research

Training GPs in parent consultation skills

An evaluation of training for the Triple P-Positive Parenting Program

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BACKGROUND The Triple P-Positive Parenting Program is a behavioural family intervention program that aims to prevent severe behavioral, emotional and developmental problems in children by enhancing the knowledge, skills, and confidence of parents.
OBJECTIVE This study evaluated the effect of training general practitioners in the use of the primary care version of the TPP on their consultation skills, satisfaction and confidence in conducting consultations with parents.
STUDY DESIGN Participants were assigned to an experimental condition that involved a brief behaviorally oriented parent consultation skills training program or to a wait-list comparison group. Thirty-two GPs participated in the training. Fifteen participants attended the first workshop (intervention group) and 17 attended the second (wait-list comparison group).
RESULTS GPs who participated in the training reported greater satisfaction with the outcomes of their parent consultations and showed significantly greater use of targeted parent consultation skills than GPs in the wait-list comparison group. Observations of GP consultation skills during simulated patient interviews with parents showed there was a significant overall improvement in their interactional skills during parent consultations. There was a high level of satisfaction with the quality of training received by the GPs.
CONCLUSION This was a brief, cost effective program that had significant effects on participating GPs' skills, confidence and satisfaction with child consultations involving behavioral problems. Implications for public health approaches to the prevention of child psychopathology are discussed.

The general practitioner is the most common first point of professional contact for parents experiencing behavioral difficulties with their young children.[1,2] In addition, many paediatric consultations deal with parental concerns about their child's behavior, development, or school achievement.[3,4]

The case for better training of GPs in the detection and management of child behavior problems arises in part from the high prevalence of behavioral and emotional problems in children in the community,[5,6] the relative neglect of behavioral counselling skills training in medical education,[7] inadequate resourcing of specialist child mental health services,[8,9] and patient resistance due to the perceived social stigma associated with mental health services.[10] Furthermore, there is evidence from other areas of health promotion which shows that GPs are credible, and potentially effective agents for behavior change.[11]

Evidence from randomised controlled trials clearly shows that behavioral family intervention (BFI) based on social learning models is the most effective form of parenting intervention available.[12–15] However, at present, BFI is not widely used in primary health care. This means that few families have access to the most

effective form of parenting intervention. The Triple P-Positive Parenting Program is a five level BFI program that aims to prevent severe behavioral, emotional and developmental problems in children by enhancing the knowledge, skills, and confidence of parents.[16] Primary Care Triple P (level 3) has been proven effective in reducing dysfunctional parenting practices and disruptive child behavior when delivered in a community health setting by nurses.[17]

In this study, the issue was how to train GPs in empirically supported parenting interventions. Our aim was to develop a brief, intensive, cost effective program to train GPs to deliver behaviorally oriented parenting information and advice. There is currently little evidence about how to train professionals to work effectively with parents.[18] Such training needs to include instruction in both theory and practice of BFI. To address the limitations of traditional didactic and workshop based training programs[19] we developed a broader approach to training that involved the integration of three complementary conceptual perspectives:

- active skills training
- a self regulation approach to skills training[20,21], and
- a systems contextual perspective addressing the work environment of practitioners.

This study is an evaluation of the effects of the training program specifically focussed on changes in GP consultation skills relating to the management of childhood behavioral and emotional issues presented by parents.

Methods

Participants were 32 GPs recruited through divisions of general practice. The training programs were held in two waves, two months apart. Fifteen participants attended the first workshop (intervention group), 17 attended the second workshop (wait-list comparison group). Participants nominated which wave of training they wished to participate in on the basis of convenience.

There were no significant differences in sociodemographic characteristics (age, years in general practice, gender hours worked, mental status or being a parent) between the intervention and comparison groups, indicating that the self selection process produced adequate matching.

Measures

Parent consultation skills

Each intervention group participant was videotaped or audiotaped conducting a five minute simulated intake interview with a 'parent' (another participant in the training program) using a standard case scenario. Observations were coded using a specifically designed system assessing GPs' parent consultation skills on a 3-point proficiency rating scale (1=inadequate, 2=adequate, 3=good). The coding system resulted in a total score ranging from 14 to 42. An alpha co-efficient of 0.83 was obtained for the 14 codes within the scale.

A trained research assistant coded all interactions, and reliability checks, conducted on a randomly selected 20% of the interactions, had a co-efficient of 0.71 for all codes, representing an adequate level of reliability.

Satisfaction with consultations

The practice audit, designed to test hypothesis two, was completed before and after the training, and was used to assess satisfaction with consultations.

Practice audit

General practitioners completed a practice audit for a two week period, detailing every consultation concerning a child under 13 years of age. The audit required GPs to record a variety of demographic and consultation related information. Where applicable, GPs completed a checklist of 33 child behavior problems adapted from the Parent Daily Report Checklist.[23] The severity of all the behavior problems the child presented with was rated on a 7-point scale from one (normal/not a problem) to seven (extremely severe).

A management plan for each case was also recorded by ticking a checklist of management strategies used, and GPs rated their satisfaction with their plan on a 7-point scale ranging from one (very dissatisfied) to seven (very satisfied).

Confidence in parent consultations

The Parent Consultation Skills Checklist assesses GPs' perceived proficiency in a

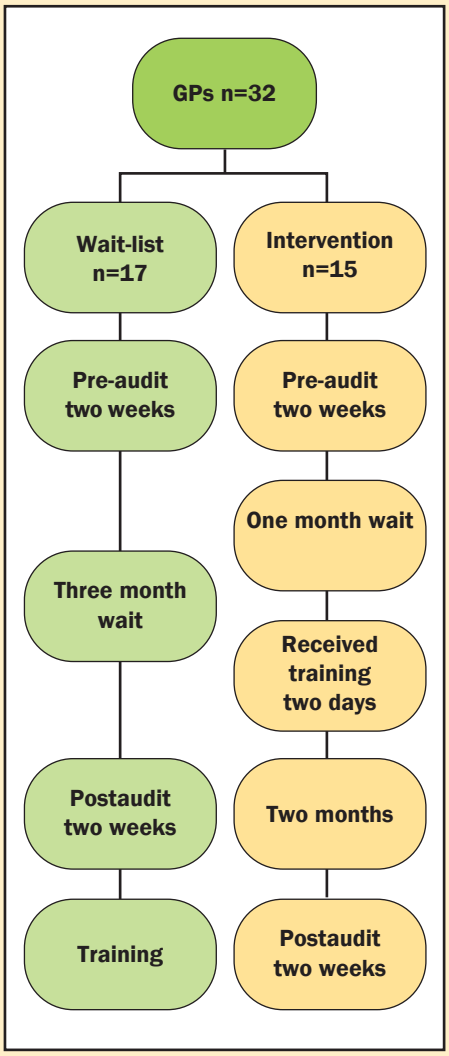

Figure 1. Timeline

Table 1. Content of four parent consultation sessions

Session number	Content of session
One	Clarification of the nature and history of the presenting problem
	Negotiation of goals for intervention
	Setting up baseline monitoring system to track the occurrence of problem behaviours
Two	Review of the initial problem to determine whether it is still current
	Discussion the results of the baseline monitoring
	Sharing conclusions about the nature of the problem and its possible aetiology with the parent
	Setting specific goals for change, and negotiating a parenting plan. This plan may involve the introduction of specific positive parenting strategies through discussion and presentation of a tip sheet or video segment, and may involve modelling and rehearsal.
Three	Monitoring family's progress
	Discussion of any implementation problems
Four	Trouble shooting of any difficulties the parents may be experiencing
	Review of progress and rate of goal achievement
	Discussion of maintenance of progress
	Future goal setting and termination of contact

Table 2. Behavioural coding of parent consultation skills at pre- and post-training for the intervention group

Observational code	Pre (n=15)	Post (n=15)	t-value	p
Identified target behaviour of concern	2.00 (0.00)	2.13 (0.35)	-1.47	0.164
Identified nature of problem	1.27 (0.46)	1.27 (0.59)	0.00	1.000
Identified antecedents/triggers	1.47 (0.52)	2.07 (0.59)	-3.15	0.007
Identified consequences	1.67 (0.49)	2.00 (0.76)	-2.09	0.055
Summarised incident	1.00 (0.00)	2.07 (0.88)	-4.68	0.000
Checked generality of example	1.00 (0.00)	2.00 (0.85)	-4.58	0.000
Displayed use of paraphrasing, summarisation and/or reflection	1.20 (0.41)	1.80 (0.86)	-2.55	0.023
Demonstrated adequate use of open and closed questions	1.67 (0.49)	2.00 (0.65)	-1.78	0.096
Used exemplification probe	1.07 (0.26)	2.33 (0.62)	-6.97	0.000
Used elaboration probes	1.67 (0.62)	2.13 (0.52)	-3.50	0.004
Used clarification probes	1.20 (0.56)	1.87 (0.83)	-3.16	0.007
Used effective time management	1.27 (0.46)	2.27 (0.70)	-4.18	0.001
Displayed adequate interpersonal skills	1.73 (0.59)	2.20 (0.67)	-3.50	0.004
Overall rating of knowledge and performance	1.20 (0.41)	2.13 (0.64)	-6.09	0.000
Total proficiency rating	19.40 (3.14)	28.13 (6.52)	-6.06	0.000

number of core skill domains and their confidence in their parent consultation skills. All 18 items are rated on 7-point scales ranging from one (not at all confident) to seven (very confident). Factor analysis has indicated the checklist measures a single construct (a=0.97), with all items loading significantly on the scale.[22]

Consumer satisfaction

Satisfaction with the training was assessed using a five item consumer satisfaction survey. Each item was rated on a 7-point scale ranging from one (very dissatisfied) to seven (very satisfied).

Design

The overall design of the study was a repeated measures design involving an intervention group and a wait-list comparison group, and two time periods (pre-training versus post-training) (Figure 1).

The Triple P Training Program for GPs

The training program was conducted by an experienced clinical psychologist, following a standardised training protocol. The program covered information about child behavior disorders: five levels of Triple P, assessment and diagnostic issues, the consultation process, and process issues. The emphasis was on developing specific consultation skills and included live and video modelling, role playing and feedback, written materials, background reading, clinical problem solving exercises and group discussion.

General practitioners were trained in the delivery of Selected Triple P, which involves providing written and videotape parenting material to parents, and Primary Care Triple P, which involves the provision of this information with the support of four 15–30 minute consultations (Table 1). At the end of the training program, GPs were provided with materials to be used in the delivery of the program: a primary care kit containing

the Practitioner's Manual for Primary Care Triple P, which has detailed session guidelines with examples of verbatim scripts, and a flip chart teaching aid to be used in consultations with parents. They were also provided with parenting videos and Triple P tip sheets for positive parenting (see Resources).

Results

A series of MANOVAs, independent samples t-tests and chi-square tests was conducted to assess comparability between groups on the audit data. To evaluate the effectiveness of the GP training program, two types of data analyses were performed. Paired t-tests were performed on observational measures and GP ratings of consultation skills to assess differences between pre- and post-training scores for the intervention group. To identify any differences between conditions at post-assessment on continuously scaled audit data, independent samples t-tests were performed. Chi-square tests were performed on categorical audit data to identify group differences at postassessment.

Parent consultation skills

Observational data

Table 2 displays the means, standard deviations and t-values for each of the 14 skills coded at pre- and post-training for the intervention group. Significant differences between pre- and post-training scores were observed for 10 of the 14 codes, with GPs displaying greater proficiency in parent consultation skills post-training. No differences between pre- and post-training scores were observed for the other four codes. The total proficiency rating for observed parent consultation skills increased significantly from pre-training to post-training.

Satisfaction with consultations

Practice audit

The only differences between the groups at pre-intervention were regarding the management plan. Before intervention when compared to the comparison group, significantly more GPs in the intervention group discussed the nature of the problem, (x^2 (1)=11.73, p=0.001), the causes of the problem, (x^2 (1)=5.03, p=0.025), asked the parent to monitor the child's behavior, (x^2 (1)=8.24, p=0.004), and referred the case on (x^2 (1)=5.48, p=0.019) at pre-assessment. No other differences were found between the groups before the intervention.

Patient characteristics

No significant differences were found between conditions at pre- or post-assessment on patient characteristics, with the exception of family type, (x^2 (3)=10.17, p=0.017). There were slightly more two parent families in the intervention group (77%) than in the comparison group (64.6%).

Consultation variables

Table 3 displays the means, standard deviations and proportions for consultation variables for the intervention and comparison group at pre- and post-assessment. At postassessment, compared to GPs in the control group, GPs in the intervention group rated children's problems as being more severe (t (78)=2.63,

Table 3. Proportions for practice audit variables at pre- and post-assessment for intervention and comparison groups

	Intervention group		Comparison group	
Variable	**Pre (n=45)**	**Post (n=42)**	**Pre (n=68)**	**Post (n=44)**
Number of cases in a two week period	23.14 (15.94)	21.62 (14.43)	28.00 (17.85)	19.92 (14.69)
% cases with nonhealth problem	15.73 (15.37)	20.64 (23.70)	21.52 (19.53)	16.50 (22.34)
Session length (minutes)	17.67 (8.97)	21.26 (9.49)	17.50 (7.28)	18.95 (8.70)
Time spent discussing nonhealth problems	11.53 (7.84)	15.38 (11.17)	9.08 (7.98)	9.53 (6.10)
Number of previous sessions	0.87 (1.20)	1.85 (2.91)	1.00 (1.63)	1.23 (2.62)
Severity of problem (1–7)	3.50 (1.49)	3.68 (1.73)	3.22 (1.56)	2.81 (1.23)
How nonhealth problems identified				
Presenting complaint	27.3%	31.7%	35.4%	19.0%
Secondary complaint	52.3%	46.3%	36.9%	40.5%
GP enquiry	15.9%	22.0%	15.4%	35.7%
Observed	4.5%	0%	12.3%	4.8%
Type of problem				
Aggressiveness	24.4%	26.8%	25.0%	11.4%
Arguing	17.8%	26.8%	16.2%	11.4%
Crying	22.2%	7.3%	29.4%	13.6%
Defiance	33.3%	31.7%	22.1%	34.1%
Fighting with sibling	15.6%	17.1%	17.6%	18.2%
Noncompliance	28.9%	46.3%	25.0%	27.3%
Running around	17.8%	14.6%	20.9%	13.6%
Number of problem behaviours	3.89 (4.22)	3.85 (3.23)	4.00 (4.44)	3.02 (3.18)

p=0.01) and spent significantly more time discussing nonhealth problems, (t (77)=2.90, p=0.005). No significant differences between conditions were found for length of consultation, number of previous consultations, or methods used to identify nonhealth problems.

Management plan

Table 4 displays the proportion of consultations where GPs used each of the 20 listed strategies to manage their cases at pre- and post-assessment. Following the training, GPs in the intervention condition were significantly more likely to rehearse a strategy (x^2 (1)=5.56, p=0.018), provide written information to parents (x^2 (1)=15.87, p=0.000) and show a video (x^2 (1)=9.24, p=0.000) during consultations, and were less likely to prescribe medication (x^2 (1)=4.00, p=0.045). Also following training, independent samples t-tests revealed that GPs in the intervention group were significantly more satisfied with their management plan than GPs in the control group (t (80)=2.41, p=0.02).

Confidence in parent consultations

Paired samples t-tests revealed that GPs in the intervention group were significantly more confident with parent consultation skills at postassessment (M: 96.21, SD: 6.12) than at pre-assessment (M: 57.43, SD: 17.37, t (13)=-7.19, p=0.000).

Consumer satisfaction

Overall mean satisfaction was 6.34 for the intervention group, indicating a high level of satisfaction with the training program.

Table 4. Use of management strategies at pre- and post-assessment in the intervention and comparison groups

Strategy	Intervention group		Comparison group	
	Pre (n=45)	Post (n=42)	Pre (n=68)	Post (n=44)
General management strategies				
Physical exam	59.1%	31.0%	50.0%	38.6%
Nonhealth issues not discussed	4.5%	2.4%	8.8%	2.3%
Explained the behaviour is normal	20.5%	16.7%	17.6%	9.1%
Disclosed own parenting experience	4.5%	2.4%	7.4%	4.5%
Reported for child abuse	0.0%	0.0%	1.5%	0.0%
Prescribed medication	4.5%	0.0%	10.3%	9.1%
Deferred discussion	2.3%	2.4%	4.5%	2.3%
Provided advice about other services	6.8%	16.7%	10.3%	4.5%
Referred case elsewhere	27.3%	19.0%	10.3%	9.1%
Targeted management strategies				
Explored the nature of the problem	79.5%	59.5%	47.1%	77.3%
Discussed causes of the problem	56.8%	45.2%	35.3%	43.2%
Provided parenting advice	15.9%	26.2%	27.9%	25.0%
Demonstrated a parenting strategy	2.3%	16.7%	5.9%	9.1%
Rehearsed a parenting strategy	0.0%	11.9%	1.5%	0.0%
Asked the parent to monitor	36.4%	21.4%	13.2%	9.1%
Established goals for change	2.3%	11.9%	7.4%	4.5%
Recommended a parenting text	0.0%	2.4%	1.5%	0.0%
Gave written information	6.8%	35.7%	1.5%	2.3%
Showed video	0.0%	19.0%	0.0%	0.0%
Made a further appointment	29.5%	42.9%	22.1%	25.0%
Satisfaction with management plan	4.33 (0.87)	5.13 (0.72)	4.53 (1.22)	4.69 (0.90)

Discussion

To our knowledge, this is the first study that shows that a well received, brief, behaviorally oriented parent consultation skills training program targeting GPs can lead to significant improvements in GPs' skills, and increased satisfaction and confidence in dealing with parents presenting with concerns about child behavior or development during routine outpatient consultation.

The audit did not show a significant increase in the length or number of consultations conducted following training during the audit period, which is important as the cost of health care delivery is a major issue in many countries. This finding suggests that the program is a useful, cost effective tool in primary care consultations.

The present findings support the value of the training model combining active skills training, a self regulation framework to facilitate skills acquisition, and an ecological approach that sought to address at least some of the structural and organisational obstacles faced by GPs in managing paediatric patients.

Other aspects of the practice audit results are worthy of note. First, most of the GPs saw young children with mild severity disruptive behavior problems. These types of cases are highly appropriate for targeted interventions by GPs and if empirically supported parenting interventions are offered when problems are first identified (before they become too severe or chronic), the potential reach of parenting interventions at a population level could be substantially increased. Parents would be able to access high quality parenting information and resources, in a destigmatised consultation

context, while problems are mild in severity and therefore easier to manage.

This study sets an important precedent for other primary care training programs. This model of training and environmental support has proven effective in changing consultation practices to incorporate an empirically proven parenting intervention. Future research is required to elucidate characteristics of the post-training environment needed to optimise durability of training gains.

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Implications of this study for general practice

- Behavioral family interventions are the most effective interventions for parents with children with behavior problems.
- GPs can be successfully trained in BFI, with improvements in consultation skills, confidence and satisfaction with consultations with parents.
- These improvements do not require increases in the time taken in consultations with parents.

Conflict of interest: none.

Resources

Triple P resources including those used in this study: www.triplep.net.

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