

The Potential of Aggressiveness in Families of Schizophrenics in Relation to the Danger of Relapse*

Michael Grube and Peter Hartwich

Department of Psychiatry; Faculty of Medicine RWTH Aachen,
Goethestraße 27–29, D-5100 Aachen, Federal Republic of Germany

Summary. The question of the potential aggressiveness in families of schizophrenics in relation to the danger of relapse was investigated (schizophrenics $n=40$, ICD and AMDP selection). The aspect of subjective intrapsychic coping with the aggressive potential in families was operationalized by 12 self-ratings divided into 3 categories: expunitive attitude, intrapunitive attitude, experience of divergency. Analysis of variance showed that there was no significant relation between the 3 categories and the relapse quote. The claim following “expressed emotion” research which would have indicated different results was not supported by investigating the patients’ subjective experience. Within the framework of our results various rehabilitation strategies and potential shelter functions in the families are discussed.

Key words: Schizophrenia – Family atmosphere – Relapse quote

Introduction

The empirical investigations of Brown et al. (1962), Brown et al. (1972) and Leff and Vaughn (1980, 1981) showed that the expressed emotion of relatives in the home exerts a significant influence on the recurrence of schizophrenia. The risk of relapse depends on intensity and time of face-to-face contact with relatives. The data for the research were collected mainly from key relatives of the patients; however, self-ratings of the patients’ intrapsychic emotional state were not included because of the danger of methodological distortion. The scope of the research was extended by Leff and Vaughn (1980) who investigated the interaction between expressed emotion, life events, and risk of relapse. Jacobs and Myers (1976) had already shown that there was a relationship, though not significant, between recent life events and the first admission of schizophrenic patients; this, however, was not confirmed by the study of Malzacher et al. (1981).

The above mentioned empirical results and indications lead to practical consequences. For example, it is possible to reduce overstimulation (Wing 1982), caused by the family atmosphere by providing a more defined social environ-

* Given in abridged version at the congress of DGPN in Münster 1982

Offprint requests to: P. Hartwich at the above address

ment. The following becomes a crucial point for investigation: whether patients who suffer from the risk of relapse and who have a decreased threshold of vulnerability just after clinical condition should be cared for in a rehabilitation unit, or, whether it would be possible and not too dangerous to reintegrate them relatively sooner into their family. The family atmosphere is seen as the critical environment in which intense and complex emotional relations could have a deteriorating effect on the patient. Janzarik (1976) regards the family atmosphere as sometimes being a restricting factor for positive rehabilitation. Therefore, it is a question of practical importance, which conditions should be considered when reintegrating a patient into his family immediately after an acute relapse, and what are the special factors that create a more dangerous emotional atmosphere. One finds a multitude of complex factors, which, out of methodological considerations, make it necessary to select a narrower area for empirical investigation e.g. the emotional tension (aggressiveness) within families. The result of investigations of emotional vulnerability and the observation from practical work with patients seem to make it evident that there is a relationship between emotional aggressive tension in families of schizophrenics and the frequency of relapse.

To test our hypothesis we decided to use data of subjective self-evaluation as an expression of the real individual intrapsychic state and of the ability to cope with environmental factors. From this point of view, self-ratings seem to be more relevant than the information collected from relatives. It is possible that patients, who are in a depressive state with reduced affectivity following an acute deteriorating condition and especially hebephrenics with an unrealistic self-assessment, could be estimated differently or even wrongly by relatives (Hartwich and Steinmeyer 1973a, b; Hartwich 1980).

Method

Forty schizophrenics were selected for investigation (selection criteria see below). The aggressive potential in their families was estimated by 15 self-rating scales (5 points) for a 3-month period.

In order to obtain different categories of the 15 items, factor analysis was used. We arrived at 3 factors of the rotated factor matrix (varimax). The excluding criterion, communality < 30, categorised 12 items as factors. Although the value of this method is limited here for methodological reasons, we used it as a complementing aid to find plausible item combinations (see Table 1). The 3 categories: 1. *extrapunitive attitude*, 2. *intrapunitive attitude*, 3. *experience of divergency*.

Data for analysis of variance were z-transformed sum scores of the item ratings in each category. Other variables were the frequency of relapses, defined by the number of admissions, and the number of quarrelling situations in the family, per week, of significance to the patient ("*Zentralität des Betroffenseins*", Lehr 1965).

Subjects

Schizophrenic outpatients, all living in families, ($n=40$) were selected by the following criteria:

Age: 20–51 years, mean 31.8 years; 19 female, 21 male.

Diagnosis: ICD 295.3 $n=27$, 295.1 $n=5$, 295.2 $n=4$, 295.7 $n=2$, 295.9 $n=2$.

Relapses: 1–11 mean 3.2.

Table 1. Items

1. Extrapunitive Attitude

- Can I offer resistance to critical remarks in the family?
(Very well 1-2-3-4-5 not at all)
- Can I defend my position actively in case of family quarrelling?
(Very well 1-2 3-4-5 not at all)

2. Intrapunitive Attitude

- Do I feel attacked by legitimate criticism by members of the family?
(Not at all 1-2-3 4-5 very much)
- Do I have guilt feelings after a quarrell?
(Never 1-2-3-4-5 always)
- Do I feel that I am responsible for family quarrels?
(Always 1-2 3-4-5 never)

3. Experience of Divergency

- Can I speak with other members of the family about my problems?
(Very well 1-2-3-4-5 not at all)
- How important are my feelings to other family members?
(Very important 1-2-3-4-5 not important at all)
- Does the family solve problems as a community?
(Always 1-2-3-4-5 never)
- How well am I integrated in my family?
(Very well 1-2-3-4-5 not at all)
- Does my family understand me?
(Very well 1-2-3-4 5 not at all)
- How much am I affected by family quarrelling?
(Not at all 1-2-3-4-5 very much)
- Is my family fair to me in quarrels?
(Always 1-2-3-4-5 never)

Table 2. Three-factor analysis of variance

Source	<i>df.</i>	MS	<i>F</i>
A	1	0.29	0.15
C	1	4.73	2.56
A × C	1	0.36	0.19
Subj. w.gr.	36	1.85	
B	2	0.12	0.19
A × B	2	0.31	0.49
B × C	2	0.17	0.27
A × B × C	2	1.72	2.73
B × subj. w.gr.	72	0.63	

At the time all the patients were being treated with long-acting neuroleptics, three-quarters of the patients were treated either in psychotherapeutic groups or individually. The psychopathological state was assessed by AMDP: thought disturbance, delusions, hallucinations and ego disturbances had to be from slight to medium. Patients who were rated as strongly disturbed in one of the AMDP items were not considered suitable for the investigation. After an introductory explanation of the form and contents of the questionnaires, most patients were able, with a little help, to fill in the questionnaires.

Results

The influence of the three categories (extrapunitive attitude, intrapunitive attitude, experience of divergency) on relapse frequency was examined by an analysis of variance (split-plot-design). Factor A (2 treatments) represented high versus low relapse frequency, factor B (3 treatments) represented the three categories, and factor C (2 treatments) represented female versus male subjects.

The main result of the investigation was that our hypothesis, assuming a significant relation between relapse frequency and categories of aggressive family atmosphere, was not verified. We arrived at two additional results: firstly, the relationship between quarrel frequency and number of relapses was not significant ($P=0.115$) and secondly, sex was not significant in relationship to the three categories.

Discussion

As far as we have investigated the subjective experience of the schizophrenic patient, the aggressive atmosphere does not seem to be as dangerous for a clinical relapse as one would have expected from the comparable "expressed emotion" research (Brown et al. 1962, 1972; Leff and Vaughn 1980, 1981). This result indicates that the investigation of the subjective individual experience of the patients and of their intrapsychic coping with overstimulating emotional factors leads to additional insights. Therefore it is not acceptable to disregard this area of subjective experience just because of methodological reasons, e.g. "causal need" as considered by Malzacher et al. (1981). We have found that the two areas we have discussed are both essential and complementary to the question of reintegration into families. Our results may be interpreted in this way: it can be emphasized that the above mentioned barrier of emotional overstimulation with regard to the three categories of aggressive atmosphere is not so extreme that an integration into the family could not be taken into consideration. In future each case should be investigated individually in order to be able to differentiate which other factors in the family might compensate for the aggressive emotional influence. It is recognized that warmth, sympathy (Brown et al. 1972) and objectivity (Schüttler et al. 1973) can be seen as sheltering influences (Davies 1968) provided by the family. Another factor could be the care and attention given to the outpatients, e.g. neuroleptics, group-psychotherapy etc., which may often neutralize emotional overstimulation. We suggest that the next step in the research should be to investigate in more detail the framework of the emotional atmosphere in relation to the danger of relapse. Potential relapse factors could be

investigated by employing objective information at the same time as self-estimation. Furthermore, the value of the above mentioned sheltering influences should be investigated in more detail, because in practical care, it is not sufficiently clear how far elements of danger can be compensated for within the family atmosphere.

References

- Brown GW, Birley JLT, Wing JK (1972) Influence of family life on the course of schizophrenic disorders: a replication. *Br J Psychiatr* 121: 241-258
- Brown GW, Monck EM, Carstairs GM, Wing JK (1962) Influence of family life on the course of schizophrenic illness. *Br J Prev Soc Med* 16: 55-68
- Davies GV (1968) Family relationships of elderly mental hospital patients. *Austr New Zeal J Psychiatr* 2: 264-271
- Hartwich P (1980) Schizophrenie und Aufmerksamkeitsstörungen. Springer, Berlin Heidelberg New York
- Hartwich P, Steinmeyer E (1973a) Analyse der Antriebstypen bei Hebephrenen – Faktorenanalytischer Beitrag zur Objektivierung von Antriebssyndromen. *Arch Psychiatr Nervenkr* 217: 79-94
- Hartwich P, Steinmeyer E (1973b) Das Antriebsrelief bei Hebephrenen – Vergleichende Untersuchung zum Antriebsverhalten und Antriebserleben bei Hebephrenen und Gesunden. *Arch Psychiatr Nervenkr* 217: 285-298
- Jacobs S, Myers J (1976) Recent life events and acute schizophrenic psychosis: a controlled study. *J Nerv Ment Dis* 162: 75-87
- Janzarik W (1976) Grenzen der Rehabilitation Schizophrener. In: Huber G (Hrsg) Therapie, Rehabilitation und Prävention schizophrener Erkrankungen. Schattauer, Stuttgart
- Leff J, Vaughn C (1980) The interaction of life events and relatives' expressed emotion on schizophrenia and depressive neurosis. *Br J Psychiatr* 136: 146-153
- Leff J, Vaughn C (1981) The role of maintenance therapy and relatives' expressed emotion in relapse of schizophrenia: a 2-year follow-up. *Br J Psychiatr* 139: 102-104
- Lehr U (1965) Erscheinungsweisen des Konflikts. In: Thomae H (Hrsg) Handbuch der Psychologie, Bd 2. Hogrefe, Göttingen
- Malzacher M, Merz J, Ebnöther D (1981) Einschneidende Lebensereignisse im Vorfeld akuter schizophrener Episoden. *Arch Psychiatr Nervenkr* 230: 227-242
- Schüttler R, Gross G, Huber G (1973) Die Bedeutung sozialer Faktoren für den Verlauf schizophrener Erkrankungen. In: Huber G (Hrsg) Verlauf und Ausgang schizophrener Erkrankungen. Schattauer, Stuttgart
- Wing JK (1982) Sozialpsychiatrie. Springer, Berlin Heidelberg New York

Received December 20, 1982