

ARTICLE

Evidence-based Practice in Parent Training: The search for sound evidence of effectiveness

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'As science based practitioners, clinicians are obliged to use therapeutic techniques which are supported empirically' (Nixon, 2002, p. 536). This is certainly the case in the field of parent training, wherein the development of 'evidence-based' programmes has become a priority to ensure that the treatment programmes adopted actually work. However, the treatment outcome research on parent training is profuse with methodological difficulties thus putting a question mark over the validity of evidence for the effectiveness of various programmes to date. In consideration of such difficulties, and in light of the importance of achieving a sufficient evidence basis for a programme, the evaluation of the Parents Plus Early Years Programme (Sharry, Hampson & Fanning, 2003) is discussed.

Introduction

Parent Training in its basic and adapted forms is fast becoming a fundamental treatment approach in clinical child psychology and psychiatry (Mc Mahon and Forehand, 2003). However, recently there have been many calls for more rigorous research into the effectiveness of such programmes. For example, Nixon (2002) draws attention to the 'paucity' of well-designed outcome studies in parent training, and more particularly, those that focus exclusively on pre-school children. This is without doubt true in the field of parenting programmes in Ireland where a recent study noted that although there has been a rise in these programmes and their use as a clinical intervention, it had not been met with a rise in research into the effectiveness of this approach (Rylands, 1995).

The Parents Plus Charity has, since its establishment in 2001, paid particular attention to the development and dissemination of information about best practice in parent training and in particular has focused on the evaluation of the Parents Plus Programmes developed within the Mater Hospital. For example, the original Parents Plus Programme for primary school children (Sharry & Fitzpatrick, 1998) has been researched by the Department of Psychology, UCD, and has been found to be effective in helping reduce childhood behaviour problems and increasing parental coping (Behan, Fitzpatrick, Sharry, Carr & Waldron, 2001). Furthermore, efforts are currently being made to evaluate the Parents Plus Early Years Program, (Sharry, Hampson and Fanning, 2003) and Parents Plus Adolescent's Program (Sharry and Fitzpatrick, 2001). The focus for this particular article is on the evaluation of the Early Years Program.

The Parents Plus Early Years Programme (PPEY) (Sharry, Hampson, & Fanning, 2003) was developed as a broad parent training intervention that could be relevant for both children with behavioural problems and children with a range of mild developmental difficulties and thus could be adapted as a frontline intervention for the majority of preschool children referred to child mental health services. The PPEY uses video-tape modelling and feedback

within individual and group sessions to empower parents in effective communication with their children. The programme is preventive and responds to the huge need for information and support regarding parenting, as defined by parents, community groups and schools and identified in numerous reports (e.g. Interim Report for the Commission of the Family, 1996; Study of Parenting Programmes commissioned by Barnardos 1996).

There is no doubt that such a preventive programme is essential but the pressing question is whether the programme succeeds in what it aims to do and if it stands up to the test of scrutiny. In the following sections we will look at the importance of evidence based practice in this area, focusing particularly on what constitutes sufficient evidence in clinic-based research. Following that we consider the limitations that cloud the field of evidence based research in parent training to date and how, in light of the criticisms of previous research, the evaluation of the Early Years Programme was undertaken and how it aims to address such difficulties.

Evidence based practice

Evidence-based practice is receiving increased attention from purchasers and providers of mental health services in UK, US, Ireland and elsewhere (Carr, 2000). All such services should be using evidence-based interventions and certainly, there are an ever-increasing number of them doing so (Hutchings, Lane & Gardner, 2004). The idea of evidence-based practice proposes the value in taking evidence into consideration but not to a point of being confined to the evidence available (Stricker, 2003). In other words, our approach to evaluating evidence should be a critical one. But what exactly is meant by the term evidence and what constitutes sufficient evidence?

What constitutes sufficient evidence?

Stricker (2003) refers to evidence as the conclusions that we draw from studies whether it is based on qualitative or quantitative data that are derived from experimental, quasi-experimental or correlational studies. Stricker adds that

when evaluating evidence from a study we need to focus on the efficacy (internal validity) and the effectiveness (external validity). Furthermore, striking a balance between these two measurements is crucial for evidence obtained to be deemed of sufficient weight to influence clinical practice.

The source of much debate in recent years, qualitative research is increasingly seen as having implications for practice and its inclusion in methodology has been both called for and supported in the research literature (e.g. Chwalisz, 2003; Morse, Swanson & Kuzel, 2001). Qualitative data can be reduced to quantitative form for the purpose of analysis or can be used for putting forward narrative conclusions (Stricker, 2003). Qualitative research (e.g. descriptive studies) can present a personal, and often more convincing, account of whether a specific intervention is helpful for an individual.

Overall, practice that is based on 'current, valid and reliable information' (Bradshaw, 2000), derived from both quantitative and qualitative research, can help Health Professionals to build a picture of the relative benefits of various treatments and hence make informed clinical decisions around the best treatments available. This is certainly the case in the field of parent training where building up an empirical base for a programme is essential for validating the programme and gaining the confidence and acceptance of professionals and the public alike, in their adoption.

Evidence based practice in parent training: Research background

The effectiveness of parent training programmes, based on social learning ideas, has considerable support in the literature (Kazdin, 1997). In particular, video based approaches to parent training are effective ways of reducing parental stress and childhood problems (e.g. Webster-Stratton, Kolpacoff, Hollinsworth, 1988). Even though behavioural parent training has built up an impressive empirical basis and has achieved a high standing in the clinical domain, there remain some inherent, salient methodological limitations and difficulties in need of address.

Serketich and Dumas (1996) in a review of Behavioural Parent Training programmes concluded that although there is evidence for the short-term effectiveness of BPT, there is a need for more rigorous models of research methodology and reporting. In their review of BPT programmes only 26 out of 117 studies from a comprehensive literature search, met all six of the criteria for inclusion in a meta-analysis

(see table 1 below). Whilst, the vast majority of the studies met the first three of the six criteria the failure of 91 of the studies to meet the remaining three criteria through ensured their exclusion from the analysis. That is, almost 80% of studies reviewed failed to reach basic standards of methodological rigour such as the inclusion of separate measures for both parent and child behaviours. This reveals a pressing need for more rigorous research in this area of parent training.

Evaluating the Parents Plus Programme

Learning from the criticisms of previous outcome research studies and adhering as closely as possible to recent recommendations laid out for evaluating parent training programmes for preschool children (e.g. Serketich & Dumas, 1996; Nixon, 2002) we need to employ both an adequate design and methodological criteria for evaluating the Parents Plus Early Years Programme. Doing so will facilitate the establishment of a basis of 'current, valid and reliable information' for our investigation into particular questions such as how effective the programme is in helping parents develop good relationships with their children, while promoting development and managing behavioural problems.

The Initial study

The first step in the approach to a rigorous evaluation of the programme was an extensive pilot study carried out from 2002-3 in the Child and Adolescent Mental Health Services in the Mater Hospital (Sharry, Guerin, Griffin, Drumm, in press). The sample comprised of 25 children, with a range of conduct, developmental and attention problems and their parents (31 in total), who attended one of three Parents Plus Early Years Programmes in two separate clinics. A pilot study would provide an opportunity to test out the suitability of chosen measures and draw attention to practical issues that could pose potential problems in a future main study.

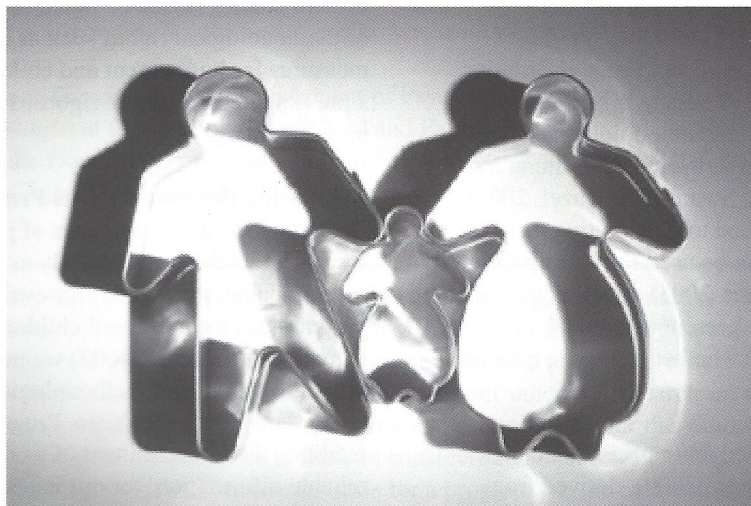
What results did the initial study yield?

Using a repeated measures design, and focusing on the collection of both quantitative and qualitative data through independent observation measures and parent report measures the initial study identified significant changes in behaviour and functioning for parent and child after treatment. Parents reported a significant reduction in child difficulties in the total problems, conduct problems and Hyperactivity scales of the Strengths and Difficulty Questionnaire (Goodman, 1997). A significant decrease in parental stress was measured by the Parent Stress Scale (Berry & Jones, 1995). Furthermore the gains reported for

Table 1 Methodological criteria for inclusion in meta analysis (Serketich & Dumas, 1996)

1. The programme targeted primarily on an anti-social behaviour,
2. The programme trained caregivers in the use of differential reinforcement and/or time-out technique
3. The study used a sample of preschool and/or elementary school age
4. The study had at least one measure for child behaviour
5. The study had a suitably matched control group for comparison with BPT group
6. The study had a sufficient sample size for treatment and possible control group

both the SDQ and the PSS were maintained at five month follow-up. Parents also reported a significant gain in the attainment of personal parenting and child goals. A before and after video observation of parent-child interaction in a free-play situation, measured by independent observers, showed an increase in positive parent-child attention and a decrease in parent-child instructions.



Moreover, the quantitative results are supported by the results of the qualitative study. Semi-structured interviews conducted with each parent at the follow-up stage (five months) depicted positive changes from the parents' perspective. Some common themes emerged in the interview transcripts of parents including a positive change in the child's communication and behaviour. In the case of reported changes in their own behaviour, parents emphasized an increase in consistency, calmness and self-awareness in their responses to their child, as well as a general improvement in relationships with their child.

What conclusions can we draw based on the initial evidence?

Keeping in line with the idea of being critical about evidence it follows that we must be careful about what conclusions we draw from the pilot study. Certainly, the pilot study confirms that it is possible to successfully collect data in the naturalistic setting of a frontline mental health clinic. Conducting the study in a 'real world' setting affords strength to the evaluation study. Many treatment studies have been carried out in 'laboratory' settings (Nixon, 2002), thus limiting their external validity for implementation in a clinic setting (Weisz, Huey, & Weersing, 1998). Furthermore, while the study did produce encouraging results it also raises some serious practical issues in need of address and any encouraging results must be considered in view of such issues.

The question of to what extent this initial evidence is sound presents itself. Stricker (2003) highlights that evidence is always subject to limitations, and it is the research design and the nature of the data that can often determine the magnitude of these limitations. Let us first consider our data and design in light of the six criteria set out by Serketich and Dumas (1996) in their review of parent training programmes. Certainly, with a treatment focus on behavioural difficulties and the employment of social learning principles the study meets the review's criteria for primary target and therapeutic techniques. The criteria for appropriate sample age, is also met with the young children in this study aging between 2-5 years (i.e. of pre-school or early primary school age). Also, the outcome measures used in the study focused on both parent behaviour and child behaviour. Building on this criterion of outcome

measures and considering recent recommendations for multi-method assessment (e.g. Chambless & Hollon, 1998) it is worth noting the fact that the outcome measures focus

on both parent reported reductions in child behaviour problems and parenting stress, as well as independent observation of parent-child interaction. Indeed, favourable change is indicated by both the parent reports in child behaviour problems and parental stress, and in parent-child interaction as measured by an independent observer thus adding to the internal validity of our measures.

Furthermore, the gains noted were maintained at five-month follow-up. Conducting a follow-up is essential for establishing the social validity of an intervention (Serketich & Dumas, 1996). Indeed, recommendations have been made for studies to carry out more than one follow-up (Chambless & Hollon, 1998). This may be particularly relevant for assessing change in preschool children as their needs and difficulties being transient can change over a very short period of time.

The initial study falls short on an important criterion set out by Serketich and Dumas, and a standard weighed highly in the research literature of parent training in general. This is the lack of a suitably matched control group. A control group was not used for the purpose of comparison with the treatment group and its absence presents a limitation to the initial evaluation. Indeed, the absence of a suitable control group restricts our interpretations of the results. Any of the positive gains reported by the parent could be a result of the child's or indeed, the parent's maturation over the passage of time. In order to make any decisive conclusions about the treatment effects, the change in children who attend the PPEY will have to be compared with children who received alternative treatment or those on a waiting list.

Future Recommendations: The multi-site controlled study

In consideration of the criticisms and recommendations made in the literature (e.g. Serketich & Dumas, 1996; Nixon, 2002) and with a view to building on the strengths and addressing the limitations of the pilot study, a multi-site controlled study was initiated in September 2003. The study, employing a comparative treatment outcome design, will focus on a larger sample of parents and their children attending one of ten Parents Plus Early Years Programmes in four different mental health clinics. By comparing the children who are part of the parenting programme with those on a waiting list and those receiving alternative treatments we will be able to draw more definite conclusions based on the any evidence for possible treatment effects. However, whilst monitoring the long term adjustment of parents and children from both the treatment group (those partaking

in the parent training intervention) and the control group (those not receiving treatment) is essential for the drawing of reliable conclusions on the long term effectiveness of a parent training programme (Serketich & Dumas, 1996), this remains a difficult endeavour due to the ethical restriction issue of denying treatment to children with difficulties on a long-term basis.

The inclusion of four different clinics will afford the study with a larger sample size. With a bigger sample questions such as the differential effects for children with different disorders and difficulties can be examined. A large sample size can help address the important issue of comorbidity within a sample and how this issue can have a differential effect on outcome. The effect of the child's gender and the relative contribution of mothers and fathers can also be addressed with a larger sample size.

Overall, using a comparative treatment outcome design to collect both qualitative and quantitative data from a large sample of preschool children and their parents using parent report and independent measures, and collection of follow-up data, are all part of efforts for achieving a more rigorous research methodology. Moreover, to be effective critics about future results we will need to provide an extensive report on these results and a thorough description of the sample used. An extensive reporting of results, whether they are significant or not and detailing of means and standard deviations for all variables at each stage of assessment is recommended (Serketich & Dumas, 1996). Also, a broad description of the sample including the difficulties of the children in question (Kazdin, 1999) and a detailed outline of demographics of the parents involved (e.g. Webster-Stratton, 1992) will allow for an examination of the relationships between such variables and outcome.

While a detailed discussion of all the methodological issues mentioned is beyond the scope of this article, we hope we have drawn attention to the pertinent difficulties that pose challenges to the field of evidence based practice, in particular in parent training. Clearly, there is a lot of work to be done. In the case of the evaluation of the Parents Plus Early Years Programme, by mid-2005 we hope to have enough data to constitute a major multi-site controlled study that will be the first of its type in Ireland. Certainly, the continued efforts to improve the standards of research methodology and design at home and abroad in the field of parent training are essential for avoiding use of ineffective programmes, and for establishing confidence in the programmes that do work.

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REPORTS

National Strategy for Action on Suicide Prevention National Stakeholders Meeting November 2-3, 2004

I recently attended, as a representative of PSI, the above workshop on developing a National Strategy for action on Suicide prevention. As this is a topic which is very much in the public domain recently, I thought some information with regard to same, might be of interest to your readers. It was good that PSI had a seat at the table, so to speak, but as there were a lot of stakeholders represented, approximately 60, this led to a bit of confusion and repetition, at times, however all in all it was a worthwhile exercise. A "Future Search" approach was taken to the conference, whereby there was a lot of brain-storming, writing on walls and team presentations. The final strategy and priority actions arising out of this work will be forwarded to us sometime in the future. The following is the background to the strategy and the initial four goals proposed.

Background

Following the passing of the Criminal Law (Suicide) Act 1993, the issue of suicide prevention firmly entered the public discourse. In 1995, the Minister for Health and Children established a National Task Force on Suicide. Around the same time, the National Suicide Research Foundation and the Irish Association of Suicidology were both established.

The National Task Force published its Final Report in 1998 making 86 recommendations in the areas of primary prevention, crisis intervention, bereavement support and research. Current endeavours in developing a National Strategy for Action on Suicide Prevention will build on the work of the Task Force and the National Suicide Review Group will play a central role in the development and implementation of the Strategy.

In the course of developing the revised national strategy, the project team has already conducted 'Open Space' consultation at five locations across the country with a total of over 600 participants. These consultation days were held in order to ascertain what the key issues were for people with an interest and responsibility in suicide prevention. Simultaneously, a scientific writing group has been meeting regularly to review evidence and analyse approaches to suicide prevention strategy development internationally. The National Stakeholders meeting, November 2-3 2004, was planned in order to allow key stakeholders the opportunity to shape the development of the strategy framework and to provide input and guidance in relation to implementation, based on the following goals

Goal 1 General Population Approach

To promote the positive mental health and well-being of the Irish population and reduce inequality in Irish society.

Goal 2 High Risk and Vulnerable Groups

To reduce the risk of suicidal behaviour among vulnerable and high risk groups

Goal 3 Research and Information

To encourage research and to improve access to information in relation to trends in suicidal behaviour and the associated causes

Goal 4 Monitoring and Evaluation

To develop structures and processes to be put in place for monitoring the implementation of the strategy and evaluating specific components of it.

Specific actions addressing these goals were formulated at the conference and will be collated and sent on to us shortly.

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