A modified video-feedback intervention for carers of foster children aged 6 years and under with reactive attachment disorder: a feasibility study and pilot RCT

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Scientific summary

Video-feedback intervention for carers of foster children

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Scientific summary

Background

There were 68,840 looked-after children in the UK as of 31 March 2014, of whom 51,340 were cared for in foster placements. These numbers gradually increased in the preceding few years. Looked-after children are at significantly greater risk of experiencing childhood mental, emotional and behavioural problems, including suboptimal attachment patterns. Despite this, access to children's mental health services and therapeutic interventions is highly variable. Furthermore, many interventions to treat emotional or behavioural difficulties, or to promote positive well-being and attachment have not been tested rigorously among looked-after children. There is thus an urgent need to develop clinically effective and cost-effective interventions, and to make them available for this large group of highly vulnerable children. The Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline is an extensively evaluated and generally effective treatment for promoting sensitive parenting and increasing rates of secure attachment. Therefore, it is a promising approach for addressing the emotional and mental health needs of young children in foster care. The original treatment programme has been tested with many different populations, including children at increased risk of behavioural problems. In addition, the treatment manual has already been adapted for use in foster care in the Netherlands, but has not been adapted to the UK foster care context until now.

Objectives

The objectives were to:

1. adapt an existing evidence-based intervention, the Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline, to meet the specific needs of children aged ≤ 6 years with difficulties in the domain of attachment falling under the rubric of the term 'reactive attachment disorder' in foster care in the UK, using intensive input from a collaborative team of expert clinicians and foster carers
2. conduct and evaluate a feasibility case series to optimise the treatment manual and assess clinician and foster carers' views regarding the acceptability of the intervention
3. conduct a scoping study of the practical and scientific hurdles that would need to be overcome in preparation for a pilot trial
4. conduct a pilot randomised controlled trial of the modified intervention to determine the feasibility of a future full-scale trial of clinical effectiveness and cost-effectiveness, including recruitment rates, the characteristics of treatment as usual for these children, treatment dropout rates, completion rates of study measures, development and testing of a measure of service use, and constrained estimates of measure variances.

Methods

Design

The study had several interlinked phases. We adapted the Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline for use in a UK foster care setting with children presenting with symptoms of reactive attachment disorder (phase 1). We trained a range of professionals working with children in foster care (primarily child and adolescent mental health services professionals) to deliver the modified intervention to a small case series of foster parents and children (phase 2a). We also conducted a scoping study involving key stakeholders from local authorities and mental health services

to optimise the study protocol; and interviews focused on strategies for engaging local authorities and social services, recruitment methods, the utility and acceptability of a screening system for attachment problems and the suitability and acceptability of the intervention from the point of view of practitioners and managers in mental health services and social care (phase 2b). Finally, we conducted a pilot randomised controlled trial of the proposed intervention, assessing key feasibility parameters and monitoring usual care (phase 3). As part of phase 3, we also conducted qualitative interviews with the foster carers who received the new intervention to further assess its acceptability.

Health technology

The health technology was the Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline modified for children with reactive attachment disorder symptoms in foster care in the UK. The original intervention is an extensively evaluated and effective treatment approach recommended by the National Institute for Health and Care Excellence for treating attachment problems among looked-after children. It has been shown to reliably enhance the sensitive responsiveness of parenting and reduce attachment difficulties among children in care or on the edge of care. The programme was previously adapted for use with children in the Dutch foster care system. Based on both the original and the Dutch foster care manuals, we adapted this well-established attachment-focused intervention to suit the needs of young children placed in foster care in the UK who were presenting with reactive attachment disorder symptoms. The programme aims to (1) improve the sensitive responding of foster carers, (2) improve the consistent responding of foster carers to challenging child behaviour, (3) improve foster carer–child relationships and (4) improve reactive attachment symptoms, and the child's emotional and behavioural outcomes. The intervention was compared with usual care. The modified intervention was delivered in-home by trained mental health practitioners in the NHS and other appropriately qualified professionals. The practitioner allocated to each family films the child and carer interacting at home and provides feedback in the following session. The six sessions are delivered over a period of 4–6 months.

Setting

This study was set in outpatient NHS mental health services across eight trusts and nine partner social services departments. Sites included urban (Greater London, Peterborough) and rural/semirural (Yorkshire/Hertfordshire) areas.

Target population

The target population was foster carers with fostered children aged ≤ 6 years with difficulties in the area captured by the diagnostic term 'reactive attachment disorder'.

Inclusion criteria

Parental figure

- Foster carer(s).
- Aged ≥ 18 years.
- Proficient in English.
- Capacity to consent.

Child

- Living with foster carer(s) in a placement planned to last at least 4 months.
- Aged between 11 months and 6 years.
- Presence of symptoms or difficulties in the area of reactive attachment disorder [as defined by the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th edn. Arlington, VA: American Psychiatric Association; 2013)] as assessed using the Disturbances of Attachment Interview, a validated research diagnostic interview. Note that, owing to recruitment difficulties, this diagnostic criterion was removed during the last period of the pilot trial to increase throughput of cases.

Exclusion criteria

The exclusion criteria were as follows:

- parental figure – (1) insufficient language or cognitive abilities to participate fully in trial procedures or (2) already engaged in a similar parenting intervention
- child – severe developmental disability.

Measurement of costs

The Child and Adolescent Service Use Schedule was used to measure the use of all health, social care and education-based services and to support the description of usual care.

Measurement of outcomes

Screening

Screening used reactive attachment disorder symptom scores from two questionnaires: the Attachment Screening Assessment and the Development and Well-Being Assessment.

Primary outcome

The primary outcome was reactive attachment disorder symptom scores in the Disturbances of Attachment Interview.

Secondary outcomes

Secondary outcomes were the quality of the child's attachment pattern to caregiver, the child's general psychopathology, and emotional/behavioural problems; parental sensitivity, self-efficacy and stress; and goal-based outcomes.

Analysis

Feasibility parameters (means, proportions and variance estimates) were assessed using 95% confidence intervals. Qualitative methods and process records were used to address questions regarding stakeholder and foster carer perceptions of treatment acceptability and delivery.

Service user involvement

Input to the study design, treatment development and evaluation protocol from foster carers was substantial throughout the project. Specifically, foster carers were engaged in reviewing and shaping the modified clinical intervention, providing feedback on study measures, and in planning recruitment, participant engagement and study dissemination.

Ethics review

This study was reviewed by the London–Harrow Research Ethics Committee (reference number 17/LO/0987) and given a favourable opinion.

Governance

A Trial Steering Committee and a Data Monitoring and Ethics Committee were established, which included senior researchers and practitioners with experience in treatment development studies and trials, patient and public involvement representatives and a statistician. Each committee met approximately every 6 months during the project.

Results

Timetable

The project ran for 32 months. In phase 1 (4 months), we adapted and produced intervention manuals prepared study materials and set up sites. In phase 2 (6 months), we trained therapists, undertook

initial feasibility testing and further examined key implementation parameters. In phase 3 (22 months), we completed a pilot randomised controlled trial and qualitative interviews with the recipients of the intervention.

Research findings

The Manual Development Working Group implemented a series of minor changes to the intervention protocol that focused on improving the suitability of the video-feedback intervention for the UK foster care context, and endorsed the content and approach of the intervention (phase 1). Challenges to recruitment affected both the case series and the final pilot trial in significant ways despite numerous modifications to the protocol and the inclusion of additional sites. In the case series trial (phase 2a), six cases were planned, but only three cases were recruited. The learning from this phase was complemented by detailed interviews with stakeholders ($n = 10$; phase 2b).

In the pilot randomised controlled trial (phase 3), there were challenges to recruitment, most significantly in the initial stages of contact with foster carers. The overall number of mailed-out questionnaires ($n = 336$) was smaller than the original target of 500, largely because significant numbers of children registered with the local authorities were considered inappropriate or ineligible for the study. The overall response rate to the screening questionnaires was low at 29%, but varied substantially by site. The screening tools performed well in identifying potentially eligible participants, demonstrating good convergence and sensitivity against the research diagnostic interview. The results of the research diagnostic interview indicated that approximately 33% of the sample had significant reactive attachment disorder symptoms (22/67 children assessed, 95% confidence interval 22% to 44%). Of the 67 participants who completed the research diagnostic interview, 30 went on to take part in the randomised controlled trial. Thus, we were able to recruit three-quarters of the target sample size of 40 participants. Of the randomised families, 15 were allocated to the new treatment and 15 continued to receive usual care. At the end of the pilot trial, 11 foster carers took part in qualitative interviews to explore their experiences of the intervention.

Although recruitment and efficient working with local authorities and foster carers remained a significant concern in relation to feasibility, most other study parameters were deemed feasible and acceptable. Most notably, we achieved good levels of completeness of outcome data and all of the participants who received the treatment completed all sessions. Both foster carers and practitioners found the intervention programme acceptable and helpful. We concluded that a larger-scale trial may be feasible, but only if three critical conditions are in place: (1) the adequate resourcing of dedicated trial staff in each local authority; (2) the widest inclusion criteria possible, including children in foster care, under special guardianship orders, and possibly extended to include children who have been recently adopted; and (3) central resourcing of intervention capacity to supplement NHS staff, as the rate of staff turnover was generally high and the capacity in sites was low.

Conclusions

The Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline, adapted for UK foster care, appears highly acceptable to foster carers and other stakeholders, and meets a clear need in addressing both the emotional needs of children and the training and support needs of foster carers. The strain and scarce resources within local authorities, and, to a lesser extent, NHS mental health services, posed significant difficulties to recruitment and to optimal intervention delivery. We were able to develop solutions to many, but not all, of these barriers and conclude that a clinical trial in this context may be possible if adequate resourcing for recruitment is provided within local authorities and the target group of children is widened as far as possible.

Trial registration

This trial is registered as ISRCTN18374094.

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