

## Family intervention in psychosis: who needs it?

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The interest in families as part of the social environment of people suffering from psychosis dates from the war. The early ideas took the form of speculation without adequate research underpinning, and were often couched in terms that suggested that families might be to blame for the sufferers' illness. Nevertheless, the speculations were a first attempt to appreciate the impact of the social environment on psychotic disorders.

Formalized attempts to modify the family environment for the benefit of patients date only from the past two decades. They received a considerable impetus from the development of a reliable way of evaluating family relationships. It also proved to be a strong predictor of outcome in schizophrenia, as measured by symptomatic relapse or readmission. This was the measure of expressed emotion (EE). It was developed in the 1960s by George Brown and his colleagues (Brown & Rutter, 1966; Brown *et al.*, 1972) as an evaluation of key attributes of the way in which family members describe their interaction. The predictive capacity of EE in psychosis has now been established beyond doubt (Bebbington & Kuipers, 1994). It has been demonstrated in a wide range of locations and cultures.

In the 1960s and 70s, psychological interventions with patients suffering from psychosis were regarded as at best ineffective, and at worst actually

harmful. We now know that this view was certainly wrong. However, the importance of the research on EE at that time was that it suggested the possibility of using the wider resources of family relationships to effect changes in patients as well as in carers.

In consequence, the primary purpose of family intervention has usually been the amelioration of the condition of the patient. However, in tandem with the EE literature, there was literature examining the difficulties for the family members themselves in living with somebody who was psychiatrically disturbed (Fadden *et al.*, 1987). Implicit in this is the idea that families might be needy on their own account and, therefore, legitimate recipients of intervention. Furthermore, this literature has been consistent in emphasising that carers themselves had difficult and sometimes intractable problems to deal with. It has now been suggested that EE itself can be seen as a proxy measure of burden (Jackson *et al.*, 1990; Smith *et al.*, 1993; Scazufca & Kuipers, 1996). Thus, EE indicates the quality of the carer's relationship with the patient, and how the carer appraises problems within it. Burden also reflects this. The key process is appraisal. Problems which are appraised as difficult also cause distress (Barrowclough & Parle, 1997). Thus, all carers have difficulties and burdensome problems; however, the way they appraise the difficulties allows one to predict both who feels burdened and who is likely to have high EE relationships with the patient. Burden and EE both seem to be independent of the sufferers' symptom levels, behavioural problems and social disabilities (Scazufca & Kuipers, 1996).

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Family interventions for schizophrenia are now well established. We have recently been conducting a meta-analysis of these treatments for the Royal College of Psychiatrists/British Psychological Society Guideline for the new British National Institute for Clinical Excellence. In the process we have managed to clarify a number of related issues. We were able to identify 19 randomised controlled trials comparing family therapy with some other treatment. These have been conducted in a wide range of cultural and service contexts.

The early studies of intervention (Leff *et al.*, 1982; 1985; Falloon *et al.*, 1982; 1985; Hogarty *et al.*, 1986) showed excellent outcomes. Overall the literature confirms these good results. However, it has been claimed (Mari & Streiner, 1994) that more recent studies suggest intervention is less effective. The apparent decline in effectiveness was attributed to the enthusiasm and charisma of the people conducting the earlier studies. However we now find that the diminishing effect of family intervention with time may also be explained by the fact that the later studies involved *group* treatments of the families, whereas the earlier studies consistently relied on the treatment of individual families. Thus, we estimate that for single family therapy the «number needed to treat» (NNT) to prevent relapse in the first year of treatment is 6.3, while to prevent readmission it is 5.7. In the second year of treatment the equivalent values are 3.9 and 3.5. The NNT to prevent a relapse in the *follow-up period* after the end of treatment is 7.1 for individual family treatment, but this falls to 20.8 for readmission.

We were only able to calculate a general figure for relapse for group treatments. This had a value of -32. The negative figure indicates that group based family treatment is marginally (but non-significantly) *worse* than the comparison treatment. It does seem unlikely that group treatments are entirely ineffective, given that social comparison can be a powerfully reassuring group process. However, when the chosen outcome variable is the reemergence of psychotic symptoms, or readmission to hospital, it is clear that single family interventions are much more effective, and must be considered the first choice of therapists. Finally, it is worth noting that we found little evidence to support the contention that the effects of family therapy might be mediated through improved compliance with medication.

Although effects have been claimed to persist for up to eight years following treatment (Tarrier *et al.*, 1994), the figures quoted above could indicate that

the benefits of intervention gradually attenuate after it has finished. This may be an artefact of choosing a single event such as relapse or readmission as the outcome variable. Thus survival would decline with time in both intervention and control groups, although doing so more quickly in the latter. Nevertheless, in relation to a single event like relapse, the intervention group would eventually catch up. The results of interventions have not been presented in terms of alternative measures of outcome, such as the number of days in hospital, or duration of illness periods. Such measures would be able to distinguish between an effect in delaying the outcome event and an attenuation of the effectiveness of family intervention. If family therapy really does have reduced long-term effects, this has considerable clinical implications, such as a need for continuing but less intense family support as the families pass through different life stages.

There have been reports that are consistent with the idea that, for some people, perhaps particularly those rated low on EE, family intervention can be aversive and may even make things worse (Linszen *et al.*, 1996). It is hard to tell if this is the case from our meta-analyses. The family interventions have sometimes been carried out on families chosen precisely because they exhibited high levels of EE, but most studies have not distinguished them on this basis. Thus, it is not possible to state from the aggregate evidence of these studies whether treatment should be limited to people with a strong sense of burden. The limited data available to us suggests that all patients might benefit from family intervention.

It should be noted that the reported studies have as their target the improvement of the mental state of patients. There has been relatively little attention to the outcome for carers. It may well be harder to sustain the effects on patients than those on carers. There is thus an argument for using carer outcome as the measure of the success of these interventions. This is a recognition that carers have their own needs, and that it is legitimate to address them. One of us (EK and colleagues) has just completed a study of this type.

There remain a number of unanswered questions concerning family interventions. In addition to the distinction between individual and group family treatment, there are many differences between the interventions that have been subjected to randomised controlled trials. Treatments in some trials are given over only six weeks (Goldstein *et al.*, 1978; Bloch *et*

*al.*, 1995), while Hogarty *et al.* (1986) gave treatment over a two year period. Likewise, the spacing of treatments ranges from weekly (e.g. Falloon *et al.*, 1982; Vaughan *et al.*, 1992) to a session every month (or even 3 months – Zhang *et al.*, 1994). This range of intensity obviously blurs the distinctions between treatment and post-treatment booster sessions. In the absence of good evidence about the relationship between treatment spacing and effectiveness, it would seem reasonable to go for a median position of advising sessions on a fortnightly basis for six months or so, followed by boosters initially every two to three months.

It may yet be the case that not all families need family intervention and that highly disturbed families will benefit more. It is also possible that, in order to achieve enduring effects with patients, it is more effective to use individual psychological treatments with them, for example, Cognitive Behaviour Therapy (CBT) (Drury *et al.*, 1996; Kuipers *et al.*, 1998, Tarrrier *et al.*, 1998; 1999). A high dropout rate (around a third) has always been a problem with family intervention and CBT certainly seems to engage clients more effectively. Even when formal family intervention is not an option, the knowledge obtained from the research clearly indicates the principles of good practice in relating to the families of people with psychotic illnesses.

When someone in a family develops psychosis, this represents a serious and traumatic event for the other family members as well as for the sufferer. At the very least, all families would probably benefit from being able to talk about this event. They need time to process the associated distress and the opportunity to reappraise behaviour they find strange or difficult. However, it is possible that carers only need formal intervention when they reach high levels of distress. This may also be the situation in which it is easiest to engage them. Family intervention does appear to be more effective when offered to families individually.

However, for all but the most upset and poorly functioning family systems, the opportunity to form an ongoing therapeutic alliance with the members of a community mental health team, to be taken seriously, and to be informed and involved in treatment decisions might be a reasonable and effective aim.

The ideas developed in the research into family burden, relationships and interventions can be extended. After all, relatives are not the only carers, and many of the features of informal caring have

their counterparts in formal therapeutic relationships. Of particular interest are the important relationships developed in key-working. Kuipers and her colleagues (eg Kuipers & Moore, 1995) hypothesised that keyworkers were likely to share some of the attitudes seen in informal carers. Prior work had already suggested this possibility (Watts, 1988; Herzog, 1992), and detailed examination revealed it to be the case. Staff carers showed a range of relationships, with at least 40% being critical with at least one client. They also found the same behaviour difficult: social withdrawal, and embarrassing or disruptive behaviour (Moore *et al.*, 1992a). A hostel characterised by staff who were rated high on EE had a more rapid throughput of clients than a hostel with low EE staff (Ball *et al.*, 1992). Staff in direct interaction with clients showed more (benign) criticism and were less supportive if they had been rated as high on EE (Moore *et al.*, 1992b). Similar findings were reported in relation to keyworkers in community mental health teams (Oliver & Kuipers, 1996). Staff in low EE relationships were better able to tolerate the slow pace of change, to appreciate the clients' perspective, and to be positive about at least one aspect of the client even if they had very difficult behaviour. High EE relationships with clients were unrelated to satisfaction at work, which appeared to be mediated by other factors. Others have produced similar findings, for instance that patients in hostels with critical staff rate themselves as having poorer quality of life (Snyder *et al.*, 1994).

Thus there is clear evidence that staff who work with this client group may also find it difficult, and that promoting and sustaining positive relationships for those with psychosis, might well be an important objective of successful community care (Willems and Leff, 1997). This area has been neglected in favour of setting up systems that deliver care to 'hard to engage' clients. It seems likely that concentrating more on the quality of relationship developed by staff in these circumstances may be another important and under-recognised aspect of improving outcomes. The evidence so far suggests that assertive outreach does not necessarily improve outcome, and it seems likely that the quality of relationship between key worker and client is the most crucial feature.

We started this editorial with a questioning title. So who does need family intervention? The evidence that we have reviewed does not give a simple answer. It certainly gives no grounds for saying that treatment should be withheld from particular carers on the basis of their characteristics (for instance be-

cause they come within the low EE category). We can, however, be clear about the benefits of working with individual families rather than in group formats. Apart from that, the research gives no guidance concerning the scheduling and duration of treatment. In normal clinical situations, considerations of resource apply, and on these grounds it would seem reasonable to focus on families with the greatest appearance of being burdened by their circumstances. Nevertheless, less burdened families require assessment at some level, but will probably manage with shorter and less intensive interventions. Where families are in considerable and persistent difficulty, booster sessions after the end of the more intensive part of treatment appear to extend the effect of intervention on patient outcomes, and are particularly indicated when there is some upheaval in family circumstances. Finally, the parallels between the attitudes of formal and informal carers suggest that the effectiveness of clinical keyworkers would be enhanced by educational approaches following principles similar to those of family intervention.

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