# Need-Adapted Treatment of Schizophrenia: Family Interventions

#### KLAUS LEHTINEN

Need-adapted treatment of schizophrenia is an integrative treatment model developed in the Turku Schizophrenia Project. It is based on the interactional viewpoint and understanding on the interactional level. Experience of family and network therapy has shown that immediate interactions-oriented intervention is an essential starting-point for the treatment. It creates the possibility for the treatment as a whole to become a therapeutic process. For clinical purposes, it has seemed logical to divide the patients into three groups; the methods and focus of the family-oriented work differ somewhat between the groups. The main separator between these is the level of social functioning before the psychosis.

The need-adapted treatment model for the treatment of psychoses is an attempt to integrate different modes of therapy in public mental health care and to make the treatment of a patient as a whole into a psychotherapeutic process (Alanen *et al*, 1991). The following are the main principles of this approach.

- (a) The therapeutic activities are planned and carried out flexibly and individually in each case so that they meet the real, changing needs of the patients, and of the people making up their personal interactional networks.
- (b) Examination and treatment are dominated by a psychotherapeutic attitude.
- (c) The different therapeutic activities should support and not impair each other.
- (d) The process quality of therapy is clearly perceived.

The psychotherapeutic methods include both family and individual therapy, and milieu therapy in hospital and day hospital wards developed to function as psychotherapeutic communities (Alanen, 1975). The aim of this paper is to clarify the role of the interactional viewpoint as a basis for treatment in the model, and to describe experiences of family therapy in schizophrenia.

#### Schizophrenia in interaction and culture

Hypotheses on characteristic family and parental patterns related to schizophrenia have evolved from observations on parents to more complex patterns in the interaction. Focusing on the former gave the observations of the problematic mother-child relationship (Fromm-Reichmann, 1948; Alanen, 1958) and the double bind (Bateson *et al*, 1956), followed by the interest in triads (Weakland, 1960).

The concepts of schismatic and skewed families (Lidz et al, 1957), the rubber fence and pseudomutuality (Wynne et al, 1958), communication deviance (Singer & Wynne, 1963) and schizophrenic games (introduced by the Milan group (Selvini-Palazzoli *et al*, 1978)) were descriptions of interactional patterns embracing the whole family. The aetiological significance of these observed interactional patterns has been questioned however (Anderson et al, 1986). Expressed emotion (Brown et al, 1962, 1972; Leff & Vaughn, 1985; Leff et al, 1989) is an interesting concept, connected to the prognosis of schizophrenia but not to aetiology. The hypothesis that family interaction has aetiological significance has gained strong support from studies by Tienari et al (1985) on the influence of hereditary and psychosocial factors on vulnerability to schizophrenia.

Interactional patterns observed in the treatment of schizophrenia have been linked with an increased risk of a chronic course; for psychotic patients, hospitalisation and diagnostic practices have been accused of being illness-maintaining rather than health-provoking (Rosenhahn, 1984; Ojanen & Sariola, 1986). The effects of culture and interaction on the prognosis of schizophrenia have been demonstrated in the study carried out by the World Health organization (1973, 1979), where the prognosis was found to be better in developing countries: it seems that acute schizophrenic psychoses are relatively common there, but a chronic course of the disease is rarer (Waxler, 1979; Warner, 1983; Kuusi, 1986). This has been postulated to depend on the culture being better adapted to managing schizophrenia. In Ethiopia, for example, psychosis is understood to be caused by witchcraft; the victim has broken a taboo, is affected by an evil spirit, or has been put under a spell by someone. In the

Table 1
Aetiological hypotheses and foci and methods of family therapy in schizophrenia

Focus of treatment	Methods of treatment  Medication; training to recognise handicaps			
Change in biological processes or adaptation to them				
Reorganising the psychic structures, or inner adaptation	Psychotherapy focusing on 're-experience' and insight or support			
Change in interaction	Interventions focusing on recognition and change of interaction patterns			
Change in social structures	Change in cultural patterns and legislation			
Change on any level affects the whole	Methods proven effective on any level in integrated use			
	Change in biological processes or adaptation to them Reorganising the psychic structures, or inner adaptation Change in interaction Change in social structures			

Ethiopian culture, beliefs about the aetiology of psychosis are therefore understandable and linked to everyday life; the conviction is that cure is possible, if a competent enough witch-doctor is available (Torrey, 1980). This is in striking contrast to the pessimism of developed countries.

The question of aetiology has also become controversial in the family therapy movement, although systemic thinking and thus the idea of circular versus linear causality has been generally accepted. Circular causality or circularity refers to the idea that cause and effect are interconnected in a coevolutionary manner. Naming one factor cause and the other effect is just one punctuation; the opposite is also possible (Simon et al, 1985). The aetiological position taken by family therapists on whether schizophrenia is an interactional or biological disorder has seemed to relate to the circumstances in which they are working (Tarrier, 1991). The psycho-educational approach has clearly favoured a biological aetiology, and thus regarded neuroleptic medication as a necessity. This approach has evolved in work with chronic schizophrenic patients, whereas those working with more acute cases and using intervention-oriented approaches have favoured the interactional aetiology. Table 1 clarifies the links between aetiological hypotheses, methods used, and aims for therapy.

From the systemic point of view, however, the question of aetiology loses its meaning; in this theoretical framework the interconnectedness of different parts and levels of the whole is paradigmatic. The interactional and cultural patterns associated with schizophrenia are present in the circular process, as well as the intrapsychic and biological aspects (Hoffman, 1981). Thus, schizophrenia exists in the interactional domain, as well as having a representation in the biological and intrapsychic domains. We have earlier used the metaphor of virus infection to describe the way in

which the schizophrenic process affects interaction (Lehtinen & Räkköläinen, 1993); it seems that all communication involving the 'schizophrenic' is distorted, as if some additional rules, or behaviour-directing codes, are active. The interactional 'virus', the behavioural pattern associated with mental illness, corrupts the network and by so doing affects the patient's mind in a manner that we fear is comparable to the way a virus infection destroys a biological organism, or a computer virus the functioning of a computer.

#### Integration

Integration means the creation of a whole by linking separate phenomena. The mind and the interaction are bound in a coevolutionary process, where a complex integrated structure of separate individuals and their interaction is maintained by constant coordination of behaviour in interaction and its co-ordination in language (Maturana & Varela, 1980, 1987). A simple example is the common language; typically, separate individuals share the meaning of a word. If there are different views they are discussed until an understanding is reached. A person's perception of reality is a product of continual interaction with other people. The shared perception of reality which exists in interaction, in language, as well as in the individual's perception of reality, is under the constant influence of sensory input. Interpretation of sensory input in turn is affected by the reality perception. Psychosis is understood as a momentary loss of integration in this structure, both in mind (Räkköläinen, 1977; Pao, 1979) and in interaction (Lehtinen & Räkköläinen, 1986). After the momentary loss, a new, different integrated structure is created.

The nuclear role of interaction in the creation of this new integrative state becomes clear when acute psychotic outbreaks in married patients are observed.

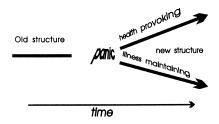


Fig. 1 Reformulation as a crossroad.

Typically, before the psychosis, both spouses have had acute and prolonged difficulties and symptoms; they may have sought or planned to get psychiatric help. The psychotic break is like coming to a junction in the railway: one rail leads towards integration by linking the psychosis and the concept of disease, which in this case has the name 'schizophrenia'; the other rail leads towards integration by linking the psychosis with disruption connected to both previous and present painful obstacles in life. The interaction observed between the spouses differs according to which rail they are on. Such a phenomenon is frequently observed in family therapy (Watzlawick, 1978, 1984; Andolfi & De Nichilo, 1989; Gelcer *et al.*, 1990).

The focus of several techniques used in family therapy is to achieve the second kind of integration (Minuchin, 1974; Watzlawick et al, 1974; Haley, 1984). This can be seen most clearly in the 'counterparadox' approach of the Milan group. In this, the family is given an interpretation where the individual behaviour and life situations of all family members are linked together and positively connotated; the role of the behaviour of each individual in the family interaction is given a positive description (Selvini-Palazzoli et al, 1980), including the psychotic behaviour. 'Counterparadox' refers to the antagonistic action the interpretation is thought to have to the paradoxical, unconscious, interactional pattern in the family which maintains psychosis. The assumption is that the interactional patterns change when they are made conscious in this manner (Selvini-Palazzoli et al, 1978).

## Family therapy and need-adapted treatment

From the late 1960s, family therapy was practised and training arranged in the Turku Psychiatric Clinic; a more formal three-year training was started in 1979. In spring 1981, it was decided that each patient on the acute psychosis ward, together with his/her family, at the very beginning of treatment, should meet a

family therapy team created from ward personnel. At that time, the family therapy methods applied were mostly influenced by the Milan group (Selvini-Palazzoli *et al.*, 1978, 1980).

The years 1980–1982 were a period of enthusiastic development, and in 1983-1984 a new cohort study was started as part of the Turku Schizophrenia Project, completed by two- and five-year follow-ups (Alanen et al, 1991; Lehtinen, 1993). This is an action research project with the aim of developing the psychotherapeutically oriented treatment of new schizophrenic patients. The results are assessed by comparing the follow-up findings of the cohorts which have been assembled during different phases of the development of the therapeutic approach (concerning earlier cohorts cf. Alanen *et al* (1980, 1986), Salokangas (1986)). The 1983–1984 patient sample consisted of all new patients included in the schizophrenia group (DSM-III diagnoses of schizophrenic disorder and schizophreniform psychosis (American Psychiatric Association, 1980), RDC diagnosis schizoaffective psychosis (Spitzer et al, 1975)) aged 16-45 years and first admitted to treatment from the Turku catchment area during 12 months in 1983-1984. The study also formed the Finnish part of the NIPS project described in this supplement by Gilbert & Ugelstad (1994).

The follow-up results reflected the beneficial effects of the new family-centred approach on the patients' prognosis, when compared with a cohort admitted to treatment in 1976-77. The patients managed better with half the amount of hospital days and less out-patient care. Only 18% in the 1983-84 series were on disability pension compared with 51% in the 1976-77 series (Table 2). The sums of the scores on the Strauss-Carpenter (Strauss & Carpenter, 1974, 1977) subscales (range 0-16) were compared, using the two-tailed t-test. When the patients were grouped by diagnosis, the difference was clear in the patients with schizophreniform psychosis (P=0.02) and in those with paranoid schizophrenia (P = 0.03); in the rest there was no difference. The follow-up results are published in more detail elsewhere (Alanen et al, 1991; Lehtinen, 1993).

The strengthening of the interactional approach greatly influenced the development of therapeutic activities, the main emphasis being transferred from individual psychotherapy to family-oriented work, especially in the initial phase of treatment. The methods for working with the families had stabilised mainly to three: family sessions held in the family studio, therapy meetings, and miniconferences.

Table 2						
Patients on disability pension at five-year follow-up: comparison of old and new series						

	Diagnostic group							
	Schizophreniform psychosis		Paranoid schizophrenia		Other schizophrenia		All schizophrenia	
	Old	New	Old	New	Old	New	Old	New
Number of patients	15	10	25	8	13	10	53	28
Patients on pension: %	27	0	72	0	38	50	51	18
Significance	P = 0.03		P = 0.000		P = 0.6		P = 0.003	

The work with the families in the studio was performed by the team. The practice was that one of the team members interviewed the family, while others watched behind the one-way mirror; if necessary the team and the therapist communicated by telephone. The aim of these sessions was to reach enough understanding to reformulate the situation and to give the psychosis a meaning, linked to the family's present life situation, interactional patterns, and history. This was thought to be accomplished by the interviewing process, supported when necessary by a verbal intervention. This intervention was given after a team discussion. Often, a message of this type was given as early as at the end of the first or second session. The team was kept open for other ward personnel to join, because it was seen as important that the knowledge acquired at the sessions and the working methods could be shared.

Therapy meetings (Räkköläinen et al, 1991) were more informal meetings on the ward, in which the patient and staff members discussed the situation as a group. One or two of the more experienced staff took more responsibility for leading the discussion. Later, it became the practice to invite family and other network members to these meetings, in which the emphasis was on increasing understanding and supporting the therapeutic process.

'Mini'-meetings were more frequent, short orientation sessions, like small therapy meetings, with the patient and 2-4 staff members. In these discussions new patients and occasionally some relatives were met. The meetings were more focused on practical matters than the therapy meetings.

There was a general attempt in the treatment to maintain a working position where wondering, *ihmettely*, about everything was possible. The Finnish word *ihmettely* has the quality of the English words to wonder and to be curious. Cecchin (1987) has used the concept 'curiosity' to describe this important position and feeling of freedom, which is essential for the maintenance of the observational

position and the process quality in psychotherapeutic work.

#### Team-work

The practice of using teams was an important development: the most notable benefit from it was that having a team helped us to tolerate and contain better the anxiety present in a psychotic crisis. We have suggested specific 'psychosis teams' to undertake responsibility for treatment as a basic principle (Lehtinen & Räkköläinen, 1986; Alanen et al, 1990, 1991). Originally, the function of these teams was thought to be in providing the immediate intervention, and thus laying the basis for future treatment if necessary. The following three basic principles were seen as important in establishing the basis for treatment of acute schizophrenia (Lehtinen & Räkköläinen, 1986; Alanen et al, 1989).

The first was that the patient should be present in situations that concern him and his treatment.

The second was that regular conjoint meetings should be arranged, with staff members, the patient, and his/her family members or other important network persons being present, beginning with an intensive initial examination when the patient is admitted to treatment. In these, therapy meetings became the most important single activity.

The third principle was that a systemic general orientation should be put into practice. The interactional understanding obtained in the family and network sessions is used as the basis for integrating other activities in the treatment process.

In the follow-up of our sample it became evident that we had to add a fourth principle: that there should be maintenance of continuity during treatment, for several years when needed. This was because several families had dropped out of treatment prematurely or their treatment had become discontinuous; 'our' families were being worked with by other teams. It became clear that we had focused

Table 3 Characteristics and treatment suggestions for the three groups

	Characteristics	Initial intervention	Long-term treatment	Very long term	
Group I: acute break	Acute onset; the psychosis is clearly and easily linked to problems in the close network	Systemic reframing by linking the psychosis to major life events	Follow-up of adaptation; any interest in further psychotherapy should be supported; any new psychotic episodes or major difficulties treated as in group II	psychotic episodes becomes chronic, treated	
Group II: sealed crisis	Acute onset; linking the psychosis to problems in the close network is possible but therapeutically insufficient	Systemic reframing by linking the psychosis to major life events	Insight-oriented family therapy or insight-oriented/supportive individual therapy (the latter needs support by a case management team); maintenance of continuity	Individual therapy continued; if improvement poor, treated as in group III	
Group III: malignant isolation	Delayed onset; chronic from very beginning; isolation of patient and family; poor adaptation to the age group	Focus on normalisation of family patterns and adaptation problems, with special emphasis on dangers of isolation	Stepwise enlargement of the network; problem oriented interventions when needed; close surveillance and contact; maintenance of continuity	Surveillance and support when necessary; maintenance of continuity	

too much on the initial intervention and neglected to maintain continuity; we should have focused more on the creation of a good enough treatment alliance. Later, the scope of the team's duties was enlarged to become a holistic responsibility for the case over years, regardless of whether the patient was being treated in an out-patient unit or on a ward.

During the years, our work with families has evolved from seeing the family as the sole locus of problems to understanding better how greatly we and the treatment system are involved in the complex pattern that maintains and creates the problems. The techniques used have adapted themselves to this finding. In practice, the use of the studio has diminished and the therapy meetings have become the main tool. Part of this change is due to increased experience, which has allowed more flexibility in the technique.

#### The three patient groups

A clear need for more focused approaches in different situations arose when the cases in the five-year follow-up were analysed (Lehtinen, 1993). For clinical purposes it was possible to distinguish three main groups within the first-episode psychoses, which needed different strategies (Table 3). Similar divisions have originated from different research approaches. Cullberg (1992) has presented such a separation based on biological findings and the same was suggested by Pao (1979) from psychodynamic research.

#### Group I

The first group consists of those patients whose psychosis comes abruptly in the middle of an

outwardly normal life; the outbreak is clearly linked to the intensification of long-term problems in the family, sometimes also involving other important relationships. In this group, immediate intervention and reformulation by the team are often enough to stop the psychotic behaviour; the treatment needed consists on average of two to five family sessions, possibly supported by some symptomatic medication. In Turku, the patients are most often admitted to hospital for a few days, which is a disadvantage. arising from our model having its roots in hospital. During the five-year follow-up, this group seemed to have managed well: the psychosis had remained a unique though frightening episode in the history of the patient and family. Although the responsibility of seeking further help, if needed, can be left to the patient and the family, the team should do a follow-up examination one or two years later, to confirm the degree of adaptation.

#### Group II

Although initial differences between groups I and II may be minor, social functioning is usually somewhat worse in the latter. The main difference is observed during the crisis intervention: although some clear linkages between the psychosis and the present situation and history of the family can be made and interpreted, they do not resolve the situation as easily as in the first group. The therapist and team have a feeling of 'looseness'. For example, when the patient is an adolescent, linkage between his/her behaviour and difficulties in the relationship with the parents may seem clear, but the interventions tend somehow to dissolve. There is a feeling that

a start has been made, but that further work will be needed.

Most female patients in group II seemed to seek individual therapy readily, after the family intervention phase. In the follow-up, it became clear that the patients, their families, and the therapy process had needed better support. Typically, some difficulties arose during the first and second year of the individual therapy; after this, the situation started to improve. It is important to link these difficulties with the therapy and the understanding gained in the initial phase. This is possible if the same team or at least one member of the team is continuously available for consultations or repeated therapy meetings. In the follow-up, the risk of losing continuity of this kind was clear. More emphasis should be placed on follow-up by the team itself, and on maintaining a good-enough treatment alliance.

This part of the team's work could be called working as a 'responsibility team' or 'case team'; it should have a position similar to that of a family doctor. The initial intervention must be designed so that it lays a foundation for this continued work. The total amount of work involved may be quite small but, because it is spread over several years, the problem is how to maintain the continuity over the years. The aim is that the patient, or family, or someone in the network should contact a team member in case of difficulties – the earlier the better.

The male patients in group II mostly remained without further treatment after the first two years; however, when new difficulties arise, it is of the utmost importance to maintain continuity of case. Male patients seem to be at particular risk of being labelled 'chronic' in further contacts.

### **Group III**

The third group consists of those cases that are chronic from the very beginning. Typically, the patient has slowly isolated him/herself socially over some years and an interactional adaptation has occurred in the family, which usually means isolation also of the family as a whole. The patient and his/her family's contacts are often limited to some relatives. During the isolation process help may have been sought, but in vain; the patient will have missed the normal psychosexual development of adolescence, and the family is in a vicious circle of isolation, worry, shame, guilt, and further isolation. A descriptive name for group III cases would be the 'malignant isolation syndrome'.

Our attempts to focus the initial interventions in a manner similar to that used in groups I and II were failures. Even though the interventions seemed to be appropriate, the situation remained unchanged. At best, the acute crisis was resolved and prolonged admission was avoided; in these cases also, any loss of continuity was deleterious.

However, there seemed to be a tendency to underestimate the difficulties of the patient and the family, so that they would be left alone, as if the team were hoping for a cure by 'magic'. Afterwards, this seems like a pattern of avoidance, which can be seen as a reaction formation to avoid feelings of fear, failure, and helplessness.

When the treatment of these patients as a whole was considered, there seemed to be two patterns. Some were kept in hospital for long periods, with episodic attempts to 'rescue' them, usually with trials of medication. However, they also stayed socially isolated in hospital. Others were left with their families, with episodic attempts to 'do something', leading mostly to the use of dramatic interventions, aiming at immediate recovery, as if there were only two possibilities: total health or total illness. The teams were at risk of seeing the family members as 'difficult' and impossible to work with.

It was of interest, though, that these patients who were living with their families, with little or no treatment, did not seem to manage any worse in the follow-up than those who had long-term admission to hospital.

Family interventions in group III families should focus on the most obvious problem – the social isolation of the patient and family – and on other practical problems appearing in their life; linking the illness to daily life must take place in small, practical steps. Keeping the patients connected as much as possible to a normal network, as opposed to remaining in hospital, has seemed beneficial. Here, the team must work in the home and follow flexibly wherever finding solutions for practical problems will lead: if this means extending the work to the larger social network, this should be done.

In the larger network, there is a tendency to leave patients isolated because of fear and not knowing how to approach and behave towards them. One practical reformulation made by the team to change this was as follows:

"Bill has for some reason isolated himself from his age-group and not gained the experience of how to be in contact with other people as a grown-up; this is a problem especially in relation to the opposite sex. The task is so difficult that he has created an imaginary world, where he enters when the difficulties seem too great or when the isolation becomes unbearable. Our task is to repeatedly shake him out of his imaginary world to our common reality, and thus gradually draw him into this reality. These experiences are essential for

him, because they are the primary means for gaining enough relational skills to feel sufficiently secure to slowly loosen himself more and more from his imaginary world."

It has appeared to be important that the therapists continually focus on the worst that has happened, and bring it into the discussion; otherwise, what is unspoken undermines the entire work and treatment alliance. Also, when the worst is focused on by the therapists, others present will bring up the good and healthy in the patient's behaviour. In some families, problems in the marriage, on which we had focused an intervention initially, start to appear and may be worked with, when there has been enough improvement over the years.

The method used with group III resembles that described in the 'psycho-educational' approach (Anderson et al. 1986). We have not considered it necessary to arrange any formal education on schizophrenia for the families; possible questions are worked with when they appear. A reason for this is our attempt to normalise and reformulate problems and thus work for health, as opposed to maximal adaptation to a handicap. When medication is used, it is explicitly prescribed to help a certain behavioural pattern or experience, and its desirable effect is explained to both the patient and family members in those terms, as well as its efficacy being evaluated in the longer run. The aim is to create a surveillance situation where the benefits of medication can be observed and understood. In practice, this often means intermittent use of medication when a need for it is observed; this may also be useful in that it helps the possible benefits of medication to be recognised. Those advocating the psycho-educational approach have emphasised the importance of continuous use of depot neuroleptics (Doane et al. 1985; Leff et al, 1985, 1989; Anderson et al, 1986), but in the latest report by Falloon (1992), dealing with new patients on the verge of psychosis, this view has changed, coming closer to our approach.

#### Conclusion

Therapeutic work based on the interactional approach seemed to be clearly beneficial in the management of schizophrenia. However, use of the approach described here creates demands on mental health care, which are mostly qualitative: training and experience in different psychotherapeutic methods are needed, not only to practise them but to understand their indications and the quality of the treatment processes. The issue of continuity is especially difficult since treatment processes easily last for five to ten years. This is a long time in

professional as well as in personal life, and typical career expectations are often in conflict with this fundamental requirement. Using teams to maintain continuity makes controlled changes in staff possible, but the process still remains vulnerable. The present focus in the development of the need-adapted model is on leaving the hospital as the base of activities and learning to work where the problems arise – in the home and within the social network.

#### References

- ALANEN, Y. O. (1958) The mothers of schizophrenic patients. Acta Psychiatrica & Neurologica Scandinavica, 33 (suppl. 124).
- —— (1975) The psychotherapeutic care of schizophrenic patients in a community psychiatric setting. In *Studies of Schizophrenia* (ed. M. H. Lader) (special publication 10). London: British Journal of Psychiatry.
- , RÄKKÖLÄINEN, V., LAAKSO, J., et al (1980) Problems inherent in the study of psychotherapy of psychoses: conclusions from a community psychiatric action research study. In Psychotherapy of Schizophrenia (eds J. S. Strauss, M. Bowers, T. W. Downay, et al). New York: Plenum Press.
- ——, , —, et al (1986) Towards Need-Specific Treatment of Schizophrenic Psychoses. Berlin: Springer Verlag.
  ——, LEHTINEN, K. RÄKKÖLÄINEN, V. (1989) Utvecklandet av vården av nya schizofrenipatienter i Finland. Nordisk Psykiatrisk Tidsskrift, 43, 39-48.
- —, ANTTINEN, E. E., KOKKOLA, A., et al (1990) Treatment and rehabilitation of schizophrenic psychoses: the Finnish treatment model. *Nordic Journal of Psychiatry*, **44** (suppl. 22).
- \_\_\_\_\_, Lehtinen, K., Räkköläinen, V., et al (1991) Need-adapted treatment of new schizophrenic patients: experiences and results of the Turku Project. Acta Psychiatrica Scandinavica, 83, 363-372.
- AMERICAN PSYCHIATRIC ASSOCIATION (1980) Diagnostic and Statistical Manual of Mental Disorders (3rd edn). Washington DC: American Psychiatric Association.
- Anderson, C. M., Reiss, D. J. & Hogarty, G. E. (1986) Schizophrenia and the Family. New York: Guilford Press.
- Andolfi, M. & De Nichilo, A. (1989) The Myth of Atlas Families and the Therapeutic Story. New York: Brunner/Mazel.
- BATESON, G., JACKSON, D. D., HALEY, J., et al (1956) Towards a theory of schizophrenia. Behavioral Science, 1, 251-264.
- Brown, G. W., Monck, E. M., Carstairs, G. M., et al (1962) Influence of family life events on the course of schizophrenic illness. British Journal of Preventive and Social Medicine, 16, 55-68.
- BIRLEY, J. L. T. & WING, J. K. (1972) Influence of family life on the course of schizophrenic disorder: a replication. *British Journal of Psychiatry*, 121, 241-258.
- Cecchin, G. (1987) Hypothesizing, circularity, and neutrality revisited: an invitation to curiosity. Family Process, 26, 405-414.
- CULLBERG, J. (1992) Combining psychodynamics and biology. (In symposium; Verklighet och Visioner, arranged by Intresse Föreningen för Skitsofreni, 9-10 March, Stockholm.)
- Doane, J. A., Falloon, I. R., Goldstein, M. J., et al (1985) Parental affective style and the treatment of schizophrenia: predicting course of illness and social functioning. Archives of General Psychiatry, 42, 34-42.
- Falloon, I. R. H. (1992) Early intervention for first episodes of schizophrenia: a preliminary exploration. *Psychiatry*, 55, 4-15
- Fromm-Reichmann, F. (1948) Notes on the development of treatment of schizophrenics by psychoanalytic psychotherapy. *Psychiatry*, **11**, 263–274.

- GELCER, E., McCABE, A. E. & SMITH-RESNICK, C. (1990) Milan Family Therapy: Variant and Invariant Methods. London: Jason Aronson.
- GILBERT, S. & UGELSTAD, E. (1994) Patients' own contributions to long-term supportive psychotherapy in schizophrenic disorders. British Journal of Psychiatry, 164 (suppl. 23), 84-88.
- HALEY, J. (1984) Ordeal Therapy. New York: Jossey-Bass.
- HOFFMAN, L. (1981) Foundations of Family Therapy. New York: Basic Books.
- Kuusi, K. (1986) Prognosis of Schizophrenic Psychoses in Helsinki in 1975-1983 (monographs of Psychiatria Fennica, 13). Helsinki: Foundation for Psychiatric Research in Finland. (In Finnish, English summary.)
- LEFF, J. & VAUGHN, C. (1985) Expressed Emotion in Families: its Significance for Mental Illness. New York: Guilford.
- , Kuipers, L., Berkowitz, R., et al (1985) A controlled trial of social intervention in the families of schizophrenic patients: two year follow-up. British Journal of Psychiatry, 146, 594-600. , BERKOWITZ, R., SHAVIT, N., et al (1989) A trial of family

therapy v. a relatives group for schizophrenia. British Journal of Psychiatry, 154, 58-66.

- LEHTINEN, K. (1993) Need-adapted treatment of schizophrenia: a five year follow-up study from the Turku project. Acta Psychiatrica Scandinavica, 87, 96-101.

  — & Räkköläinen, V. (1986) Akuutin psykoosin
- systeemianalyyttinen hoita. Reports of Psychiatria Fennica, 71, 79-92 (in Finnish).
- (1993) Community psychiatry as a psycho-- &: therapeutic device. In The Psychotherapy of Schizophrenia (eds G. Benedetti & P. M. Furlan). Göttingen: Hogrefe & Huber.
- LIDZ, T., CORNELISON, A. R., FLECK, S., et al (1957) The intrafamilial environment of schizophrenic patients: II. Marital schism and marital skew. American Journal of Psychiatry, 114, 241 - 248.
- MATURANA, H. R. & VARELA, F. J. (1980) Autopoiesis and Cognition. Boston: Reidel Press.
- (1987) The Tree of Knowlege: the Biological Roots - & --of Human Understanding. Boston: New Science Library.
- MINUCHIN, S. (1974) Families and Family Therapy. London: Tavistock.
- OJANEN, M. & SARIOLA, E. (1986) Skitsofrenia: laitoskierteestä vapauteen. Helsinki: Otava.
- PAO, P. N. (1979) Schizophrenic Disorders: Theory and Treatment from a Psychodynamic Point of View. New York: International Universities Press.
- RÄKKÖLÄINEN, V. (1977) Onset of Psychosis: a Clinical Study of 68 Cases (Annales Universitatis Turkuensis, Ser. D, 35). Turku: University of Turku.
- , LEHTINEN, K. & ALANEN, Y. (1991) Need-adapted treatment of schizophrenic process: the essential role of familycentered therapy meetings. Contemporary Family Therapy, 16,
- ROSENHAHN, D. L. (1984) On being sane in insane places. In The Invented Reality: How Do We Know What We Believe We Know? (Contributions to Constructivism) (ed. P. Watzlawick). New York: W. W. Norton. (Modified from the original published in Science (1973), 179, 250-258.)

- SALOKANGAS, R. K. R. (1986) Psychosocial outcome in schizophrenia and psychotherapeutic orientation. Acta Psychiatrica Scandinavica, 74, 497-506.
- SELVINI-PALAZZOLI, M., BOSCOLO, L., CECCHIN, G., et al (1978) Paradox and Counterparadox. New York: Jason Aronson.
- -, et al (1980) Hypothesizing-circularityneutrality: three guidelines for the conductor of the session. Family Process, 19, 3-12.
- Simon, F. B., Stierlin, H. & Wynne, L. C. (1985) The Language of Family Therapy: a Systemic Vocabulary and Sourcebook. New York: Family Process Press.
- SINGER, M. T. & WYNNE, L. C. (1963) Differentiation characteristics of parents of childhood schizophrenics, childhood neurotics and young adult schizophrenics. American Journal of Psychiatry, 120, 234-243.
- SPITZER, R. L., ENDICOTT, J. & ROBINS, E. (1975) Research Diagnostic Criteria. New York: New York State Psychiatric Institute, Biometrics Research Division.
- STRAUSS, J. & CARPENTER, W. (1974) The prediction of outcome in schizophrenia. II. Relationships between predictor and outcome variables. Archives of General Psychiatry, 31, 37-42.
- (1977) Prediction of outcome in schizophrenia: & five-year outcome and its predictors. Archives of General Psychiatry, 34, 159-163.
- TARRIER, N. (1991) Some aspects of family interventions in schizophrenia I-II. British Journal of Psychiatry, 159, 475-484.
- TIENARI, P., SORRI, A., LAHTI, I., et al (1985) The Finnish adoptive family study of schizophrenia. Yale Journal of Biology and Medicine, 58, 227-237.
- TORREY, E. F. (1980) Schizophrenia and Civilization. New York: Jason Aronson
- WARNER, R. (1983) Recovery from schizophrenia in the Third World. Psychiatry, 46, 197-212.
- WATZLAWICK, P. (1978) The Language of Change. New York: Basic Books.
- (ed.) (1984) Invented Reality: How Do We Know What We Believe We Know? (Contributions to Constructivism). New York: W. W. Norton.
- , WEAKLAND, J. H. & FISH, R. (1974) Change: Principles of Problem Formation and Problem Resolution. New York: Norton.
- WAXLER, N. E. (1979) Is outcome of schizophrenia better in nonindustrial societies? Journal of Nervous and Mental Disease, 167,
- WEAKLAND, J. H. (1960) The 'double-bind' hypothesis of schizophrenia and three-party interaction. In The Etiology of Schizophrenia (ed. D. D. Jackson). New York: Basic
- WORLD HEALTH ORGANIZATION (1973) The International Pilot Study of Schizophrenia. Geneva: WHO.
- (1979) Schizophrenia an International Follow-up Study. Chichester: John Wiley.
- WYNNE, L., RYCKOFF, I. M., DAY, J., et al (1958) Pseudomutuality in the family relations of schizophrenics. Psychiatry, 21,

Klaus Lehtinen, MD, Senior Lecturer in Psychiatry, Department of Clinical Medicine, University of Tampere, Box 607, SF-33101 Tampere, Finland