Abstract

Background This study focuses on the effect of psycho-educative family therapy on the self-assessed burden in families in which one member has suffered from relapse of schizophrenia or a schizoaffective syndrome. The impact on the family’s self-assessed attitude towards continuing to take care of the patient was also evaluated. Burden and attitude were assessed continuously during a period that contained no further relapse episodes.

Methods Included were 31 families in which one family member suffered from schizophrenia or a schizoaffective syndrome. Of these, 14 families underwent a psycho-educative intervention programme called BFT (Behavioural Family Therapy). The remaining 17 families, i.e. the contrast group, received conventional family support. The intervention was initiated within 24 h after the patient/family member was admitted to a psychiatric ward due to relapse of the psychotic disorder. The intervention continued until the patient was discharged from hospital. Falloon’s Distress Scale and Attitude Scale were used in the families’ self-assessments of burden and attitude towards continuing to take care of the patient, respectively. The self-assessments were performed on three occasions: 1) on the day of admission to the ward, or the day after; 2) 4–5 weeks after admission; and 3) on the day of discharge, or the day after. Medication doses were registered upon admission and at the time of discharge. Finally, the rates of re-occurring relapses within 1 year after discharge from hospital were determined, i.e. 1 year after the completion of the family treatment programme. The BFT families had access to the therapist for questions after the programme had been completed, when needed. The patients and families in the contrast group had access to physicians and therapists in the outpatient care.

Results The self-assessed family burden was significantly lower for the BFT families at the time of discharge, compared to the contrast group, and the self-assessed attitude towards continuing to take care of the patient was significantly more positive for the BFT families at the time of discharge, compared to the contrast families. One patient in the BFT group relapsed within 1 year, whereas 13 patients relapsed in the contrast group. The dosages of neuroleptics were significantly lower on discharge than on admission for the patients in the BFT group.

Conclusions The results suggest that BFT, when provided to schizophrenic patients and their families during a hospitalisation period caused by a psychotic relapse, reduces the feeling of burden in these families. Likewise, the families’ attitude towards continuing to take care of the patients was influenced in a positive way.

Key words family – behavioural – intervention – schizophrenia – burden – attitude – relapse – medication

Introduction

The first modern studies on the importance of the interplay between the schizophrenic patient and his family were performed in the 1940s and 50s. Theories were presented regarding the family’s and in particular the mother’s possible importance for triggering off the schizophrenic disorder in a family member (Tietze 1949; see also Cohen 1982). Brown et al. (1958) found that the rates of re-admission to hospital care tended to be higher for patients who lived with their spouse or parents, compared to patients who lived in their own housing or together with other relatives. In the mid-50s, Brown developed the theory of Expressed Emotions...
The Expressed Emotions are measured by means of five variables that reflect the caregiver attitude (hostility, critical comments, emotional over-involvement, positive comments, and warmth). The EE concept has proven useful for the understanding of the interactions within families with a schizophrenic member. It has also resulted in various therapeutic and educational strategies. Vaughn and Leff (1976) found that the relapse rate of the patient was affected by the EE profile of the caregiver. Thus, relapse rates were higher for those patients whose families rated high on critical comments, emotional over-involvement, and hostility. Similar conclusions were drawn in subsequent studies (Hatfield 1979; Falloon et al. 1981; Leff and Vaughn 1985; Butzlaff and Hooley 1998; Bustillo et al. 2001).

In later years, EE-related research has also focused on the burden of the whole family, not only of the patients themselves (Fadden et al. 1987; MacCarthy et al. 1989; Mueser and Gingerich 1994; Mueser et al. 1996). Several studies have indicated that in order to reduce family burden, the schizophrenic patient and his family should, ideally, be subjected to family-based interventions (Falloon et al. 1981; Falloon and Shanahan 1990; Falloon 1992; McFarlane 1994; Mueser and Glynn 1995; Borell et al. 1995; McFarlane et al. 1996). Such interventions include elements of stress management, communication strategies, problem solving, goal achievement, and receiving knowledge about the psychotic disorder and early warning signs (Falloon et al. 1981, 1985; Malm et al. 1989; Hogarty et al. 1986, 1991; Tarrier et al. 1988; Hansson et al. 1992; Falloon and Fadden 1993; Randolph et al. 1994; Berglund 1995; Schooler et al. 1997; Hahlweg and Wiedemann 1999). In a recent study by Mueser et al. (2001) the addition of behavioural family therapy to supportive family management did not, however, influence family burden. Finally, the literature on the impact of family-based intervention on family burden is limited with regard to separating the effect that reduced relapse rates may have on family burden (Bustillo et al. 2001).

The primary aim of the present study was to further evaluate the effect of family-based intervention on family burden, as well as on the family’s attitude towards continuing to take care of the schizophrenic family member. The interventions were initiated on the patient’s re-admission to hospital care, due to relapse of the disorder, and concluded by the time of discharge from hospital. Family burden and attitude were rated by the families themselves upon re-admission, 1 month after re-admission, and at the time of discharge, respectively. Accordingly, family burden was assessed continuously during a period that contained no further relapse episodes. For comparison, an equal protocol was applied for families who received conventional support.

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**Subjects and methods**

### Patients

The study was carried out at the Department of Psychiatry, Varberg Hospital, Sweden, during the period 1994–1997. Included in the study were all 38 known families in the north of the county of Halland in which: 1) one member suffered from schizophrenia or a schizoaffective syndrome according to the DSM-IV criteria (American Psychiatric Association 1994), and 2) the patients had a regular and close contact with their family members. All of the patients were previously known to the Department and the associated psychiatric outpatient care unit, and their psychiatric diagnoses were reconsidered every 6 months. Each family entered the present study upon the family member’s re-admission to a closed ward due to relapse of the psychotic disorder (see below). The families were evenly divided into one group which underwent the Behavioural Family Therapy (BFT) programme, and one contrast group which received conventional family support (see below). Primarily, 10 families were placed in the BFT group, but 4 of those families never received BFT treatment at the request of the schizophrenic family member. The remaining 28 families were distributed between the groups by lottery, which was performed by the head nurse of the ward in the presence of one of the authors (NS). Later, another 3 families in the BFT group dropped out: 2 families moved to other catchment areas and the third family decided to make a break in the treatment because of the death of a family member. Thus, 31 patients and their families remained in the study; 14 (8 men, 6 women) in the BFT group and 17 (5 men, 12 women) in the contrast group. The mean age of the patients was 29.3 years (SD 5.4) in the BFT group and 36.9 years (SD 7.8) in the contrast group. The mean duration of the disorder from the first psychotic episode that required admission to hospital was 9.0 years (SD 3.1) in the BFT group, and 11.1 years (SD 5.1) in the contrast group. In the BFT group, 8 families had contact with the patient on a daily basis, and in the remaining 6 families the average contact frequency was less than once a day. The corresponding figures for the contrast group were 10 and 7, respectively. In the BFT group, 13 patients had schizophrenia and 1 patient had a schizoaffective disorder. In the contrast group, 15 patients suffered from schizophrenia and 2 from a schizoaffective disorder. The mean duration of hospital care was 177.4 days (SD 75.1) for the patients in the BFT group, and 135.4 days (SD 51.8) for the patients in the contrast group.

### Treatment principles

With the patient’s consent, family intervention was initiated within 24h of the patient’s re-admission to a psychiatric ward upon relapse of the psychotic disorder. Below, the outlines of the two intervention techniques applied are presented.

**Behavioural Family Therapy programme (BFT)**

BFT consists of the following main items (Falloon et al. 1984):

1. Individual interviews with each family member.
2. Analyses of these interviews.
3. Psycho-education about the psychotic disorder.
4. Psycho-education about early warning signs of emerging relapse of the psychotic disorder.
5. Communication skills training.
6. Training of problem-solving skills and goal achievement.
7. Social skills training.
8. For elements 3–7 above, 2–3 one-hour sessions were held per month. The sessions were mostly held in the homes of the families. The patients were always participating.

**Conventional family support**

The 17 families included in the contrast group received support according to the following principles:

1. 8–10 sessions per month. Of these, 1–3 sessions were held upon