LECTURE

Family Therapy of Schizophrenia

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(Received for publication on March 31, 1999)

Abstract. Family therapy of schizophrenia has long been conceived and practised under etiological premises. Familial disturbances as pathological regression/fixation (psychoanalytical) and individuation-impairing family dynamics (systemic) were addressed directly in the hope of "curing" the disorder. The efforts to prove the viability of the concepts and/or the efficacy of the therapeutic approach were largely unsuccessful. Newer strategies of family therapy of schizophrenia are both more precise in their theoretical assumptions and more performing in the pursuit of their therapeutic goals. We analyse the basis of modern family therapy in the "Expressed-Emotions (EE)"-research and propose a newer, more adequate understanding of the EE phenomenon. From our own studies and from a general review of relevant studies we derive an understanding of the rationale of family work and family therapy of schizophrenia. We discuss the results of a meta-analysis on the active ingredients and the conditions of efficacy of family interventions. (Keio J Med 48 (3): 151–154, September 1999)

Key words: schizophrenia, expressed emotions, family intervention, social network

A Concept Undergoes Change

In the past 25 years the concept and significance of family therapy has undergone a fundamental change. Given the information available at the time and the groundbreaking trends very heterogeneous and incompatible models on the origin and treatment of schizophrenia were constructed, psychoanalytical and systemic models being the prevalent paradigms of family therapy of schizophrenia at that time. These models addressed the etiologic aspect of the illness and prescribed direct therapy of the assumed causes (pathologic family regression and fixation resp. dysfunctional family ties). In the meantime neither theoretical substantiation of these therapies nor the results of their application (irrespective of the theoretical background) have managed to secure them a prominent place in today's scenario comprising the understanding and treatment of schizophrenia. From the theoretical perspective they have neglected to integrate biological-psychiatric research results in their concept of disorder, from the practical perspective the resource "family" still has not been conceived and defined as a rehabilitative factor with a clearly defined target. Even now there are no simple etiologic and pathogenic models

nor is there any reason to expect that future research results will produce such simple formulations of the "causes of schizophrenia."

Instead, the "vulnerability-stress-model," which largely excludes etiologic assumptions, has proved to be heuristically worthwhile, as it is extremely suitable for formulating interactive relationships between heterogeneous variables like gene (-expression) and the family environment. The most interesting questions debated today deal with interactions between psychopharmacotherapy and therapeutic modification of psychosocial variables. Thus, in a sense family interventions of schizophrenia are based on a less "sophisticated" theoretical background and no longer pretend to treat the "causes" of schizophrenia. Nowadays, psychiatry recognizes family therapy as a component of the standard program offered by clinics and as an integral part in therapy schemes, or, to be more precise, most colleagues in the field no longer deny its usefulness. In fact, family intervention seems rather to be the exception in psychiatric therapy and whether or not it is applied seems to depend more on local availability rather than on suitability to the case in question.

The objective of this paper is to move beyond the widespread "randomness" in prescribing family inter-

vention and demonstrate the necessity and efficacy of a family-based therapeutic approach in the treatment of schizophrenia.

Social Network and Expressed Emotion

Angermeyer¹ has summarized research results on the social network of schizophrenic patients as follows: 1. Prior to onset: The density of the social network is normal to slightly diminished. 2. In the early stage of illness: social network is mainly composed of family members. 3. In the late stage: social network very impoverished, mainly composed of fellow-patients and non-family caregivers. Surely, it is generally agreed that the situation described in statement 3 is neither desirable nor can it be understood as meaning that patients are doomed to their fate for the rest of their lives. At the early onset of the illness, the "family" as a natural resource functions as the nucleus of the patient's social network while underpinning interconnecting threads, and does so more than any other form of therapy offered. The transition from Stage 2 to Stage 3 is often characterized by a long process resulting in the loss of the "family" resource, usually brought about after family members have suffered a long series of disappointments and often by "burn out" on the part of the family members providing care. Psychiatric institutions with their diverse resources are called on to replace the patient's missing or overtaxed natural resources. However, it has become apparent that there are limits to financing substitute living quarters and caregiving regimens, and here too these capacities are quickly exhausted when striving to attain a standard of living for their patients which is as close to "normal" as possible. The objective of family therapy and therapeutic family intervention, one of the best studied forms of therapy, is to retain the family (resp. other members with close ties to the patient) as a resource in order to optimize therapy, rehabilitation and stability of the social network. To be sure, family-related factors, as research on expressed emotion (EE) has shown, can have anti-therapeutic effects.

Butzlaff and Hooley² demonstrated in a meta-analysis of relevant literature that the following assertions are now based on solid empirical grounds: EE is a robust relapse-predictor in schizophrenia. EE is more evident in chronic patients than in patients in the early stages of illness. Effect sizes are larger in affective disorders and in eating disorders than in schizophrenia. Further studies on the influence of EE on relapse rates in schizophrenia will not produce new evidence. Given the broad empirical basis now available it is important to work towards a new understanding of the EE phenomenon which operates independently of the initial observations of the first describers.

We recommend that when speaking of the "EE" phenomenon the following adapted perspective be applied: EE is a characteristic of interactions that can also be measured as an attitudinal variable. The interactional perspective is more relevant to the process and the therapy applied than the attitudinal perspective.

This leads to the following assumptions: Characterization of interactions should not be restricted to a dichotomous approach but be based on a wide range of categorized interactions. It is inappropriate to characterize interactions as uni-directional. Therapy should, if possible, be directed towards the most important partners participating in disturbed interactions.

Based on this interpretation of EE interactivity Hahlweg³ was able to show that it is not the occurrence of negative interactions itself that is characteristic of High EE but the unrestrained length of the sequence of negative interactions (up to 20 interactions, compared to 5 in Low EE families) (Fig. 1). A close examination of what appears to be Low EE reveals that this behavior cannot be simply described as a lack of High EE characteristics. Low EE, provided it is not just an expression of resignation, can be characterized as a suitable and desirable form of behavior towards a schizophrenic patient. Contrasting characteristics in interactive styles are depicted in the table below (Table 1).

As early studies on EE had individualized EE status as well as time of contact with High EE families as a relapse predictor, this led to the assumption that a reduction in the time of contact between the patient and his family should be part of the recommended therapeutic treatment. Given the information available, this recommendation can no longer be propagated (Fig. 2). As demonstrated in Fig. 2, decreasing contact density in High EE families results merely in a slight reduction

Fig. 1 Negative interactive sequences in High EE and Low EE (after Hahlweg³). EOI: emotional overinvolvement, CRIT: critical.

Table 1 Interactive Styles in High EE and Low EE Families (modified after Hubschmid and Zemp 1989)

High EE	Low EE
Profuse and generalizing criticism	Little criticism, specific and target-oriented
Pessimistic view of illness outcome	Optimistic view of illness outcome
"Behavior is controlled by patient"	"Behavior is partially illness-related and only partially controllable"
Family members battle to control patient's behavior	Behavioral limits are set
Aggressive self-assertion on the part of the patient due to negative emotional background	Flexible self-assertion on the part of the patient
Commands	Proposals
Behavioral style: rigid, conflict-directed, polarizing	Behavioral style: de-escalating
Effects: relapse likelihood increased	Effects: relapses are prevented
In general non-acceptance of rehabilitative schemes	Rehabilitative measures are accepted

EE: expressed emotions.

Fig. 2 Relapse rate in relation to EE status and duration of contact (after Bebbington and Kuipers 1994⁵).

whereby the level of relapse risk remains still very high (our studies have shown this to be attributable to persistent High EE interactions with other caregivers). It is much more promising to create, by means of family therapy, a climate of Low EE interactions with relatives and other caregivers. In this case, higher density of interaction even results in a lowering of the relapse risk.

Studies on Family Intervention: Where Science Stands Today

Family intervention studies on schizophrenic patients,^{6–9} which since the beginning of the 80s have gained in significance not only with respect to scientific results but also to practicability, are founded on a number of common assumptions: 1. Schizophrenia is

considered to be an illness. 2. The family environment is not considered to cause the illness. 3. Therapy is supportive in nature and sees the family as a therapeutic agent. 4. Therapy consists of a “treatment package” which entails drug treatment and outpatient clinical management. Whereby statements 1–3 clearly differentiate family intervention from the psychoanalytic and systemic therapies discussed above, statement 4 expresses that together with the therapeutic family sessions a program comprising the implementation and the coordination of multimodal treatment ingredients has to be established.

Family intervention studies have in common high practical relevance and some methodological problems. The studies compare “therapeutic packages” and are hardly in a position to test hypotheses as to the differential efficacy of the therapeutic components. It will be up to individual studies on the respective therapeutic modality to produce relevant results. Psychosocial studies on intervention practices greatly vary in methodological stringency. Conclusively, expert opinion on the eligibility of these studies for meta-analytic investigations varies greatly.

This is exemplified in the meta-analysis based on 12 studies by Mari and Streiner¹⁰ and the analysis by Falloon and collaborators (unpublished observations) of 38 studies. This may help to explain the contrast in the conclusions drawn in each study: Mari is very tentative whereas Falloon is assertive. According to Mari and Streiner,¹⁰ family interventions reduce relapse and hospitalization frequency, compliance and vocational opportunities improve. Expressed emotion and family burden, however, do not decrease. At least 6 patients must undergo treatment, in order to prevent a single relapse. This would result in an unfavorable cost-benefit-ratio. Cardin's¹¹ and our own cost-analysis¹² do not support this assumption.

Let me briefly summarize the most important results of Falloon's meta-analysis which to date has not been published: 38 controlled studies +6 in preparation; 6826 cases; 16 studies with good resp. excellent methodology; 13 studies with adequate resp. good methodology; 9 studies with poor methodology.

Factors not associated with outcome: methodological quality of the studies; duration of treatment (less/more than 6 months); severity of disorder; type of session (single family/family group).

Factors associated with a favorable outcome: strength of treatment ($\chi^2 = 18,3; p = 0,0002$); type of treatment strategy ($\chi^2 = 566; p = 0,0001$). The effect of strength of treatment (stringency and adherence to the treatment) is depicted in Fig. 3. The relationship between treatment gains and therapeutic strategy applied (Fig. 4). As to reduction of the family burden, average effect size when applying cognitive-behavioral family-

Fig. 3 Outcome in relation to strength of treatment.

Fig. 4 Outcome in relation to therapeutic strategy.

therapy amounts to 0.87 compared to 0.31 in the control groups.

Our studies^{1,2} as well as Falloon's meta-analysis demonstrate that modified family interaction (i.e. low-EE interaction as described before) along with improved crisis management constitute the core elements in the efficacy of family intervention.

Conclusions and Future Directions

Family interventions based on behavioral therapy have proved to be effective in preventing relapse and rehospitalization of schizophrenic patients. Meta-analyses based on a small number of studies do not clearly reflect the degree of efficacy with respect to the family burden. Given the close association between treatment stringency and treatment gains it seems only logical that the treatment of patients suffering from schizophrenia duly include family members and other carers on a broader and well-structured basis.

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