Support by another mother and a child-life specialist decreased anxiety in mothers of children with chronic illnesses

Ireys HT, Chernoff R, DeVet KA, et al. *Maternal outcomes of a randomized controlled trial of a community-based support program for families of children with chronic illnesses*. *Arch Pediatr Adolesc Med* 2001 Jul;155:771–7.

QUESTION: In families of children with chronic illnesses, does a support intervention decrease maternal anxiety and depression?

Design

Randomised (allocation unconcealed*), blinded (data collectors)*, controlled trial with 1 year of follow up.

Setting

11 specialty clinics and 5 general paediatric clinics in Baltimore, Maryland, USA.

Patients

161 mothers of children who were 7 to 11 years of age; did not have mental retardation; and were diagnosed with diabetes, sickle cell anaemia, cystic fibrosis, or moderate-to-severe asthma (daily medication, wheezing 2 to 3 times weekly, and ≥ 1 hospital or emergency department visit in the previous 6 months). 86% of families were followed.

Intervention

Families were allocated to a support intervention called Family-to-Family Network (n=86) or to a control group (n=75). Each family in the support intervention group was assigned to a 2 person intervention team: an experienced network mother and a child-life specialist. The network mother visited the family (seven 60 to 90 min visits), telephoned the family biweekly, and participated in 3 special social events. Network mothers were trained to provide informational support, affirmational support (ie, enhancing confidence), and emotional support. The child-life specialist met and talked primarily with the child. Each mother in the control group received the telephone number of another experienced mother (who had not received training) to call if she wished.

Main outcome measures

Maternal anxiety (Psychiatric Symptom Index [PSI] anxiety subscale) and depression (Beck Depression Inventory).

Main results

Analysis was by intention to treat. Mothers in the intervention group had decreased anxiety scores (mean change from baseline for PSI anxiety score [from 18.9 to 16.8] 2.1, 95% CI -2.7 to 6.9), whereas mothers in the control group had increased scores (mean change from

baseline for PSI anxiety score [from 19.2 to 21.5] 2.3, CI -2.8 to 7.4) (p for main effect = 0.03). Groups did not differ for depression scores. Multivariate analysis showed that the intervention and maternal health were predictors of post-test anxiety scores after controlling for baseline anxiety; the effects of the intervention were greater for mothers with a high baseline anxiety score (p < 0.001) and for mothers who were in poor health (p < 0.01).

Conclusion

In mothers of children with chronic illnesses, support given by another experienced mother and a child-life specialist reduced anxiety.

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COMMENTARY

Clinicians who have cared for children with a chronic illness will need little convincing that the support of others who have experience with the problem can make a big difference in how families cope. Why, then, should we seek evidence for what seems both good sense and simple humanity? Firstly, we do not know how much (or what dose) of support is most efficacious for particular outcomes. Secondly, we do not know the cost effectiveness of schemes to provide support.

The trial by Ireys *et al* provides some of the answers. Children with 1 of 4 important chronic conditions were included, and the intervention was practical — continued support from a mother who had a child with similar problems and had received additional training. The findings convincingly show that maternal anxiety was reduced more in the intervention group than in the control group.

How should clinicians respond? Individually, we should try to ensure that families of children with chronic illnesses are offered — and encouraged to draw on — support and advice from someone who understands their situation and is knowledgeable about the variety of services available. To accomplish this, we may need systems to identify and appraise the suitability of persons or groups who could offer support.

But should we encourage provider organisations to set up and fund support schemes? The evidence for this is less clear. The range of outcomes investigated in the study was limited; no information about the effect on the health of children or use of health services was presented. The intervention is reported to have had no effect on symptoms of maternal depression, although no data were reported. Furthermore, the costs of developing and running the scheme are not described. The training and payment of the experienced mothers who provided support are probably relatively small in relation to other healthcare costs, but it would be unwise to accept this assumption.

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