this study the Menninger syndrome rating was compared to the global ratings of the other institutions.

Table II

B. Inter-hospital Comparison

1. Sociopsychological Variables

The distribution of the variables of social class, age, education and California F Scale score among the three institutions is presented in Table III.

Table III

a) Social Class: The anticipated difference in social class composition of the three institutions was observed. At Menninger Hospital the population was predominantly upper class; At Hillside Hospital, middle class; and at Massachusetts Mental Health Center, predominantly lower class.

b) Age: There were no differences in age distribution in the institutional populations.

c) Education: The populations also differed in educational attainment, with patients having more years of education at Menninger Hospital than at Massachusetts Mental Health Center. While 41 per cent of the patients at MMHC had not completed high school, only 32 per cent at Hillside and 23 per cent at Menninger did not graduate.

d) F Score: Differences in the distribution of scores on the California F Scale were also observed. Fifty-one per cent of Menninger patients had F scores below 30, and only eight percent with scores of 50 or above -- the higher F scores being associated with higher degrees of stereotypy. In contrast, at Hillside thirty-one per cent of the patients had F scores below 30 while at MMHC only twenty per cent were below 30.

Thus, differences in social class, educational attainment and performance on the F Scale were observed. These differences permit a test of the hypotheses relating sociopsychological factors to the treatment variables among these institutions.

2. Psychiatric Treatment Variables

a) Selection of Treatment: Among the institutions, significantly fewer patients at Menninger Hospital (43%) received somatic therapy than at Hillside (64%) or MMHC (68%) (Table IV).

b) Duration of Hospitalization: The three institutions differed with regard to patient's length of stay (Table IV). Patients at Menninger Hospital were hospitalized longest, with 65% of patients remaining for twelve months or more, compared to 31 per-cent of the Hillside patients and only 5 per-cent at the Massachusetts Mental Health Center. The modal stay of the Hillside group was between seven and eleven months while two-thirds of the MMHC patients were discharged within six months of hospitalization.

c) Discharge Evaluation: In each hospital, most patients were evaluated at the time of discharge as "improved" (Table IV). At Menninger Hospital, however, a higher percentage (19%) of patients were rated as "unimproved" and only a single patient was scored "recovered" or "much improved". The highest percentage of "recovered" or "much improved" ratings (28%) and the lowest proportion of "unimproved" (10%) were found at the Massachusetts Mental Health Center.

d) Diagnosis: For statistical analysis three diagnostic groupings were made: schizophrenia, affective disorders, and

psychoneurosis and personality disorders (Table IV). The diagnostic proportions of patients within these groups were similar for Hillside and MMHC, as slightly more than half were diagnosed as schizophrenia and one-quarter as psychoneurosis or affective disorder. In contrast, at Menninger Hospital psychoneurosis and personality disorder accounted for more than fifty per-cent of the population.

Table IV

C. Intra-Hospital Comparisons

The lack of meaningful criteria for the subdivision of populations, their homogeneity within each institution, and the limited sample size (several groupings were obtained which had fewer than five cases) precluded significant intra-hospital comparisons. However, the trends appeared similar to those found in the earlier study. Age and F score were found related to the selection of treatment at Menninger Hospital (older and higher F score patients more frequently receiving somatic therapy), and F score alone at Hillside. Length of hospitalization and chronological age were related at both the Menninger and Hillside Hospitals - the younger patients remaining for the longest periods. While such relationships were significant in these two hospitals, a similar trend was noted at the MMHC (Table V) where no patients over 40, but 14% of patients under the age of 20 remained longer than a year.

Table V

DISCUSSION

The patients of three voluntary psychiatric hospitals exhibited significant inter-institutional differences in social class and years of education, but not age; in distribution of California F Scale scores; and in each of the treatment variables -- duration of hospitalization, selection of treatments and distributions of diagnoses and discharge evaluations (7). Expectations based on our earlier intra-Hillside Hospital were confirmed. The institution serving upper class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

It is our impression that these differences in psychiatric treatment are related more to differences in staff attitudes and social class variables than psychiatric differences in populations. The contrasts between institutions in duration of hospitalization are great, as are the complexity of diagnostic formulations, discharge evaluations, definitions of psychotherapy, and the details and amount of recorded data. While these stylistic differences may be dismissed as idiosyncratic, they follow a pattern related to social differences, and their consistency with expectations suggests a greater dependence on social class variables than ordinarily acknowledged.

Such population and treatment variable relationships are interactive processes, determined both by the attitude of the physician and the administrative staff and by the constellation of symptoms or history which patients present. Such relationships are marked most in those psychiatric conditions where diagnostic criteria are least specific, i.e., where objective criteria defining diseases of known etiology are absent, as in schizophrenia, psychoneurosis, personality and behavior disorders. Under these conditions of perceptual and situational ambiguity, the observer's attitudes and expectations become significant aspects of his perceptions, classifications, and decisions. A similar situation was clearly documented by Pasamanick, Dinitz and Lefton (6) in their study of variations in diagnosis within a single institution. They observed that patients assigned at random to different wards did not differ in type of admission, marital status, education, age or residence. Significant differences did occur, however, in

the incidence of various diagnostic classifications among the three wards and among three administrators on one ward. As no differences in the populations were demonstrated, we believe the different incidence of diagnoses reflect the attitudes of the examiners.

Present psychiatric concepts of diagnosis and clinical evaluation have little meaning when transferred from one institution to another. Literal adherance to these concepts produces paradoxical results. For example, Menninger Hospital with the more highly trained personnel conducting treatment, keeps its patients for the longest time, has the fewest patients diagnosed as schizophrenia, and yet, reports the poorest treatment results. At MMHC, in contrast, which is most inclusive in defining a therapist, keeps patients for the shortest periods, and has a higher proportion of the population classed as schizophrenia, reports the best treatment results.

In the absence of independent criteria for the quality of care or the assessment of comparability of populations for degree of illness among the institutions, these findings do not reflect the relative therapeutic efficacy of the institutions. Since the evaluations are based on the institution's own ratings, we believe that the differences reflect variations in the criteria used for evaluation of improvement rather than intrinsic psychiatric characteristics.

In our initial Hillside study (4) it was postulated that different criteria of improvement were utilized for persons of different social background. It was suggested that the higher the person's social background the more complex the criteria employed. This has been literally confirmed in the present study, with the staff of Menninger Hospital using a tripartite rating compared to the global rating of the other two institutions. Even considering the syndrome rating on which our comparative statistical analyses were based, it is our contention that for lower class persons we are apt to assess improvement in relation to symptom relief or the patient's capacity to resume work, while for upper class persons the criteria emphasize such complex intangibles as "developing insight," or "working through one's problems."

While these investigations have again demonstrated the role of social factors in psychiatric treatment, we have been greatly impressed by the methodological problems of studies across institutions. These institutions were selected for their educational

leadership and the expectation that the recorded variables would be clearly defined. But differences in institutional style made it difficult to obtain comparable data. This experience is a cue to the problems of the conventional use of comparative statistics, especially in the evaluation of psychiatric therapies. The use of discharge ratings, diagnostic classifications or length of hospitalization as criteria in therapeutic evaluations or the identification of comparable populations are subject to extensive error unless the institutions are clearly matched for staff attitudes and style as well as social class patterns in patient populations. These difficulties also extend to the failures of scientists to confirm clinical or laboratory observations made in other laboratories, for the lack of confirmation may reflect differences in populations and psychiatric criteria as much as errors in the original hypotheses. The use of the terms "schizophrenia" or "psychoneurosis" to explore changes in psychological and biological features of mental illness has led to a science burdened by negative results. Even were a valid observation to be reported from one laboratory today, we do not have the methods to describe psychiatric populations adequately for a satisfactory test of the hypothesis. Increased attention must be paid to the classification of subjects by "objective" criteria rather than our present methods, so highly dependent on institutional and observer attitudes and the socio-psychological aspects of the therapist-patient interaction.

SUMMARY AND CONCLUSION

Population characteristics, defined by social class, age, education and F score, were related to treatment variables in three voluntary teaching hospitals. Treatment variables included type of treatment, duration of hospitalization, diagnosis and discharge evaluation. Inter-institutional differences were observed in patient social class, years of education and distribution of California F scores, but not age.

The variations in treatment characteristics among institutions were significantly different in the predicted direction. The institution serving upper class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

These variations in psychiatric practices followed a pattern consistent with the social class differences among the institutions and are not regarded as idiosyncratic.

Such differences in institutional style make comparisons of diagnoses, duration of hospitalization and treatment results between institutions difficult and tenuous, and the need for more objective criteria for the classification of psychiatric populations is emphasized.

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TABLE I

Redesignation of Discharge Diagnoses

Menninger Discharge Diagnoses	General Classification
Depressive Reaction Narcissistic Personality	Psychoneurosis
Anxiety Reaction Narcissistic Personality	Psychoneurosis
Narcissistic Personality	Personality Trait Disturbance
Narcissistic Personality Alcoholism, Chronic Infantile Personality	Sociopathic Personality Disturbance
Passive Aggressive Personality Alcoholism	Sociopathic Personality Disturbance
Infantile Personality Schizophrenic Reaction, Schizo-Affective Type	Schizophrenic Psychosis

TABLE II

Comparative Ratings of Clinical

Condition At Time of Hospital Discharge

MENNINGER HOSPITAL	HILLSIDE HOSPITAL	MASSACHUSETTS MENTAL HEALTH CENTER
Social Adjustment		
Improved	Recovered	Recovered
Unimproved	Much Improved	Markedly Improved
	Improved	Moderately Improved
Character Structure	Unimproved	Slightly Improved
Improved		Unimproved
Unimproved		
Syndrome		
Complete Remission		
Improved		
Unchanged (or worse)		

TABLE III

Interhospital Comparisons for Sociopsychological Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
	N	(87)	(133)	(72)
Social Class	I	31%	7%	3%
	II	51	20	28
	III	17	34	13
	IV	1	34	28
	V	0	5	28
		$X^2 = 121.5$; df=8: $p < .001$		
Age	N	(100)	(173)	(95)
	<20	19%	19%	15%
	20-39	59	58	52
	40 +	22	23	33
		$X^2 = 3.9$; df=4; p=n.s.		
Years of Education	N	(100)	(173)	(91)
	<12	23%	32%	41%
	12-15	54	51	49
	16+	23	17	10
		$X^2 = 9.7$; df=4; $p<.05$		
F Score	N	(92)	(163)	(76)
	10-29	51%	33%	20%
	30-49	41	50	38
	50-70	8	17	42
		$X^2 = 39.2$; df=4; $p<.001$		

TABLE IV

Interhospital Differences in Treatment Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
Type of Treatment	N	(100)	(173)	(89)
	Psychotherapy	21%	36%	24%
	Somatic	43	64	68
	Other	36	--	8
	$X^2 = 82.8$; df=4; $p<.001$			
Duration of Hospitalization	N	(100)	(173)	(95)
	<7 months	22%	27%	67%
	7-11 months	13	42	27
	>11 months	65	31	5
	$X^2 = 90.6$; df=4; $p<.001$			
Discharge Evaluation	N	(99)	(172)	(88)
	Recovered, Much Improved	1%	23%	28%
	Improved	80	62	61
	Unimproved	19	15	10
	$X^2 = 29.3$; df=4; $p<.001$			
Discharge Diagnosis	N	(95)	(171)	(85)
	Schizophrenia	43%	52%	54%
	Affective Psychosis	5	22	17
	Psychoneurosis and Personality Disorder	52	26	29
	$X^2 = 23.8$; df=4; $p<.001$			

TABLE V

Duration of Hospitalization

By Age

PERCENTAGE OF AGE GROUP STAYING OVER ONE YEAR

Age	Menninger	Hillside	MMHC
Below 20	81	42	14
20-29	73	36	6
30-39	61	30	6
40-49	30	20	0
50+	36	0	0

March 12, 1965

Dr. Nathaniel Siegel, Ph.D.
National Institute of Mental Health
Bethesda, Maryland

Dear Nate:

I have accepted all your recommendations and have redone this report. Enclosed are a few copies which, while they still may have a typographical error, are in a form which could be sent to a publisher. I have taken the liberty of running this off on Colitho plates, so that if it is not published, we may still have some copies for our friends.

Unless I hear from you or receive a stop order, I will send a copy of this to the Archives of General Psychiatry.

My best regards.

Sincerely yours,

Max Fink, M.D.
Professor of Psychiatry

MF:jm

March 12, 1965

Dr. Robert L. Kahn, Ph.D.
Division of Psychiatry
Montefiore Hospital and Medical Center
111 East 210th Street
New York, New York 10467

Dear Bob:

Following all the recommendations in our last discussion, I have accepted the full responsibility for this draft. Recognizing the emotional problems involved, I have deleted Max's name. In this draft, I have assumed the senior authorship insofar as you seem to be reluctant to do anything with the document. If you would like, I will have the first page redone and have this submitted to the Archives of General Psychiatry, with you as senior author.

If I do not hear from you, I will assume that this draft is satisfactory, and submit it as it is to Dr. Grinker.

My best regards.

Sincerely yours,

Max Fink, M.D.
Professor of Psychiatry

MF:jm

MONTEFIORE HOSPITAL AND MEDICAL CENTER

111 EAST 210TH STREET, BRONX, NEW YORK 10467, TELEPHONE: 212/TU 1-1000

March 15, 1965

Max Fink, M.D.
Professor of Psychiatry
Department of Psychiatry
Missouri Institute of Psychiatry
University of Missouri
5400 Arsenal Street
St. Louis, Missouri

Dear Max:

Thank you for sending me the draft of the "Three Hospitals" paper. I can understand your deleting Max's name since he never seemed able to accept this organization of the material. I would appreciate it, however, if my name were restored as senior author when the paper is submitted for publication. I do not, in fact, feel "reluctant" to handle it, and if you wish, I am quite prepared to arrange for publication. I have no objections, however, if you wish to submit it to Dr. Grinker first with myself as the senior author.

I notice from your letterhead that you are now a professor at the University of Missouri. I hope this change will be beneficial to your professional interests. You certainly have my best wishes.

Regards to Martha.

Sincerely,

Robert L. Kahn, Ph.D.
Head, Section of Psychology
Division of Psychiatry

RLK:DCS

April 1, 1965

Robert L. Kahn, Ph. D.
Head, Section of Psychology
Division of Psychiatry
Montefiore Hospital and Medical Center
111 East 210th Street
Bronx, New York 10467

Dear Bob:

The revised draft is enclosed, and it has gone to Dr. Grinker in this form. I do hope he accepts it, because it is one of the more interesting non-biological studies in which we have participated.

The changes here have been many, and I now find myself in a position similar to that which I held in 1958. The administrative burdens are minimal and relate exclusively to my own studies. I seem to have achieved a maximum of independence for research with a great deal of authority over patients, staff, and facilities. Whether I can make something of this only time will tell. I have a few excellent co-workers, but none have the stimulation and imagination that you exhibited.

I look forward to seeing you in May during the APA Meeting. My best regards.

Sincerely yours,

Max Fink, M.D.
Professor of Psychiatry

MF:jm

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
BETHESDA, MD. 20014

NATIONAL INSTITUTES OF HEALTH
AREA CODE 301 TEL: 656-4000

March 17, 1965

In reply refer to:
M-TMR-SS

AIRMAIL

Dr. Max Fink
Professor of Psychiatry
Missouri Institute of Psychiatry
University of Missouri
5400 Arsenal Street
St. Louis, Missouri 63139

Dear Max:

Thank you for the colitho copies of the "Sociopsychological" paper. It looks fine and I hope that it will be accepted by the Archives of General Psychiatry.

I have been in touch with some of our training grantees in Missouri, making the Missouri Institute of Psychiatry more visible to them as a research source. I hope that some cooperative endeavor may result in the not too distant future.

Please keep in touch, and give my best regards to Martha.

Sincerely,

Nathaniel H. Siegel, Ph. D.
Acting Chief, Social Sciences Section
Training and Manpower Resources Branch
National Institute of Mental Health

April 1, 1965

Nathaniel H. Siegel, Ph.D.
Acting Chief, Social Sciences Section
Training and Manpower Resources Branch
National Institute of Mental Health
Department of Health, Education, and Welfare
Bethesda, Maryland

Dear Nat:

After sending copies of the sociopsychological paper to Bob, he indicated a preference for being the senior author. I am pleased to exceed to his wish, and enclosed is a copy of the report with the revised face sheets. A copy similar to this has gone to the Archives.

Sincerely yours,

Max Fink, M.D.
Professor of Psychiatry

MF:jm

March 30, 1965

Dr. Lewis Robbins, M. D.
Medical Director
Hillside Hospital
P. O. Box 38
Glen Oaks, New York

Dear Lew:

During the winter meetings Bob Kahn, Nat Siegel and I discussed this study and we agreed to prepare it for publication.

A final draft is enclosed for your information. We have taken the liberty of submitting this to Dr. Grinker for his consideration for publication in the Archives.

If you deem it advisable, I would be pleased to send a copy to anyone you suggest at the Menninger Foundation.

Sincerely yours,

Max Fink, M. D.
Professor of Psychiatry

MF:kp

March 30, 1965

Dr. Jack Ewalt, M. D.
Professor of Psychiatry
Massachusetts Mental Health Center
72-76 Fenwood Road
Boston, Massachusetts

Dear Dr. Ewalt:

Some years ago, a comparative study was undertaken with the Massachusetts Mental Health Center as a cooperating institution. A final copy of the report of that study is enclosed. We have received permission to publish this information from Dr. Greenblatt.

I am writing to tell you that we have submitted this draft for consideration by the Archives of General Psychiatry.

I would be pleased to have your comments.

Sincerely yours,

Max Fink, M. D.
Professor of Psychiatry

MF:kp

March 30, 1965

Dr. Roy R. Grinker, Sr.
Department of Psychiatry
Michael Reese Hospital
Chicago, Illinois 60616

Dear Dr. Grinker:

I am taking the opportunity to enclose two copies of a report "Sociopsychological Aspects of Psychiatric Treatment in Three Voluntary Hospitals" for your consideration for publication in the Archives.

This report represents a study undertaken some years ago by my associates and myself at the Hillside Hospital. We have decided to submit this for publication, in view of the continued interest in the social aspects of diagnosis and treatment.

Sincerely yours,

Max Fink, M. D.
Professor of Psychiatry

MF:kp

Harvard Medical School
Department of Psychiatry
74 Fenwood Road, Boston 02115

Massachusetts Mental Health Center
(Boston Psychopathic Hospital)
Department of Mental Health

JACK R. EWALT, M.D.
BULLARD PROFESSOR OF PSYCHIATRY
SUPERINTENDENT

April 5, 1965.

Dr. Max Fink
Professor of Psychiatry
Missouri Institute of Psychiatry
5400 Arsenal Street
St. Louis, Missouri 63139

Dear Max:

Thank you for the copy of your study of the Hillside Menninger's MMHC. I found it very interesting and, considering the differences particularly between this place and Menninger's, I am impressed with the way you could tease out comparable elements. I would hope some energetic person would about ten years after the first study do a repeat on the same three institutions, using as near as possible the same criteria to see what directions or shifts if any had taken place among them. I strongly suspect that there would be directional changes in all three but the differences you found would probably persist.

Sincerely,

Jack

Jack R. Ewalt, M. D.

June 3, 1965

Dr. Robert L. Kahn
Division of Psychiatry
Montefiore Hospital and Medical Center
111 East 210th Street
New York, New York 10467

Dear Bob and Nat:

Dr. Grinker has accepted our manuscript. Congratulations! I look forward to seeing this material in press.

Sincerely yours,

Max Fink, M. D.
Professor of Psychiatry

MF:kp

cc: Nathaniel Siegel, Ph.D.
National Institute of Mental Health
Bethesda, Maryland

PROCESSING OF ACCEPTED MANUSCRIPTS

Each accepted manuscript is processed in the Chicago Editorial Offices of the Archives of General Psychiatry bringing together all elements of the printed pages of the final published article.

You will receive a reproduction of the typescript, edited according to the official AMA Style Book, for final review and approval. There will be no galley proof.

Your manuscript is accepted with the understanding that it may be necessary to make minor revisions, or to request changes in illustration or text.

The Editors

SAMPLE DETACH SAMPLE

AUTHOR(S) (AND ONE ADDRESS): R. K. Merchant and J. P. Utz
1200 Blank Street, Chicago, Illinois 60610

TITLE: Familial Sarcoidosis

(Name of) JOURNAL: Archives of Internal Medicine

Sarcoidosis was observed in a mother and her daughter. The criteria for this diagnosis included (1) a compatible clinical picture, (2) granulomatous inflammation with little or no necrosis and the absence of demonstrable microorganisms to specially stained sections of biopsy material, (3) negative cultures, particularly for acid-fast bacteria and fungi, of appropriate body fluids, exudates, and surgically excised granulomatous tissue, and (4) a positive Kveim test. These cases of sarcoidosis, together with 73 others involving more than one member of each 32 families, suggest the possibility that a complex hereditary trait is operative in the pathogenesis of Sarcoidosis.

DETACH

INVITATION...TO PREPARE AN ABSTRACT OF YOUR COMMUNICATION WHICH WILL BE CONSIDERED FOR PUBLICATION IN THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

Suggestions:

1. Type name(s) of author(s) (also address of one of the authors), title of article and name of journal in which the original article appears.

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   a) Indicate purpose, extent, kind of study, materials and methods used.

   b) Refer chiefly to new data—*the high points*—informational, *not* descriptive; e.g., new statistics, new apparatus, new technics, new diagnostic criteria, new evidence, new preventive measures, a new theory, new treatment. Do not use abbreviations.

3. The abstract should not exceed 200 words.

NOTE: Accepted abstracts will be printed concurrently with publications of the original article.

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INVITATION...TO PREPARE AN ABSTRACT OF YOUR COMMUNICATION WHICH WILL BE CONSIDERED FOR PUBLICATION IN THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

Suggestions:

1. Type name(s) of author(s) (also address of one of the authors), title of article and name of journal in which the original article appears.

2. Type abstract on attached card and mail promptly:

   a) Indicate purpose, extent, kind of study, materials and methods used.

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AUTHOR(S) (AND ONE ADDRESS): R. K. Merchant and J. P. Utz
1200 Blank Street, Chicago, Illinois 60610

TITLE: Familial Sarcoidosis

(Name of) JOURNAL: Archives of Internal Medicine

Sarcoidosis was observed in a mother and her daughter. The criteria for this diagnosis included (1) a compatible clinical picture, (2) granulomatous inflammation with little or no necrosis and the absence of demonstrable microorganisms to specially stained sections of biopsy material, (3) negative cultures, particularly for acid-fast bacteria and fungi, of appropriate body fluids, exudates, and surgically excised granulomatous tissue, and (4) a positive Kveim test. These cases of sarcoidosis, together with 73 others involving more than one member of each 32 families, suggest the possibility that a complex hereditary trait is operative in the pathogenesis of Sarcoidosis.

AUTHOR(S) (and one address): *Kahn, R.L., Fink, M. and Siegel, N.
*Division of Psychiatry, Montefiore Hospital, 111 E 210 St., NY 10467)
TITLE: Sociopsychological Aspects of Psychiatric Treatment in Three Voluntary Hospitals.
JOURNAL: Archives of General Psychiatry

Population characteristics, defined by social class, age, education and F score, were related to treatment variables in three voluntary teaching hospitals, Hillside Hospital (N.Y.), C.F. Menninger Memorial Hospital (Topeka), and Massachusetts Mental Health Center (Boston). Treatment variables included type of treatment, duration of hospitalization, diagnosis and discharge evaluation. The institutions differed in patient social class, years of education and distribution of California F scores, but not age.

The institution serving upper class patients had the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients had the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

Psychiatric treatment and management practices differ among institutions according to the prevailing social class characteristics of their populations.

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Max Fink, M.D.
University of Missouri
School of Medicine
5400 Arsenal Street
St. Louis, Missouri 63139

re: Manuscript Number 3836
Sociopsychological Aspects of
Psychiatric Treatment in Three
Voluntary Hospitals by KAHN, Fink,
and Siegel

Dear Doctor Fink:

I am very pleased to inform you that your paper has been accepted by the Editorial Board for publication in the ARCHIVES OF GENERAL PSYCHIATRY.

Yours very truly,

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Chief Editor

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re: Manuscript Number 3826
Sociopsychological Aspects of
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KAHN, et al

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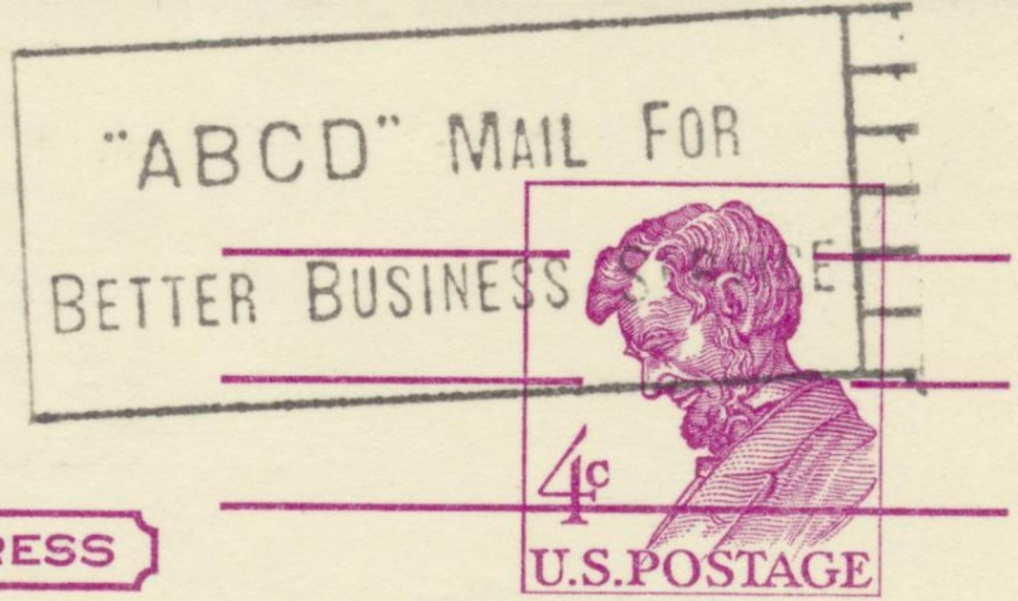

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Max Fink, M.D.
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June 15, 1965

Dr. Roy R. Grinker, Sr., Chief Editor
Archives of General Psychiatry
Institute for Psychosomatic and Psychiatric Research
29th Street and Ellis Avenue
Chicago, Illinois 60616

Dear Dr. Grinker:

Enclosed are three copies of the manuscript entitled "Sociopsychological Aspects of Psychiatric Treatment in Three Voluntary Hospitals," as requested in your recent letter. I am also enclosing the medical abstract card. I have previously sent one to Dr. Danilevicius, as he had requested this about ten days ago.

Thank you very much for your interest.

Sincerely yours,

Max Fink, M.D.
Professor of Psychiatry

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Sociopsychological Aspects of Psychiatric Treatment in Three Voluntary Hospitals

Robert L. Kahn, Ph.D.*, Max Fink, M.D.**,

Nathaniel Siegel, Ph.D.***

SOCIOPSYCHOLOGICAL ASPECTS OF PSYCHIATRIC TREATMENT IN THREE VOLUNTARY HOSPITALS

Robert L. Kahn, Ph.D.*, Max Fink, M.D.**,

Nathaniel Siegel, Ph.D.***

This study was done when the authors were associated at the Department of Experimental Psychiatry, Hillside Hospital, Glen Oaks, L.I. New York, 1959-1962.

The cooperation of Dr. Max Pollack and the staffs of the Massachusetts Mental Health Center and the C.F. Menninger Memorial Hospital is gratefully acknowledged.

Aided, in part, by grants MY-2092 and MY-2715, of the National Institute of Mental Health, U.S. Public Health Service; and the Nassau County Mental Health Board.

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MIP 2/1/65

In their studies of the New Haven psychiatric patient population, Hollingshead and Redlich reported significant relationships between an individual's position in the social class structure and the incidence of treated illness, types of diagnosed disorders and kinds and duration of psychiatric treatment administered (2). The influence of the economic status of the patient on the availability of treating personnel, however, was not excluded.

Studies of the role of social factors in the treatment of hospitalized patients independent of their financial status and the availability of treatments were undertaken at Hillside Hospital in 1957. In this hospital, a variety of treatment modes, including individual psychotherapy, pharmacotherapy and convulsive therapies were available to all patients regardless of their ability to pay. In our surveys (3,4) we observed that patients hospitalized for the shortest periods were older, had less education and were more often of foreign birth. These older, less educated patients were predominantly treated by convulsive therapy and received more favorable clinical discharge ratings. In contrast, younger, native born, more educated patients were hospitalized for longer periods, treated primarily by psychotherapy and received poorer discharge ratings. These clinical factors were also related to a measure of stereotypy, the California F Scale (1,5). Higher F scores, i.e., greater stereotypy, were often found in patients diagnosed as involutional psychosis who were referred for convulsive therapy, hospitalized for shorter periods, and more often were rated as much improved or recovered.

It was suggested that differences in psychiatric treatment among hospitals should refle-t a similar influence of social factors as noted for patients within Hillside Hospital. To test this suggestion it was decided to employ the procedures of the 1957 Hillside study in three institutions — Hillside Hospital, the C.F. Menninger Memorial Hospital in Topeka and the Massachusetts Mental Health Center in Boston. These institutions were selected with the expectation that diverse treatment modalities were equally available to populations of different social classes. Each provided short-term treatment of voluntary patients and did not provide custodial care. Each is a residency training center with a full time supervisory staff and active research units, emphasizing psychoanalytically-oriented psychotherapy.

This study was designed to determine the population characteristics of the three institutions with respect to social class, age, education and F score; and to relate these characteristics to treatment variables of type of treatment, duration of hospitalization, diagnosis and discharge evaluation among the institutions.

METHOD

A census of all voluntary, adult patients in residence in the institutions was undertaken in January 1959. While Menninger and Hillside Hospitals had voluntary patients only, a small number of those at the Massachusetts Mental Health Center (MMHC) were assigned by the courts for psychiatric evaluation or were members of a chronic schizophrenic state hospital group transferred for a specific research project. These patients were excluded from the study because of their non-voluntary status.

The California F scale was scored for each patient on the census day.

Eighteen months later the records of discharged patients were examined to determine the social and psychiatric factors of the study. For a measure of social class, the Hollingshead 2-factor index - a weighted score of education and occupation - was used (3,4,7). The study population consisted of 173 patients at Hillside, 100 at Menninger and 95 at the Massachusetts Mental Health Center.

The study included examination of the relations of the social to the psychiatric variables within each institution as well as between institutions. These comparisons were difficult, however, because of various methological differences discussed below. These difficulties were most marked in the intra-hospital comparisons and accordingly, in the analyses of psychiatric variables emphasis will be placed on the differences between institutions with citation of intra-institutional trends. These difficulties also led to missing information for some data, reflected in the tables by the varying population sample sizes.

RESULTS

A. METHODOLOGICAL PROBLEMS

When reporting studies from one institution, the structure of the hospital is taken for granted and either ignored or mentioned briefly. In gathering comparable data from multiple institutions, however, the differences between institutions are accentuated. While these institutions were selected as comparable in teaching, research and treatment programs, they were functionally unlike in ways which influenced the data of the study. Specific differences were prominent in the designation of type of treatment, diagnostic classifications, and the evaluation of treatment outcome.

1. Designation of Type of Treatment: The criteria for designating that a patient received "psychotherapy" differed among the institutions, making comparisons difficult.

At Menninger Hospital psychotherapy was designated as treatment administered on a prescription basis by a staff psychiatrist for which the patient was charged a fee. Sessions with a psychiatric resident physician were considered part of routine administrative patient care.

At Hillside Hospital psychotherapy was defined as treatment sessions with a psychiatric resident. Staff psychiatrists did not treat patients, but restricted their activities to supervising resident physicians. No additional fees were charged.

At the Massachusetts Mental Health Center psychotherapy was designated as the activity of many disciplines — psychiatric

residents, psychologists, social workers, nurses and medical students. Formal records of such sessions were not routinely included in the patient's record and to ascertain which patients received psychotherapy it was necessary for members of the study team to interview the resident physician responsible for each case.

2. Diagnosis: Individual institutional diagnostic styles made comparisons difficult. At Menninger Hospital diagnoses employed the multiple evaluative scheme recommended by the American Psychiatric Association, while both Hillside and MMHC followed different unitary systems. Several examples of diagnoses from Menninger are listed in Table I, with our suggested conversions into categories comparable to that of the other two institutions. These conversions provide a source of distortion.

Table I

3. Discharge Ratings of Improvement: Ratings of improvement at the three hospitals varied in format and detail. The discharge rating at Menninger Hospital was tripartite with a separate evaluation for social, characterological and syndrome changes. Hillside Hospital and Massachusetts Mental Health Center had global ratings making it difficult to assess the contribution of each factor of the Menninger system (Table II). For this study the Menninger syndrome rating was compared to the global ratings of the other institutions.

Table II

B. INTER-HOSPITAL COMPARISONS

1. Sociopsychological Variables

The distribution of the variables of social class, age, education and California F Scale score among the three institutions is presented in Table III.

Table III

a) Social Class: The anticipated difference in social class composition of the three institutions was observed. At Menninger Hospital the population was predominantly upper class; at Hillside Hospital, middle class; and at Massachusetts Mental Health Center, predominantly lower class.

b) Age: There were no differences in age distribution in the institutional populations.

c) Education: Thepopulations also differed in educational attainment, with patients having more years of education at Menninger Hospital than at Massachusetts Mental Health Center. While 41 per cent of the patients at MMHC had not completed high school, only 32 per cent at Hillside and 23 per cent at Menninger did not graduate.

d) F Score: Differences in the distribution of scores on the California F Scale were also observed. Fifty-one per cent of Menninger patients had F scores below 30, and only eight per cent with scores of 50 or above — the higher F scores being associated with higher degrees of stereotypy. In contrast,

at Hillside thirty-one per cent of the patients had F scores below 30 while at MMHC only twenty per cent were below 30.

Thus, differences in social class, educational attainment and performance on the F Scale were observed. These differences permit a test of the hypotheses relating sociopsychological factors to the treatment variables among these institutions.

2. Psychiatric Treatment Variables

a) Selection of Treatment: Among the institutions, significantly fewer patients at Menninger Hospital (43%) received somatic therapy than at Hillside (64%) or MMHC (68%) (Table IV).

b) Duration of Hospitalization: The three institutions differed with regard to patient's length of stay (Table IV). Patients at Menninger Hospital were hospitalized longest, with 65% of patients remaining for twelve months or more, compared to 31 per cent of the Hillside patients and only 5 per cent at the Massachusetts Mental Health Center. The modal stay of the Hillside group was between seven and eleven months while two-thirds of the MMHC patients were discharged within six months of hospitalization.

c) Discharge Evaluation: In each hospital, most patients were evaluated at the time of discharge as "improved" (Table IV). At Menninger Hospital, however, a higher percentage (19%) of patients were rated as "unimproved" and only a single patient was scored "recovered" or "much improved." The highest percentage of "recovered" or "much improved" ratings (28%) and the

lowest proportion of "unimproved" (10%) were found at the Massachusetts Mental Health Center.

d) Diagnosis: For statistical analysis three diagnostic groupings were made: schizophrenia, affective disorders, and psychoneurosis and personality disorders (Table IV). The diagnostic proportions of patients within these groups were similar for Hillside and MMHC, as slightly more than half were diagnosed as schizophrenia and one-quarter as psychoneurosis or affective disorder. In contrast, at Menninger Hospital psychoneurosis and personality disorder accounted for more than fifty per cent of the population.

Table IV

C. INTRA-HOSPITAL COMPARISONS

The lack of meaningful criteria for the subdivision of populations, their homogeneity within each institution, and the limited sample size (several groupings were obtained which had fewer than five cases) precluded significant intra-hospital comparisons. However, the trends appeared similar to those found in the earlier study. Age and F score were found related to the selection of treatment at Menninger Hospital (older and higher F score patients more frequently receiving somatic therapy), and F score alone at Hillside. Length of hospitalization and chronological age were related at both the Menninger and Hillside Hospitals - the younger patients remaining for the longest periods. While such relationships were significant in these two hospitals,

a similar trend was noted at the MMHC (Table V) where no patients over 40, but 14% of patients under the age of 20 remained longer than a year.

Table V

DISCUSSION

The patients of three voluntary psychiatric hospitals exhibited significant inter-institutional differences in social class and years of education, but not age; in distribution of California F Scale scores; and in each of the treatment variables — duration of hospitalization, selection of treatments and distributions of diagnoses and discharge evaluations (7). Expectations based on our earlier intra-Hillside Hospital study were confirmed. The institution serving upper class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a

lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

It is our impression that these differences in psychiatric treatment are related more to differences in staff attitudes and social class variables than psychiatric differences in populations. The contrasts between institutions in duration of hospitalization are great, as are the complexity of diagnostic formulations, discharge evaluations, definitions of psychotherapy, and the details and amount of recorded data. While these stylistic differences may be dismissed as idiosyncratic, they follow a pattern related to social differences, and their consistency with expectations suggests a greater dependence on social class variables than ordinarily acknowledged.

Such population and treatment variable relationships are interactive processes, determined both by the attitude of the physician and the administrative staff and by the constellation of symptoms or history which patients present. Such relationships are marked most in those psychiatric conditions where diagnostic criteria are least specific, i.e., where objective criteria defining diseases of known etiology are absent, as in schizophrenia, psychoneurosis, personality and behavior disorders. Under these

conditions of perceptual and situational ambiguity, the observer's attitudes and expectations become significant aspects of his perceptions, classifications, and decisions. A similar situation was clearly documented by Pasamanick, Dinitz and Lefton (6) in their study of variations in diagnosis within a single institution. They observed that patients assigned at random to different wards did not differ in type of admission, marital status, education, age or residence. Significant differences did occur, however, in the incidence of various diagnostic classifications among the three wards and among three administrators on one ward. As no differences in the populations were demonstrated, we believe the different incidence of diagnoses reflect the attitudes of the examiners.

Present psychiatric concepts of diagnosis and clinical evaluation have little meaning when transferred from one institution to another. Literal adherance to these concepts produces paradoxical results. For example, Menninger Hospital with more highly trained personnel conducting treatment, keeps its patients for the longest time, has the fewest patients diagnosed as schizophrenia, and yet, reports the poorest treatment results, At MMHC, in contrast, which is most inclusive in defining a therapist, keeps patients for the shortest periods, and has a higher proportion of the population classed as schizophrenia, reports the best treatment results.

In the absence of independent criteria for the quality of care or the assessment of comparability of populations for degree of illness among the institutions, these findings do not reflect the relative therapeutic efficacy of the institutions. Since the evaluations are based on the institution's own ratings, we believe that the differences reflect variations in the criteria used for evaluation of improvement rather than intrinsic psychiatric characteristics.

In our initial Hillside study (4) it was postulated that different criteria of improvement were utilized for persons of different social background. It was suggested that the higher the person's social background the more complex the criteria employed. This has been literally confirmed in the present study, with the staff of Menninger Hospital using a tripartite rating compared to the global rating of the other two institutions. Even considering the syndrome rating on which our comparative statistical analyses were based, it is our contention that for lower class persons we are apt to assess improvement in relation to symptom relief or the patient's capacity to resume work, while for upper class persons the criteria emphasize such complex intangibles as "developing insight," or "working through one's problems."

While these investigations have again demonstrated the role of social factors in psychiatric treatment, we have been greatly impressed by the methodological problems of studies across institutions.

These institutions were selected for their educational leadership and the expectation that the recorded variables would be clearly defined. But differences in institutional style made it difficult to obtain comparable data. This experience is a cue to the problems of the conventional use of comparative statistics, especially in the evaluation of psychiatric therapies. The use of discharge ratings, diagnostic classifications or length of hospitalization as criteria in therapeutic evaluations or the identification of comparable populations are subject to extensive error unless the institutions are clearly matched for staff attitudes and style as well as social class patterns in patient populations. These difficulties also extend to the failures of scientists to confirm clinical or laboratory observations made in other laboratories, for the lack of confirmation may reflect differences in populations and psychiatric criteria as much as errors in the original hypotheses. The use of the terms "schizophrenia" or "psychoneurosis" to explore changes in psychological and biological features of mental illness has led to a science burdened by negative results. Even were a valid observation to be reported from one laboratory today, we do not have the methods to describe psychiatric populations adequately for a satisfactory test of the hypothesis. Increased attention must be paid to the classification of subjects by "objective" criteria rather than our present methods, so highly dependent on institutional and observer attitudes and the sociopsychological aspects of the therapist-patient interaction.

SUMMARY AND CONCLUSION

Population characteristics, defined by social class, age, education and F score, were related to treatment variables in three voluntary teaching hospitals. Treatment variables included type of treatment, duration of hospitalization, diagnosis and discharge evaluation. Inter-institutional differences were observed in patient social class, years of education and distribution of California F scores, but not age.

The variations in treatment characteristics among institutions were significantly different in the predicted direction. The institution serving upper class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

These variations in psychiatric practices followed a pattern consistent with the social class differences among the institutions and are not regarded as idiosyncratic.

Such differences in institutional style make comparisons of diagnoses, duration of hospitalization and treatment results between institutions difficult and tenuous, and the need for more objective criteria for the classification of psychiatric populations is emphasized.

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TABLE I

Redesignation of Discharge Diagnoses

Menninger Discharge Diagnoses	General Classification
Depressive Reaction Narcissistic Personality	Psychoneurosis
Anxiety Reaction Narcissistic Personality	Psychoneurosis
Narcissistic Personality	Personality Trait Disturbance
Narcissistic Personality Alcoholism, Chronic Infantile Personality	Sociopathic Personality Disturbance
Passive Aggressive Personality Alcoholism	Sociopathic Personality Disturbance
Infantile Personality Schizophrenic Reaction, Schizo-Affective Type	Schizophrenic Psychosis

TABLE II

Comparative Ratings of Clinical

Condition At Time of Hospital Discharge

MENNINGER HOSPITAL	HILLSIDE HOSPITAL	MASSACHUSETTS MENTAL HEALTH CENTER
Social Adjustment		
Improved	Recovered	Recovered
Unimproved	Much Improved	Markedly Improved
	Improved	Moderately Improved
Character Structure	Unimproved	Slightly Improved
Improved		Unimproved
Unimproved		
Syndrome		
Complete Remission		
Improved		
Unchanged (or worse)		

TABLE III

Interhospital Comparisons for Sociopsychological Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
Social Class	N	(87)	(133)	(72)
	I	31%	7%	3%
	II	51	20	28
	III	17	34	13
	IV	1	34	28
	V	0	5	28
		$X^2 = 121.5$; df=8: $p < .001$		
Age	N	(100)	(173)	(95)
	<20	19%	19%	15%
	20-39	59	58	52
	40 +	22	23	33
		$X^2 = 3.9$; df=4; p=n.s.		
Years of Education	N	(100)	(173)	(91)
	<12	23%	32%	41%
	12-15	54	51	49
	16+	23	17	10
		$X^2 = 9.7$; df=4; $p<.05$		
F Score	N	(92)	(163)	(76)
	10-29	51%	33%	20%
	30-49	41	50	38
	50-70	8	17	42
		$X^2 = 39.2$; df=4; $p<.001$		

TABLE IV

Interhospital Differences in Treatment Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
Type of Treatment	N	(100)	(173)	(89)
	Psychotherapy	21%	36%	24%
	Somatic	43	64	68
	Other	36	--	8
		$X^2 = 82.8$; df=4; $p<.001$		
Duration of Hospitalization	N	(100)	(173)	(95)
	<7 months	22%	27%	67%
	7-11 months	13	42	27
	>11 months	65	31	5
		$X^2 = 90.6$; df=4; $p<.001$		
Discharge Evaluation	N	(99)	(172)	(88)
	Recovered, Much Improved	1%	23%	28%
	Improved	80	62	61
	Unimproved	19	15	10
		$X^2 = 29.3$; df=4; $p<.001$		
Discharge Diagnosis	N	(95)	(171)	(85)
	Schizophrenia	43%	52%	54%
	Affective Psychosis	5	22	17
	Psychoneurosis and Personality Disorder	52	26	29
		$X^2 = 23.8$; df=4; $p<.001$		

TABLE V

Duration of Hospitalization

By Age

PERCENTAGE OF AGE GROUP STAYING OVER ONE YEAR

Age	Menninger	Hillside	MMHC
Below 20	81	42	14
20-29	73	36	6
30-39	61	30	6
40-49	30	20	0
50+	36	0	0

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Department of Psychiatry
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Dear Doctor Fink:

An edited copy of your manuscript entitled, "Sociopsychological Aspects of Psychiatric Treatment: A Report of Treatments in Three Voluntary Hospitals," is enclosed for your final checking and approval. Also enclosed is a layout that shows placement of title, copy, and illustrations. Please indicate any necessary changes in a covering letter rather than on the edited typescript. We will be responsible for checking your material against proofs.

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Yours very truly,

Judith M. Kiolbassa

amh

Judith M. Kiolbassa

November 5, 1965

Judith M. Kiolbassa
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

Dear Miss Kiolbassa:

Thank you very much for your letter of November 2. I shall try to answer each item in sequence.

The article title is satisfactory, although I think the sub-head should read "A Report of Treatment in Three Voluntary Hospitals." The word "treatments" and "treatment" are probably interchangeable, but in this instance, I think the singular form is preferable. However, both are acceptable.

While the address at the end of the article is one that will be used for a long-term basis, I would prefer that you change this for Dr. Kahn, and that is the Department of Psychiatry, University of Chicago, Chicago, Illinois.

The acknowledgement included the name of Dr. Max Pollack. In all the studies done at Hillside, Dr. Pollack was a co-participant. In this study he was one of the three people who visited each of the institutions. However, in writing this report, there were some disagreements as to the conclusions, and he elected not to be a co-author of the study. My associates and I, would, however, like to indicate his assistance, and for this reason, I think a statement, "The cooperation of Dr. Max Pollack is gratefully acknowledged" would be appropriate.

The renumbered references are correct. I am assuming that the Journal limits the number of authors to three, and that this is the reason why that in two of the citations the co-authors are omitted. If this is not a general rule, perhaps in this instance the co-authors could be listed. On page 1a, in addition to the notation regarding the cooperation of Dr. Pollack, would you please change the address of Dr. Kahn from Montifiore Hospital to: Department of Psychiatry, University of Chicago, Chicago, Illinois.

Also, the dates 1959-1962, which follow the statement concerning the origin of the study, are inexplicable by themselves. In our original report, we used the sentence, "This study was done when the authors were associated at the Department of Experimental Psychiatry, Hillside Hospital, 1959-1962." If some full sentence of this kind is not to be included, then I would suggest that the dates 1959-1962 be omitted.

I have read the text carefully, and find two small corrections which I have marked. On page 2, near the bottom, the corrections put a slash line through the number 5, and this may be unclear to the printer. It should read "the California F Scale. (4,5)

On page 10, reference 7 should be number 6, and I have so marked this copy.

Page 19 is a table, and there is a symbol which I do not understand. In the first column,"complete remission"is split with a symbol which to me would indicate that the word "remission" should be under "complete." If that is so, this may be unclear. I do not know how this will be set, but "complete remission," "markedly improved," "moderately improved" are each word pairs that should not be split. If this is too long for the column, then I hope you will indicate that "markedly improved" fit together by appropriate spacing.

This is the first time that I have had the opportunity to edit a manuscript in this fashion, and I must say that I found it quite helpful.

Thank you for the opportunity to work with you, and I look forward to the final results.

Sincerely yours,

Max Fink, M.D.
Professor of Psychiatry

MF:jm

Sociopsychological Aspects of Psychiatric Treatment in Three Voluntary Hospitals

Robert L. Kahn, Ph.D.*, Max Fink, M.D.**,

Nathaniel Siegel, Ph.D.***

Sociopsychological Aspects of Psychiatric Treatment in Three Voluntary Hospitals

Robert L. Kahn, Ph.D.*, Max Fink, M.D.**,

Nathaniel Siegel, Ph.D.***

This study was done when the authors were associated at the Department of Experimental Psychiatry, Hillside Hospital, Glen Oaks, L.I. New York, 1959-1962.

The cooperation of Dr. Max Pollack and the staffs of the Massachusetts Mental Health Center and the C.F. Menninger Memorial Hospital is gratefully acknowledged.

Aided, in part, by grants My-2092 and MY-2715, of the National Institute of Mental Health, U.S. Public Health Service; and the Nassau County Mental Health Board.

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MIP 2/1/65

In their studies of the New Haven psychiatric patient population, Hollingshead and Redlich ~~have~~ reported significant relationships between an individual's position in the social class structure and the incidence of treated illness, types of diagnosed disorders and kinds and duration of psychiatric treatment administered (2). The influence of the economic status of the patient on the availability of treating personnel, however, was not excluded.

Studies of the role of social factors in the treatment of hospitalized patients independent of their financial status and the availability of treatments were undertaken at Hillside Hospital in 1957. In this hospital, a variety of treatment modes, including individual psychotherapy, pharmacotherapy and convulsive therapies were available to all patients regardless of their ability to pay. In *our* ~~these~~ surveys (3,4) we observed that patients hospitalized for the shortest periods were older, had less education and were more often of foreign birth. These older, less educated patients were predominantly treated by convulsive therapy and received more favorable clinical discharge ratings. In contrast, younger, native born, ~~and~~ more educated patients were hospitalized for longer periods, treated primarily by psychotherapy and received poorer discharge ratings. These clinical factors were also related to a measure of stereotypy, the California F Scale (1,5). Higher F scores, i.e., greater stereotypy, were often found in patients diagnosed as involutional psychosis, who were referred for convulsive therapy, hospitalized for shorter periods, and more often were rated as much improved or recovered.

~~In the survey reported here,~~ it was suggested that differences in psychiatric treatment among hospitals should reflect ~~the~~ *a similar* influence of social factors as noted for ~~the~~ patients within Hillside Hospital. To test this suggestion it was decided to employ the procedures of the 1957 Hillside study in three institutions -- Hillside Hospital, the C. F. Menninger Memorial Hospital in Topeka and the Massachusetts Mental Health Center in Boston. These institutions were selected with the expectation that ~~they had~~ diverse treatment modalities *were* equally available *to populations* ~~not served~~ ~~patients~~ of different social classes. Each provided short-term treatment of voluntary patients and did not provide custodial care. Each is a residency training center with a full time supervisory staff and active research units, emphasizing psychoanalytically-oriented psychotherapy.

This study was designed to determine the population characteristics of the three institutions with respect to social class, age, education and F score; and to relate these characteristics to treatment variables of type of treatment, duration of hospitalization, diagnosis and discharge evaluation among the institutions.

METHOD

A census of all voluntary, adult patients in residence in the institutions was undertaken in January, 1959. While Menninger and Hillside Hospitals had voluntary patients only, a small number of those at the Massachusetts Mental Health Center (MMHC) were assigned by the courts for psychiatric evaluation or were members of a chronic schizophrenic state hospital group transferred for a specific research project. These patients were excluded from the study because of their non-voluntary status. The California F scale was scored for each patient on the census day.

Eighteen months later the records of discharged patients were examined to determine the social and psychiatric factors of the study. For a measure of social class, the Hollingshead 2-factor index - a weighted score of education and occupation - was used (3,4,7). The study population consisted of 173 patients at Hillside, 100 at Menninger and 95 at the Massachusetts Mental Health Center.

The study included examination of the relations of the social to the psychiatric variables within each institution as well as between institutions. These comparisons were difficult, however, because of various methodological differences discussed below. These difficulties were most marked in the intra-hospital comparisons, and accordingly, in the analyses of psychiatric variables emphasis will be placed on the differences between institutions with citation of intra-institutional trends. These difficulties also led to missing information for some data, ~~which is~~ reflected in the tables by the varying population sample sizes.

RESULTS

A. Methodological Problems

When reporting studies from one institution, the structure of the hospital ~~may be~~ is taken for granted and either ignored or mentioned briefly. In gathering comparable data from multiple institutions, however, the ~~many~~ differences between institutions are accentuated. While these institutions were selected as comparable in teaching, research and treatment programs, they were functionally unlike in ways which influenced the data of the study. Specific differences were prominent in the designation of type of treatment, diagnostic classifications, and the evaluation of treatment outcome.

1. Designation of Type of Treatment: The criteria for designating that a patient received "psychotherapy" differed among the institutions, making comparisons difficult.

At Menninger Hospital psychotherapy was designated as treatment administered on a prescription basis by a staff psychiatrist for which the patient was charged a fee. Sessions with ~~the~~ a psychiatric resident were considered part of routine administrative patient care.

At Hillside Hospital psychotherapy was defined as treatment sessions with a psychiatric resident. Staff psychiatrists did not treat patients, but restricted their activities to supervising resident physicians. No additional fees were charged.

At the Massachusetts Mental Health Center psychotherapy was designated as the activity of many disciplines -- psychiatric residents, psychologists, social workers, nurses and medical students. Formal records of such sessions were not routinely included in the patient's record and to ascertain which patients received psychotherapy it was necessary for members of the study team to interview the resident responsible for each case.

2. Diagnosis: Individual institutional diagnostic styles made comparisons difficult. At Menninger Hospital diagnoses employed the multiple evaluative scheme recommended by the American Psychiatric Association, while both Hillside and MMHC followed different unitary systems. Several examples of diagnoses from Menninger are listed in Table I, with our suggested conversions into categories comparable to that of the other two institutions. These conversions provide a source of distortion.

Table I

3. Discharge Ratings of Improvement: Ratings of improvement at the three hospitals varied in format and detail. The discharge rating at Menninger Hospital was tripartite with a separate evaluation for social, characterological and syndrome changes. Hillside Hospital and Massachusetts Mental Health Center had global ratings making it difficult to assess the contribution of each factor of the Menninger system (Table II). For this study the Menninger syndrome rating was compared to the global ratings of the other institutions.

Table II

CAPs

B. Inter-hospital Comparisons

1. Sociopsychological Variables

The distribution of the variables of social class, age, education and California F Scale score among the three institutions is presented in Table III.

Table III

a) Social Class: The anticipated difference in social class composition of the three institutions was observed. At Menninger Hospital the population was predominantly upper class; At Hillside Hospital, middle class; and at Massachusetts Mental Health Center, predominantly lower class.

b) Age: There were no differences in age distribution in the institutional populations.

c) Education: The populations also differed in educational attainment, with patients having more years of education at Menninger Hospital than at Massachusetts Mental Health Center. While 41 per cent of the patients at MMHC had not completed high school, only 32 per cent at Hillside and 23 per cent at Menninger did not graduate.

d) F Score: Differences in the distribution of scores on the California F Scale were also observed. Fifty-one per cent of Menninger patients had F scores below 30, and only eight percent with scores of 50 or above -- the higher F scores being associated with higher degrees of stereotypy. In contrast, at Hillside thirty-one per cent of the patients had F scores below 30 while at MMHC only twenty per cent were below 30.

Thus, differences in social class, educational attainment and performance on the F Scale were observed. These differences permit a test of the hypotheses relating sociopsychological factors to the treatment variables among these institutions.

2. Psychiatric Treatment Variables

a) Selection of Treatment: Among the institutions, significantly fewer patients at Menninger Hospital (43%) received somatic therapy than at Hillside (64%) or MMHC (68%) (Table IV).

b) Duration of Hospitalization: The three institutions differed with regard to patient's length of stay (Table IV). Patients at Menninger Hospital were hospitalized longest, with 65% of patients remaining for twelve months or more, compared to 31 per-cent of the Hillside patients and only 5 per-cent at the Massachusetts Mental Health Center. The modal stay of the Hillside group was between seven and eleven months while two-thirds of the MMHC patients were discharged within six months of hospitalization.

c) Discharge Evaluation: In each hospital, most patients were evaluated at the time of discharge as "improved" (Table IV). At Menninger Hospital, however, a higher percentage (19%) of patients were rated as "unimproved" and only a single patient was scored "recovered" or "much improved". The highest percentage of "recovered" or "much improved" ratings (28%) and the lowest proportion of "unimproved" (10%) were found at the Massachusetts Mental Health Center.

d) Diagnosis: For statistical analysis three diagnostic groupings were made: schizophrenia, affective disorders, and

psychoneurosis and personality disorders (Table IV). The diagnostic proportions of patients within these groups were similar for Hillside and MMHC, as slightly more than half were diagnosed as schizophrenia and one-quarter as psychoneurosis or affective disorder. In contrast, at Menninger Hospital psychoneurosis and personality disorder accounted for more than fifty per-cent of the population.

Table IV

CAPS

C. Intra-Hospital Comparisons

The lack of meaningful criteria for the subdivision of populations, their homogeneity within each institution, and the limited sample size (several groupings were obtained which had fewer than five cases) precluded significant intra-hospital comparisons. However, the trends appeared similar to those found in the earlier study. Age and F score were found related to the selection of treatment at Menninger Hospital (older and higher F score patients more frequently receiving somatic therapy), and F score alone at Hillside. Length of hospitalization and chronological age were related at both the Menninger and Hillside Hospitals - the younger patients remaining for the longest periods. While such relationships were significant in these two hospitals, a similar trend was noted at the MMHC (Table V) where no patients over 40, but 14% of patients under the age of 20 remained longer than a year.

Table V

DISCUSSION

The patients of three voluntary psychiatric hospitals exhibited significant inter-institutional differences in social class and years of education, but not age; in distribution of California F Scale scores; and in each of the treatment variables -- duration of hospitalization, selection of treatments and distributions of diagnoses and discharge evaluations (7). Expectations based on our earlier intra-Hillside Hospital study were confirmed. The institution serving upper class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

It is our impression that these differences in psychiatric treatment are related more to differences in staff attitudes and social class variables than psychiatric differences in populations. The contrasts between institutions in duration of hospitalization are great, as are the complexity of diagnostic formulations, discharge evaluations, definitions of psychotherapy, and the details and amount of recorded data. While these stylistic differences may be dismissed as idiosyncratic, they follow a pattern related to social differences, and their consistency with expectations suggests a greater dependence on social class variables than ordinarily acknowledged.

Such population and treatment variable relationships are interactive processes, determined both by the attitude of the physician and the administrative staff and by the constellation of symptoms or history which patients present. Such relationships are marked most in those psychiatric conditions where diagnostic criteria are least specific, i.e., where objective criteria defining diseases of known etiology are absent, as in schizophrenia, psychoneurosis, personality and behavior disorders. Under these conditions of perceptual and situational ambiguity, the observer's attitudes and expectations become significant aspects of his perceptions, classifications, and decisions. A similar situation was clearly documented by Pasamanick, Dinitz and Lefton (6) in their study of variations in diagnosis within a single institution. They observed that patients assigned at random to different wards did not differ in type of admission, marital status, education, age or residence. Significant differences did occur, however, in

the incidence of various diagnostic classifications among the three wards and among three administrators on one ward. As no differences in the populations were demonstrated, we believe the different incidence of diagnoses reflect the attitudes of the examiners.

Present psychiatric concepts of diagnosis and clinical evaluation have little meaning when transferred from one institution to another. Literal adherance to these concepts produces paradoxical results. For example, Menninger Hospital with ~~the~~ more highly trained personnel conducting treatment, keeps its patients for the longest time, has the fewest patients diagnosed as schizophrenia, and yet, reports the poorest treatment results. At MMHC, in contrast, which is most inclusive in defining a therapist, keeps patients for the shortest periods, and has a higher proportion of the population classed as schizophrenia, reports the best treatment results.

In the absence of independent criteria for the quality of care or the assessment of comparability of populations for degree of illness among the institutions, these findings do not reflect the relative therapeutic efficacy of the institutions. Since the evaluations are based on the institution's own ratings, we believe that the differences reflect variations in the criteria used for evaluation of improvement rather than intrinsic psychiatric characteristics.

In our initial Hillside study (4) it was postulated that different criteria of improvement were utilized for persons of different social background. It was suggested that the higher the person's social background the more complex the criteria employed. This has been literally confirmed in the present study, with the staff of Menninger Hospital using a tripartite rating compared to the global rating of the other two institutions. Even considering the syndrome rating on which our comparative statistical analyses were based, it is our contention that for lower class persons we are apt to assess improvement in relation to symptom relief or the patient's capacity to resume work, while for upper class persons the criteria emphasize such complex intangibles as "developing insight," or "working through one's problems."

While these investigations have again demonstrated the role of social factors in psychiatric treatment, we have been greatly impressed by the methodological problems of studies across institutions. These institutions were selected for their educational

leadership and the expectation that the recorded variables would be clearly defined. But differences in institutional style made it difficult to obtain comparable data. This experience is a cue to the problems of the conventional use of comparative statistics, especially in the evaluation of psychiatric therapies. The use of discharge ratings, diagnostic classifications or length of hospitalization as criteria in therapeutic evaluations or the identification of comparable populations are subject to extensive error unless the institutions are clearly matched for staff attitudes and style as well as social class patterns in patient populations. These difficulties also extend to the failures of scientists to confirm clinical or laboratory observations made in other laboratories, for the lack of confirmation may reflect differences in populations and psychiatric criteria as much as errors in the original hypotheses. The use of the terms "schizophrenia" or "psychoneurosis" to explore changes in psychological and biological features of mental illness has led to a science burdened by negative results. Even were a valid observation to be reported from one laboratory today, we do not have the methods to describe psychiatric populations adequately for a satisfactory test of the hypothesis. Increased attention must be paid to the classification of subjects by "objective" criteria rather than our present methods, so highly dependent on institutional and observer attitudes and the sociopsychological aspects of the therapist-patient interaction.

SUMMARY AND CONCLUSION

Population characteristics, defined by social class, age, education and F score, were related to treatment variables in three voluntary teaching hospitals. Treatment variables included type of treatment, duration of hospitalization, diagnosis and discharge evaluation. Inter-institutional differences were observed in patient social class, years of education and distribution of California F scores, but not age.

The variations in treatment characteristics among institutions were significantly different in the predicted direction. The institution serving upper class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

These variations in psychiatric practices followed a pattern consistent with the social class differences among the institutions and are not regarded as idiosyncratic.

Such differences in institutional style make comparisons of diagnoses, duration of hospitalization and treatment results between institutions difficult and tenuous, and the need for more objective criteria for the classification of psychiatric populations is emphasized.

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TABLE I

Redesignation of Discharge Diagnoses

Menninger Discharge Diagnoses	General Classification
Depressive Reaction Narcissistic Personality	Psychoneurosis
Anxiety Reaction Narcissistic Personality	Psychoneurosis
Narcissistic Personality	Personality Trait Disturbance
Narcissistic Personality Alcoholism, Chronic Infantile Personality	Sociopathic Personality Disturbance
Passive Aggressive Personality Alcoholism	Sociopathic Personality Disturbance
Infantile Personality Schizophrenic Reaction, Schizo-Affective Type	Schizophrenic Psychosis

TABLE II

Comparative Ratings of Clinical

Condition At Time of Hospital Discharge

MENNINGER HOSPITAL	HILLSIDE HOSPITAL	MASSACHUSETTS MENTAL HEALTH CENTER
Social Adjustment		
Improved	Recovered	Recovered
Unimproved	Much Improved	Markedly Improved
	Improved	Moderately Improved
Character Structure	Unimproved	Slightly Improved
Improved		Unimproved
Unimproved		
Syndrome		
Complete Remission		
Improved		
Unchanged (or worse)		

TABLE III

Interhospital Comparisons for Sociopsychological Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
Social Class	N	(87)	(133)	(72)
	I	31%	7%	3%
	II	51	20	28
	III	17	34	13
	IV	1	34	28
	V	0	5	28
		$X^2 = 121.5$; df=8: $p < .001$		
Age	N	(100)	(173)	(95)
	<20	19%	19%	15%
	20-39	59	58	52
	40 +	22	23	33
		$X^2 = 3.9$; df=4; p=n.s.		
Years of Education	N	(100)	(173)	(91)
	<12	23%	32%	41%
	12-15	54	51	49
	16+	23	17	10
		$X^2 = 9.7$; df=4; $p<.05$		
F Score	N	(92)	(163)	(76)
	10-29	51%	33%	20%
	30-49	41	50	38
	50-70	8	17	42
		$X^2 = 39.2$; df=4; $p<.001$		

TABLE IV

Interhospital Differences in Treatment Variables

		Menninger Hospital	Hillside Hospital	Massachusetts Mental Health Center
Type of Treatment	N	(100)	(173)	(89)
	Psychotherapy	21%	36%	24%
	Somatic	43	64	68
	Other	36	--	8
	$X^2 = 82.8$; df=4; $p<.001$			
Duration of Hospitalization	N	(100)	(173)	(95)
	<7 months	22%	27%	67%
	7-11 months	13	42	27
	>11 months	65	31	5
	$X^2 = 90.6$; df=4; $p<.001$			
Discharge Evaluation	N	(99)	(172)	(88)
	Recovered, Much Improved	1%	23%	28%
	Improved	80	62	61
	Unimproved	19	15	10
	$X^2 = 29.3$; df=4; $p<.001$			
Discharge Diagnosis	N	(95)	(171)	(85)
	Schizophrenia	43%	52%	54%
	Affective Psychosis	5	22	17
	Psychoneurosis and Personality Disorder	52	26	29
	$X^2 = 23.8$; df=4; $p<.001$			

TABLE V

Duration of Hospitalization

By Age

PERCENTAGE OF AGE GROUP STAYING OVER ONE YEAR

Age	Menninger	Hillside	MMHC
Below 20	81	42	14
20-29	73	36	6
30-39	61	30	6
40-49	30	20	0
50+	36	0	0

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Infantile Personality Schizophrenic Reaction, Schizo-Affective Type	Schizophrenic Psychosis

differences cannot be dismissed as merely idiosyncratic since they follow a pattern related to social differences consistent with previous findings.

Such population and treatment variable relationships appear to be intpractive processes, determined both by the attitude of the physician and the administrative staff as by the constellation of symptoms or history which a patient may present. Such relationships will be most marked in those psychiatric conditions where diagnostic criteria are least specific, i.e., where the objective criteria defining diseases of known organic impairment are absent, as in schizophrenia, psychoneurosis and personality and behavior disorders. Under conditions of perceptual or situational ambiguity the observer's attitudes and expectations become the basis for perception and classification. This view was clearly demonstrated by Pasamanick, Dinitz and Lifton (7) in their study of variations in diagnosis within a single institution. They observed that patients randomly assigned to different wards did not differ in type of admission, marital status, education, age or residence. Significant differences did occur, however, in diagnoses among the three wards and among three administrators on one ward. As it is highly unlikely that these differences were inherent in the population,

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Sociopsychological Aspects of Psychiatric Treatment in Three Voluntary Hospitals

Max Fink, M.D.,*
Robert L. Kahn, Ph.D.,** ~~Max Pollack, Ph.D.,~~
and
Nathaniel Siegel, Ph.D.***

~~and~~

~~Ma[redacted], M.D.,****~~

DISCUSSION

The patients of three voluntary psychiatric hospitals exhibited significant inter-institutional differences in social class and years of education, but not age; in distribution of California F Scale scores; and in each of the treatment variables -- duration of hospitalization, selection of treatments and distributions of diagnoses and discharge evaluations (7). Expectations based on our earlier intra-Hillside Hospital were confirmed. The institution serving upper class patients did have the longest duration of stay, a higher proportion of psychoneurotic diagnoses and more complex diagnostic schemata, a lower proportion of patients receiving somatic forms of therapy, and the poorest discharge ratings among the three institutions. Similarly, the institution serving lower class patients did have the shorter periods of hospitalization, lower proportions of psychoneurotic diagnoses, and the better discharge evaluations.

It is our impression that these differences in psychiatric treatment are related more to differences in staff attitudes and social class variables than psychiatric differences in populations. The contrasts between institutions in duration of hospitalization are great, as are the complexity of diagnostic formulations, discharge evaluations, definitions of psychotherapy, and the details and amount of recorded data. While these stylistic differences may be dismissed as idiosyncratic, they follow a pattern related to social differences, and their consistency with expectations suggests a greater dependence on social class variables than ordinarily acknowledged.

Such population and treatment variable relationships are interactive processes, determined both by the attitude of the physician and the administrative staff and by the constellation of symptoms or history which patients present. Such relationships are marked most in those psychiatric conditions where diagnostic criteria are least specific, i.e., where objective criteria defining diseases of known etiology are absent, as in schizophrenia, psychoneurosis, personality and behavior disorders. Under these conditions of perceptual and situational ambiguity, the observer's attitudes and expectations become significant aspects of his perceptions, classifications, and decisions. A similar situation was clearly documented by Pasamanick, Dinitz and Lefton (6) in their study of variations in diagnosis within a single institution. They observed that patients assigned at random to different wards did not differ in type of admission, marital status, education, age or residence. Significant differences did occur, however, in

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