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Article · November 2009

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# Safety, Feasibility and Family Experiences of Preventive Interventions for Children and Families with Parental Depression

**Key words:** family; parental depression; preventive intervention; implementation; user experiences

## Introduction

Depression in parents occurs frequently, and children with depressed parents have an elevated risk for psychiatric disorders (Beardslee *et al.*, 1998; Hammen & Brennan, 2003; Weissmann *et al.*, 2006). As the number of successful prevention trials has increased in the last 15 years, there has been increasing emphasis on how effectively to implement

and disseminate interventions widely (Albee & Gulotta, 1997; Evans *et al.*, 2005).

For many situations of risk including parental depression the number of families affected is so large that broad-scale public health approaches are needed rather than lengthy interventions by specialists (Hosman *et al.*, 2004). A series of expert panels have called specifically for development of programmes for depressed parents that can be widely implemented (Hosman *et al.*, 2004; Mrazek & Hosman, 2003; National Research Council & Institute of Medicine, 2009). Although the need for public health

## A B S T R A C T

*We report on the safety and feasibility and family members' experiences of two public health interventions for families with depressed parents. Depressed patients (N = 119) with children were randomised into either a one- or two-session discussion conducted by a clinician with parents, or a family intervention involving the whole family. Family members' experiences were assessed by questionnaires. Clinicians provided information on intervention fidelity. The interventions proved safe and feasible, and were delivered with fidelity. Parents and*

*children reported positive working relationships, increases in family understanding and decrease of worry. Children reported that they would recommend the intervention to others. Parents reported enhanced self-understanding, parenting and future orientation. While both interventions were received positively, parental perceptions of the family intervention were more positive. Child-centred public health interventions can be trained and implemented in adult mental health settings. Such approaches are valued by parents and children.*

prevention programmes targeting families with parental depression has been recognised, to date no information is available on how to integrate an evidence-based prevention programme that employs a systems-wide approach in a national health care system. This report describes one phase of the development and implementation of a country-wide programme for children of parents with depression and related adversities, directed by the senior author. This national effort focused first on developing programmes for children of depressed parents and gradually expanded to include families with parents who have a variety of mental and other health conditions.

Depression in families is an important focus for prevention because depression in caregivers has a negative effect on all family members (Beardslee *et al*, 1998; Hammen & Brennan, 2003; Weissmann *et al*, 2006; Solantaus-Simula *et al*, 2002). There is also evidence of the value of psychoeducational approaches with families facing mental illness in a variety of conditions (Institute of Medicine, 1994; Beardslee *et al*, 2003). Clinically, children of parents receiving psychiatric services are a natural target for preventive intervention. Despite the high risk to these children, it has not been customary in adult psychiatric services to offer support or care for a patient's children (Beardslee, 1998; Leijala *et al*, 2001). For these reasons, the Effective Child & Family Programme (EC&FP) was begun in Finland by Dr Solantaus in 2001 to develop methods and infrastructure for mental health services to meet the needs of patients' families and children throughout the country (Solantaus & Toikka, 2006; Toikka & Solantaus, 2006; Solantaus, 2005). This initiative was also mandated by law. The *Child Welfare Act 683/1983* in Finland provides that mental health services for adults address patients' children's needs for support and care. The present study is part of this programme that will eventually be implemented country-wide and involve thousands of clinicians and patients.

The Family Talk Intervention (FTI), developed by Beardslee and associates, was selected to be implemented in Finland because it has been shown to be effective and leads to sustained gains in families (Solantaus & Beardslee, 1996; Beardslee *et al*, 2003, 2008). It has also been adapted for use in other settings, including single-parent African-American families (Podorefsky *et al*, 2001) and Latino families (D'Angelo *et al*, 2009). In addition, a brief parent intervention, the Let's Talk about Children Discussion-One (LT-1), was developed by Dr Solantaus and designed to meet the minimum requirements of the *Child Welfare Act* (Solantaus & Toikka, 2006). The FTI is designed to be conducted when either the clinician or the family believes a more extensive intervention is needed.

The decision by the EC&FP to bring child mental health promotion and disorder prevention to organisations that treat adults represents a paradigm change from the traditional treatment and individual-centred approaches employed in mental health services for adults. A set of training structures and supports was put into place (Toikka & Solantaus, 2006).

There are many potential challenges associated with the implementation of the programme within adult psychiatric services. Many mental health professionals in Finland have little or no systematic training in child mental health or in interviewing children. Patients who are parents may find talking about parenting and children threatening, both because of the effects of depression on parenting (Solantaus-Simula *et al*, 2002; Cummings & Davies, 1994; Goodman & Gotlib, 2002; Kaslow *et al*, 1994; Leinonen *et al*, 2003; Solantaus-Simula *et al*, 2002) and because patients often fear that their children will be taken away from them. Children who are not accustomed to talking about their parents' mental health problems (Solantaus & Beardslee, 1996) might find participation difficult in the Family Talk Intervention. Although this had been examined in programmes in the United States, it was important to listen to and obtain families' reactions in Finland.

In order to implement this programme successfully, clinicians who treat parents have to be able to carry out respectful and sensitive discussions with parents about children and parenting, and with children about their parents' and family's problems. If family experiences are negative, families are likely to shy away from preventive efforts and implementation is likely to be ineffective. Assessing how working relationships develop and whether parents were able to talk about their concerns was therefore essential, as was including the children's views on participation in the Family Talk Intervention.

Implementation also fails if the clinicians' experiences are negative. Our earlier study (Toikka & Solantaus, 2006) documented clinicians' satisfaction with the interventions, 80–90% reporting increased work motivation and joy. As part of the EC&FP strategy for eventual wide-scale implementation, clinicians who were treating adults for depression also offered and delivered the prevention services. Rendering this preventive service was part of the regular clinical work of the treating clinician and was covered under the National Health Service.

Special care needs to be directed to ensuring the safety of preventive methods (Hosman *et al*, 2004; Institute of Medicine, 1994). Depression in families often creates distance and misunderstandings between family members, interrupts continuity of life and affects future perspectives. Parents

might feel helpless and hopeless and worried about their children and the family situation (Hammen & Brennan, 2003; Solantaus-Simula *et al.*, 2002a, 2002b; Solantaus & Beardslee, 1996). As depressed patients are prone to experience excessive worries and guilt (Kaslow *et al.*, 1994), it was important to explore whether the methods employed increased the patients' and family members' burdens or caused major harm, and to make sure that the methods did not increase stigma in the family.

Equally important was the assessment of family members' experiences of immediate benefits from the interventions. As Rogers has emphasised, the perception of advantage may be more important than objective advantage for diffusion of new methods (Rogers, 2002). This might be especially relevant for preventive interventions, which, in contrast to treatment interventions, are not based on identified clinical needs.

These preventive intervention approaches focus on increasing mutual understanding in the family, parents' self-understanding and good parenting, as well as opening future perspectives for the family (Beardslee *et al.*, 1998; Beardslee *et al.*, 2008) so it was important to assess whether family members perceived immediate relief from our interventions in any of these areas.

The aim of this study is to establish the safety and feasibility of the LT-1 and the FTI interventions, and to describe family members' experiences of benefits. We examined the following hypotheses.

- It would prove feasible and effective to train clinicians who worked in an adult psychiatric setting in the use of intervention strategies on child mental health and parenting.
- Both interventions would prove to be safe and feasible to deliver.
- Families would report satisfaction and benefits from both interventions.
- Families would report more benefits for the PFI than for basic public health prevention because of both prior studies and its greater length and responsiveness to the needs of the families.

## Method

### *Study design*

This is a family clustered, randomised, controlled intervention trial design (RCT). The approval of the appropriate ethical committee, the Hospital District of Helsinki and Uusimaa, was obtained.

## *Procedure*

The clinicians treating the patients provided verbal and written information about the study and the rights of all family members to refuse and/or withdraw participation at any point in the study. Informed consent forms were obtained from parents and children over 15 years of age, in accordance with Finnish regulations. The parents were instructed also to inform younger children of their rights to refuse and/or withdraw from the study. The families were randomised into two intervention groups using computer-based block randomisation with block sizes of six to eight.

The interventions were delivered by clinicians from 16 health care units treating adult patients. The clinicians filled in logbooks for each intervention session reporting the dates and, in the FTI, the session type and content. Baseline questionnaires were sent to families one to three weeks before the interventions, and feedback questionnaires were sent within one to two weeks after the intervention.

## *Participants*

Three of the four large organisations treating adults with mental disorder in the capital area decided to have at least one of their units join the programme. Five other health organisations from different parts of the country volunteered spontaneously. Sixteen health care units in the eight regional organisations in the capital area, and smaller cities and rural areas in different parts of the country, participated in the study.

Patients and their families were recruited by clinicians working in the participating units. Dual and single parent families were invited to participate if at least one parent was currently being treated for any of the various ICD-10 categories of mood disorder as the primary diagnosis in their medical records, and had at least one child between the ages of eight and 16 not in psychiatric treatment. Comorbidity with both psychiatric and medical illness was allowed, excluding schizophrenia and a life-threatening stage of a somatic disease of the parent or child. Exclusion criteria included ongoing family therapy, custody disputes and immediate need for involvement of child protection services.

The clinicians recorded contact with eligible patients and their reasons for refusal. During the first 15 months 175 families were eligible and 75 (42.8%) consented. After this, however, there was considerable variability in the rates of reporting between clinicians. On the basis of data from the first 15 months, we estimated that 40–45% of all eligible families had consented to the study. The refusals among the first 175 patients were attributable to the patients themselves (35%) (for example, 'I am not interested' or 'I am feeling

better and want to put it behind me'), other family members (39%), family situation (7%), parents not wanting to talk about mental illness with children (7%), randomisation (2%) and unknown reasons (10%).

The sample consisted of 119 single and dual parent families of whom 60 were randomised to FTI and 59 to LT-1. Eight families left the study before baseline assessment or the intervention, and two additional families withdrew from the study during the intervention. The feedback questionnaire was returned by 90 families (45 FTI and 45 LT). Altogether the response rate to the questionnaires was 83% in families who completed the intervention and 76% in the original sample.

Forty-three only or eldest children (21 girls and 22 boys) participating in PFI filled in the feedback forms. The mean age of the children was 11.9 (range 8–17, *sd* = 2.6). Children did not participate in the LT-1 and so were not approached.

### **The interventions**

Both interventions aim to support parents to be as effective parents as possible despite mood disorder and to support children's healthy responses to parental moods (Solantaus-Simula *et al*, 2002; Solantaus & Beardslee, 1996; Beardslee *et al*, 2003, 2008). The methods share five aims:

- to support positive self-understanding in the parents
- to support mutual understanding in the family
- to support positive parenting
- to support future orientation in the family
- to identify children who need additional services.

In both interventions, the parents were given a self-help guide called *How Can I Help My Children: A Guide Book for Parents with Mental Health Problems* (Solantaus & Ringbom, 2002) and a standard information booklet about depression written for depressed patients. In both interventions, children's needs for additional services, such as psychiatric or social services, were assessed and the families were helped to access them.

The FTI proceeds in a stepwise fashion through six sessions and, with the clinician's help, culminates in a Family Meeting (Beardslee *et al*, 2008). The intervention begins with two Parent Sessions covering family history and psychoeducation about depression and resilience, and continues with a Child Session. In the Planning Session with the clinician, parents plan how to discuss depression and family strategies for dealing with it with their children. In the Family Session, the clinician helps the parents

conduct a meeting with their children. In the Follow-Up Session with parents, the intervention is reviewed, and plans for the future are developed. In Finland, training for the FTI lasted about two years, including 17 full days a year and supervision of the trainees' cases (Toikka & Solantaus, 2006).

In the Let's Talk about Children intervention, the clinician conducts a child-focused discussion with the patient and possibly his/her spouse to provide information to parents about how they can support their children. The LT-1 takes one or two sessions, the minimum discussion time being 15 minutes. Children are not seen directly in this intervention approach. Training for the LT-1 was three hours.

### **Measures**

#### **Demography and mental health**

Details of the demographic features and mental health of participants are presented in **Table 1**, opposite. Parents' diagnoses were based on clinical records and reported by clinicians. The Beck Depression Inventory (BDI) and the Children's Depression Inventory (CDI) are 21-item self-report scales for measuring depressiveness in adults and children respectively (Beck *et al*, 1961; Kovacs, 1985).

#### **Safety**

Parents and children were asked explicitly whether the intervention had caused harm and, if yes, how. Subjects could also indicate negative responses to questions about their experiences of the interventions (**Table 2**, page 20).

#### **Feasibility and fidelity**

The FTI requires six sessions, at least one of which should be a family session (Beardslee *et al*, 2008). The LT-1 is considered to be run with fidelity if children are discussed for at least 15 minutes in one session with the parents. Clinicians completed logbooks for each intervention session, reporting the dates and, in the FTI, the session type and whether the main topics for each session were discussed. The parents were also asked to make recommendations about the best timing for such an intervention (acute stage, early stage of treatment, later during treatment, recovery stage).

#### **Families' experiences of the interventions**

The parents were asked to describe their relationship with the clinician using a five-point scale (very good ... very poor), whether it had been possible for them to discuss the things they had wanted to discuss (yes all, yes most, some, not much) and whether they had experienced the intervention as useful (four-point scale). The parents also reported

**TABLE 1** Mean Baseline Characteristics of the Two Intervention Groups as Reported by Mothers (N = 105) and Only or Eldest Children (CDI, N = 98)

|   | LT-1<br>% (N) | FTI<br>% (N) | p value |
|---|---------------|--------------|---------|
| <b>Diagnosis (mothers)</b>              |               |              |         |
| bipolar disorder                        | 9.1 (5)       | 7.4 (4)      | 0.750   |
| depression                              | 67.3(37)      | 66.7(36)     | 0.786   |
| no diagnosis                            | 23.6(13)      | 25.9(14)     | 0.478   |
| <b>Diagnosis (fathers)</b>              |               |              |         |
| bipolar diagnoses                       | 8.1 (3)       | 8.1 (3)      | 0.650   |
| depression                              | 38.9(14)      | 35.1(13)     | 0.464   |
| no diagnosis                            | 52.8(19)      | 56.8(21)     | 0.458   |
| <b>BDI total score</b>                  |               |              |         |
|   |               |              | 0.785   |
| 0–13                                    | 48.9(23)      | 45.0(18)     |         |
| 14–24                                   | 27.7(13)      | 25.0(10)     |         |
| 25 and more                             | 23.4(11)      | 30.0(12)     |         |
| <b>CDI total score (children)</b>       |               |              |         |
|   |               |              | 0.616   |
| 0–12                                    | 88.6(39)      | 85.2(46)     |         |
| 13 and more                             | 11.4 (5)      | 14.8 (8)     |         |
| <b>Labour market situation</b>          |               |              |         |
|   |               |              | 0.251   |
| employed                                | 59.6(30)      | 53.8(28)     |         |
| unemployed/laid-off                     | 13.5 (7)      | 15.4 (8)     |         |
| retired                                 | 3.8 (2)       | 11.5 (6)     |         |
| other                                   |               |              |         |
| <b>Professional training</b>            |               |              |         |
|   |               |              | 0.032*  |
| no professional training                | 5.8 (3)       | 17.0 (9)     |         |
| vocational course                       | 9.6 (5)       | 24.5(13)     |         |
| vocational training                     | 13.5 (7)      | 15.1 (8)     |         |
| polytechnic/vocational institute        | 50.0(26)      | 26.4(14)     |         |
| university                              | 19.2(10)      | 11.3 (6)     |         |
| something else                          | 1.9 (1)       | 5.7 (3)      |         |
| <b>Family size, Adults in family:</b>   |               |              |         |
|   |               |              | 0.733   |
| 1                                       | 32.7(17)      | 35.8(19)     |         |
| 2                                       | 67.3(35)      | 64.2(34)     |         |
| <b>Family size, Children in family:</b> |               |              |         |
|   |               |              | 0.153   |
| 1                                       | 42.9(21)      | 24.5(12)     |         |
| 2                                       | 30.6(15)      | 28.6(14)     |         |
| 3                                       | 12.2 (6)      | 22.4 (11)    |         |
| 4 or more                               | 14.3 (7)      | 24.5(12)     |         |

whether they had continued to discuss children and family in their treatment sessions after the intervention (yes/no).

The children in the FTI were asked to report on talking to the clinician in the individual and the family meetings, using a five-point scale (very easy... very difficult) and whether the clinician understood them and they were able to say things they wanted. The children were also asked whether they would recommend the intervention to other children (yes/no).

### Perceived intervention benefits

Parents' reported sense of self-understanding, mutual family understanding, parenting, future orientation, well-being, treatment motivation and child-related worries were studied

(Table 2). The format was 'Do you think that the intervention had an impact on [the item]?', followed by choices ranging from negative to positive change on a five-point scale.

Children participating in the FTI were asked (Table 3, below) whether the intervention had made it easier to talk with the parents and to ask about parental problems, had enhanced their parents' understanding of them, their understanding of the parents, and made them feel better (yes/no).

### Statistical methods

The responses describing change were collapsed into three classes. The two positive change responses were combined ('much better' or 'somewhat better') as were those describing diminishment of a negative feeling ('decreased a little' or 'decreased a lot'). Neutral ratings were 'no change', 'not well but not poorly' or 'not useful but not useless', while negative combined the two lowest points on most scales ('somewhat negative' or 'very negative').

Baseline characteristics (Table 1) were analysed for both mothers and fathers, but only maternal data is presented because many single-mother families participated. The CDI was reported by the children and parental diagnoses, according to clinical records, by the clinicians. For the analysis of the responses to intervention, mothers were principal informants but if their responses were missing fathers' responses were included so that only one parental response per family was included.

To compare the perceived intervention effectiveness between groups,  $\chi^2$  tests were used.

## Results

### Sample characteristics

Table 1 shows the socio-demographic and clinical data of the two intervention groups as reported by mothers, children

**TABLE 3** Children's (N = 43) Responses Concerning the Impact of the FTI on Parent-Child Understanding and Communication in the Family

|  | Yes<br>% (N) | No<br>% (N) |
|--|--------------|-------------|
| Did the intervention:                              |              |             |
| Make it easier to talk with mother?                | 60.5 (23)    | 39.4 (15)   |
| Make it easier to talk with father?                | 48.5 (16)    | 51.2 (17)   |
| Make it easier to ask about the parents' problems? | 59.0 (23)    | 41.0 (16)   |
| Help you to understand the mother better?          | 33.3 (13)    | 66.7 (26)   |
| Help you to understand the father better?          | 28.6 (8)     | 71.4 (20)   |
| Help the mother to understand you better?          | 66.7 (24)    | 33.3 (12)   |
| Help the the father to understand you better?      | 59.3 (16)    | 40.7 (11)   |

**TABLE 2** *Perceived Intervention Benefits among Parents*

|                                   | Intervention type<br>(N) | Negative change |     | No change |     | Positive change |     | $\chi^2$ | df | p value            |
|-----------------------------------|--------------------------|-----------------|-----|-----------|-----|-----------------|-----|----------|----|--------------------|
|                                   |                          | %               | (N) | %         | (N) | %               | (N) |          |    |                    |
| <b>Self-understanding</b>         |                          |                 |     |           |     |                 |     |          |    |                    |
| Self-acceptance                   | LT-1 (44)                | -               |     | 54.5 (24) |     | 45.5 (20)       |     | 8.49     | 1  | 0.004*             |
|                                   | FTI (42)                 | -               |     | 23.8 (10) |     | 76.2 (32)       |     |          |    |                    |
| Shame                             | LT-1 (31)                | 9.7             | (3) | 74.2 (23) |     | 16.1 (5)        |     | 13.89    | 2  | 0.001 <sup>‡</sup> |
|                                   | FTI (35)                 | 8.6             | (3) | 31.4 (11) |     | 60.0 (21)       |     |          |    |                    |
| Prejudice                         | LT-1 (26)                | -               |     | 65.4 (17) |     | 34.6 (9)        |     | 3.40     | 1  | 0.07*              |
|                                   | FTI (36)                 | -               |     | 41.7 (15) |     | 58.3 (21)       |     |          |    |                    |
| Guilt                             | LT-1 (42)                | 2.4             | (1) | 33.3 (14) |     | 64.3 (27)       |     | 1.85     | 2  | 0.44 <sup>‡</sup>  |
|                                   | FTI (38)                 | 5.3             | (2) | 21.1 (8)  |     | 73.7 (28)       |     |          |    |                    |
| <b>Family understanding</b>       |                          |                 |     |           |     |                 |     |          |    |                    |
| Understanding the spouse          | LT-1 (29)                | -               |     | 55.2 (16) |     | 44.8 (13)       |     | 1.73     | 1  | 0.19*              |
|                                   | FTI (29)                 | -               |     | 37.9 (11) |     | 62.1 (18)       |     |          |    |                    |
| Understanding children            | LT-1 (44)                | -               |     | 47.7 (21) |     | 52.3 (23)       |     | 7.91     | 1  | 0.005*             |
|                                   | FTI (42)                 | -               |     | 19.0 (8)  |     | 81.0 (34)       |     |          |    |                    |
| Couple relationship               | LT-1 (30)                | -               |     | 80.0 (24) |     | 20.0 (6)        |     | 9.40     | 2  | 0.004 <sup>‡</sup> |
|                                   | FTI (27)                 | 3.7             | (1) | 40.7 (11) |     | 55.6 (15)       |     |          |    |                    |
| Relationship with children        | LT-1 (44)                | -               |     | 65.9 (29) |     | 34.1 (15)       |     | 14.73    | 1  | <0.001*            |
|                                   | FTI (41)                 | -               |     | 24.4 (10) |     | 75.6 (31)       |     |          |    |                    |
| Relationship between children     | LT-1 (25)                | -               |     | 92.0 (23) |     | 8.0 (2)         |     | 8.15     | 1  | 0.004*             |
|                                   | FTI (36)                 | -               |     | 61.1 (22) |     | 38.9 (14)       |     |          |    |                    |
| <b>Parenting</b>                  |                          |                 |     |           |     |                 |     |          |    |                    |
| Confidence in parenting           | LT-1 (44)                | -               |     | 50.0 (22) |     | 50.0 (22)       |     | 4.13     | 1  | 0.04*              |
|                                   | FTI (42)                 | -               |     | 28.6 (12) |     | 71.4 (30)       |     |          |    |                    |
| Sense of adequacy as a parent     | LT-1 (44)                | 2.3             | (1) | 77.3 (34) |     | 20.5 (9)        |     | 12.0     | 2  | 0.001 <sup>‡</sup> |
|                                   | FTI (42)                 | 7.1             | (3) | 40.5 (17) |     | 52.4 (22)       |     |          |    |                    |
| Ideas for parenting               | LT-1 (43)                | N/A             |     | 27.9 (12) |     | 72.1 (31)       |     | 6.30     | 1  | 0.012*             |
|                                   | FTI (42)                 | N/A             |     | 7.1 (3)   |     | 92.9 (39)       |     |          |    |                    |
| <b>Future orientation</b>         |                          |                 |     |           |     |                 |     |          |    |                    |
| Confidence in one's own future    | LT-1 (44)                | -               |     | 54.5 (24) |     | 45.5 (20)       |     | 8.49     | 1  | 0.004*             |
|                                   | FTI (42)                 | -               |     | 23.8 (10) |     | 76.2 (32)       |     |          |    |                    |
| Confidence in children's future   | LT-1 (44)                | -               |     | 27.3 (12) |     | 72.7 (32)       |     | 6.05     | 1  | 0.014*             |
|                                   | FTI (42)                 | -               |     | 7.1 (3)   |     | 92.9 (39)       |     |          |    |                    |
| Confidence in family future       | LT-1 (44)                | -               |     | 43.2 (19) |     | 56.8 (25)       |     | 8.70     | 1  | 0.003*             |
|                                   | FTI (42)                 | -               |     | 14.3 (6)  |     | 85.7 (36)       |     |          |    |                    |
| <b>Other</b>                      |                          |                 |     |           |     |                 |     |          |    |                    |
| One's own well-being              | LT-1 (44)                | -               |     | 56.8 (25) |     | 43.2 (19)       |     | 12.04    | 2  | 0.001 <sup>‡</sup> |
|                                   | FTI (42)                 | 4.8             | (2) | 21.4 (9)  |     | 73.8 (31)       |     |          |    |                    |
| Importance of one's own treatment | LT-1 (28)                | -               |     | 60.7 (17) |     | 39.3 (11)       |     | 3.45     | 2  | 0.15 <sup>‡</sup>  |
|                                   | FTI (29)                 | 3.4             | (1) | 37.9 (11) |     | 58.6 (17)       |     |          |    |                    |
| Worries about children            | LT-1 (42)                | -               |     | 33.3 (14) |     | 66.7 (28)       |     | 11.1     | 1  | 0.001*             |
|                                   | FTI (42)                 | -               |     | 4.8 (2)   |     | 95.2 (40)       |     |          |    |                    |

\*  $\chi^2$ -test, ‡ Fisher's Exact test.

(CDI) and clinicians (parental diagnoses). The groups were otherwise similar but maternal education was higher in the LT-1 ( $p = 0.032$ ). There were no group differences for fathers on any measure.

**Feasibility**

Both interventions were conducted with fidelity by the clinicians according to the clinician logbook records. On average, the FTI included 6.1 sessions (range 6–8), with a

Family Session in all cases. More than 90% of the given topics were discussed in the respective FTI sessions. In the LT-1 group, 76% families had one meeting, all exceeding the minimum of 15 minutes. The parents recommended that the FTI/LT-1 be carried out at the acute stage in 10%/15%, early stage of treatment in 62%/35%, later during the treatment 15%/35% and at the recovery stage 13%/8%. It was recommended that the LT-1 be carried out at an earlier stage than the FTI, on a nearly significantly level ( $p = 0.086$ ).

## ***Experiences of intervention sessions***

According to parental reports, the working relationship was good or very good in 71% of the LT-1 ratings and 86% of the FTI ratings, neutral in 25%/14%, quite poor in 5%/0% and very poor in none, with no statistical differences between groups. Most parents reported that they had been able to discuss what they had wanted in both interventions. Four LT-1 (10%) and three FTI (7%) parents reported that they had been able to discuss only partly and one LT-1 parent (2%) hardly anything of what they had wanted to discuss. All FTI parents and 83% of LT-1 parents in treatment had continued to discuss family and children in their clinical sessions after the intervention.

Children's experiences of the Family Talk Intervention were also mainly positive. The children found the Child Sessions easy in 77%, not easy not difficult in 21%, and difficult in 2%. The Family Session was reportedly more difficult for them, the respective figures being 62%, 29% and 10%. Children reported that the clinician understood them very well in 64% and well in 36%, while no-one reported not being understood. Children were able to say everything or most things they wanted (95%). Most children would have recommended the intervention to other children (85%).

## ***Perceived intervention benefits***

### **Parents' responses**

Both interventions were rated as having beneficial effects on self-understanding, mutual understanding in the family, parenting and future perspectives (*Table 2*). In addition, parents reported an increase in their well-being and treatment motivation, and a decrease in worries about children. As expected, the FTI was rated significantly more positively than the LT-1 for most comparisons. The FTI was found useful more often than the LT-1 (93%/64%;  $p = 0.01$ ).

Nine children (23%) in the FTI and seven (16%) in the LT group were referred for further services, with no statistical difference between the groups. Family counselling was recommended significantly more often in the FTI group than in the LT group (25% vs 5% of families,  $p = 0.008$ ).

### **Children's responses**

Children's experiences of the FTI were also positive (*Table 3*). At least half of the children reported that the intervention had made it easier to talk with their parents and had helped their parents to understand them more, and the majority reported that the intervention had made them feel better. Half of the children (50.0%) reported a decrease, another

half (46%) reported no change and one child (4%) reported an increase in parent-related worries.

## ***Safety***

Overall, the vast majority of subjects ticked 'no' for the specific question on harm. Only two FTI parents and one child ticked 'yes'; one parent explained that her husband got upset and the other that his wife failed to understand the reasons and the origins of his mood disorder. The child said that she did not know what to say in the meeting. In addition, there were some negative responses on specified items (*Table 2*) but none of these parents reported harm in the specific question about harm. All parents who reported some negative response also reported positive effects on other items.

## ***Discussion***

Our main hypotheses were confirmed. This study represents an important step in the process of country-wide implementation of the interventions.

## ***Feasibility and safety***

Overall, both interventions were carried out with fidelity and were received positively by family members. The interventions introduced a new and sensitive area of discussion for parents, children and clinicians. Given the increasing awareness of the need to work with families and to listen to their concerns, it is important that both parents and children experience the sessions positively. They were able to talk about family issues in their own meetings, they felt understood by the clinician, and a large majority reported feeling better after the discussions. Family members' experiences were in agreement with clinicians' satisfaction with the methods (Toikka & Solantaus, 2006).

Parents gave advice on the timing of the interventions. About 60% of the LT-1 parents recommended the intervention at an early stage of treatment rather than at acute or later stages. The FTI parents were more equally divided between early and later stages of treatment. This is understandable, since having a family discussion with children present is more challenging for the ill parent than a discussion with the spouse and the clinician. It is, however, noteworthy that 10–20% of families recommended discussions about family and children at the acute stage, implying that the timing must be tailored to the needs of individual families.

A few parents reported harm or adverse outcomes on some items while they also reported benefits on others. The



negative experiences were very limited, and both interventions can be considered safe to be carried out in the Finnish health care system. The interventions do not increase a sense of stigma in parents, nor do they endanger parents' mental health. However, the limited number of adverse responses serve to emphasise that talking about a parent's mental illness and its consequences for family and children is a sensitive topic, and discussions have to be carried out with care.

It is important that preventive interventions also identify needs for treatment services. Our two interventions were equally effective in identifying children with needs for further services. The FTI was more effective in identifying needs for family counselling, which is understandable since it involves the whole family. One of the aims of the interventions is to make it possible to discuss children and family in the treatment relationship even beyond the interventions. This was accomplished, because all FTI and four in five LT-1 families reported later discussions.

### ***Perceived intervention benefits***

Family members reported considerable benefits from both interventions. The FTI was reported to be more beneficial in many aspects, which was similar to other research findings showing that longer and more interactive preventive interventions tend to be more effective (Solantaus-Simula *et al*, 2002). This is also true in previous trials of the FTI (Beardslee *et al*, 2008). The results confirm that the FTI, originated in the United States, suits Finnish family culture and so is a good choice for country-wide implementation.

The results also indicate that even a brief constructive discussion with parents about their children and psycho-education about resilience (LT-1) are felt by parents to have considerable benefits. Parenting was supported and future hope increased. Feelings of stigma – guilt, shame, prejudice – in parents were alleviated, and understanding between family members was fostered. A father said spontaneously that the LT-1 had saved his marriage. How can so short an intervention offer such benefits? One hypothesis is that, by showing a way to open discussion on a silenced problem and offering guidelines for parenting, the intervention mobilised parents' own strengths and capacities.

Over 70% of the FTI parents and over 40% of the LT-1 parents reported feeling better after the interventions, even though these were preventive interventions rather than treatment. Being able to share worries about and within the family and learning how to deal with problems might have given family members a sense of empowerment and family unity. Including parenting and attention to children in the psychiatric treatment plan may therefore be beneficial for

the patient as well as for the children.

It proved safe, feasible and beneficial to have the clinicians who were treating the parents deliver the prevention services. This will aid in widespread implementation, since it is an efficient system and enhances the clinician's therapeutic alliance with the patient. The fact that 16 health districts participated, with positive results, indicates that clinicians can be trained effectively in a variety of settings.

### ***Limitations***

There was a large initial refusal rate. Such refusal rates have also been found in other preventive intervention studies (National Research Council & Institute of Medicine, 2009; Gillham *et al*, 2000; Prinz *et al*, 2001). This might be at least partly because there was no clinical need for the interventions. In addition, in family approaches all family members have to consent to the study, which lowers the consent rate compared with interventions for individuals. There was also sample loss in the follow-up questionnaires. However, particularly noteworthy, given the increasing awareness of the need to involve families as partners in health care, is the strong family support for these interventions. The interventions are based on the principle of respect for the family, and aim to help the family accomplish a set of goals.

While more intensive assessment methods could have been used (direct interviews), our aim was to use straightforward assessment techniques that could also be used in the broader dissemination process. Similarly, use of the log-books was an extensive part of training and is an important aid in widespread implementation.

The possibility of response bias in parents' responses needs to be considered. However, the obtaining of their responses was a completely separate process from the intervention delivery, and the responses were not shared with treating clinicians. In addition, the recruitment of health care organisations was on a voluntary basis. It is likely that the participating units had more motivation to include the patients' children in their agenda than other units. In addition, children were asked to confirm or deny a positive impact of the intervention without a negative choice (**Table 3**). These factors might have induced a positive bias in our results.

### ***Clinical implications***

Our results indicate that parents in treatment for depression are relieved if they are offered an opportunity to discuss their children and to learn how to support them in spite of depression. Clinicians in psychiatric services for adults can

be trained to conduct discussions about parenting and children with sensitivity and to create an atmosphere of security and understanding for families.

## Conclusions

Despite its limitations, we believe this study is a step forward in prevention in psychiatry. It is the first study to demonstrate that child-centred preventive interventions can be carried out successfully in real-life conditions in psychiatric services for adults, and that they are valued and welcomed by parents and children. Most important, the study gives voice to psychiatric patients themselves and to their children, a population that deserves to be heard when services are developed.

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