

## **Open Dialogue Approach: Treatment Principles and Preliminary Results of a Two- year Follow-up on First Episode Schizophrenia**

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### **Abstract:**

As part of the Need- Adapted Finnish model, the Open Dialogue (OD) approach aims at treating psychotic patients at their home. Treatment involves patient's social network and starts within 24 hours after contact. Responsibility for the entire treatment process rests with the same team in both inpatient and outpatient settings. The general aim is to generate dialogue to construct words for the experiences, which exist in psychotic symptoms. As part of the Finnish National Acute Psychosis Integrated Treatment multicentre project (API project), three comparisons were made: 1) patients from the initial phase of OD (API group, N=22) were compared historically with patients from the later phase of OD (ODAP group, Open Dialogue in Acute Psychosis, N=23). 2 and 3) The API (N=22) and ODAP (N=23) groups, both in Western Lapland were compared separately with schizophrenic patients (Comparison group, N=14) from another API research center who were hospitalized and received conventional treatment. Compared to the Comparison group, the API patients were hospitalized for fewer days, family meetings were organized more often and neuroleptic medication was used in fewer cases. The ODAP group had fewer relapses and less residual psychotic symptoms and their employment status was better than in the Comparison group. ODAP group had shorter hospitalization than API group. It is suggested that OD, like other family therapy programs, seems to produce better outcomes than conventional treatment, given the decreased use of neuroleptic medication.

**Open Dialogue Approach: Treatment Principles and Preliminary Results of a Two- year Follow-up on First Episode Schizophrenia**

In the 1980s, the Finnish National Schizophrenia Project (Alanen, 1997; Salokangas, Rökköläinen & Stengård, 1991) was established to improve care in cases of major mental illness. In this context, Alanen and his colleagues in Turku developed the Need-Adapted approach, which emphasized rapid early intervention, the planning of treatment to meet the changing and case-specific needs of each patient and family, and the adoption of a therapeutic attitude in both examination and treatment. In analyzing the problems and in creating the treatment plans, therapeutic attitude means throughout focusing on the therapeutic process, not only to the specific decisions made. Treatment was seen as a continuous process, involving the integration of different therapeutic methods and constant monitoring of progress and outcomes (Alanen, 1997; Alanen, Lehtinen, Rökköläinen & Aaltonen, 1991). Since the early 1980s in Finnish Western Lapland a further innovation operating within the Need-Adapted approach has been developed: the Open Dialogue (OD) approach. The idea behind OD is the provision of psychotherapeutic treatment for all patients within their own personal support systems. This is done by generating dialogical communication within the treatment system, and involves mobile crisis intervention teams, patients, and their social networks in joint meetings. In this article, the OD approach and the study carried out to determine its effectiveness in treatment of schizophrenia are described. Since this article is a study report, the language used is a very categorical one. This type of language does not well resonate the practice of OD, where firm categories and detecting deficiencies of the clients are avoided. A more profound description both of the theoretical basis and of the clinical practice has been given elsewhere (Seikkula, 2002; Seikkula, Aaltonen, Alakare, Haarakangas, Sutela, & Keränen, 1995; Seikkula, Alakare, & Aaltonen, 2001a)

### Western Lapland context

The province of Western Lapland (72 000 inhabitants during the study periods, 1992-1997) lies to the north of the Gulf of Bothnia and shares a border with Sweden. The southern part of the region, where most of the population lives, is industrialized. Linguistically, ethnically and in religion the population is homogenous; over 90% are Finnish-speaking Lutheran Finns and live within 60 kilometers of Keropudas hospital. The incidence of schizophrenia has been extremely high: in the mid 1980s, for example, an annual average of 35 new schizophrenia patients per 100,000 inhabitants, average being 13/100 000 in the rest of Finland (Salokangas et al., 1991)

As the OD approach was developed, all five mental health outpatient clinics and the hospital with its 30 acute beds set up case-specific mobile crisis intervention teams. In principle, all clinical staff members can be called upon to participate in these teams. Therefore, the inpatient and outpatient staff (about 100 professionals) participated in a three-year training program in either family therapy or some other form of psychotherapy from 1989 through 1998. Qualification as a psychotherapist by Finnish legal standards was obtained by 75% of the staff.

In a crisis, regardless of the specific diagnosis the same procedure is followed in all cases. If hospital treatment is considered, the crisis clinic in the hospital will set up a case-specific team for the crisis meeting, either before the decision to admit for voluntary admissions, or during the first day after admission for the patients referred to

the hospital against their own will<sup>1</sup>. The team usually consists of two or three staff members (for instance a psychiatrist from the crisis clinic, a psychologist from the patient's local mental health outpatient clinic, and a nurse from the hospital ward). The team takes charge of the entire treatment sequence, regardless of whether the patient is at home or in the hospital and irrespective of how long the treatment is expected to last. In other types of crisis, where hospitalization is not considered, the regional mental health outpatient clinics take responsibility for organizing a case-specific team, inviting staff members from different agencies in accordance with the patient's needs. For instance, in cases of clients who are involved with several agencies at the same time, the team may consist of a nurse from the outpatient clinic, a social worker from the social office and a psychologist from the child guidance clinic. The principles governing psychiatric organization have been extended to cover the clinical practice of the entire state social and health care system in the Western Lapland province.

### Treatment principles

The most critical steps in developing the OD were taken (1) in 1984, when treatment meetings began to be organized in the hospital, replacing systemic family therapy (see below); (2) in 1987, when a crisis clinic was founded in the hospital to organize case-specific teams for inpatient referrals; and (3) in 1990, when all the regional mental health outpatient clinics started to organize mobile crisis interventions teams. Seven main principles of treatment have emerged from the various training and research programs that have been undertaken (Aaltonen et al., 1997; Haarakangas, 1997; Keränen, 1992; Seikkula, 1991, 1994). These are:

- (1) The provision of immediate help. The clinics arrange the first meeting within 24 hours of the first contact, made either by the patient, a relative or a referral agency (since 1987). In addition, a 24-hour crisis service exists (since 1992). Providing an immediate response aims to prevent hospitalization in as many cases as possible. In non-voluntary referrals this often means that the compulsory admission can be avoided on the whole (Seikkula, 1991). The psychotic patient participates in the very first meetings already during the most intense psychotic period.
- (2) A social network perspective. The patients, their families, and other key members of the patient's social network are always invited to the first meetings to mobilize support for the patient and the family. Other key members may include official agencies, such as the local employment and health insurance agencies to support vocational rehabilitation, fellow workers or, neighbors and friends (since 1987).
- (3) Flexibility and mobility. These are guaranteed by adapting the therapeutic response to the specific and changing needs of each case, using the therapeutic methods which best suit each case. During the crisis phase no exact treatment plans for the future are constructed. After the crisis is calming down the forms of treatment and therapeutic methods are chosen that best fit the patients problems and preconditions. After the

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<sup>1</sup> In case of a compulsory referral the crisis team is advisable to be contacted already before the referral is made. This is not, however, always possible and the treatment start after the patient has arrived to the hospital.

heaviest crisis the treatment process continues in a more structured form. The meetings are organized at the patient's home, with the consent of the family (since 1988).

(4) Responsibility. Whoever among the staff is first contacted becomes responsible for organizing the first meeting, in which decisions about treatment are made. The team then takes charge of the entire treatment process (since 1993 – 1994).

(5) Psychological continuity. The team is responsible for the treatment for as long as it takes in both outpatient and inpatient settings. Members of the patient's social network are invited to participate in the meetings throughout the treatment process. The various methods of treatment are combined so as to form an integrated process. The treatment of an acute psychotic crisis would seem to require between two and three years (Jackson & Birchwood, 1996). In line with this notion, in the study described below, 50% of the treatments of schizophrenia patients had come to the end at the two-year follow-up (since 1988).

(6) Tolerance of uncertainty. Building a relationship in which all parties can feel safe enough in the joint process strengthens this. In psychotic crises, having the possibility for meeting every day at least for the first 10 – 12 days appears necessary to generate an adequate sense of security. After this the meetings are organized regularly according to the wishes of the family. Usually no detailed therapeutic contract is made in the crisis phase, but instead, it is discussed as a routine part of every meeting whether and, if so, when the next meeting will take place. Meetings are conducted so as to avoid premature conclusions or decisions about treatment. For instance, neuroleptic medication is not introduced in the first meeting; instead, its advisability should be discussed in at least three meetings before implementation. Tolerance of uncertainty can be seen as an active attitude among the therapists to live together with the network aiming at a joint process instead of the treatment being all the time reactions to what happens.

(7) Dialogism. The focus is primarily on promoting dialogue, and secondarily on promoting change in the patient or in the family. The dialogical conversation is seen as a forum where families and patients have the opportunity to increase their sense of agency in their own lives by discussing the patient's difficulties and problems (Haarakangas, 1997; Holma & Aaltonen, 1997). A new understanding is built up in the area between the participants in the dialogue (Andersen, 1995; Bakhtin, 1984; Voloshinov, 1996). Instead of having some specific interviewing procedure, the team's aim in constructing the dialogue is to follow the themes and the way of speaking that the family members are used to. The latter two principles (tolerance of uncertainty and dialogism) have been established as working guidelines since 1994 – 1996 (Seikkula et al., 1995).

In the meetings the participants discuss the various issues associated with the actual problem. All management plans and decisions are also made with everyone present. According to Alanen (1997), the meeting has three functions: (1) to gather information about the problem, (2) to plan treatment and on the basis of the diagnosis made in the course of the conversation make all decisions needed, and (3) to generate a psychotherapeutic dialogue. The starting point for treatment is the language of the family; how the family has, in their own language, named the patient's problem. Problems are seen as social constructions specific to each particular conversation (Bakhtin, 1984; Gergen, 1994; 1999; Shotter, 1993). Each person has his/her own voices in constructing the problem and, as Anderson (1997) has noted, listening to others

becomes more important than any specific way of interviewing. In the case of a psychotic patient, it seems important to accept the psychotic hallucinations or delusions of the patient as one voice among others. In the beginning, these are not challenged, but the patient is encouraged to tell more about his/her experiences.

An important idea behind OD is to integrate different methods of treatment so as to form a single treatment process. The patient can have individual or other therapies (e.g., art therapy, group therapy, occupational therapy) and the family can meet for family therapy. In cases of psychotic crisis, psychiatric and vocational rehabilitation are both emphasized from the very beginning. For instance, special two-month vocational rehabilitation courses can be organized jointly with the local state employment and health insurance agencies. Treatment usually starts with intensive meetings during the heaviest phase of the crisis after which individual psychotherapy and other types of psychotherapy and rehabilitation are applied in addition to the meetings. In the final phase of treatment various forms of psychological and vocational rehabilitation receive more emphasis than the treatment meetings, although these will usually continue throughout the entire process. These processes and the principles of OD will be illustrated in the following case. The patient was included into the research project described later in this article.

*Case “ Taking care of her studies”. (ODAP group patient).*

Liisa was 16 years when, during her first year in the vocational school, she started to show signs of problems to her parents. She became easily irritated and isolated herself in her room during weekends at home. She continued to go to a school in another city, where she also had a flat, but next April all seemed to come down. She stopped taking care of her hygiene, her talking went to a mumble and her eyes were turned towards the sky. She also had peculiar body movements, such as rocking. Her parents could not have any contact with her and took her as emergency to the local primary care. She stayed overnight in the ward and the following day a team consisting of a psychiatrist from the psychiatric hospital, a nurse and a psychologist from the local psychiatric outpatient clinic, met her at the primary care center together with her parents. It was decided that Liisa would return home and home visit were organized. In several meetings following each other almost every day or every second day, Liisa was most often sitting with her knees under his jaw and turning her eyes towards the sky and when asked, she did not answer, only some mumbling was heard. Her parents were very worried, they both cried a lot, and her brother came home from his study place to support them. In many meetings, neuroleptic medication was considered, but the parents did not like that idea and the psychiatrist wanted to be careful. In the meetings, a slight progress was noted in the sense that Liisa started to sleep better and she also started to give short answers to the team member's questions.

During the summer, after 3 months treatment, a five week break occurred in the meetings instructed by the family. New meetings were organized and after 6 months, surprising to everyone, Liisa said that she was going to return to her studies. Both the parents and the team members were very suspicious and did not believe that Liisa could cope with her studies and living away from home. After discussing this at two meetings, the team approved Liisa's initiative and proposed network meetings at Liisa's school. In two meetings Liisa with her family, the principle of the school, Liisa's closest teacher and

the school nurse, discussed the support needed by Liisa. Although the team proposed continuing the treatment meetings, the family disapproved saying that after Liisa had moved away, there was no sense for these meetings to continue. Altogether 20 treatment meetings were organized.

At the 2 year follow-up the entire family was seen. Liisa was no longer psychotic and she was going to take her exam from the vocational school. Her parents said that they were worried all the time although nothing alarming had happened. Liisa has showed some hints of psychotic problems for a year altogether, but they had not appeared for a year. When asked of their experiences, they were satisfied that Liisa had not been hospitalized although in the beginning it was a rather difficult situation for the family. They were also satisfied with not having used neuroleptic medication. Liisa used anxiolytic medication for 3 months in the beginning to help her sleep. In the process they had not liked some circular questions asked by one member of the team, which especially the mother had felt increased her guilt of Liisa's psychosis.

The family was met after 6 years. Liisa said that she had taken another profession too, as she was unable to find a job. She had not had any psychotic symptoms, although every now and then she felt anxiety. She had started to think the possibility of starting individual psychotherapy to clarify to herself what had happened during her crisis. Her parents said that their life had become much more serious than before, her mother even said that "laughter has disappeared from our life". No they felt that it would have been good to have some meetings, for instance once a year, to meet with the team and to tell of their life.

In analyzing this case, the main principles of OD has mostly been applied. Treatment started immediately within 24 hours after the contact from primary care, the team in the first meetings took the responsibility for the entire process and guaranteed the psychological continuity. The idea of mobilizing the social network was applied and that seemed to give positive results, too. Perhaps the sadness of the family afterwards describe some problems in dialogism in the sense that although the family did not want further treatment meetings, the team did not generate dialogue, in which other voices of the situation had been heard, as well. Especially important for the team during the first 3 months seemed to be the tolerance of uncertainty. Although Liisa was severely psychotic during this phase and the team several times thought e.g. the possibility of neuroleptic medication to more rapidly decrease the psychotic symptoms, they heard the family's wish and continued to meet intensively to share the difficult situation and thus supporting both the family and Liisa.

### OD and other psychosocial approaches in psychosis

Certain ideas from systemic family therapy (Selvini-Palazzoli, Boscolo, Cecchin, & Prata, 1978; 1980) especially of circular reasoning rather than linear causality, positive connotation, and some aspects of circular questioning are also elements in OD. However, OD does not focus on the family system or even communication within the family system (Boscolo & Bertrando, 1993). The aim in OD is not "to give an impulse to change the fixed logic of the system by introducing a new logic" (Boscolo & Bertrando, 1998, p. 217), but to create a joint space for new language, where things can begin to have different meanings, as Anderson and Goolishian (1988;)

and Anderson (1997) have described it. In OD therapists do not focus on ways of behaving and communicating that are behind manifest behavior.

In OD, the therapist focuses on the words that are said in order to build up new words and a new language. This is in line with the ideas of social constructionist writers (Gergen, 1994; Gergen & McNamee, 2000; Shotter, 1993). White (1995) has described narrative therapy with psychotic patients and Holma and Aaltonen (1997, 1998) have conducted a research project on narrative therapy with first episode patients. Both OD and narrative therapies share the social constructionist view of reality, but differ in their understanding of the authorship of new narratives. Narrative therapists aim at re-authoring the problem saturated story, whereas dialogic approaches aim at moving from stuck monologues to more deliberating dialogues (Smith, 1997). In narrative therapy the narrative has an author; in dialogical therapies the new narrative is co-created, in the space between the participants.

OD and psycho-educational programs (Anderson, Hogarty, & Reiss, 1980; Falloon, Boyd, & McGill, 1984; Falloon, 1996; McGorry, Edwards, Mihalopoulos, Harrigan, & Jackson, 1996) share a view of the family as an active agent in the process. Families are seen neither as the cause of psychosis nor as an object of treatment, but as “competent or potentially competent partners in the recovery process” (Gleeson, Jackson, Stavely, & Burnett, 1999, p. 390). The two approaches differ in their theoretical assumptions about psychosis. OD emphasizes the most intense crisis phase and the process quality of building treatment plans. From the perspective of the stress-vulnerability model (Zubin & Spring, 1977), psycho-educational approaches most often aim at determining an exact diagnosis and choosing the treatment program according to that diagnosis (McGorry, 1999). Families are involved in psychoeducation to improve communication to prevent relapses and to enhance remission either in individual session or multiple-family groups (Chadwick & Birchwood, 1996; Eckman et al., 1992; Falloon et al., 1984; Gleeson et al., 1999; Hogarty et al., 1997; Liberman & Corrigan, 1993; Liberman & Green, 1992; McFarlane, Link, Dushay, Matchal, & Crilly, 1995a and b; Mueser, Wallace, & Liberman, 1995; Perris & McGorry, 1998). Many of these programs see psychosis as symptoms of an illness, whereas in OD psychotic behavior is seen as one possible answer in the present dialogue. In OD it is not given a uniform explanation of psychosis, but the discussion is based on the family’s way of discussing of the problem.

## Evaluation of effectiveness

The study reported in this article aimed at clarifying the effectiveness<sup>2</sup> of OD in treatment of first episode psychosis. In what follows, a summary is given of the most common results. Most studies of psychosocial treatment in first-episode psychosis have dealt with family psycho-educational, behavioral and cognitive therapies (Bustillo, Lauriello, Horan, & Keith, 2001; Penn & Mueser, 1996). The second generation studies (Fadden, 1998; Jackson & Birchwood, 1996) have focused on preventing schizophrenia by early intervention in the prodromal phase (Edwards & McGorry, 1998; Falloon, 1992;

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<sup>2</sup> The term “effectiveness” is usually used in quasi-experimental designs in which no exact hypothesis is made of what is the cause of the effect. The term “efficacy” is used in randomized control trials, where the variables are controlled to find out what caused the result (Pinsof & Wynne, 2000).

Garbone, Harrigan, McGorry, Curry, & Elkins, 1999; Larsen, Johannesen, & Oppjordsmoen, 1998; Yung et al., 1998).

The most frequently employed outcome measures have included number of relapses, ratings of psychotic symptoms and social functioning, employment status and hospital days (Keefler & Koridar, 1994; Liberman & Corrigan, 1993; Loebel et al., 1992; McGorry et al., 1996). Generally 40 % of schizophrenia patients were considered to have improved after follow-ups averaging 5.6 years (Hogarty et al., 1994), the average rate of a favorable outcome declining over time to about 36 %. In the advanced psychosocial programs, Lieberman (1996) found that 86 % of schizophrenic patients seemed to recover from psychosis during the first year, but 78 % of these relapsed at least once thereafter. For all psychotic patients, relapses during the first and second year of treatment have decreased to 14-35 % (Lieberman, 1996; Linszen, Lenior, de Haan, Dingemans, & Gersons, 1998; McGorry et al., 1996); however, risk of relapse increases if the continuation of treatment is not guaranteed (Linszen, Dingemans, Scholte, Lenior, & Goldstein, 1998). Family psycho-education and social skills training became less effective against late relapse in the second year after discharge (Hogarty et al., 1997). Over a half of patients were found to be living on disability allowance after two years (Gupta, Andreasen, Arndt, & Flaum, 1997; Shepherd, 1998), whereas in the studies by Lehtinen (1993) and Cullberg et al. (2000), which had small samples, this figure was only about 20 %. The number of hospital days has decreased to approximately 25 – 40 during the first year of treatment (Cullberg et al., 2000; Lehtinen, 1993; McGorry et al., 1996). Where neuroleptics were not started at the outset, they were later seen as necessary in about a half of all psychotic patients (Cullberg et al., 2000; Lehtinen, Aaltonen, Koffert, Rääkölöinen, & Syvälahti, 2000). Employment status was better when placebo was used instead of neuroleptic medication (Johnstone, Macmillan, Frith, Benn, & Crow, 1990).

### Study design

The effectiveness of OD was explored in the context of the Finnish national multi-center API (Acute Psychosis Integrated Treatment) project, which ran from April 1, 1992, through December 31, 1993, with a follow-up of two years from the beginning of treatment, under the direction of the National Research and Development Center for Welfare and Health (STAKES) in conjunction with the Universities of Jyväskylä and Turku (Lehtinen et al., 1996, 2000). Western Lapland was one of the six research centers. All first-episode cases of non-affective psychosis (DSM-III-R) were included. After December 31, 1993, it was decided to continue the project on the local level, to sustain the results of the API period as well as to produce a further improvement in the results. The continuation period, named the Open Dialogue Approach in Acute Psychosis (ODAP), ran from January 1, 1994 through March 31, 1997.

One aim of the Finnish API project was to provide a better information base on which to develop appropriate medication practices as an element of psychotherapeutic treatment. Three research centers – including Western Lapland - sought to avoid starting the use of neuroleptic medication during the early stage of treatment. The results from these three centers were compared with results from three others where neuroleptics were used in the traditional way. A specific procedure for deciding whether or not to use



neuroleptic medication was planned. During the first three weeks, benzodiazepines were used in the event of need for medication and, after this, if there was no progress in the psychotic symptoms or in the social behavior of the patient, neuroleptic medication was considered. The problem of the study design was that it was not specifically planned to evaluate the effectiveness of OD, since it was a part of a multicenter project with more general aims. Because the study was not planned as a randomized trial to evaluate a treatment method, but was a descriptive study of the entire treatment system in single catchment area, no conclusions should be drawn as to the efficacy of OD compared to conventional treatment. The local ethical committee gave permission for the study, and every patient was asked to give his/her consent to inclusion.

This report describes the results for the three different groups of schizophrenia patients, two in Western Lapland (API and ODAP groups) and one comparison group. The system of treatment had already been reorganized during the API period, but it was not until the ODAP period – since 1994 - that it became possible to transform the content of the psychotherapy. The staff had enough training to establish responsibility, tolerance of uncertainty and dialogism as the guiding principles of the treatment meetings. In comparing the API and ODAP periods the differences between treatment methods are not categorical, but in the ODAP period treatment was built on the foundations of the work done during the API period. It had become possible to apply the psychotherapeutic elements in a more systematic way and the therapists were able to make use of the experiences of the treatment of psychotic problems gained during the API period. The Comparison group came from another API project center in the city of Jyväskylä. Ethnically, this region is quite similar to that of Western Lapland. The population is homogenous, over 90% Finnish, and the main occupational fields are services, manufacturing and education. This project center organized the treatment in a more institutionalized way. First-episode psychotic patients were referred to the local psychiatric hospital by local outpatient clinics or by a general practitioner. In the ward, family meetings were organized within 24 hours after admission and neuroleptic medication was prescribed at the outset. In some cases, members of the outpatient staff were able to participate in the meetings in the hospital, but for the most part the hospital team took charge of the process. After the inpatient period, patients were referred to the outpatient clinic for after-care, which meant that the staff members changed. The research procedures were the same in the Comparison group, the inclusive periods being the same with the API study group in Western Lapland.

### Samples

In Western Lapland, complete data were available for 34 API patients, of whom 22 were diagnosed as having schizophreniform or schizoaffective psychosis or schizophrenia; and 44 ODAP patients, of whom 23 were diagnosed as having schizophreniform or schizoaffective psychosis or schizophrenia. Disregarding three dropouts at the outset, the data cover all psychotic patients in Western Lapland during both periods (Table 1).

Although the Comparison group contained 21 psychotic patients, it was found in performing the comparison that only the schizophrenic group was comparable (N=14) to

both the Western Lapland groups (see Table 2). In all three groups patients diagnosed as having milder forms of psychosis, such as Psychosis NUD and Brief psychotic episodes, were excluded. In the Comparison group, one patient was diagnosed as having psychotic depression and was excluded. The analysis was done by (1) comparing the Comparison group (N=14) to the API (N=22) and the ODAP (N=23) groups so as to compare the effectiveness of OD to conventional treatment and (2) conducting a historical comparison between the API (N=22) and ODAP (N=23) groups to see if the original API results persisted beyond the original study as well as to see if further changes or improvements were forthcoming as the approach was transformed into a more consistent dialogic approach by the use of properly trained staff. The evaluations of all these groups were done both at the outset of treatment and two years thereafter. At the outset, no significant differences appeared in age, sex, marital or employment status, or in diagnosis, and hence the groups can be regarded as comparable with each other (Table 2).

The psychiatric diagnosis was made in two phases. After the first meeting, the team, jointly with the responsible chief psychiatrist (author BA), formulated an initial hypothesis and after six months, having also interviewed the patients individually, she made the final diagnosis. The same procedure was followed in the Comparison group, where an experienced psychiatrist, who was not involved in the treatment processes, made the diagnosis. An experienced psychiatrist from outside the two regions served as an outside rater to test the reliability of the diagnosis. The level of diagnostic consistency of the schizophrenia diagnosis was 78% in the Western Lapland group and 80% in the Comparison group (Kappa = .453;  $p=.002$ ).

## Methods

The main sources of information were (1) process variables, i.e., registered number of hospital days, number of family meetings and registration of the use of neuroleptic medication and individual psychotherapy, and (2) outcome variables, i.e., registered number of relapses (defined as making a new contact for treatment after terminating the original treatment, or an intensification of existing treatment in the form of more intense meetings because of new psychotic or other symptoms), whether the patient was employed, studying, job-seeking or living on a disability allowance, and the ratings of mental state by BPRS (Brief Psychiatric Rating Scale, Overall & Gorham, 1962) GAF (General Assessment of Global Functioning, Endicott et al., 1976) and by a 5-category sub-scale of the Strauss-Carpenter Rating Scale (0=no symptoms; 1=mild symptoms almost all the time or moderate occasionally; 2=moderate symptoms for some time; 3=prominent symptoms for some time or moderate symptoms all the time; 4=continuous prominent symptoms; Strauss & Carpenter, 1972; Opjordsmoen, 1991). The ratings were jointly done, using a consensus conference method, by two of the authors (JS or BA) who, as researchers, were not involved in the specific treatment process<sup>3</sup>. All the above-mentioned ratings were done at the baseline and at the two-year

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<sup>3</sup> In one case in the API group and in one case in the ODAP group both the researchers were involved as responsible therapists in the same process, and thus this principle of being an outsider to the process could not be followed. This was because both of these cases were the most difficult ones and thus all the

follow-up. The same procedure was followed in the Comparison group by authors JH and AR.

The research procedure includes some substantial problems. (1) The raters could not be blind to the treatment the patient received, which increased the risk of bias to see the outcomes more favorable and (2) the raters were different in both study centers, which decreased the reliability of the ratings. These problems were handled by having a joint meetings of the researchers of the both centers at the two-year follow-up. Based on the patients' records, the researchers at each center rated the patients at the other center. After this, in a consensus conference the four researchers decided the joint ratings. The results of the ratings should be interpret cautiously, whereas the variables that are based on the registration of the treatment incidents and on the official statistics such as employment status include more reliable information.

The statistical analysis was conducted first as pair comparisons using the Pearson Chi-square in cross tables, a one-way analysis of variance (ANOVA) and a t- test for the comparison of the means of independent groups and after that for repeated measures analysis of variance to compare the change in ratings between the three groups. Because API and Comparison groups had the same inclusion period (April 1.1992 – Jan. 31.1997) they were compared first. Only in case no differences occurred between API and Comparison group the differences between ODAP and Comparison group were analyzed.

## Results

### Comparison of the groups at the follow-up

*Differences to Comparison group.* Because of the differences in the approaches used, it was predictable that the process variables such as hospitalization ( $p < .01$ ) and neuroleptic medication ( $p < .001$ ) were more often used in the Comparison group than in the API group (Tables 3 and 4). A significant difference occurred in the number of family meetings in that the Comparison group had fewer meetings than API group ( $p < .001$ ). The number of meetings varied from 6 through 55 in the API group, from 0 through 99 in the ODAP group and from 0 through 23 in the Comparison group. Individual psychotherapy was applied to about the same extent in each of the three groups.

At least one relapse occurred in 31% of the API, in 24 % of the ODAP and in 71 % of the Comparison group. The difference was significant between the API and Comparison group ( $p < .05$ ; Table 5). The ODAP patients had fewer residual psychotic symptoms than the patients in the Comparison group ( $p < .05$ ). The employment status of the ODAP patients was better than in the Comparison group ( $p < .001$ ). In the Comparison group, 6 out of 14 (30%) patients were studying, working or job-seeking, as against in 19 (83%) cases in the ODAP group.

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possible resources were mobilized to take care of their treatment. They also received the most sever ratings in BPRS, GAF and Psychotic symptoms.

*Differences between API and ODAP groups.* In the API and ODAP groups, similar numbers of patients received neuroleptic medication. Treatment dropout rates were also similar (14% -16%). ODAP group patients had significantly fewer hospital days than API group patients. We noted a slight, non-significant decrease in relapse rate during the ODAP period. Compared to ODAP, the API patients had a higher BPRS score ( $p < .05$ ; Table 4). Two patients in the API group received an especially high score, which probably caused the difference. Both these patients were on neuroleptic medication.

*Repeated measures of variance with time and the three groups.* To see the differences in the change of GAF rating, psychotic symptoms rating and employment status, the three groups were compared simultaneously in repeated measures analysis of variance (Table 6). The smallest improvement in the GAF rating was found in the Comparison group (Table 7;  $p < .001$ , the interaction effect), as was the smallest decrease in psychotic symptoms (Table 7;  $p < .01$ ). Employment status declined in the Comparison group, remained the same in the API group, and slightly improved in the ODAP group due to one more case located in the category of studying, working or job-seeking at follow-up (Table 7;  $p < .05$ ). In the historical comparison, both the improvement in GAF and decrease in psychotic symptoms were the same in the API and ODAP groups. Concerning employment status, the ODAP group tended to have a better outcome, but the difference was not significant.

### Discussion

Comparison of the Western Lapland API and ODAP groups to the Comparison group showed that in the first two groups hospitalization was shorter and neuroleptics were used in fewer cases. In the Comparison group fewer family meetings were held and patients had more relapses. Employment status improved in the ODAP group. With regard to the change in psychological status, the both groups in Western Lapland showed a greater improvement in the GAF rating and a greater decrease in psychotic symptoms. In BPRS a difference was found between the Western Lapland API and ODAP groups.

### Limitations of the study

Before commenting on the results, the shortcomings of the data and the limitations of the study design should be noted as these affect the conclusions that can be drawn. Psychosis, and in particular schizophrenia, is a rare problem and in a small catchment area the selection of cases is susceptible to the effects of many unforeseen factors. This risk especially concerns the Comparison group, which was selected over a 21-month period. Thus the patients in the Comparison group could have had more severe symptoms than is usual in that health district. In small samples simply a single patient being moved between categories may affect statistical significance. We tried to reduce the influence of chance events influencing sample selection from this small population in Western Lapland both by conducting a historical comparison and by having a comparison group from conventional treatment. On the other hand, selecting from a small catchment area is also an advantage in the sense that it is possible to control for those patients who were excluded for some reason, since the treatment is the only kind available for psychiatric patients.

The other problem comes from the fact that the design was a naturalistic study. Utilizing a historical comparison restricts the conclusions to describing the differences in the effectiveness between study groups and does not allow making causal statements. Many variables were not controlled for and may have affected the outcomes. In a historical comparison, criteria for including patients into the treatment may change, even within the same organization, although in the Finnish context the psychiatric units have to take care of all patients. Staff members may change and bring with them personal variables that are uncontrolled. The social, economic and psychological situation of the patients may vary, producing different types of psychiatric problems. The researchers performing the ratings were involved in developing the OD approach, which raises the risk of bias. To minimize this kind of bias, more objective data on the use of treatment and employment status were included, and the ratings of psychological status and symptoms should be seen as confirming the validity of this information.

#### Outcome differences

Relapses have commonly been seen as salient indicator of outcome. In the Comparison group relapses occurred in surprisingly many cases, which may be due the discontinuation of treatment after the initial inpatient phase. This was also noted in the Linzen et al. (1998b) project. In Western Lapland the interaction between the team and the social network around the patient seemed to develop in a more positive direction. When the patients succeeded in returning to active employment or study, they also had less psychotic symptoms, and vice versa. In this sense the outcome of the ODAP group is especially interesting, as an improvement in employment status actually occurred during the treatment period.

It can be suggested that the differences in the outcomes found here were related to the differences in the treatment. The most noteworthy difference concerned the number of family meetings. In Western Lapland the patient's family and social network participated closely in the treatment from the very beginning. The length of treatment and the number of treatment meetings varied considerably, but individual psychotherapy was used in about a half of the cases, as in the Comparison group as well. In the Comparison group families also participated in the inpatient phase, but not to the same extent as in the other two groups. After the inpatient phase the therapists were changed. As far as the differences in employment status are concerned, it is possible that whereas in Western Lapland members of the patient's social network were able to participate fully in the meetings, in the Comparison group the meetings were more, if not entirely, focused on the patient's families. The active involvement of the social network decreased the gap between the patient and the family and in this way could have helped to support the patient in returning to an active social life. The short or no hospitalization of the API and ODAP groups supported this. Return to work and to studying was encouraged, which means that periods on a disability allowance became shorter. As part of the patient's social network an important role was played by various agencies, e.g., for vocational rehabilitation, which were able directly to assist in building up possibilities for vocational rehabilitation and training. These remarks on the outcome made here should be seen as suggestions for further research, not as causal conclusions.

### Problems of open dialogue system

A problem in instituting OD may be that the treatment is very much centered around the team, which takes responsibility for the continuity of treatment. It is an administrative and therapeutic challenge to commit oneself to teams that may end up working for several years. A team may consist of two or three staff members who will meet approximately 25 times, mostly during the first year of treatment. In several cases more than 50 meetings were organized over two years. Changes in the team composition threaten continuity, especially when they come from different clinics.

During the ODAP period, 52 staff members either completed or were participating in the three-year training program in family therapy. This training is especially valuable in enhancing the tolerance of uncertainty during treatment. Open dialogue is far less structured than many other psychosocial models, but its outcomes seem comparable. The outcomes do not, however, take place automatically, but presuppose specific psychotherapeutic training and experience in working with psychotic patients and their families. The expertise of the staff is not primarily focused on the setting-up of specific therapeutic programs or training courses, but, instead, on generating dialogue in the extreme situation of a psychotic crisis. This kind of work presupposes psychotherapeutic skills, for which we believe training is a necessity.

### Use of neuroleptic medication

Whether or not neuroleptics were used at the outset, patients seemed to recover: 79% of the ODAP patients had no or mild residual psychotic symptoms at follow-up. Postponing the start of neuroleptic medication and, in 64 % of cases not using any neuroleptic medication did not seem to increase the number of relapses and dropouts. Relapse has been seen as the biggest risk in non-medication studies (Carpenter, 1977; Wyatt, 1997). The two-year relapse was 24% in the ODAP group and 31% in the API group. The number of relapses among all psychotic patients has varied between 14 and 35 % in psychosocial programs (Bustillo et al., 2001; Hogarty et al., 1997). One of the lowest relapse rates is that reported by Linzsen et al. (1998). In their time-limited project, 16 – 20% of patients relapsed during the first year, but problems emerged after discontinuing the project and relapses rose to 64% by the two-year follow-up. In the present study, we believe that the low proportion of dropouts (14% API, 16% ODAP) was probably related to most of the crisis interventions being conducted at the patient's home.

This study does not allow any firm conclusions to be drawn on the use of neuroleptic medication in general. We do not know how patients with mild psychotic symptoms at the two-year follow-up would have done had they taken neuroleptics at the outset of treatment. The findings regarding employment status resemble those from one of the few placebo trials on neuroleptic medication. In the Johnstone et al. (1990) study, patients had a better occupational outcome on placebo than on neuroleptics. In this study, during the ODAP period, 83% of patients were either studying, working or job-seeking, while 34% of all the patients had used neuroleptics at some point during their treatment. The question can be asked whether neuroleptic medication should be used in the early phase of treatment or not to distinguish those patients who can genuinely benefit from it from those patients whose chance of an active social life can be put at risk by it.

According to the present results, postponing the start of neuroleptics did not increase the risk of a poorer outcome. In fact, in another study (Seikkula et al., 2001) it was found that neuroleptic medication was related to a poor outcome. This question needs further clarification.

The cost-effectiveness of open dialogue

As developed in Western Lapland OD is not an expensive approach; rather it is a cost-effective one for the community. It has meant moving hospital personnel to crisis intervention work in the outpatient setting. Although no analysis of the cost-effectiveness of OD has been conducted, it is useful to examine OD in the context of the financing of state health care in Finland. Because of the deep recession of 1991, there were drastic cuts nationwide in the resources available to psychiatry. Budgets for psychiatric services in Western Lapland decreased by 33% from the end of the 1980s through the mid 1990s, and became the lowest among health districts in Finland. Although professionals view these cuts in funding as unfair and threatening, especially to the treatment of long-term patients, the decrease has not affected the quality of the treatment of first episode psychotic crises, as this study demonstrates. Compared to many time-limited research projects, the advantage of the Western Lapland model is that the OD approach has been incorporated into the state psychiatric system and thus the end of the research project constitutes no threat to the continuity of the treatment of psychotic patients.

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TABLE 1  
Reasons for exclusion from the study during the API and ODAP periods in Western Lapland

	API (Apr. 1,1992 to Jan.31,1993)	ODAP (Jan.1,1994 to March 31,1997)
Treatment started	39	54
Refused to participate	1	2
Not reached at follow-up	2	2
Excluded because of earlier treatment	0	3
Treatment started in a unit outside OD	1	1
Deceased	1	2
Total material	34	44

TABLE 2

Characteristics and premorbid adjustment of the schizophrenia patients in the three groups at the baseline

	API group N=22	ODAP group N=23	Comparison group N=14	Chi-square	df	P
Age	19 - 38	17-43	18-42			
- mean	27,6	27,8	27,7	F(2,57=	.030)	NS
Sex				.765	2	NS
Male	12	16	8			
Female	10	7	6			
Marital status				4.166	6	NS
Single	14	17	8			
Married, living together or divorced	8	7	6			
Employment status				10.691	8	NS
Studying	4	4	1			
Working	10	11	10			
Unemployed	2	5	2			
Passive	6	3	1			
Diagnosis/DSM-III-R				3.026	2	NS
Schizophrenia	13	19	8			
Schizophreniform psychosis	9	4	6			

Note. “Unemployed” means had been working during the last 2 years, but presently unemployed and job-seeking. “Passive” means being unemployed without searching for a job.

TABLE 3

Frequencies in treatment process variables in the three groups at the two-year follow-up, a pair comparison

	API group N=22	ODAP group N=23	Comparison group N=14	Chi- square	df	P	Power
Use of neuroleptics							
Started	8	8	14	14.58	2	<.001a	1.00
Ongoing	5	4	10	8.35	2	<.05 a	.74
Individual psychotherapy							
Yes	12	11	8				
No	10	12	6	.49	2	NS	

a) Chi-square between API and Comparison groups

TABLE 4

Means of treatment process and outcome variables in the three groups at the two-year follow-up, t-test pair comparison

	API group N=22	ODAP group N=23	Comparison group N=14	t-value	df	P	$\eta^2$
Hospitalization days							
Mean	35.9	14.3	116.9	3.29	34	<.01 <sup>a</sup>	.242
SD	44.0	25.0	102.2				
Number of family meetings							
Mean	26.1	20.1	8.9	-4.291	34	<.001a	.351
SD	14.1	20.6	6.2				
BPRS score							
Mean	32.3	24.9	26.5	2.532	40	<.05b	.144
SD	13.7	5.2	7.1				

Note. BPRS is a 19 item scale, each item rated 1-9. a) T-test for independent samples between API and comparison groups; b) T-test for independent samples between API and ODAP groups.



TABLE 5

Frequencies of outcome variables in the three groups at the two-year follow-up

	API group N=22	ODAP group N=23	Comparison group N=14	Chi -square	df	P	Power
Number of relapsed patients	8	6	10	4.21	1	<.05a	.39
Employment status							
Studying or working	13	15	3				
Unemployed	1	6	3				
Disability allowance	8	2	8	10.36	8	<.001b	.82
Residual psychotic symptoms							
0 - 1	14	19	7	4.43	4	<.05 b	.41
2 - 4	6	4	7				

Note. Unemployed means to have been working during the last 2 years, but at the moment unemployed and job-seeking. a) Chi-square between API and Comparison groups; b) Chi-square between ODAP and Comparison groups.

TABLE 6  
Repeated measures analysis of variance with time (1,2) and groups (1,2,3) as factors

	API groups	ODAP group	Comparison group	Total
<hr/>				
GAF rating				
Baseline	3.2 (sd .80)	2.8 (sd .64)	4.2 (sd .89)	3.3 (sd .63)
2 year follow-up	5.8 (sd 1.6)	5.7 (sd 1.3)	4.9 (sd 1.6)	5.6 (sd 1.5)
Psychotic symptoms				
Baseline	3.5 (sd .51)	3.3 (sd .69)	3.2 (sd 1.9)	3.3 (sd .63)
2 year follow-up	.9 (sd 1.1)	.6 (sd .99)	1.9 (sd 1.5)	1.0 (sd 1.3)
Employment status				
Baseline	1.4 (sd .49)	1.3 (sd .48)	1.3 (sd .47)	1.3 (sd .48)
2 year follow-up	1.4 (sd .49)	1.1 (sd .29)	1.6 (sd .51)	1.3 (sd .46)

Note. Employment status variable was dichotomized: 0 = studying, working or job-seeking; 1= passive or living on a disability allowance.

TABLE 7

Repeated measures analysis of variance with time (1,2) and groups (1,2,3) as factors (n=60)

Scale	F	df	P
GAF rating	97.51	1,56	<.001 a
	.64	2,56	NS b
	9.12	2,56	<.001 c
Psychotic symptoms	186.52	1,55	<.001 a
	4.31	2,55	<.05 b
	7.12	2,55	<.01 c
Employment status	.09	1,56	NS a
	2.28	2,56	NS b
	3.30	2,56	<.05 c

Note. Employment status variable was dichotomized: 0 = studying, working or job-seeking; 1= passive or living on a disability allowance.

a= Time main effect; b= group main effect; c= Time (1,2) by groups (1,2,3) interaction effect