Soteria – a treatment model and a reform movement in psychiatry

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In honour of Loren Mosher

"Everyone is much more simply human than otherwise" H.S.Sullivan - The interpersonal theory of psychiatry

Introduction

The Soteria treatment model was originated by the American Psychiatrist Loren Mosher during the early 1970s. As director of the Schizophrenia Branch at the National Institute Mental Health (1968-1980) he developed two federally-funded research demonstration projects: "Soteria" (1971-1983) and "Emanon" (1974-1980). The aim was to investigate the effects of a supportive milieu therapy ("being with") for individuals diagnosed with "schizophrenia" (DSM-II), who were experiencing acute psychotic episodes for the first or second time in their lives. In these programs neuroleptics were either completely avoided, or given in low dosages only.

Since the founding of Soteria Bern by Luc Ciompi in 1984, similar programs have been developed in Europe, mostly in the form of residential facilities situated in proximity to psychiatric hospitals. Initiatives to promote such programs are currently active around the world. Due to the expectation that neuroleptics would be used selectively, in acute as well as long-term situations, the program's challenge to the medical model of "schizophrenia," and the wide acceptance of inpatient treatment provided by mental health professionals (Mosher & Hendrix 2004, p. 282), the Soteria model has been consistently marginalized in psychiatric discourse and largely ignored in the scientific literature. On the other hand, during the past twenty years the Soteria approach has become quite influential within the debate about the optimal therapeutic methods and the development of state-of-the-art acute inpatient services. To this day, the Soteria model remains particularly encouraging for the consumer/survivor movement, since it represents a concrete alternative to traditional treatment which is dominated by neuroleptic use, since it demonstrates the self-healing potential of individuals experiencing acute psychoses, and constitutes a major attempt to humanize psychiatry.

Personal roots – Loren Mosher (1934-2004)

As a student, Mosher discovered existentialism and phenomenology in approaching unavoidable human suffering, by reading the works of Rollo May, Medard Boss, Karl Jaspers, Soren Kirkegaard, Henri Bergson, Merleau-Ponty and Sartre. He developed a great appreciation of subjectivity, openness and divergent theories. His psychiatric training at Harvard was strongly influenced by Elvin Semrad, who was less determined to cure patients, than to jointly explore their lives guided by pride, respect and empathy. These are the roots of an approach characterized by "being with" rather than by "doing to," the prevailing attitude in the dominant bio-medical therapeutic paradigm. Semrad promoted the experiential confrontation of the

insecurity, unpredictably, and unintelligibility that are fundamental to psychiatric problems, and which trigger anxiety among treaters and patients alike. Another important source of influence to Mosher was Sullivan's (1962) way to present therapeutic human relationships in his interpersonal theory and applied in his specially designed milieu for persons with schizophrenia at Shepard-Pratt Hospital in the 1920's.

Following his residency, Mosher spent several painful years working in various psychiatric institutions. In 1966 he completed a research fellowship at Kingsley Hall in London with R.D. Laing, whose book "The Divided Self" (1960) he had read with considerable interest, and whose studies about families with psychotic members (Laing 1964) particularly aroused his interest.

Mosher spent the years 1966-1967 as a fellow at the London Tavistock Clinic, where he met John Bowlby and Anna Freud. At the same time, he kept in contact with Kingsley Hall (1965-1970), a therapeutic community led by R. D. Laing for individuals diagnosed with "schizophrenia" and others who were seen as "more together" (Laing). This environment was designed to permit going through the experience of psychosis without unduly pathologizing influences. Mosher ultimately felt like an outsider at Kingsley Hall, and the institution seemed rather helpless in confronting the difficulties of its residents.

Accordingly, Kingsley Hall became a guiding post for the development of the Soteria model in positive and negative ways. The major modification was that staff was paid to work with 6-7 clients focusing mainly on "being with" the most psychotic residents and Mosher adopted the applied phenomenology from the clinical studies of R. D. Laing (1960, 1967) and the Daseins-Analysis of Medard Boss (1963). During these years, he was also interested in the labeling theory, proposed by Scheff (1966), suggesting that the condition of those suffering from mental disorders usually worsens after they have been given the label of "crazy." A type of self-fulfilling prophecy inevitably occurs wherein the individual conforms his or her behavior to the label given to him or her. This introduces the important idea that a diagnostic label actually confers a type of reward to individuals for certain atypical behaviors and that stigma (negative attitudes that others have of the subjects) contributes to the maintenance of the mental disorder. He knew also well Ernest Goffman's (1961) analysis of the rigid structure in psychiatric hospitals, defining them as total institutions with deleterious consequences for the patients as well as Community psychiatric approaches such as the Fairweather Lodge (Fairweather et. al., 1969). The social psychologist George Fairweather found that people with serious mental illness are less likely to return to the hospital when they live and work together as a group, rather than dispersed as individuals.

From 1968-1980 Mosher was Director of the NIMH Schizophrenia Center without having direct access to research funding. With the background of these experiences and theoretical positions Mosher developed between 1969 and 1970 the Soteria Model and the methodology for studying it

An understanding of psychosis:

Mosher had a life-long skepticism vis-a-vis models of "schizophrenia," among other reasons

because they would obscure an open phenomenological view, particularly since this term has not lost its quality as a riddle to this day. Mosher saw psychosis as a coping mechanism and a response to years of various subjectively traumatic events that caused the person to retreat from reality.

Elements of the psychotic experience are personality fragmentation, loss of sense of self, a difficulty of distinguish the inner being from its outer appearance, ambivalence, possibly an environment that reinforces fearfulness, as well as common mystical experiences. The experiential and behavioral attributes of "psychosis" – including irrationality, terror, and mystical experiences – are seen as the extremes of basic human qualities.

The Soteria Setting:

A "homelike" environment in a 12- room house with garden within a fairly poor neighborhood in San José, California, offering intensive milieu therapy for 6-7 individuals, called residents or clients. For research reasons they were unmarried persons newly diagnosed with "schizophrenia", with one or two new residents admitted each month.

About 7 full-time staff members plus volunteers, selected for their individual rather than formal qualifications, and characterized as psychologically strong, independent, mature, warm, and empathic.

Soteria staff was significantly more intuitive, introverted, flexible, and tolerant of altered states of consciousness than the staff on the general psychiatric inpatient unit (Hirschfeld et al. 1977; Mosher et al. 1973). These personality traits seem to be highly relevant for success in this kind of work.

Former residents could become regular staff member and did so on several occasions. Soteria employed a quarter-time psychiatrist, who visited the house once a week, and was available on call.

24- or 48-hour shifts gave the opportunity of "being with" residents for long periods of time and thereby go through complete biological/psychological psychotic cycles while avoiding disruptive separations due to staff turnover, an experience only family members or significant others have under ordinary circumstances.

At times of high activity - mostly afternoon until midnight – Soteria tried to have a 50/50 mix of relatively "organized" and disorganized persons in the house including recovering clients and volunteers (Mosher & Hendrix 2004).

Procedures

Staff's primary duty is to "be with" disorganized clients without the expectation that they need to be doing something specific. If frightened, they should call for help. Partial recovery can generally be achieved within 6-8 weeks, and the average length of stay was 4-5 month. Soteria was an open social system which allowed easy access, departure and return, if needed. Everyone shared the day-to-day running of the house to the extent they could. Roles were only minimally differentiated to encourage flexibility, with little emphasis on hierarchy which meant relatively informal day-to-day functioning. Integration into the local community was paramount. Instead of traditionally defined, formal in-house "therapy", Yoga, massage, art, music, dance,

sports, outings, gardening, shopping, cooking, etc. were offered and much appreciated. Special meetings were scheduled to deal with interpersonal problems as they emerged, and family mediation was provided as needed. Continuity of relationships after moving out of the house was greatly encouraged.

General guidelines for behavior, interaction and expectation:

Do no harm.

Treat everyone, and expect to be treated, with dignity and respect.

Guarantee asylum, quiet, safety, support, protection, containment, interpersonal validation, food and shelter.

Expect recovery from psychosis, which might include learning and growth through and from the psychotic experience.

Provide positive explanations and optimism.

Identify plausible explanations: emphasis on biography, life events, trigger factors instead of vulnerability; promoting experiences of success;

The patient is encouraged to develop his/her own treatment plan; he or she is considered the expert.

To identify meaningful aspects of life beyond being a patient;

Do not assume responsibility for anything the clients might be capable of achieving – trust in self- help.

No use of the labels "schizophrenia" or "schizophrenic";

Collaboration with patients, even if he/she does not take medication.

Rules

Violence to self or others is forbidden.

Visitors are not allowed without prearrangement and agreement of the current residents of the house. Family members and friends are welcome, but it is preferred that they plan their visits in advance.

No illegal drugs are allowed in the house. (In practice residents rarely used illegal drugs, certainly not in the house.)

No sex between staff members and residents (a form of incest taboo).

Three Phases

1. Acute crises:

During this phase 'being with' is used as a practice of interpersonal phenomenology. The use of a special room (like the "soft room" in Bern) was soon abandoned in favor of a fluid interpersonal way of "being with" in a variety of physical and social settings.

"(The) most basic tenet is 'being with' - an attentive but non-intrusive, gradual way of getting oneself "into the other person's shoes" so that a shared meaningfulness of the subjective aspects of the psychotic experience can be established within a confiding

relationship...This requires unconditional acceptance of the experience of others as valid and understandable within the historical context of each person's life -even when it cannot be consensually validated. Soteria also paid thoughtful attention to the caregiver's experience of the situation (not unlike the psychoanalytic concept of 'transference'). Compared to traditional phenomenology, this represented a new emphasis on the interpersonal, aligning the method with modern concepts of systems and the requirements of interactive fields without sacrificing its basic open-minded, immediate, accepting, non-judgmental, non-categorizing, 'what you see is what you get' core principles. The method aimed to keep in focus the whole "being" ('Dasein') in relation to others." (Bola & Mosher et al 2005)

As long as residents were not a threat to themselves or others, extremes of human behavior were tolerated.

Detailed case reports are given in Mosher & Hendrix (2004) and Mosher & Hendrix et al (1994). Understandably, no definitive instructions or algorhythms for the treatment of psychosis were formulated in either of the two Soteria projects. It is not the psychosis that is being treated, but rather a human being in the midst of a psychotic experience is being supported and accompanied, realizing that each individual is very different from the other, and there is consequently no "universal recipe" (Runte 2001), or in the words of Loren Mosher: "there is no cookbook." The uniqueness of each staff member is being recognized as well. The major problems that are presented result from specific behaviors: social withdrawal, sexualization, infantilization, and aggressivity.

2. Restitution of the fragmented personality in a protective context:

During this phase, the resident is expected to get involved in daily routines, for the staff it signals a role change from being a "parent" to a more symmetrical peer relationship. In order to normalize the experience of psychosis, it is being related to the person's biographical context, framed in positive terms, and described in everyday language.

Developing relationships was of great importance to facilitate a process of imitation and identification among clients, and for the staff to be able to acknowledge any precipitating events and the painful emotions that stem from them. Usually, these emotions are disavowed, but at Soteria they were discussed until they could be tolerated.

3. Orientation to the world outside:

This included role diversification and growing competence and the development of new relationships inside and outside the house: cooperation, planning, arrangement. It was common to reach a consensus among the entire group before a resident was discharged. The naturally developing social network of peers continued after discharge to support recovery and to facilitate community integration, which included direct help with housing, education, work and social life.

Once someone was a member of the Soteria community, she/he was always welcome back in

case they were having difficulties, as long as space at the house was available.

Everyone was equally welcome if he or she were not having any problems and only wanted to socialize or help with activities. Over time both residents and staff were socializing outside the facility itself.

Mosher believed that this network was of crucial importance for the long-term outcome of the Soteria work. The "Soteria community" was still active at least 10 years after the program was closed. It never did get studied, since it was an unplanned development that was not anticipated in the research design.

Mosher formulated this pointedly: "In fact, the deeper sense of the Soteria program was mainly to bring people together in order to foster long-term relationships."(Mosher et al 1994). Voyce Hendrix estimates, that approximately 5% of the residents were hospitalized during their stay at Soteria, because staff felt, that they were not able to refrain from harming themselves or others, but such decisions were made by the entire group as well.

Medication

Whenever possible, no neuroleptics were used during the first 6 weeks of treatment. However, benzodiazepines were permitted. If there was no sufficient improvement after six weeks, Chlorpromazine (Thorazine) was initiated in dosages of 300 mg or more (Mosher & Menn, 1978). Basically, the medication was supposed to remain under the control of each resident. Dosages were adjusted based on self-observation and reporting to staff. After two weeks, the patient could decide whether they wanted to continue the medication or not (Mosher, Hendrix et al., 1994, p. 17).

"Today my position is that, since no real alternatives to antipsychotic drugs are currently available, to be totally against them is untenable. Thus, for seriously disturbed people, I occasionally recommend them – as part of collaborative planning with my client – but in the lowest dosage and in the shortest length of time possible. Instead of antipsychotics, however, I prefer to calm acute psychosis and restore sleep/wake cycles with an initial course of minor tranquilizers accompanied by in-home crisis intervention." (Mosher in: Mosher & Hendrix 2004)

Supervision

The psychiatrists and the principal investigator were charged with supervising the staff. "Feelings that seem to cause the staff to shift from the 'being with' to the 'doing to' mode are explored in detail" (Mosher et al 1973, p.393).

"The team-members were explorers in a yet unmapped borderland." (Mosher et al 1994)

Funding

Alma Menn became the program director of Soteria. During the following years until Soteria and Emanon was closed Voyce Hendrix worked as program coordinator.

Initially, Soteria was funded for 18 months only. Over the next ten years, eight progress reports were requested and submitted, and five site visits by federal reviewers took place. "Our grant

was reviewed more times by more committees than any grant in the history of the NIMH." (Mosher & Hendrix 2004, p. 304)

In 1976, Mosher was terminated as the principal investigator of Soteria, and the research design was changed from space-available treatment assignment of the first cohort (1971-1976 with 79 subjects) into an experimental design with random assignment in the second cohort (1976-1979 with 100 subjects). No further publications were submitted until 1999, when Mosher und Bola published the final analyses which included the data collected after 1976. Once NIMH funding had ceased, despite careful data collection methods and positive results, Emanon and Soteria remained open only until 1980 and 1983, respectively.

In 1980 Mosher was removed as the Chief of the Schizophrenia Center at the NIMH while he was on sabbatical in Italy writing a book on community psychiatry. "All of this occurred because of my strong stand against the overuse of medication and their disregard for drug-free, psychological interventions to treat psychological disorders." (Mosher & Hendrix 2004)

Research Design

The Soteria project used a quasi-experimental treatment comparison with consecutive admissions and space-available treatment assignment in the first cohort (1971-1976; N=79) and an experimental design with random assignment in the second cohort (1976-1979; N=100). Data were collected for two years post-admission. Subjects for the study or control groups were recruited from two county hospital psychiatric emergency screening facilities in the San Francisco Bay Area. All persons meeting the criteria were asked to sign informed consent.

Inclusion criteria:

- ages 15-32, and not currently married (relatively poor prognosis group)
- initial diagnosis of schizophrenia by three independent clinicians (DSM-II)
- judged to be in need of hospitalization
- one or no previous hospitalization with a diagnosis of schizophrenia for less then four weeks
- post-discharge treatment was uncontrolled.

Control group:

- treated in well-staffed general hospital psychiatric wards supporting a medical model
- 94% were treated continuously with anti-psychotic medication (average 700 mg chlorpromazine-equivalents per day)
- post-discharge medications prescribed for nearly all
- post-discharge placement in other parts psychiatric network if needed
- post-discharge treatment was uncontrolled

Results

Six-Week Outcomes:

Results for both groups – measured with the Global Psychopathology Scale – were similar and showed significant improvement. Since only 33 % of the Soteria subjects received neuroleptics during the initial six weeks (12 % continuous), Soteria proved to be equally effective for the majority of clients as neuroleptics for acute symptom reduction. (Mosher et al 1995)

Two-Year Outcomes

The separate analyses of the two experimental cohorts yielded equally favorable overall results in comparison with the control group, and significantly better results with regard to their independent living status. While the first experimental cohort showed a significantly lower relapse- and medication-rate over two years, (Mosher & Menn, 1978), the second cohort only showed a non-significant trend in this direction. Mosher suggested that this might have been due to the demoralizing effect on the staff of the program's financial instability, and in particular the dissolution of the social networks that had developed around both houses (Soteria and Emanon).

The positive impact of the Soteria intervention on relapse-prevention, or rather the prevention of rehospitalizations, was demonstrated for the first cohort over a period of two years (Mathews et al 1979), utilizing survival analysis. Soteria residents (n=32) showed significantly better survival rates after two years, especially those who were treated without neuroleptics (92% in the first cohort), in comparison with those 50% of control subjects (total n=36) who received neuroleptics continually over the two years.

In their <u>comprehensive re-analysis</u> of both cohorts, (see: Bola & Mosher 2003, for methodological details), all study completers were included, and divided into several subgroups, taking into consideration the higher attrition rates among control subjects. 28% (50 of 179) of the control subjects were lost to follow up after 2 years.

All completers:

Main effects analysis for study completers adjusted for differential attrition (N=129):

Overall Soteria subjects had nearly one-half of a standard deviation better composite outcomes (± 0.47 SD, t = 2.20, p = .03) than individuals receiving usual treatment. They also had significantly better outcomes on two of the eight outcome measures: a 20% higher probability of membership in the lowest two psychopathology categories (± 0.20 , z = ± 0.20) and nearly one fewer readmission (± 0.98 , z = ± 0.20) than hospital treated subjects.

42.6 % of the Soteria subjects did not use neuroleptics at all, including 44.4% of the subjects diagnosed with schizophreniform disorder and 40.6 % of those who met the criteria for schizophrenia.

Schizophrenia Subjects:

Completing individuals with schizophrenia (N = 49) - adjusted for differential attrition - had eight-tenths of a standard deviation better composite outcomes when treated at Soteria (\pm 0.81 SD, t = 2.42, p = .02). These individuals had significantly better outcomes on four of the eight outcome measures: a 44% higher likelihood of having no or nearly no psychopathology (\pm 0.44, z = -2.11, p = .04), a 48% higher likelihood of having excellent or very good improvement in psychopathology (\pm 0.48, z = -2.67, p = .01), and a 40% higher probability of working (\pm 0.40, z = 2.30 p = .02; which includes a 29% higher likelihood of full-time work).

Schizophreniform Subjects

Completing individuals diagnosed with schizophreniform disorder, adjusted for attrition (N = 80) had one-third of a standard deviation better outcomes when treated at Soteria (not statistically significant) on the composite outcome scale (+0.34 SD, t = 1.22, n.s.). These individuals had significantly better outcomes on one of the eight outcome measures, with an average of one and one-quarter fewer readmissions to 24-hour care (-1.24 readmissions, z = -2.36, p = .02) than similar individuals receiving hospital treatment).

Drug-free responders:

At the two year follow-up, the drug-free group (43% of all Soteria subjects) was performing well above the overall group mean (at +.82 of a standard deviation) on a composite outcome scale, representing the dimensions of rehospitalization, psychopathology, independent living, social and occupational functioning.

Whatever impact the subjects lost to follow-up might have had on the results, it is clear that the 43% completely unmedicated Soteria-subjects had a much better outcome than the whole control group treated with neuroleptics. There was also a moderate benefit for Soteria subjects who did not receive neuroleptics when compared to a sub-set of the control group who had a similar profile that might have predicted a drug-free response (Bola & Mosher 2002). This might either be due to the lack of medication or because of a greater benefit from the intense psychosocial treatment, or both.

Predictors for drug-free responders extracted from various studies:

Three clinical criteria emerged from Bola & Mosher's meta-analysis (2002) as positive prediktors for Soteria-treatment without neuroleptic medication (with a positive predictive power of 75%):

- higher level of social competence prior to onset of illness (Goldstein Scale)
- relatively older age at onset of illness
- fewer diagnostic symptoms (positive Symptoms, catatonia, disturbance of affect, speech/thought, behavior)

The first criterion was confirmed in most other studies that addressed this question in traditional clinical settings. The second criterion appeared rarely, and the third one not at all. Another frequently replicated positive predictor:

• sudden and acute onset

was definitely not confirmed in the Soteria study, with high rates of effectiveness among patients diagnosed with schizophrenia who had a gradual onset (42% treated without neuroleptics). It is important to mention in this context that the Finnish API study of minimal neuroleptic use failed to demonstrate that a duration of untreated psychosis of more than six months correlates with a negative outcome of medication-free treatment (Lehtinen et al 2000, Bola et al 2006 submitted).

Summary of the key results for Soteria-subjects who completed the study:

"For all subjects, Soteria had a moderate effect-size advantage (+0.47 SD). For schizophrenia subjects, Soteria had a large effect-size advantage (+0.81 SD). 43% of subjects who went through the Soteria program did not receive antipsychotic drugs during follow-up, and had strikingly good outcomes (+0.82 SD). These findings demonstrate a striking advantage for early episode subjects treated at Soteria." (Bola et al 2005)

Luc Ciompi and Soteria Bern

Theory of Schizophrenia

For Ciompi, as well as Mosher, all theory about schizophrenia is grounded in the basic and fundamentally human element of "schizophrenic being". All aspects of schizophrenic experience make sense from the perspective of biography.

In his book "Affektlogik (Affective Logic)" (1982) Luc Ciompi developed a sophisticated view of the Soteria-approach in an intelligent and comprehensive blend of empirical findings and theoretical perspectives, all with the aim of making psychosis more understandable. He integrated the phenomenological and psychopathological, subjective and objective, affective and cognitive, the biological and the social aspects. Central elements in Ciompi's presentation are the longitudinal studies of patients with schizophrenia (Ciompi & Müller, 1976); the key influence of psychosocial factors on the course of illness (Ciompi, 1980, 1988); Piaget's developmental psychology; system theory; psychoanalytic individual and systemic family therapies; and neurobiology. Subsequently, Ciompi gave further attention to the important role of affects in the organization of (intra)psychic processes (Ciompi, 1997a), and complemented his model of psychosis with considerations based on chaos-theory as a theory of non-linear and chaotic system dynamics (Ciompi 1989, Ciompi et al, 1992).

According to the "affect-logic" (in the double meaning as "logic of affects" and as "affectivity of logic") Ciompi understands an acute psychosis as an anxiety-ridden type of disintegration of diffuse "affective and cognitive relational systems" or "programs concerning feelings, thoughts,

and behaviors" with the possible outcome of forming relatively isolated "affective and cognitive realms", i.e. delusional ideas. The transition into frank psychosis can be understood from a chaos-theoretical perspective as a non-linear phase-jump (bifurcation) given an excess of affect, and, accordingly, remission can be seen as a reversal of this jump under conditions of enduring emotional relaxation.

The guiding image for the treatment of acute psychosis according to Ciompi is a "good mother, who intuitively knows how to calm her child who is caught up in frightful fits of delirious fever" (Ciompi, in: Ciompi et al 2001, p. 60). Accordingly, he assigns great importance to the protection from stimuli, emphasizing enduring emotional relaxation, the calming of anxiety, and continuous relationships, which led him to reintroduce the "soft room" in the treatment of acute states. Unequivocal, and non-contradictory communication is another important treatment element (Ciompi et al 1991).

Concerning pharmacotherapy, Ciompi prefers low-dosing over drug-free treatment. (1997b)

Development of Soteria Bern

In 1984 Ciompi founded Soteria Bern, having been "infected" during a stay at Soteria California seven years earlier. Until 1998, he was in charge of the project, followed by Holger Hoffman. In distinction to Mosher, Ciompi considered himself a "psychiatric reformer" (Ciompi in Ciompi et al 2001, p. 46) and wanted to integrate Soteria Bern from the beginning into the community-based mental health services network, establishing it as a theoretical framework within a bio-psycho-social model of psychosis. In Bern, more than half of the staff consisted of mental health professionals. Principally, the phase-specific process is laid out similarly in Bern as in California. Relaxation and protection from stimuli are emphasized in the acute phase, with the liberal use of the "soft room" where residents and supporters spend most of their time during the first days and weeks of their stay. The diagnosis of schizophrenia is used and openly discussed with patients and relatives.

Compared to Soteria California, Bern uses more prophylactic medication maintenance during the reintegration phase, and a more systematic approach in individual and family treatments. While a fairly durable network of former residents did develop in Bern, it was not seen as an equally significant factor in achieving long-term psychosocial stability, as in the two California houses.

Soteria Bern reports that only 10-15% of individuals experiencing a first psychotic episode cannot be treated in their program, which indicates a fairly low level of selectivity ("creaming").

Evaluation Research

Evaluation research is largely responsible for the replication of the Soteria-results in a new programmatic structure which was completely independent from its American predecessors. To this end, Ciompi chose a prospective 2-year study design that included 22 first-break subjects

who met DSM-III criteria for schizophrenia and compared them to a pair-wise matched control group consisting of 22 individuals with statistically similar age, sex, premorbid social adjustment and predominant positive or negative symptoms, recruited from four different clinical services.

The results of this effort were not as impressive as in the original Soteria study, given that the outcomes in the areas of psychopathology, social and vocational reintegration, and relapse rates were no better than in several other well-functioning control sites. One remarkable difference was the fact that after two years – not unlike California – only 9% of Soteria subjects lived in their parental home, compared to 34% in the control group. This is an important finding, considering the significance of expressed emotions within the family of origin as a predictor of future relapse, and its regulation by distancing (from the parental home). The proportion of first-break subjects who were not treated with neuroleptics was 30% - relatively low when compared to most similar studies, who generally arrive at a rate of 40%. However, the dosages were three to five times lower than among control-subjects (Ciompi et al. 1993). Altogether, daily and cumulative dosages were approximately 40% lower than in the comparison group. The four patients who remained free of neuroleptics for the entire two-year study period, showed the best overall results encompassing the control group.

The treatment costs per patient in the pilot-study were initially higher, but were ultimately lowered to 90% of the cost of acute inpatient treatment by reducing the average length of stay to three month (Ciompi, in: Ciompi et al 2001).

Medication

These results led to a certain measure of disappointment among the program staff, with a notable reduction in explicitly drug-free treatment, leading to the situation of today, where virtually all patients are treated with mostly low-dose neuroleptics. In recent years, neuroleptics were being given within 2-3 weeks, if symptoms persisted. Furthermore, low-dose maintenance neuroleptics are prescribed as a rule to prevent relapse, given that relapse rates were only moderately reduced at Soteria California (1st cohort), and not at all in Bern. The initial practice of "targeted medication" has been abandoned altogether since it was considered as too risky (Hoffmann, in: Ciompi et al 2001).

Particularly positive treatment effects would most likely be found in the domain of subjective experiences: satisfaction, self-worth, positive self-concept, long-term personality development, less stigmatization and discrimination among residents and their relatives ("soft data" from qualitative research yet to come).

On the one hand, Soteria Bern succeeded to become firmly established within the psychosocial service system of Bern, serving as a model program; on the other hand, precisely this level of integration might have contributed to a decrease of its radical nature and its effectiveness as a psychosocial intervention. Since its foundation, Soteria Bern has provided encouragement for service users and providers as a programmatic model and training site. Another unique feature of

Soteria Bern is the regular referral of former residents to outpatient psychotherapy, especially utilizing the services of Elizabeth Aebi, a former Soteria staff member who is a highly experienced psychoanalyst.

The soft room and further developments

Unfortunately, there has not been a qualitative study of the interactive and intrapsychic processes that are important elements of Soteria Bern's treatment approach. Consequently, I cannot prove my hypothesis that the introduction of the "soft room" as a routine element of the treatment program has contributed to a comparatively poorer outcome by inducing regressive wishes and by taxing the patient with highly ambivalent relational patterns stemming from (earlier) traumatization (Read et al 2005). In recent years the length of stay has been shortened to three months in response to pressures from third-party payers. This led to a more time limited use of the soft room, therefore eschewing longer regressively symbiotic processes. The therapeutic focus lies more on relaxation and providing protection from overstimulation than interactive being with the psychotic experience. One other advantage of the "soft room" might be that it creates a space where only a limited number of roles are available to its occupants. This means that the worker can encounter the patient with less anxiety as he dares to jointly enter a space that is not familiar in traditional psychiatry, and therefore generally avoided. Patients with "borderline" patterns of relationships, which tend to result from traumatic experiences (Read et al 2005), are only placed in the soft room during the first acute days, and at the earliest opportunity transferred to day treatment.

The rather low re-admission rate of 12% and the basically routing administration of neuroleptics indicates a rather close connection to the traditional service system, suggesting that Soteria is a singular experience with rather limited impact.

Ciompi's concepts about psychosis and of acute treatment as providing an enduring emotional relaxation, are striving for a high degree of scientific objectivity, by virtue of its tendency to lay out practice-guidelines – in a considerably more structuring fashion than Mosher's open phenomenological approach—raises the question whether the core aspects of treating psychosis can even be captured by such operational categories, and whether such a concept ultimately creates more obstacles and limitations than security and therapeutic efficacy.

Ciompi himself shared some of his skepticism about the many trials of scientific description in a subsequent personal reflection about Soteria, expressing a "deep respect before the unsolved "riddle of schizophrenia". Over the years, mysteries have been purportedly uncovered too many times, or rather violated by some partial truth, be it from a genetic, eugenic, psychopharmacologic, social or family dynamic perspective. Not unlike Loren Mosher I have come to the conclusion, after frequent and hardly innocuous dogmatic excesses, that the theoretical uncertainty and emotional immediacy of an engaged and empathic lay person—certainly within a steady dialogue with equally empathic experts—can come closer to a deeper truth of this enigmatic "disturbance" (or at least cause less harm) than any highfalutin theory."

(Ciompi, in: Ciompi et al 2001, p. 179).

Attempts at explaining the effectiveness of Soteria

Mosher:

Promoting new relationships.

"Relationships were the decisive elements: if they did not develop at Soteria, nothing changed. But it was near impossible to avoid forming some kind of relationship at Soteria. The only question was, what kind of relationships needed fostering..." (Mosher et al 1994, p. 15)

Developing a more independent identity:

"Without the supportive network of basic interpersonal relationships clients were not capable of developing an identity independent from their families of origin. If this did not succeed, these young people who had just emerged from their parental homes in the midst of a psychotic episode, were bound to head for another crisis." (Mosher et al 1994, S 67)

Beyond this there is a fair amount of overlap between the Soteria-approach and the salient therapeutic elements according to Frank (1972):

An environment experienced as healing.

A trusting relationship with a therapist.

Developing a plausible explanations for the problems that had occurred.

Promoting positive expectations for the future, largely through the personal qualities of the therapist.

Promoting the possibility for positive experiences as part of the therapeutic process.

Ciompi:

In explaining the effects of Soteria, Ciompi builds on his main element of "persistent reduction of tension" which contains several other not clearly identifiable "more subtle components" (Ciompi, in: Ciompi et al 2001). This main factor corresponds theoretically with the concept of "affective logic" in Ciompi's understanding of psychosis, since it influences the capacity of "affects to have impact on thinking and behavior" (ibid. p. 50) and it also imitates the effects of neuroleptics in such a milieu (ibid. p. 65). Even more sensitive research is not likely to help identify these subtle factors, much less have them operationalized and evaluated. (Ciompi, in: Ciompi et al 2001).

Dissemination and Replicability of the Soteria-Approach

Since the founding of Soteria in 1971, there have been approximately 12 similar projects around the world, most of them in Europe. Currently, there are projects in Bern (Switzerland), Zwiefalten and Munich Haar (Germany), Stockholm North (Sweden), and several in Denmark. The greater popularity and replication of Soteria in German-speaking countries is probably also a result of Luc Ciompi's more integrative approach. Ciompi speculates that Loren Mosher's antipsychiatric attitude and the critical stance towards neuroleptics have been an important hindrance to its replication in the USA.

An additional eleven initiatives to replicate Soteria have faltered due to the lack of cooperation of area hospitals. Clearly, a successful implementation of Soteria hinges on close collaboration with a regional hospital (in: Ciompi et al, 2001).

Additionally, the Soteria model has contributed to the establishment of acute inpatient units within the established mental health system, which employ so-called "Soteria elements" (Kroll, 1998): early examples were two wards at the psychiatric hospital in Gütersloh (closed in 2001 due to a change in administration) and Gießen; at least further 8 similar inpatient units and crisis residences followed, each explicitly promulgating a Soteria concept.

Usually, its central elements are a live-in kitchen, availability of multiple relationships, involvement of relatives even including the possibility of overnight stays on the unit, an open door secured by a reception area, and a "soft room" (staff participation on an hourly basis only).

Psychotherapeutic support (depending on staff capacity), reconstruction of meaning and biographical understanding of psychotic experiences. Initially, the main focus is a reduction of force and coercive measure, and the maintenance of an open-door policy. Both effects were demonstrated in a historical and internal comparison at the Soteria-unit in Gütersloh (Jiko 1997). The feasibility of this approach is generally challenged by the high census of regular hospital wards (19-30 patients), limited staffing, pressures to admit without specific selection criteria, and the heterogeneity of diagnostic groups. As a rule, initial staff resistances based on past experience recede rather quickly, and the teams achieve a positive identification with the program. However, routine support of patients in the midst of psychoses by "being with" is not being provided. Medications are generally given in low doses, but only rarely avoided entirely.

Both Mosher and Ciompi have welcomed this development in principle. In the meantime, a certain level of polarization between the original Soteria-concept and these acute inpatient units that employ Soteria-elements has become notable. There is a conflict regarding the spreading of Soteria principles by integration within the standard treatment system; which might mean risking a dilution of the treatment effect and false labeling. On the other hand, there is also a concern about holding on to the original idea with its considerable therapeutic potential and its aversion to neuroleptics, bearing the risk of further marginalization and ultimately extinction.

Under ideal circumstances I would assume that both of these approaches might be valid,

especially if the intentions are clearly shown. However, at this point I would primarily champion the establishment of bona-fide Soteria programs to support research and further programmatic development. Obviously, such a position does not take into account the level of widespread opposition to such efforts.

Soteria – Criticisms and supportive arguments

In the following I have compiled the most important arguments presented for and against a Soteria intervention according to the original model:

Criticisms

- Considerable effort with so far limited additional therapeutic success.
- The new atypical neuroleptics, may not be quite as harmful as typicals. Keeping dosages low might limit adverse effects to a tolerable minimum.
- Withholding neuroleptic medications might worsen the prognosis.
- Many people would rather not experience the profound suffering of psychosis to such a great extent. Quite a few patients would not return to Soteria for a second time. How can we find out, at the onset of a treatment, what a person experiencing psychosis, might truly desire?
- The risk of relapse is almost as high in Soteria as for an episode that was treated with neuroleptics.
- Soteria separates patients with a more favorable prognosis from others with a less positive outlook. If someone "fails" at Soteria, he might experience the transition into the group of the less propitious even more adversely.
- Staff might not be truly reliable and adequately prepared for this kind of work.
- Does it pay to invest a great deal of institutional and staffing resources in this group, if the long-term results are not really impressive? Psychotherapeutic work might be more important and effective during later treatment phases.
- Soteria represents the wishes of a minority of service users and a few professionals
- Soteria divides psychiatry into good and evil. It creates confusion among service users, relatives and professionals, and much opportunity for dissent and splitting.
- If a patient who is being treated without drugs gets into a dangerous situation, this could cause a serious ethical and legal problem, all the way to a law suit and the revocation of a medical license.

Supportive arguments

- Intensive psychotherapeutic processes during acute psychotic episodes are possible and effective. Even intuitively talented staff members can provide them.
- Soteria allows us to identify those 30-40% of patients, who can recover without neuroleptics and have no or rare relapses and thus do not require prophylactic treatment, and who will have a better social and vocational outcome if treated in this manner.

- Soteria programs most likely lower the threshold of therapeutic engagement. They should be part of early intervention programs.
- Delaying of neuroleptic treatment is unlikely to be harmful. Bola's meta-analysis (2006) of the all six truly randomized clinical studies of patients that were not medicated over a period of 4-6 weeks (60% received neuroleptics afterwards) showed that in 5/6 studies the experimental group was slightly but not significantly favored.
- Irreversible adverse effects of neuroleptics including diabetes, neurotoxicity (apoptosis) and higher mortality justify the trial of all therapeutic alternatives to avoid their use or to limit their dosages.
- The significantly reduced maintenance dosages after acute low dose neuroleptic medication cause much less side effects and toxicity and increase long term concordance with medication.
- The acceptance of neuroleptic medication in patients is higher after a failed neuroleptic-free treatment trial. For some targeted medication can be learned much easier in a Soteria setting.
- Soteria-like treatment enhances psychosocial functioning. (Cullberg et al 2002, 2006).
- By experiencing a psychotic world in a supportive social context, the inner themes and conflicts of the patient can be elucidated, which otherwise remain hidden behind the psychotic symptoms and are later suppressed by neuroleptics. This often makes it easier to address these conflicts later in an insight-oriented psychotherapy.
- Treatment at Soteria is experienced as less stigmatizing and devaluing. The positive impact on self-worth and acceptance is probably essential for psychological and social integration and the long-term prognosis.
- Patients who have been treated in Soteria-like crisis apartments in the Parachute project in Sweden and their relatives report more positive experiences and satisfaction than those who went through a usual hospitalization (Cullberg et al 2002, 2006).
- Offering Soteria as an alternative to hospitalization might have a humanizing effect on hospital treatment itself.
- Most drug studies are conducted with control groups that are also receiving medication, or in rare instances, placebo after a short term washout of neuroleptics. Only patients who participate in Soteria treatment would constitute a real control group. Such a design could shed light on many unresolved research questions.

Soteria as an "ideological movement" and a guiding idea

Beyond all this, the Soteria idea has contributed to the fact that milieu- and interpersonal aspects of treatment, especially in German-speaking countries, are taken a bit more seriously. "In the past 15-20 years we have been continually accompanied, overtly or not, by the Soteria model. It has become a measure of humane treatment methods, a humane approach towards patients, even a measure of the appropriate conduct of doctors." (Maneros, in: Ciompi et al 2001, p. 219)

Especially following the broad success of de-hospitalizing long-term patients from large institutions, the need for a fundamental retooling of acute treatment has emerged. The Soteria concept remains of predominant importance for this work-in-progress. Obviously, there are plenty of detractors who are dubious about the scientific proof of its effectiveness.

Application of Soteria Principles to advancing community-based care

Over the past three decades a largely community-based, family-oriented and individualized treatment model has been developed in Turku, Finland, called the "need adapted treatment model" (Alanen et al 2000, Alanen 1997). Loren Mosher was rather involved with this model during the last 15 years of his life, which led him to conclude: "Common sense tells us, that immediate family and social network intervention at the crisis site is preferable, when possible, because it avoids medicalization (i.e., locating "the problem" in one person by labeling, sorting and disempowering him/her) of what is really a social system problem (Weick, 1983). Dedicated facilities cannot, by definition, be where the problem originates. The special contextual conditions of Soteria-type programs can be created in a family home, a non-family residence, or a network meeting held nearly anywhere. Such care has been pioneered in Finland (Lehtinen et al, 2000; Seikkula et al., 2003)) and is now also being studied in Sweden (Cullberg et al. 2002)." (Bola, Mosher & Cohen 2005)

"Soteria-type facilities can provide a second-step temporary artificial social network when a natural one is either absent or dysfunctional." (Mosher, unpublished manuscript)

As part of the Swedish multi-center "Parachute Project," small crisis-apartments outside of the hospital were successfully introduced in several regions to provide short-term crisis intervention. Patients who made use of these apartments did significantly better than control subjects in their psycho-social functioning, and along with their families, were especially satisfied with their treatment. (Cullberg et al 2002, 2006).

Personal assessment and outlook

The Soteria-model has provided a notable impulse for improving the therapeutic milieu within the acute care system especially in German-speaking countries, and thereby has made an essential contribution towards enhancing the quality of the services and the lives of individuals suffering from psychoses. In addition, several model programs have emerged and have successfully implemented some of the Soteria-elements within routine services. However, a continual "being with" that goes beyond a few hours, can almost never be provided. Classical Soteria programs have not been established during recent years.

Presently, there is a risk that Soteria development comes to a halt at this point, or even takes a gradual turn backwards, especially given the assertions that the new "atypical" neuroleptics could address the problems sufficiently. Under increasing financial constraints we are witnessing a reduction of psychosocial treatments within services offered to individuals with psychoses.

In my view, the historical and therapeutic potential of the Soteria concept is far from exhausted. Quite possibly, the combination of Soteria-facilities with community-based psychosis treatment teams that work according to the need-adapted model, might offer the best chance to facilitate its survival. (Alanen et al 2000; Alanen 1997; Aderhold et al 2003). Such an approach would significantly lower the average length of stay at Soteria, and thereby its costs. Lehtinen et al (2000) and Seikkula et al (2003, 2006 in press) have demonstrated that such a primarily ambulatory service system can offer treatment without neuroleptics for 40-70% of individuals experiencing a first psychotic episode. In 3 regions and 2 historical cohorts, these subgroups achieved the best results compared to their controls. This model was also successfully evaluated in Sweden (Cullberg et al 2002).

It is my assumption that further refinement of neurobiological methods will provide more clarity about the "antipsychotic" effects of therapeutic relationships and relaxing environments on neuronal systems that are altered by psychosis, and will thereby provide further rationale for including the Soteria-model among the key treatments of psychosis.

It is also quite likely that an increasing awareness of the toxicity of the atypical neuroleptics—along with the drug-induced deficit syndrome, obesity, hypercholisterinaemia, diabetes, also increased cell-death (apoptosis; e.g. Bonelli 2005) and mortality, especially when prescribed in combination with other drugs (Henderson et al 2005, Joukamaa et al 2006) – will promote the reconsideration of psychosocial treatments to their full potential. The aim would be to avoid drugs completely for at least 40% of the patients, or alternatively, to use the lowest possible dosage and thus contain the possible risks.

Neuroleptics should be seen as elements of a historical compromise and not as a curative solution,. An open ethical debate concerning their use must be held with service users and their organizations. Further Soteria services combined with community-based teams that use the need-adapted treatment model would enable multi-center studies with large sample sizes.

Above all, psychiatric patients should not become hugely profitable resources for the pharmaceutical industry, which uses their revenues to dictate research agendas, even to the point of taking over service providers such as hospitals and clinics.

Such a treatment model can become a rallying point for service users and relatives, especially in Europe. Professionals still seem more thwarted by the economic dependencies from the pharmaceutical industry that have invaded the entire medical system in an insidious fashion (Angell 2004), as well as by one-sided beliefs determined by biological reductionism. Currently there is a notable effort especially in England (House of Commons Health Committee 2005) to contain the influence of the pharmaceutical industry on the medical system. There is a growing international movement to promote and disseminate Soteria and similar alternative treatment programs (i.e. http://www.soterianetwork.org/; www.intar.org). I am optimistic and trust in the

frequently dialectial movements in history.

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