Developing a Global Psychotherapeutic Approach to Schizophrenia: Results of a Five-Year Follow-Up

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This is an account of a long-range action research project to determine indications for and effects of a comprehensive psychotherapeutic approach, including various treatment modalities, in the treatment of schizophrenics. Four diagnostic groups were established among the 100 patients. In the course of data analysis, the group of typical schizophrenics (56 percent) was contrasted to or compared with the entire series. A further diagnostic differentiation was established according to ego functioning; i.e., imminent, acute, regressive, and paranoid ego disintegrations, respectively.

Patients and family members were interviewed upon admission, and again two and five years later, and the data recorded on a 163-item form from which 40 clinical and psychosocial variables were constructed after the baseline examinations. In addition to cross-tabulation, logistic regression analysis was employed.

The conclusion that the follow-up study supports the effectiveness of our global psychotherapeutic approach to treating schizophrenia seems justified. Results so far indicate that five modes of therapy in addition to drug treatments are optimal for different patients. The five modes are long-term individual psychotherapy, couple or conjoint family therapy for married patients, family therapy with the family of origin, flexible short-term crisis intervention with a family focus, and extensive long-term treatment focused on social rehabilitation for the most ill-starred patients.

We are reporting the results of our endeavor to develop a global psychotherapeutic program for the treatment of schizophrenics in the framework of community psychiatry, utilizing the resources of two psychiatric hospitals—the Clinic of Psychiatry at Turku University and Kupittaa Hospital—and of the district outpatient mental health offices.

“Global” is used to indicate psychotherapeutic treatment modes chosen to meet specific needs of various schizophrenic patients and their families. Schizophrenic patients are heterogeneous in their therapeutic needs: one patient benefits from individual therapy, another from family therapy, a third from a combination of both; some patients need the more extensive support of a psychotherapeutic ward community that is not indicated for others. Furthermore, the global therapeutic orientation includes pharmacotherapy, when indicated, in support of psychotherapy.

Our project represents action research shaped and developed by therapeutic goals with therapies developed in accordance with individual patient needs rather than a...
“controlled” outcome study of a single mode or measure. This research approach is
different methodologically from rigidly controlled studies utilizing standardized forms
allowing for scrutiny of reliability. Such measures hardly ever permit innovative
observations. A flexibility in experimental design and a readiness to accept new ideas
and changes in therapeutic plans are part of the quality of psychotherapeutic work with
schizophrenic patients, as is a degree of optimistic enthusiasm, which is difficult to
measure and maintain in strictly controlled circumstances.

Our psychotherapeutic orientation is based on psychodynamic principles, and
schizophrenia is considered a syndrome based on deep-rooted personality deviations
that vary continuously in interaction with and relation to the surrounding system,
particularly the patient’s family. Therapeutic plans for schizophrenic patients are
based on empathic and understanding exploration of the patients themselves and of
their families.

In addition to individual and family therapies, another therapeutic base is the
hospital ward, which functions as a psychotherapeutic community [1]. Such wards are
essential at the beginning of treatment of autistic and regressed patients who lack any
conscious motivation for therapy and for patients whose life situation is problematic.
For these patients, the ward community provides the necessary security as well as
support through group activities. Group therapy, in the strict sense, however, is not
part of our routine therapeutic system as are individual, family, and community
therapies.

One important goal is to provide psychotherapeutic treatment to as many patients as
possible for whom it is indicated. This requires a wide range of activities, provided by
our multiprofessional staff of therapists. Most of them, however, have not undergone
formal psychotherapeutic training and are continuously and intensively supervised.

Our therapeutic program has been evolving; it is important to emphasize that the
results presented here reflect but one stage of development in our therapeutic
orientation, and that further changes have occurred. In the beginning, individual and
community therapies were further advanced than family therapy, which only began
later on. This condition is clearly reflected in the results of our follow-up studies.

OBJECTIVES AND METHODS

Subjects were 100 patients aged 16 to 45 years, diagnosed as schizophrenic, who,
during the period 1976–1977 were consecutively admitted for the first time into one of
the units of the community psychiatric system of the Turku district (Table 1).

Our central project objectives were the following:
1. How widely could we carry out the different facets of our therapeutic
orientation and with what kind of patients?
2. What effects did the therapeutic orientation in general and the different
therapeutic activities in particular have on the patient’s prognosis?
3. What indications for the different therapeutic activities could be outlined and
what “global model” constructed, and, finally, what kind of resources were required
for optimal implementation of the different programs?

In accordance with the action-research nature of the project, the diagnostic criteria
for inclusion of patients in the series were relatively broad. The central criterion was
the presence of definite psychotic schizophrenic symptoms indicative of a disintegrat-
ion of the previous functional level of the personality. This is in accord with the
Bleulerian tradition; i.e., that the primary psychic disorder in schizophrenia consists of
A GLOBAL PSYCHOTHERAPEUTIC APPROACH TO SCHIZOPHRENIA

TABLE 1
Community Psychiatric Treatment Units of the Mental Health District of the City of Turku (1976–1977)

| Hospitals |          |
|-----------|----------|
| Clinic of Psychiatry (University Hospital) | 111 beds |
| Clinic of Psychiatry (University Hospital) | 18 day patients |
| Kupittaa Hospital | 364 beds |
| Other hospitals outside the Turku area (chronic patients only) | 139 beds |

3.7 beds per 1,000 inhabitants

| Open Care |          |
|-----------|----------|
| Turku Mental Health Office | 1.2 staff members per 10,000 inhabitants |
| Clinic of Psychiatry after-care activity | Accomplished by staff working on the wards |
| Psychiatric Outpatient Clinic of the University of the University Central Hospital (general hospital) | Six staff members primarily active in liaison psychiatry |

an elementary weakness in functional integrity pertaining to drives and emotions on the one hand and associations on the other [2,3]. This definition also includes the psychoanalytic concept of the regressive element in psychotic conditions of a breakthrough of primary process—previously controlled by the ego—in the form of psychotic symptoms [4,5].

We divided the series into four diagnostic subcategories (Table 2). The largest, comprising 56 patients, was the group of typical schizophrenias with the more persistent symptoms of the kind suggested by Langfeldt [6] and very similar to the criteria of "schizophrenic disorder" in the DSM III classification, although we did not adhere to the strict criterion of duration specified in DSM III. The other diagnostic subcategories were schizophreniform psychosis, schizoaffective psychosis, and borderline psychosis [7,8]. In our discussions of significant predictors, however, we considered separately only the entire series on the one hand and the group of typical schizophrenias on the other.

During the course of the work, we established another diagnostic classification which had a psychodynamic premise and was based on an assessment of the disturbances in ego functions; i.e., the degree and duration of disintegration and its dynamic meaningfulness. Grouping according to these ego psychological criteria proved significant in our subsequent analyses. Table 3 shows the distribution of ego-dynamic criteria in relation to diagnostic subcategories.

The group of imminent ego disintegration consisted of the patients whose psychotic condition was characterized by ominous, imminent fragmentation of ego function, but who were not massively psychotic. The symptoms are clearly of defensive significance in protecting the patient against internal anxiety and more profound personality disintegration.

The group of acute ego disintegration included patients whose psychotic condition developed relatively suddenly and was massive. The symptoms reflect decompensation of the previous psychic balance rather than defensive significance.

The group of regressive ego disintegration encompassed those patients whose illness
was clearly related to persistent and serious difficulties in interpersonal relationships and social coping. The psychotic symptoms generally appeared gradually and slowly, though they could be sudden in some cases, but even the patients with a sudden onset of symptoms had had conspicuous difficulties in their pre-psychotic adjustments. The psychotic symptoms are profound, and although they are of internal defensive significance for the patients at the psychotic level, they generally interfere seriously with social coping.

The group of paranoid ego disintegration consisted of patients whose psychotic development was dominated by rigid, typically paranoid formations signifying projective modes of problem solving. Ego disintegration is less generalized than in the group of regressive disintegration, and the patients are better able to cope socially.

COURSE OF STUDY

Our original team consisted of four members, three (YOA, VR, RR) working in the Clinic of Psychiatry and one (JL) a staff member in the Turku Mental Health Office.

A basic psychiatric evaluation was carried out on all patients and included separate interviews of the patient and of family members as well as the formulation of a therapeutic plan. The basic examination, like the two-year follow-up study, also included a set of psychological tests, which were not directly related to therapeutic planning.

The implementation of the therapies, however, was the responsibility of the different units; not all of our therapeutic plans were carried out but were influenced by factors emanating from both therapeutic staff and patients.

Follow-up studies were done after two-year and five-year periods. Findings are based on the initial examination and the five-year follow-up.

The psychiatrist of the team (VR) met 98 patients included in the series at the time of the basic examination as soon as possible after admission. Two patients admitted to the psychiatric outpatient clinic of the Turku University Central Hospital refused to meet him, and the data on these patients consist of information obtained from the units where the patients were treated. The nurse specialist of the team (RR) also met the same patients and interviewed relatives of 90 patients. Additional information on the patients was acquired from the epicritic files of the different therapeutic units and the therapeutic plan meetings held in them, which—with the exception of those at the Kupittaa Hospital—were attended by the members of the team whenever possible.

In accordance with the principles of action research, the members of the team also
endeavored to participate in the therapeutic activities and their supervision and to stimulate the implementation of psychotherapeutic treatments. The nurse specialist made the most notable personal contribution to the therapeutic work and the support given to relatives, as she was the only team member working full-time on the project.

Our knowledge of the development of most of the patients was comprehensive and covered a long period. This mode of work, however, involves the risk of subjectivity in the assessments made. To ascertain the effect of potential subjectivity, a follow-up examination was carried out by an independent psychiatrist at the time of the two-year follow-up.

The data acquired in the basic examination were recorded on a 163-item form on which we constructed more than 40 clinical and psychosocial background variables. The variables are included in Appendix 1.¹

At the five-year follow-up examination, we analyzed the correlations between these background variables and the implementation of the different therapies as well as the correlations between the background variables and the therapeutic variables constructed from the therapies on the one hand and the clinical course of our patients on the other.

The five-year follow-up interviews were carried out by three members (YOA, JL, VR), each interviewing patients with whom they had not been involved therapeutically. Seventy-nine patients were interviewed; three patients had suicided, eight refused to meet the examiner, and interviews with ten patients were made impossible by other factors. The nurse specialist met with members of 82 patients' families. Further data on the patients were obtained from the therapeutic units as well as from social authorities. The primary therapists reported in detail through a questionnaire.

Relatives were interviewed in a majority of cases where the patient could not be interviewed, so that adequate information was obtained on 95 patients at the time of the five-year follow-up.

At this time a number of prognostic variables were constructed, of which the ones selected for this presentation are included in Appendix 2.¹

Statistical analyses (AK) were based on cross-tabulations of the different groups of variables and on logistic regression analysis. The latter method was employed to

¹Appendices are obtainable from the authors upon request.
analyze the different modes of therapy as well as the variables explaining the prognosis.

The lack of a control series naturally limits the conclusions that can be drawn from our findings concerning the outcome of the psychotherapeutic orientation. The most central starting point was the comparison between clinical course of the "group of psychotherapy cases" emerging from our series (54 patients covered in the five-year follow-up) and the course of patients not included in this group and treated mainly with pharmacotherapy (41 patients).

In the late 1970s, personnel in the Turku Mental Health District were basically hospital-oriented. Only 21 of our 100 patients were admitted for treatment via an outpatient unit, but for only 17 was the outpatient unit the first treatment locus. The inpatient wards of the Clinic of Psychiatry were the first therapeutic experiences for 54 patients, the day hospital ward for five, and the Kupittaa Hospital for 24 patients. Psychotherapeutic programs were routine in the Clinic of Psychiatry and the Mental Health Office but not at the Kupittaa Hospital.

Table 4 summarizes the psychotherapeutic activities carried out during the five follow-up years. The criteria for the different modes of therapy shown were based on the duration of the treatment and the number of therapeutic sessions.

Regarding outpatient therapy, the units of the mental health district were responsible for 73 percent of the individual, family, and group therapies carried out, a majority of them being distributed between the outpatient facility of the Clinic of Psychiatry (42 percent) and the Turku Mental Health Office (27 percent). Twenty-two percent of the therapies were conducted in the private sector, which was utilized intentionally to supplement the inadequate public resources. The psychotherapeutic communities functioned on the inpatient wards of the Clinic of Psychiatry and the small day hospital ward where several patients started therapy that was later pursued in the outpatient units—or at least plans for such therapy were made.

Table 5 shows the occupational categories of the therapists in charge of the individual, family, and group therapies and the number of cases for which they were responsible. The total is higher than the number of cases, because some patients had successively two or more therapists. Of the 52 therapists, most were psychiatrists and nurse specialists, both of whom numbered 13, but a majority of cases (41) were attended by nurses. Only eight therapists—three psychiatrists and five psychologists—had undergone significant psychotherapeutic training. Supervision took place in about two-thirds of the cases and it proved a prerequisite for successful long-term therapeutic relationships.

We have previously presented our findings concerning the indications for different treatment modes for schizophrenics [7–9]. Analyses based on logistic regression show what kind of patients were selected for the most important modes of therapy and the type of patients excluded.

Intensive individual therapy lasted the longest among psychotherapies. The mean number of therapeutic sessions for the 26 patients receiving this mode of treatment was 163. The intensity of the therapy varied; although there were often two or three sessions a week at the initial stages of treatment, the average frequency generally was once a week over the entire course of therapy. In the beginning, the treatment was regularly supported by low-dose neuroleptic medication, usually less than 300 mg of chlorpromazine equivalency per day, which was reduced at later stages and ultimately often discontinued.
TABLE 4
Psychotherapeutic Activities According to Five-Year Follow-Up

| Mode of Treatment                                    | Number of Patients |
|-------------------------------------------------------|--------------------|
| Crisis treatment in the beginning phase               | 28                 |
| Intensive individual therapy                         | 26                 |
| Minor individual therapy                              | 31                 |
| Intensive family therapy                              | 15                 |
| Minor family therapy                                  | 10                 |
| Supportive contact with family member(s)              | 40                 |
| Intensive group therapy                               | 1                  |
| Minor group therapy                                   | 1                  |
| Intensive treatment in a psychotherapeutic community  | 25                 |
| Crisis treatment in a psychotherapeutic community     | 21                 |
| Minor treatment in a psychotherapeutic community      | 18                 |
| No psychotherapeutic treatment mode                   | 20                 |

*Crisis treatment in the beginning phase:* help given in a situation of psychotic crisis by means of rapidly initiated and frequent therapeutic visits with individual or family and environmental orientation on an outpatient basis or through brief hospitalization.

*Intensive individual therapy:* a minimum of two years of therapy with at least 80 therapeutic sessions.

*Minor individual therapy:* at least six months of therapy and at least 12 sessions.

*Intensive family therapy:* minimum of six months of therapy, and/or 12 joint sessions.

*Minor family therapy:* at least three joint sessions

*Supportive contact with family member(s):* contact with the patient’s family or a member of his family beyond the actual study period for the purpose of supporting the family during the patient’s treatment.

*Intensive group therapy:* at least one year of therapy, at least 24 sessions.

*Minor group therapy:* at least six sessions.

*Intensive treatment in a psychotherapeutic community:* at least three months of therapy; (a) a personal patient-therapist contact, (b) situational exploration of the family and the living milieu, and (c) involvement of the patient in the group and community processes of the ward.

*Crisis treatment in a psychotherapeutic community:* shorter but active community therapy in a critical situation, including exploration of and intervention in the patient’s family and/or social environment.

*Minor treatment in a psychotherapeutic community:* treatment in a therapeutic community that was not in all respects equally active and extensive as described above, but involved an empathic approach to the patient and his participation in the ward’s group and community functions.

Table 6 indicates that intensive individual therapy was selectively given to patients—or could best be given to patients—who had considerable primary insight ability. The second most important variable was lack of acting-out behavior. Indeed, individuals showing acting-out behavior were the ones who most frequently discontinued individual therapy. The diagnostic classification was of no significance for other clinical or psychosocial variables, except that the patients with schizophreniform psychoses, i.e., those with the most favorable prognosis, were not in the intensive therapy group.
Fourteen (25 percent) of the typical schizophrenics were in intensive individual therapy, the same percentage as for the entire series. A separate analysis of this group of patients showed the lack of serious personality disorders in the mother as one significant variable.

Our family orientation and supportive contacts with family members probably benefited the implementation of individual therapies. Families often contacted the therapist or another team member with the patient’s knowledge. Joint family therapy sessions were attended by 25 patients in the intensive and the less intensive therapies. Eleven were conjoint therapies of the primary family and 15 couple therapies of patient and spouse (one patient was involved in both types). Table 7 demonstrates that a particularly large number of very ill, regressively disintegrated patients were selected for the conjoint therapy of the primary family—the group including a greater-

TABLE 5
Therapist’s Occupational Groups

| Professional Category | Number of Therapists | Number of Cases |
|-----------------------|----------------------|-----------------|
| Psychiatrist          | 13                   | 24              |
| Resident physician in training | 10                   | 22              |
| Psychologist          | 8                    | 12              |
| Nurse specialized in psychiatric nursing | 13                   | 41              |
| Nurse                 | 1                    | 1               |
| Psychiatric aide      | 3                    | 3               |
| Social worker         | 4                    | 7               |
| Total                 | 52                   | 110             |

TABLE 6
Implementation of Intensive Individual Therapy: Variables Influencing the Selective Processes (Logistic Regression Analysis)

| Explaining Variables | $R$  | $p$  |
|----------------------|------|------|
| **All Patients**     |      |      |
| Insight Ability:     |      |      |
| yes/no               | 3.42 | 0.000|
| Acting-Out Behavior: |      |      |
| no/yes               | 4.86 | 0.000|
| Beginning of Symptoms: |    |    |
| acute/slow           | 2.83 | 0.008|
| Neurotic Symptoms:   |      |      |
| yes/no               | 2.06 | 0.015|
| Unemployed:          |      |      |
| no/yes               | 3.38 | 0.038|
| **Typical Schizophrenics** |    |    |
| Duration of Symptoms |      |      |
| Before Treatment Admission: |    |    |
| less than 1 month/more than 1 month | 3.00 | 0.009|
| Mother’s Severe Personality Disorder: |    |    |
| no/yes               | 2.59 | 0.061|

$R = risk; i.e., the relative probability of those differentiated by the explaining variable to be included in the response group
than-average number of patients previously treated in a child psychiatric unit or by private psychiatrists, while the married patients given couple therapy were those with "normal" psychosexual development compared with the series as a whole.

Several patients belonging to the group of regressive ego disintegration were in intensive therapy or in crisis therapy in a psychotherapeutic community (Table 8). The therapeutic communities also included a notable proportion of women and patients with a favorable attitude toward therapy, whereas the patients with imminent ego disintegration were absent from this group.

Our psychotherapy cohort, as distinct from the rest of the series, were treated in one or more of the following modes: intensive individual therapy, intensive family therapy, intensive group therapy, intensive treatment in a therapeutic community, or any less intensive psychotherapeutic treatment suited to the patient's disorder. Seven patients were in the “less intensive” group. Altogether 56 of our 100 patients were classified as psychotherapy cases.

Table 9 indicates that patients first treated in the Clinic of Psychiatry and the Turku Mental Health Office were three times as likely to become psychotherapy cases than patients first seen at Kupittaa Hospital. It must be noted, however, that the selection of the first therapeutic contact was not quite random. Patients likely to respond to psychotherapy were readily admitted to the Clinic of Psychiatry, whereas the most violent patients and the ones with alcohol problems were admitted into the Kupittaa Hospital. Male patients, as well as patients who had psychotic symptoms for a shorter period before admission, were overrepresented in the Kupittaa Hospital sample.

The second most important distinguishing variable for the whole series was regressive ego disintegration in the group of psychotherapy cases. Among the typical schizophrenic patients this parameter did not emerge as a significant variable, although it had a remarkable statistical correlation with the psychotherapy cases ($p = .014$). Hence, these patients seem within the reach of therapy, unlike the patients with paranoid ego disintegration, who had an almost significant negative correlation with the group of psychotherapy cases ($p = .034$) and a marginal negative correlation even in the group of typical schizophrenics ($p = .058$). Of the classical diagnostic subcategories, the only one to display a statistical correlation with the psychotherapy cases was the group of schizophreniform psychoses, which was largely excluded from
the group of psychotherapy cases ($p = .016$). Of the typical schizophrenic patients, 57 percent were psychotherapy cases, almost exactly the same percentage as their representation in the entire series.

These correlations indicate that the psychotherapy group included relatively more seriously ill patients than the series average. Regressive ego disintegration was almost double the number among psychotherapy patients compared with the remaining part of the series. Only one-fifth of patients with schizophreniform psychoses and a good prognosis belonged to the group of psychotherapy cases. However, some favorable

**TABLE 8**
Implementation of Treatment in Psychotherapeutic Community: Variables Influencing the Selective Processes (Logistic Regression Analysis)

| Explaining Variables                                      | $R$  | $p$  |
|-----------------------------------------------------------|------|------|
| All Patients                                              |      |      |
| Group of Regressive Disintegration: yes/no                 | 2.58 | 0.001|
| Sex:                                                      |      |      |
| female/male                                               | 2.09 | 0.001|
| Group of Imminent Disintegration: no/yes                   | 3.36 | 0.031|
| Refusing Treatment in the Beginning Phase: no/yes          | 1.90 | 0.049|
| Typical Schizophrenics                                    |      |      |
| Group of Regressive Disintegration: yes/no                 | 2.66 | 0.002|
| Quality of Interpersonal Relationships Outside of the Primary Family: not stable/stable | 1.77 | 0.013|
| Depressive Symptoms: yes/no                               | 1.78 | 0.030|

**TABLE 9**
Belonging to the Group of Psychotherapy Cases: Variables Influencing the Selective Processes (Logistic Regression Analysis)

| Explaining Variables                                      | $R$  | $p$  |
|-----------------------------------------------------------|------|------|
| All Patients                                              |      |      |
| First Therapeutic Unit:                                    |      |      |
| Clinic of psychiatry or open care/Kupittaa Hospital        | 2.63 | 0.000|
| Group of Regressive Disintegration: yes/no                 | 1.97 | 0.009|
| Symbiotic Contact Mode:                                    |      |      |
| yes/no                                                     | 1.69 | 0.015|
| Unemployed: yes/no                                         | 1.97 | 0.014|
| Typical Schizophrenics                                    |      |      |
| First Therapeutic Unit:                                    |      |      |
| Clinic of psychiatry or open care/Kupittaa Hospital        | 2.72 | 0.024|
| Beginning of Symptoms:                                     |      |      |
| acute/slow                                                | 1.98 | 0.021|
| Refusing Treatment in the Beginning Phase: no/yes          | 1.78 | 0.015|
background variables in the psychotherapy group are noteworthy. As shown in Table 9, such variables included a tendency to symbiotic attachment, the patient being employed when admitted, and a relatively acute onset as well as lack of negativism toward therapy in the group of typical schizophrenic patients.

Table 10 indicates that the patients most difficult to reach by any means of psychotherapy were particularly those without depressive symptoms who used paranoid defenses as well as individuals who were poorer, less educated than average, unemployed, or alcoholic. Men were four times as likely to belong to this group.

Of the 100 patients, 98 received neuroleptic medication at some stage of their treatment, though many only for a short period, and during the last three follow-up years, 40 percent were free of pharmacotherapy. We divided the patients into two groups on the basis of the amount of medication given during the whole follow-up period. The explaining variables of the group given more medication are shown in Table 11. In addition to regressive disintegration patients and the initial contact unit, poorly understanding or hostile relatives in the patient's family environment was a significant co-variable. Among the typical schizophrenic patients, this family assessment seems most important in explaining abundant pharmacotherapy, a finding consonant with those of Leff and Vaughn [10] based on a different research strategy. The group of psychotherapy cases had a significant positive correlation with the presence of medication during the first two follow-up years, while during the last three years of follow-up the correlation with the amount of medication was marginally negative. Only one patient in the psychotherapy group received neuroleptics corresponding to at least 300 mg of chlorpromazine daily during the last three years of follow-up, against 11 patients in the entire series.

**PROGNOSTIC FACTORS**

Of the 92 patients for whom we had acquired data at the five year follow-up, 30 percent of patients were found to have psychotic symptoms (Table 12); these included 51 percent of the group of typical schizophrenic patients. The symptoms of most patients were mild; notable symptoms were seen in 9 percent of all patients and 18 percent of the typical schizophrenics. When we determined the number of psychotic symptoms noted in the patients during the month preceding the follow-up study, using the classification proposed by Strauss and Carpenter [11], only 11 of our patients (20 percent of those with typical schizophrenia) belonged to the two lowest classes in their five-grade classification, while 55 percent belonged to the best class (lacking psychotic symptoms).

On the whole, the clinical prognosis of our patients turned out rather well compared with most studies of similar cohorts and follow-up periods [12–15]. The prognosis for working capacity must be considered somewhat more pessimistic than the clinical prognosis. At the end of the follow-up period, 43 percent of the patients were able to work normally, 25 percent showed limited working capacity, and 32 percent were unable to work (Table 13). The corresponding figures for the group of typical schizophrenics were 33 percent, 20 percent, and 47 percent.

We analyzed the prognosis multidimensionally. Here we shall discuss four prognostic variables, which simultaneously reveal the changes or the developmental tendency visible in the condition of the patients during the five years between the basic examination and the last follow-up examination. These variables are disappearance of psychotic symptoms, decrease of the nuclear symptoms of schizophrenia, increase of
insight, and working capacity. Of these prognostic variables, two are clinical, the third is psychodynamic, and the fourth psychosocial. The construction of the variables is described in Appendix 3.2

We again employed logistic regression analysis, examining simultaneously the effects of the background variables and the therapeutic variables on the changes noted in the clinical course. The following treatment variables were used: inclusion in the group of psychotherapy cases, intensive individual therapy, family therapy (intensive or less intensive), intensive treatment or crisis intervention in a psychotherapeutic community, and the amount of neuroleptic drug therapy.

Since all of the patients had psychotic symptoms upon admission, the disappearance of psychotic symptoms was measured by noting which of the patients had manifest psychotic symptoms at the end of the five-year follow-up period and which did not.

Two clinical background factors whose significance is readily understandable appeared as distinguishing variables: exclusion from the diagnostic category of typical schizophrenics and acute onset of symptoms (Table 14). Less-than-average neuroleptic medication emerged as the third differentiating variable. The significance of this factor, too, appears understandable, at least at first sight: abundant medication was indicated for the more seriously ill patients and a separate analysis of the nuclear group of patients revealed less-than-average medication as the variable most closely related to the disappearance of psychotic symptoms.

None of the other treatment variables emerged as significant. When examined separately, however, intensive individual therapy had an almost significant \( (p < .05) \) positive correlation with the disappearance of psychotic symptoms in both the total series and the group of typical schizophrenics. Inclusion in the group of psychotherapy cases had a like statistical correlation \( (p = .029) \) with the disappearance of symptoms among typical schizophrenics, but not for the whole series.

Improvement in nuclear symptoms on a three-step scale (0–1, 2–3, 4 or more) had

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**TABLE 10**

Lack of Any Mode of Psychotherapeutic Treatment: Influence of Background Variables (Logistic Regression Analysis)

| Explaining Variables | \( R \) | \( p \) |
|----------------------|--------|--------|
| **All Patients**     |        |        |
| Depressive Symptoms: |        |        |
| no/yes               | 3.27   | 0.005  |
| Basic Education:     |        |        |
| elementary school/more | 6.00   | 0.005  |
| Sex:                 |        |        |
| male/female          | 3.875  | 0.050  |
| **Typical Schizophrenics** |    |        |
| Group of Paranoid Disintegration: |    |        |
| yes/no               | 4.92   | 0.004  |
| Depressive Symptoms: |        |        |
| no/yes               | 5.29   | 0.001  |
| Alcohol or Other Addiction: |    |        |
| yes/no               | 2.93   | 0.108  |
| Unemployed:          |        |        |
| yes/no               | 3.32   | 0.124  |

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2Obtainable upon request.
occurred in 58 patients; 16 patients displayed no such improvement. The patients with only one nuclear symptom at the time of the basic examination were omitted from this comparison.

The most significant variable related to favorable outcome was exclusion from the group of typical schizophrenics (Table 15). The second most important variable was separation from the primary family at the time of the basic examination in both groups. Additionally, one treatment variable emerged as a discriminating variable in both groups: intensive individual therapy in the whole series and inclusion in the group of psychotherapy cases in the cohort of typical schizophrenics. The analysis thus clearly demonstrated the favorable effect of psychotherapy on the clinical course of patients in the schizophrenia group. Neuroleptic medication was not as significant in

### TABLE 11
Larger Neuroleptic Medication During the Follow-Up Years: Influence of Background Variables (Logistic Regression Analysis)

| Explaining Variables | $R$  | $p$ |
|-----------------------|------|-----|
| **All Patients**      |      |     |
| Group of Regressive Disintegration: yes/no | 2.26 | 0.000 |
| First Therapeutic Unit:  |      |     |
| Kupittaa Hospital/open care | 1.66 | 0.003 |
| Kupittaa Hospital/Clinic of Psychiatry | 2.05 |
| Hostile or Poorly Understanding Relatives: yes/no | 1.58 | 0.001 |
| **Typical Schizophrenics** |      |     |
| Hostile or Poorly Understanding Relatives: yes/no | 1.88 | 0.001 |
| Group of Regressive Disintegration: yes/no | 1.57 | 0.003 |
| Sex: male/female | 1.53 | 0.008 |

### TABLE 12
Presence of Psychotic Symptoms at the Time of the Five-Year Follow-Up (Percentages of the Number of Patients)

| Diagnostic Group                  | Present | Not Present |
|-----------------------------------|---------|-------------|
|                                   | Marked Mild | Potentially Definitely |
| **Typical Schizophrenia**        | 18/33 | 16/33 |
| $N = 51$                          |         | 51/49 |
| **Schizophreniform Psychosis**    | 0/0    | 11/89 |
| $N = 9$                           |         |  |
| **Schizoaffective Psychosis**     | 0/0    | 17/83 |
| $N = 12$                          |         |  |
| **Borderline Psychosis**          | 0/10   | 10/80 |
| $N = 20$                          |         |  |
| **Total**                         | 9/20   | 15/55 |
| $N = 92$                          | 30/70  |  |
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TABLE 13
Working Capacity of the Patients at the Time of the Five-Year Follow-Up
(Percentages of the Number of Patients)

| Diagnostic Groups                      | Working Capacity |
|----------------------------------------|------------------|
|                                        | No   | Diminished | Full |
| Typical Schizophrenia                  | 47   | 20         | 33   |
| N = 54                                 |      |            |      |
| Schizophreniform Psychosis             | 0    | 22         | 78   |
| N = 9                                  |      |            |      |
| Schizoaffective Psychosis              | 25   | 25         | 50   |
| N = 12                                 |      |            |      |
| Borderline Psychosis                   | 10   | 40         | 50   |
| N = 20                                 |      |            |      |
| Total                                  | 32   | 25         | 43   |
| N = 95                                 |      |            |      |

this analysis as in the correlation with complete disappearance of psychotic symptoms. Less-than-average medication, marginally significant in the decrease of nuclear symptoms in the whole series ($p < .10$), showed no such correlation in the group of typical schizophrenic patients. Among other treatment variables, the psychotherapeutic community also was marginally correlated with nuclear symptom decrease among typical schizophrenics.

Increase in insight was analyzed with a three-step scale: the patient either lacked any insight into his own role in the development of his problems and/or symptoms, or he had some insight into it, or he saw his problems and symptoms as part of himself and endeavored to solve them. Insight was considered to have increased if the patient had improved on the scale between the basic and follow-up examinations. Twenty-seven patients exhibited such improvement (including 13 typical schizophrenics); 65 (41 typical schizophrenics) did not. Three patients were excluded because they exhibited good insight at admission.

Psychotherapy influenced the increase of insight significantly (Table 16). In the

TABLE 14
Disappearance of Psychotic Symptoms at the Time of the Five-Year Follow-Up:
Influence of Background and/or Treatment Variables (Logistic Regression)

| Explaining Variables                   | $R$  | $p$   |
|----------------------------------------|------|------|
| All Patients                           |      |      |
| Diagnostic Group                       |      |      |
| Typical Schizophrenia:                 |      |      |
| No/Yes                                 | 1.94 | 0.000|
| Beginning of Symptoms:                 |      |      |
| acute/slow                             | 1.58 | 0.001|
| Drug Treatment:                        |      |      |
| little/much                            | 1.78 | 0.020|
| Typical Schizophrenics                 |      |      |
| Drug Treatment:                        |      |      |
| little/much                            | 2.17 | 0.008|
| Beginning of Symptoms:                 |      |      |
| acute/slow                             | 2.63 | 0.035|
| Typical Schizophrenics                 |      |      |
| Drug Treatment:                        |      |      |
| little/much                            | 2.17 | 0.008|
| Beginning of Symptoms:                 |      |      |
| acute/slow                             | 2.63 | 0.035|
TABLE 15
Decrease of the Nuclear Symptoms of Schizophrenia During the Five-Year Follow-Up Period: Influence of Background and/or Treatment Variables (Logistic Regression)

| Explaining Variables                                      | $R$  | $p$   |
|-----------------------------------------------------------|------|-------|
| **All Patients**                                          |      |       |
| Diagnostic Group Typical Schizophrenia: no/yes            | 1.41 | 0.002 |
| Separated From the Primary Family: yes/no                  | 1.39 | 0.006 |
| Intensive Individual Therapy: yes/no                       | 1.33 | 0.004 |
| **Typical Schizophrenics**                                |      |       |
| Separated from the Primary Family: yes/no                  | 1.61 | 0.011 |
| Psychotherapy Case: yes/no                                 | 1.63 | 0.004 |

total series, inclusion in the group of psychotherapy cases as well as treatment or crisis intervention in a psychotherapeutic community were thus correlated ($p < .01$), whereas intensive individual therapy showed an almost significant ($p < .02$) correlation. In the group of typical schizophrenics, these correlations were highly significant ($p < .001$). Family therapy did not correlate with increment in insight, and abundant medication seemed to have a negative effect, particularly for typical schizophrenics ($p < .05$). Logistic regression analysis showed that the most notable variables related to improved insight were inclusion in psychotherapy for the whole series and intensive individual therapy for typical schizophrenics.

Second in importance in both analyses was absence of alcohol or addiction problems. In the whole series one conspicuous variable was social deviance in the patient’s primary family.

It was obvious that the psychosocial conditions, past unemployment in particular, affected the working capacity of our patients. This is clearly shown in Table 17. In both

TABLE 16
Increase of Insight During the Five-Year Follow-Up Period: Influence of Background and/or Treatment Variables (Logistic Regression)

| Explaining Variables                                      | $R$  | $p$   |
|-----------------------------------------------------------|------|-------|
| **All Patients**                                          |      |       |
| Psychotherapy Case: yes/no                                 | 3.53 | 0.001 |
| Alcohol or Other Addiction: no/yes                         | 3.22 | 0.008 |
| Socially Deviating Family Background: yes/no               | 1.86 | 0.008 |
| **Typical Schizophrenics**                                |      |       |
| Intensive Individual Therapy: yes/no                       | 4.57 | 0.001 |
| Alcohol or Other Addiction: no/yes                         | 6.47 | 0.004 |
Working Capacity at the Time of the Five-Year Follow-Up: Influence of Background and/or Treatment Variables (Logistic Regression)

| Explaining Variables                                      | $R$  | $p$   |
|-----------------------------------------------------------|------|-------|
| **All Patients**                                          |      |       |
| Unemployed:                                               | 10.66| 0.000 |
| no/yes                                                    |      |       |
| Occupational Identity:                                    | 1.81 | 0.003 |
| formed/not formed                                         |      |       |
| Basic Education:                                          | 1.56 | 0.008 |
| more/elementary school                                    |      |       |
| Sex:                                                      | 1.66 | 0.023 |
| female/male                                               |      |       |
| Hostile or Poorly Understanding Relatives:                | 2.03 | 0.031 |
| no/yes                                                    |      |       |
| **Typical Schizophrenics**                                |      |       |
| Neuroleptic Treatment:                                    | 4.78 | 0.000 |
| little/much                                               |      |       |
| Sex:                                                      | 4.38 | 0.013 |
| female/male                                               |      |       |
| Basic Education:                                          | 2.11 | 0.006 |
| more/elementary school                                    |      |       |
| Alcohol or Other Addiction:                               | 9.17 | 0.079 |
| no/yes                                                    |      |       |

the whole series and the group of typical schizophrenics, lower-than-average neuroleptic treatment during the follow-up period correlated highly significantly with the maintenance of working capacity. The psychosocial outcome of female patients was clearly better than that of male patients, especially those with a lower-than-average basic education and lacking occupational identity.

Psychotherapy correlated almost significantly ($p < .05$) with the maintenance of working capacity in the total series. When the analysis was restricted to the group of typical schizophrenia, the correlation proved significant ($p = .002$); of the 32 typical schizophrenics belonging to the group of psychotherapy cases, 16 showed normal working capacity, whereas only two of the other 22 typical schizophrenics were able to work normally. Intensive individual therapy as well as treatment or crisis intervention in a psychotherapeutic community had an almost significant correlation with maintained working capacity in the group of typical schizophrenics.

Time spent in hospital showed no significant correlations over the five-year follow-up for either total series or subgroups. However, there was a tendency toward decreasing need for hospital treatment during the later follow-up years among the patients included in the psychotherapy cases, and the first therapeutic experience at a psychotherapeutically oriented hospital ward appeared as one of the variables explaining the avoidance of hospital treatment during the last two follow-up years.

**DISCUSSION**

The conclusion that the follow-up study supports the effectiveness of our global psychotherapeutic approach to treating schizophrenia seems justified. In the light of our predictor analyses, the course of patients included in psychotherapeutic treatment was clearly more favorable than that of patients not involved in psychotherapy. Two
psychotherapy subgroups showed the strongest correlation with favorable outcomes: intensive individual therapy and intensive treatment or intervention in crisis in a psychotherapeutic community. The significance of the prognostic correlations increased for the group of typical schizophrenics.

As noted earlier, we are aware of the limitations of our prognostic treatment investigation in comparison with "controlled" studies for therapeutic outcome. Thus our project can be criticized for weaknesses: the absence of control material and follow-up assessments made by the team members themselves.

The first of these shortcomings is partly compensated for by our design to compare patients in psychotherapy with those who were not. The psychotherapy cases included a relatively greater proportion of diagnostically seriously ill patients than the rest of the series. On the other hand, as a group, psychotherapy cases were characterized by some background factors which contribute generally to a good outcome of therapy. We are continuing our studies of the effectiveness of our therapeutic approach for schizophrenic patients, comparing patient groups admitted for therapy at different stages of our project [16]. We also hope other investigators will explore the effects of our global psychotherapeutic approach using control groups.

The risk of subjectivity in our assessments was met by two-year follow-up examinations carried out by an independent psychiatrist in addition to the team's examination. This examiner had not previously met any of our patients but was familiar with the nature of our therapeutic approach. It turned out that her prognostic assessments were more favorable on average than the assessments made by the team. This result could have been due to the fact that team members had information not obtained in a single interview. The mutual correlation between the assessments was of the order of 0.6–0.7 for the clinical predictor variables and 0.5 or more for the other prognostic sub-areas compared. It can further be pointed out that the assessments by the independent examiner also resulted, almost regularly, in more significant findings concerning the favorable prognosis of patients given psychotherapy compared with the other patients than did evaluations by team members [8]. The independent examination was not repeated at the time of the five-year follow-up, because we deemed it unnecessary after the two-year follow-up experience.

We are content with the number of therapeutic activities carried out despite our staff resources in the Turku Mental Health District being relatively modest, as shown in Table 1. The number of staff in the mental health office relative to the population in 1976–1977 was only half of the average for the whole country. The development of a psychotherapeutic approach in community psychiatry depends not only on the available quantitative staff resources; the qualitative resources appear even more crucial.

The treatment of 46 out of the 56 patients included in the group of psychotherapy cases consisted of more than one mode of psychotherapy, indicating the "global" nature of our design and illustrating that the combination of several psychotherapeutic treatments is necessary, particularly in the case of typical schizophrenics. Furthermore, despite opposite notions, the outcome of long-term individual therapy in the group of schizophrenic patients is often good when the therapy is given selectively to suitable patients. Regardless of the clinical severity or the diagnosis of the illness, the suitable patients are those who tend to establish a significant contact with the therapist, who are initially motivated to analyze their problems, and who lack the tendencies to act out. It would be important that this kind of patient be universally
guaranteed the opportunity to engage in psychotherapy more often than is the case at present.

Next, we should not underestimate the importance of individual therapies with relatively infrequent sessions, but based on an empathic and confidential therapeutic relationship with psychotic patients. The therapeutic relationship as such and the personal characteristics of therapists are especially important in working with these patients compared with the more technically oriented psychoanalytic therapies of neurotic patients. Therapeutic "holding" [17,18], which satisfies empathically the patient's symbiotic needs, but also supports growth and differentiation, forms the basis for such therapeutic relationships. Serious transference crises, which frequently result in a discontinuation of therapy, are easier to avoid in this kind of therapy than in more intensive, psychoanalytically oriented therapies. The intensity of the therapy is further modulated when the therapist is a member of the therapeutic community and is also involved with family treatment. The possibility also exists that the family and milieu orientation in support of individual therapies diminished suicidal risk among our patients.

The permanence of the therapeutic results still remains in doubt. Many of the patients experienced personality growth through the kind of "transmuting internalization" described by Kohut [19]. In at least some instances patients had been able, with the help of therapy, to create new, significant interpersonal relationships, and termination coincided with their consolidation; e.g., marriage.

Our findings indicate poorer results for family therapy than for individual therapy, which is contrary to other reports [20]. Family therapy was given to fewer patients, however, and training and supervision of family therapists was less intensive than for individual therapy. Moreover, therapies with primary families were carried out among very seriously ill patients. Systematic training for family therapy began in Finland only in 1979, two or three years after the admission of our patients.

The correlations between psychopharmacologic treatment and prognosis appeared negative in our statistical analyses, but this does not do justice to the significance of pharmacologic treatment in the overall therapeutic situation. Nearly all of our patients were given neuroleptic treatment, at least initially in the therapy, and at the two-year follow-up psychopharmacologic treatment and the psychotherapies correlated positively. Medication was used as a supplementary means in the psychotherapeutic approach. It was useful especially at the early stages of the therapy but was often discontinued when patients could manage without it. The maintenance of drug treatment corresponding to at least 300 mg of chlorpromazine daily during the last three years of follow-up had a strong connection with poor psychosocial prognosis among our typical schizophrenic patients.

In summary, the range of therapeutic activities we consider indicated for schizophrenics is as follows:

1. The primary treatment consists of long-term individual therapy supplemented, as indicated, with family support and treatment in a psychotherapeutic community. The suitable patients were described above.

2. The primary treatment consists of couple therapy or joint family therapy, indicated for a large portion of patients who became psychotic while married.

3. The primary therapy consists of joint therapy of the primary family, preferably in the form of system-centered intervention for patients tied to their primary families. Most patients initially need treatment in a psychotherapeutic community and later long-term individual therapy, after family therapy has made this possible.
4. The primary treatment consists of flexible, short-term crisis intervention which is family-focused and may involve others in the patient's environment. After the situation has been clarified and supported, one of the aforesaid modes of therapy may be indicated.

5. The primary therapy consists of extensive and (whenever possible) long-term treatment by a ward team—occasionally outpatient therapists—with a central goal of helping the patient to cope with his or her environment. The patients are generally seriously ill, with severe social problems, and relatives are non-understanding or hostile, with a negative attitude toward therapy. Social help often remains the core of therapy.

In a retrograde analysis of our series, where we tried to define for each patient the therapeutic regimen we now consider optimal, all these groups were roughly of equal magnitude. Two patients were left out of these groups; both had an exceedingly negative attitude toward any therapeutic activities requiring cooperation. Nevertheless, they had managed moderately well in their social lives and we considered it appropriate that they were left to manage on their own.

REFERENCES

1. Alanen YO: The psychotherapeutic care of schizophrenic patients in a community psychiatric setting. In Studies of Schizophrenia. Edited by MH Lader. Brit J Psychiat Spec Publ No. 10, 1975, pp 86–93
2. Bleuler E: Dementia praecox oder die Gruppe der Schizophrenien. Leipzig, Deuticke
3. Bleuler E: Primare und sekundare Symptome der Schizophrenie. Z ges Neuropsychiat 124:607–646, 1930
4. Fenichel O: The Psychoanalytic Theory of Neurosis. New York, Norton, 1945
5. Räkköläinen V: Onset of psychosis, a clinical study of 68 cases. Ann Univ Turkuensis Ser D: 7
6. Langfeldt G: The prognosis of schizophrenia. Acta Psychiat neurol Scand 31(Suppl 110) 1956
7. Alanen YO, Räkköläinen V, Rasimus R, Laakso J, Järvi R: Developing the treatment of schizophrenia in a community psychiatric setting. A psychotherapeutic and family-centered approach. Psychiatria Fennica 1982:101–120, 1982
8. Alanen YO, Räkköläinen V, Laakso J, Rasimus R, Järvi R: Psychotherapy of schizophrenia in community psychiatry: 2-year follow-up findings and the influence of selective processes on psychotherapeutic treatments. In Psychosocial Intervention in Schizophrenia. Edited by H Stierlin, LC Wynne, MWirsching. Berlin, Springer, 1983, pp 67–82
9. Alanen YO, Räkköläinen V, Rasimus R, Laakso J: Indications for the different forms of psychotherapy with new schizophrenic patients in community psychiatry. In Psychotherapy of Schizophrenia. Edited by C Muller. Amsterdam, Excerpta Medica, 1979, pp 185–202
10. Leff J, Vaughn C: The role of maintenance therapy and relatives' expressed emotions in relapse of schizophrenia, a two-year follow-up. Brit J Psychiat 139:102–104, 1981
11. Strauss JS, Carpenter WT: Prediction of outcome in schizophrenia. III. Five-year outcome and its predictors. A report from the International Pilot Study of Schizophrenia. Arch Gen Psychiat 34:159–163, 1977
12. Stephens JH: Long-term prognosis and followup in schizophrenia. Schizophr Bull 4:25–47, 1978
13. Achte KA: Verlauf und prognose Schizophrener Psychosen in Helsinki. In Psychiatrische Verlaufsfor- schung, Methoden und Ergebnisse. Edited by GW Schimmelpenning. Bern, Huber, 1980, pp 144–158
14. Watt DC, Katz K, Shepherd M: The natural history of schizophrenia. A five-year prospective follow-up of a representative sample of schizophrenics by means of a standardized clinical and social assessment. Psychol Med 13:663–670, 1983
15. von Sivers E: En efterundersökning av 111 patienter vårdade för schizophreni första gången under åren 1961–65. Nord Psykiatr Tidskr 37(Suppl 7): 1983
16. Alanen YO, Räkköläinen V, Laakso J, Rasimus R: Problems inherent in the study of psychotherapy of psychoses. Conclusions from a community psychiatric action research study. In The Psychotherapy of Schizophrenia. Edited by JS Strauss, M Bowers, TW Downey, S Fleck, S Jackson, I Levine. New York, Plenum, 1980, pp 115–129
17. Winnicott DW: The theory of the parent-infant relationships. Internat J Psycho-Anal 41:585–595, 1960
18. Salonen S: On the technique of the psychotherapy of schizophrenia. In Schizophrenia 75. Edited by J Jorstad, G Ugelstad. Oslo, Universitetsforlaget, 1976, pp 115–132
19. Kohut H: The Restoration of the Self. New York, International Universities Press, 1977
20. Mosher LR, Keith SJ: Psychosocial treatment: Individual, group, family, and community support approaches. Schizophr Bull 6:10–41, 1980