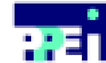
Australian e-Journal for the Advancement of Mental Health (AeJAMH), Vol. 2, Issue 3, 2003
ISSN: 1446-7984



Report on a program evaluation of a telephone assisted parenting support service for families living in isolated rural areas

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Abstract

This is a brief report of an evaluation of a pilot project to deliver a telephone supported, self-directed parenting program to isolated families living in north eastern Victoria: The Family Intervention Service (Isolated Rural Project). The aim of the project was to promote the competence and confidence of parents experiencing early difficulties in their relationship with their children to acquire skills known to promote the development, health, safety and emotional wellbeing of children. The service delivered a self-directed version of the Triple P (Positive Parenting Program). Parents were provided with a package of written resources supplemented by weekly brief telephone consultations with a practitioner over a period of ten weeks. Results of analyses of pre and post program data are presented for 73 families who completed the intervention. Significant improvements were noted in child behaviour, parenting style, parental depression, anxiety, and stress, inter-parent conflict, and parent satisfaction and efficacy.

Keywords
parent training, isolated families, program evaluation, Triple P, telephone support, self-directed program

Introduction

Parenting support in rural areas

Families who live in rural and isolated areas worldwide encounter a unique set of barriers and disincentives to accessing medical, mental health and related support services (Louc & Quill, 2000). Compared to those who live in the major metropolitan centres of Australia, rural families are typically disadvantaged (De Costa, 2003). Family and parenting support services may be lacking altogether, especially specialist services, or may be available but require families to travel long distances (Murray & Keller, 1991 as cited by Connell, Sanders & Markie-Dadds, 1997). The resultant time and financial burdens this places on families adds to the economic and social pressures already faced in rural communities. In addition to accessibility, there are other barriers to service access. The anonymity afforded to service users in the more populated metropolitan areas is harder to preserve in small rural communities. Concerns about lack of privacy, or the perceived risk of stigmatisation associated with involvement in family or parent support services, appear to be a particularly important factor in inhibiting service access.

Service providers also face significant challenges. It is notably difficult to attract and

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Citation: Cann, W., Rogers, H., & Worley, G. (2003). Report on a program evaluation of a telephone assisted parenting support service for families living in isolated rural areas. *Australian e-Journal for the Advancement of Mental Health* 2(3) www.auseinet.com/journal/vol2iss3/cannrogers.pdf
Published by: *Australian Network for Promotion, Prevention and Early Intervention for Mental Health (Auseinet)* - www.auseinet.com/journal
Received 14 August 2003; Revised 25 November 2003; Accepted 26 November 2003

retain appropriately qualified and experienced staff in rural and remote areas (Lynn, 2000). Staff have fewer professional development opportunities and are often required to work in isolated circumstances with limited resources trying to deliver service models that are inadequate. Service models developed primarily in metropolitan areas are often difficult to implement successfully in rural contexts. Home based programs, for example, can be prohibitively expensive in country areas due to the time and cost of professional travel. Services designed to operate solely during the standard working week are often not sensitive or flexible enough to respond to the unique work and seasonal demands of rural industry and lifestyle (e.g., farming).

The Positive Parenting Telephone Service

There is clearly a need to develop new and innovative models of service delivery to support families who live in isolated rural areas. The Positive Parenting Telephone Service (PPTS) is an attempt to do this utilising a near universal technology - the telephone. Telephone support services, of course, are not unique; crisis intervention (e.g., Lifeline), gambling, maternal and child health after hour services are all examples of telephone based service delivery. Parentline is a specific telephone service established for brief information and counselling to parents experiencing difficulties or requiring information. Such services are characterised by brief, generally single contacts providing information, advice or referral. The model of intervention delivered by PPTS is different in that it was designed to deliver a systematic parenting program to families over a period of 10 weeks involving scheduled telephone sessions with a practitioner.

The PPTS was one of three Family Intervention Service (FIS) demonstration projects funded by the Victorian Government Department of Human Services. Funding was initially for a period of three years essentially to trial the service model in Victoria. The PPTS was a preventative and early intervention initiative that endeavoured to engage parents who were unable to access more traditional parenting and family support services due to geographical isolation. The program could be accessed by any parent, but it was particularly aimed at families where early difficulties in the parent-child relationship placed children at risk for more serious and chronic psychosocial maladjustment. A consortium of agencies based in a Victorian rural region established the service with clinical and program support provided by the Victorian Parenting Centre. A free call phone number ensured that participants did not carry the cost of long distance telephone conversations. Staff came from a range of professional backgrounds including nursing, teaching, and social work, and they offered both day and evening appointments to participating families. Program management and clinical supervision was provided by a psychologist who was also the team leader and service manager.

The program content areas include a description of causes of childhood behaviour problems, and strategies for building strong relationships with children, encouraging desirable behaviour, teaching children new skills, and managing misbehaviour. Parents are also taught strategies for managing challenging parenting situations that increase the risk of child problem behaviour. Emphasis is placed on parents selecting personal goals, choosing strategies appropriate to their family and circumstances, problem solving and monitoring their own progress.

Method

Participants

This paper reports on outcomes for 73 families for whom pre and post data were available. From demographic information collected for the evaluation, it is apparent that the program attracted the intended target group. The age of children identified by their parents as the target child ranged from 1 to 11 years with a mean age of 5.0 (SD = 2.5) years. The majority were boys (60%) and a significant number of the target children had moderate to severe behavioural difficulties. Over half of the target children were functioning in the clinical range on a parent reported measure of disruptive childhood behaviour (Eyberg Child Behavior Inventory; ECBI, Eyberg & Pincus, 1999). Most participating parents were Australian born (95%), and the range of family structure types was similar to that found in the general

population; 83% described themselves as two parent families. Socio-economic status of participating families was low, with the mean annual income of families falling below the national average. Almost three quarters of the families (74%) earned $45,000 or less per year, and 42% earned $30,000 or less per year. Less than a third of participating parents had completed tertiary education.

Procedure

Participants were self-referred or referred via other support services to the isolated rural telephone support service for assistance with parenting issues. Thus participants were voluntary and generally well motivated, as most had actively sought assistance. Pre and post intervention data were collected from all parents who completed the program.

Parents received weekly telephone calls from a Triple P practitioner based in the region. The telephone consultations ranged in duration from 15-30 minutes and aimed to optimise the parents' use of the self-directed materials. Practitioners had general session guides, but parents were actively encouraged to set the agenda and prioritise issues for these telephone meetings. Practitioners rarely introduced new information or material, and elaborated only on ideas and concepts covered in the materials that the parents indicated they had not understood. When parents encountered difficulties, the practitioner's aim was to use minimally sufficient triggers (e.g., prompts, questions, and indications of relevant material or content) to promote maximum individual problem solving on the part of the parent.

The PPTS delivered a telephone assisted self-directed Triple P program. This version of Triple P was first developed and evaluated by the Parenting and Family Support Centre, The University of Queensland (Connell et al., 1997; Markie-Dadds, Sanders & Smith, 2001). The aim of the program is to enhance parental confidence, competence, and satisfaction in the parenting role. When parents enrolled in the program, they were given a copy of the parenting book *Every Parent* (Sanders, 1992) and an accompanying workbook *Every Parent's Workbook* (Sanders, Lynch & Markie-Dadds, 1993). The workbook divides the reading material into weekly units to be completed sequentially by parents. Short exercises and activities described in the workbook assist parents to apply and tailor program suggestions to their individual needs. In a new development, that had not been trialled before, parents also received a copy of the *Positive Parenting* video (Sanders, Markie-Dadds & Turner, 1996) that provides explanations and demonstrations of key positive parenting strategies.

Measures

All families completed a set of questionnaires related to child functioning, parenting style, parental confidence, parental coping and couple relationship factors at pre-intervention and immediately post-intervention. The pre-post measures were: the Eyberg Child Behavior Inventory (Eyberg & Pincus, 1999), the Parenting Scale (Arnold, O'Leary, Wolf & Acker, 1993), the Parenting Sense of Competence Scale (Johnston & Mash, 1989), The Depression Anxiety Stress Scale (Lovibond & Lovibond, 1995), the Parent Problem Checklist (Dadds, & Powell, 1991), and the Abbreviated Dyadic Adjustment Scale (Sharpley & Rogers, 1984). A consumer satisfaction measure was administered post-intervention.

Results

Preliminary findings of the evaluation suggest that the PPTS had a positive impact on the functioning of participating families and their children. Changes in mother reported frequency and intensity of problematic child behaviour (measured on the Eyberg Child Behavior Inventory) were analysed using a MANOVA with Problem and Intensity subscale scores as the dependent measures. There was a significant overall decrease in scores from pre to post intervention, $F(2, 51) = 87.6$, $p < .001$. Univariate tests found that the decrease was significant at the .001 level for both the Problem and Intensity subscales of the ECBI. Table 1 presents the mean pre and post ECBI scores and the univariate test results. To examine the effects of the program on children with more severe problems, we identified 36 children whose

parents reported clinically significant levels of problem behaviour prior to program commencement. Following program completion, 29 (80%) of these children were no longer in the clinical range. This suggests that the program had positive effects for many of the children with severe presenting problems.

In addition to positive behavioural change in children, there were significant changes in the use of dysfunctional parenting styles. Three dysfunctional parenting styles were measured using the Parenting Scale (PS): Laxness, Over-reactivity, and Verbosity. Laxness is defined as the tendency to be ambivalent and inconsistent in setting limits and responding to misbehaviour; Over-reactivity is the tendency to use harsh punishment, threats and meanness; and Verbosity is the tendency to talk when action would be more effective. Mean pre and post-program scores for the total sample are given in Table 2. A MANOVA showed that there was a significant overall reduction in scores from pre to post intervention, $F(3, 60) = 49.58$, $p < 0.001$. Univariate tests found significant reductions in Laxness ($F(1, 62) = 67.78$, $p < .001$, partial $\eta^2 = .522$), Over-reactivity ($F(1, 62) = 111.32$, $p < .001$, partial $\eta^2 = .642$), and Verbosity ($F(1, 62) = 57.73$, $p < .001$, partial $\eta^2 = .669$). Ninety one per cent, 85%, and 92% of parents, respectively, who had elevated scores on these three dimensions prior to intervention were no longer in the clinical range following intervention.

Other aspects of parent adjustment that were assessed were parenting satisfaction and efficacy (Parenting Sense of Competence Scale (PSOC)); parent depression, anxiety, and stress (Depression, Anxiety, Stress Scale (DASS)); parent conflict (Parent Problem Checklist (PPC)) and marital adjustment (Abbreviated Dyadic Adjustment Scale (ADAS). The pre and post intervention means and standard deviations on each of these scales are presented in Table 2. There was a significant increase in scores on the PSOC from pre to post intervention, $F(2, 60) = 60.09$, $p < .001$. Univariate analyses showed the increase was significant for both the Satisfaction ($F(1, 61) = 69.81$, $p < .001$, partial $\eta^2 = .534$) and Efficacy ($F(1, 61) = 95.33$, $p < .001$, partial $\eta^2 = .610$) subscales. Parents also reported reduced Stress, Anxiety, and Depression subscale scores on the Depression Anxiety Stress Scale (DASS). The overall MANOVA was significant for time, ($F(3, 60) = 27.62$, $p < .001$). Decreases in Depression ($F(1, 62) = 11.12$, $p = .001$, partial $\eta^2 = .152$), Anxiety, ($F(1, 62) = 12.79$, $p = .001$, partial $\eta^2 = .171$), and Stress ($F(1, 62) = 26.50$, $p < .001$, partial $\eta^2 = .299$) were all significant.

Table 1. Pre and post intervention means, standard deviations (SD) and univariate test results for the ECBI Problem and Intensity subscales

ECBI	Pre	Post	Univariate Test
Problem			
Mean	15.36	5.38	$F(1, 52)=102.3$, $p<.001$
SD	7.27	6.03	partial $\eta^2 = .663$
Intensity			
Mean	135.15	97.57	$F(1, 52)=145.8$, $p<.001$
SD	22.25	26.90	partial $\eta^2 = .737$

Table 2. Pre and post intervention means and standard deviations (SD) for the parenting scales

Scale	Pre		Post	
	Mean	***SD***	**Mean**	***SD***
PS				
Laxness	2.94	*.84*	2.06	*.61*
Over-reactivity	3.40	*.84*	2.31	*.87*
Verbosity	3.92	*.80*	2.56	*.85*
PSOC				
Satisfaction	33.95	*7.06*	40.89	*7.75*
Efficacy	26.42	*5.52*	32.24	*5.61*
DASS				
Depression	5.65	*6.28*	3.10	*4.00*
Anxiety	3.60	*3.93*	1.87	*2.92*
Stress	8.79	*7.50*	4.05	*4.80*
PPC				
Problem	4.74	*3.89*	2.34	*2.50*
Intensity	31.60	*12.72*	25.71	*11.26*
ADAS	23.81	*4.89*	25.26	*5.91*

Parenting Scale (PS); Parenting Sense of Competence Scale (PSOC); Depression Anxiety, Stress Scale (DASS); Parent Problem Checklist (PPC) and Abbreviated Dyadic Adjustment Scale (ADAS).

Parents in two parent families reported significant reductions in the number of parenting issues that caused conflict in their relationship and in the severity of conflict. There was a significant decrease in overall scores on the Parent Problem Checklist (PPC) from pre to post

intervention, $F(2,33) = .007$, $p < .001$. Univariate tests found this result was significant for both the Problem ($F(1, 34) = 5.08$, $p < .05$, partial $\eta^2 = .130$) and Intensity ($F(1, 34) = 11.73$, $p < .01$, partial $\eta^2 = .256$) subscales. At the completion of the program, parents' responses to the Parent Problem Checklist indicated that the number of parenting issues that had previously caused conflict between themselves and their partners had been halved (i.e., from a mean of 5 problems to a mean of 2.5 problems).

We also sought to examine the effect of the program on general marital satisfaction using the Abbreviated Dyadic Adjustment Scale. The results showed that parents were reporting 'normal' levels of marital satisfaction prior to intervention and that there was no change in this following intervention, $F(1, 53) = 3.08$, n.s., partial $\eta^2 = .055$).

Given that the service was trialling a new service delivery model, it was important to determine what service users thought of the service. Consumer satisfaction with the program was assessed using a 15-item parent questionnaire, where 15 indicated low satisfaction and 75 high satisfaction. The mean satisfaction score of parents who completed the program was a very high ($M = 67.67$, $SD = 8.78$). This suggests that participating families found the program acceptable, helpful, and appropriate. Our confidence in this finding of high consumer acceptability and satisfaction in the program was supported by much positive anecdotal feedback received by practitioners. Common themes included satisfaction with program content (useful, helped, made a difference in the relationships with their children), accessibility (easy, convenient, flexible), ease and effectiveness (provided solutions, easy to understand), and helpfulness of the practitioner (encouragement, support, relationship quality).

Discussion

The preliminary evaluation shows that the PPTS has the potential to reduce disruptive behaviour in children, reduce dysfunctional parenting practices, increase parental satisfaction and efficacy, reduce stress, anxiety, and depression; and reduce parental conflict over parenting issues, at least in the short-term. The data show that the majority of children who commenced the intervention with clinically significant levels of problem behaviour were indistinguishable from the 'non-clinical' group immediately following intervention. Service users also clearly indicated that they benefited from the program and appreciated its accessibility, content and the nature of its delivery. The findings of our evaluation are consistent with data reported in previous controlled trials that demonstrated program effectiveness using rigorous scientific methodology (Connell et al., 1997; Sanders, Markie-Dadds, Tully & Bor, 2000).

The results of this evaluation also continue to support the general finding of much of the Triple P research that parents can benefit from lower levels of intervention and professional involvement than is often recognised. The promising outcomes reported here were produced essentially with a self-directed program and minimal practitioner input. We expect that the results of this research will be of interest to service providers seeking to improve health and welfare outcomes in families who live in isolated areas. Agencies could consider integrating the telephone assisted self-directed Triple P program into the suite of services currently offered by their agency. It is also possible that such an option might also be appropriate in metropolitan areas. Some clients who live in city areas might indicate a preference for self-directed programs with limited professional contact. Others may wish to utilise such a program because of isolation caused by reasons other than geographical distance (e.g., lack of transport, immobility, competing demands such as work etc).

Limitations and future directions

There is a need to conduct controlled investigations of the PPTS, incorporating randomised control or comparison groups to establish the effectiveness of this program. The inclusion of a control group would determine whether improvements in child and parent measures were likely to occur over time without

the assistance of the parenting program. Comparison groups would enable evaluation of the outcomes of the program compared with other forms of intervention. The long-term impact of this program requires documentation, to ensure that the improvements observed in the short term are ongoing.

A further limitation of the current evaluation is that participation in the program was voluntary, therefore parents were likely to be well motivated to change their parenting practices. The self-directed nature of the telephone support service is appropriate for clients who are motivated to solve their problems. As such, it may not be appropriate for clients who are not voluntary. A practitioner-directed telephone support service may provide an option in these cases.

There is enormous potential for further development of this program for families who have problems accessing face to face services. For example, it would be interesting to determine whether adjunctive interventions designed to improve parental teamwork and reduce conflict or coping skills training (as provided in Level 5 Triple P interventions) could be delivered effectively using this mode of service delivery. It may also be beneficial to develop a version of the program that does not require literacy skills; this could be achieved by using video and audio materials exclusively. Furthermore, research on the effectiveness of this model of service delivery could be extended to a range of pressing and important social problems such as problem gambling, children with chronic illness, and parenting teenagers.

Acknowledgments

The Family Intervention Services initiative and this current evaluation were funded by the Victorian Government Department of Human Services. We wish to acknowledge the staff of the Positive Parenting Telephone Service who delivered the program and collected the data. We also wish to thank Upper Hume Community Health Service, Lifeline Albury-Wodonga, Goulburn Valley Community Health Service, Ovens and King Community Health Service and Murrindindi Community Health Service for the support they provided for the program and this evaluation. An earlier version of this report was presented at the World Congress of Cognitive Behavioural Therapy, Vancouver, Canada, 2001.

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