Parents’ Use of Physical Interventions in the Management of Their Children’s Severe Challenging Behaviour

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Background Although training staff supporting people with challenging behaviour in physical interventions has become accepted practice, parents are often left to fend for themselves while managing equivalent behaviours. The study explores parents’ experience of managing severe challenging behaviours, their use of physical interventions and access to training in reactive strategies.

Method A postal survey methodology was employed that utilized a novel 20-item questionnaire. The questionnaire yielded both quantitative and qualitative data concerning the types of challenging behaviour displayed by the children, frequency of use and nature of physical interventions, types of training received and any difficulties experienced in obtaining training. The sample was drawn from the membership of a national charitable organization and comprised of 72 respondents.

Results The majority of respondents had experienced major episodes of challenging behaviour. The emotional impact of living with such behaviours was apparent. Although the vast majority of respondents had employed restrictive physical interventions, few had received any formal training in such strategies. There was evidence that a number of high-risk physical interventions were sometimes being employed. Accessing training appeared more problematic for parents when compared with paid care staff.

Conclusions In this specific sample, parental use of physical intervention was high while parent training in physical intervention was uncommon. Impediments to parent training in physical intervention are discussed, as are wider issues concerning parental support.

Keywords: challenging behaviour, parents, physical intervention

Introduction

By definition, the challenging behaviours (e.g. physical aggression, self-injury and environmental destructiveness) displayed by people with intellectual disabilities pose potential risk of physical harm either to the person themselves or to their carers (Zarkowska & Clements 1996; Emerson 1995). Over the last decade, there has been a considerable growth in interest in training carers in strategies that enable them to safely manage episodes of challenging behaviours when they occur. This interest has been driven by legislative requirements to provide safe working environments (Allen 2002), by concerns about the ethics and legality of some previously available training in this area (Leadbetter 2002; Paterson et al. 2003), and by developments in the field of Positive Behavioural Support that have recognized the need to provide carers with proactive strategies for behaviour change and reactive strategies to manage out of control behaviours when they occur (LaVigna et al. 1989; Horner et al. 1990; Carr et al. 1994).

As a result of this interest, developments within the United Kingdom have included advice on producing policies on the use of physical interventions† (Harris et al. 1996), a code of practice for physical intervention trainers (British Institute of Learning Disabilities 2001), improved governmental guidance (Department of Health & Department for Education & Skills 2002), and

†Procedures designed to avoid or reduce the consequences of aggressive and other challenging, e.g. evasive techniques, breakaway procedures, physical restraint.
a national accreditation procedure for training organizations (British Institute of Learning Disabilities 2003). While these initiatives to improve practice are to be greatly welcomed, the bulk of attention to date has focussed on training paid carers to manage such behaviours; this has included training for teachers (James 2001). In contrast, very little has been written about the need to provide similar initiatives for parents. Given that many challenging behaviours have their origins in childhood (Quine 1986; Saxby & Morgan 1993; Einfield & Tongue 1996), this is a potentially serious omission. Qureshi (1990) reported that parents sometimes were injured as a result of the challenges posed by their children. Additionally, there are case reports from the United States of children with behavioural challenges suffering injury or death from inappropriate restraint application by carers (e.g. National Alliance for the Mentally Ill 2000) and in April 2004, a 15-year-old boy died after being restrained in a secure training centre in Northamptonshire, England (BBC 2004). Failing to equip parents with appropriate skills may therefore increase the risk of injuries to both child and parent, particularly if the latter has to improvise reactive management procedures. There is some evidence from the adult field that unplanned physical interventions pose higher risk of injury to service users (Spreat et al. 1986). Evidence also exists to show that challenging behaviours are a significant additional stressor for parents of children with intellectual disabilities (Qureshi 1990), and it may be hypothesized that even greater risks might be associated with strategies improvised by carers who are under such emotional pressure (Baker & Allen 2001).

There is some evidence that restraint use is a fairly frequent component in interventions for children and adolescents with intellectual disability and challenging behaviour. Emerson (2002) reports three separate studies that found that between 12–67% of children with these needs had been subject to restraint. Adams & Allen (2001) found that physical intervention by parents was the most usual response to aggressive behaviour in 56% of children referred to a specialist community behavioural intervention team. In most cases, the forms of restraint used had been improvised by the parents. This study was limited however by the fact that participants were staff members reporting on strategies used by parents, rather than parents themselves. Actual parental use of physical intervention is therefore largely unmonitored and unknown.

While there is a small literature on training staff in physical interventions (Allen 2001), the present authors could find only two anecdotal accounts of parent training in the literature. Green & Wray (1999) describe the provision of training in ‘breakaway’ techniques (procedures designed to enable carers to escape from grabs, pinches, bites, etc.) to the family of a 11-year-old boy with Prader-Willi syndrome. The authors suggest that the provision of the training contributed to the child being maintained at home, the avoidance of a residential placement and improved carer confidence regarding the management of risk behaviours. Two related barriers which had to be overcome before the training could be provided were also identified. First, the NHS Trust concerned felt that it would be vicariously liable if the child subsequently became injured as a result of the application of techniques taught by its staff. Second, concerns were expressed as to whether the techniques might constitute a battery. The first issue was resolved in theory, although probably not in law, by the joint commissioning of an external trainer by health and social services. It is unclear as to how the second issue was resolved and also what the training actually consisted of. Shinnick & McDonnell (2003) report on training a mother and a neighbour to manage the behaviour of a 34-year-old lady with intellectual disability and challenging behaviour. The training consisted of instruction in de-escalation skills and breakaway procedures. Anecdotal accounts of effective recall of procedures at 8-month follow-up, improvements in carer confidence and user behaviour were reported.

To summarize, little is known about the use of physical interventions by parents of children with intellectual disability and challenging behaviour; in particular, there are very limited data on their needs for training in reactive management procedures. The present exploratory study was designed to address the following issues:

- What topography and severity of challenging behaviours were participants exposed to?
- To what extent did they use physical interventions as a management strategy and what types of intervention were employed?
- To what extent had parents been trained in these interventions?
- What organizational or resource issues impacted upon their ability to access training?

A survey methodology was employed which yielded both quantitative and qualitative data.

**Method**

**Participants**

The sample consisted of 72 parent members of the Challenging Behaviour Foundation (CBF), a national UK
charitable organization, the mission of which is to disseminate information about the understanding and management of challenging behaviour to parents and carers. The Foundation retained a database of 287 parents. The sample therefore represented a 25% response rate. The mean age of the respondents was 43.8 years (range 27–62); 92% were female.

Measure

A 20-item questionnaire was devised specifically for the study. The scale comprised of seven items of demographic information (age of respondent, gender of respondent, age of person with intellectual disability, services received, etc.), six items describing the nature and intensity of presenting challenging behaviours, and seven items relating to the use of and training in physical interventions (use of, type of, whether training had been provided, obstacles to obtaining training, ratings of training effectiveness, etc.) Behavioural ratings of severity were made on four-point scales; Cronbach’s alpha for these items was 0.85, suggesting that these scale measures had good internal consistency. No personal identifiers were included in the questionnaire.

Procedure

A copy of the questionnaire together with a letter explaining the purpose of the study, a deadline for completion and a pre-paid reply envelope addressed to the first author were placed in sealed envelopes. Sufficient envelopes for all 287 parents on the CBF database were then sent to the organization for distribution. This method ensured confidentiality by guaranteeing that the first two authors had no access to the database.

Analyses

Quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS) Version 12. The qualitative data were initially transcribed and any material that did not relate to the survey topic area of challenging behaviour and physical interventions was discarded. The remaining text was re-read and individual units of data (i.e. sentences or paragraphs) were examined for similarities and differences in content and meaning. Similar units were then grouped together and given a descriptive label according to the particular theme or idea that they contained. The quantitative and qualitative data were then compared and organized according to a number of key categories. Finally, the relationship between training in and use of physical interventions was considered.

Results

Children and services received

The average age of the child with intellectual disabilities and challenging behaviour was 13 years (range 4–38). The majority of children (76%) were resident in the family home, 10% were in 52-week residential schools, 6% in residential schools during the week, 6% in residential care and 2% in foster care. Social work was the most frequently cited form of professional support (42%), followed by clinical psychology (31%), educational psychology (28%) and psychiatry (21%).

Experience of challenging behaviours

Seventy-five per cent of the children in the sample presented aggressive behaviours that were rated as moderately serious or severe; the corresponding figures for self-injury were 37.5% and 67% for destructiveness towards the environment. Thirty-nine per cent also presented with additional forms of challenging behaviour. Increasing severity of aggression was positively correlated with increasing severity of self-injury ($r_s = 0.380$, $P = 0.01$) and destructiveness ($r_s = 0.386$, $P = 0.01$); likewise, increasing severity of destructiveness was also positively correlated with increasing severity of self-injury ($r_s = 0.353$, $P = 0.01$).

The consequences of children’s aggressive behaviour for the family, the child themselves and significant others (e.g. teachers) are shown in Table 1. Although the impact of aggression was relatively minor for most groups, serious or major injuries usually resulted from aggression for family members in 23.7% of cases, for the child themselves in 11.1% of cases, and for significant others in 15.3% of cases. Self-injury resulted in minor injuries to the child in 50% of cases, more serious injury in 6.9% and major injury in 4.2%.

When asked to describe the most difficult behavioural incident that they had ever had to manage, 87% of respondents reported situations that had resulted in a degree of injury to themselves or other family members. Although, in some cases, a relatively minor injury was sustained, other respondents described single or multiple incidents of physical aggression that had resulted in outcomes such as cuts, sprains, broken bones, loss of consciousness and hospital treatment (‘I was attacked by my son – punched, kicked, hair pulled – then, in the same
incident, pushed against a wall. Whilst I lost consciousness and was on the ground, I was repeatedly kicked; ‘I was dragged around the floor by my hair, contact with thrown objects and prolonged and deep biting causing bleeding, bruising, infection, severe swelling and cuts needing hospital treatment; ‘Without warning, he lunged at me and bit me on the hand/arm because I held it out to protect myself. He also bit the back of my leg. I then needed hospital treatment and skin grafts’).

Accounts of injuries sustained by the children themselves were also given and included both outcomes of physical aggression (‘In anger, he crushed an ornament in his hand. This wasn’t deliberate. He was frightened and wouldn’t allow his hand to be examined or dressed’) and self-injury (‘My son smashed a window whilst head-banging it. A large shard of glass penetrated his shoulder and neck. He required hospital treatment (15 stitches’)]. Reports of significant others that had been injured during challenging behaviour included teachers, siblings, other children, health professionals and pets.

In addition to the physical consequences of a child’s behaviour, respondents also recounted poignant stories about the emotional impact of coping with behavioural challenges. Emotional responses were reported as both immediate effects of challenging behaviour (‘It’s the most distressing thing possible to watch your child self-harming. As a mother, it kills you’; ‘I was bruised all over, but the emotional pain was far more to cope with’) and long-term effects of dealing with challenging behaviour (‘As a family, my daughter has created massive strain and pressure over the years’; ‘I am so stressed. I am just living without a life’).

Use of physical interventions

Physical interventions had been used by 87.5% of respondents; 20.8% reported using them on a frequent basis. Personal restraint (i.e. restraint involving one person being held by others) had been used by 85.9% of respondents at some time. Personal restraint took on a variety of forms, for example, one person holding the child’s hand (‘I took hold of his hand firmly so that he could not break free’); one person holding the child around the body from behind, in a seated or standing position (‘He sat between my knees and I held him round the chest and held onto his arms’); and two or more people holding the child in some way (‘He became so aggressive it took 3–4 adults to hold him down’).

Seventeen per cent of respondents reported the use of physical intervention procedures that are recognized within the physical intervention literature (Leadbetter 2002) as posing high risk to the person being restrained. Among the interventions listed were the following:
- ‘Basket hold’
- ‘Restraining him by sitting behind him and holding him’
- ‘I have to get him on the floor and sit on him’
- ‘Sitting on him...restraining on floor...arm bent up his back...headlock’
- ‘Holding him pinned down on the floor with my body across his pelvis & holding down his wrists’
- ‘Restrained him on floor using arms and legs wrapped round him and rolled on the floor’
- ‘In the past have occasionally sat on him (not weight bearing)”
- ‘We did not know what to do, so we tried wrapping him in a duvet to protect us and him’

Mechanical restraint (e.g. via the use of ties, special equipment, etc.) was used much less frequently, being reported by only 26% of the sample. Examples of mechanical restraint given by respondents included tying the child’s shoelaces together to prevent them kicking out, restraining in a pushchair using reins.

2A form of single-person restraint in which the service user’s arms are crossed across their chest and held at the wrist by a carer standing, kneeling or sitting behind them.
using splints to prevent the induction of vomiting and harnesses to restrict movement.

A smaller proportion again (4%) reported using environmental restraint; the methods employed here included shutting the child in a bedroom, locking doors, putting the child in a cupboard, and using an old stable as an area for containment.

Increasing frequency of physical intervention use was positively correlated with increasing severity of injury arising from aggression for the child \((r_s = 0.299, P = 0.05)\), but not for the family or significant others. It was also positively correlated with increasing severity of other challenging behaviours \((r_s = 0.277, P = 0.05)\), and negatively correlated with parent age \((r_s = -0.275, P = 0.05)\).

The qualitative data revealed that respondents used a wide range of strategies to deal with their children’s challenging behaviour when it arose, which varied according to level of restrictiveness. First, as an initial and least restrictive response, many of the respondents described attempting to defuse the situation by talking to the child or distracting them in some way (“I try to explain that the behaviour is inappropriate and try to calm her”). Second, physical removal was often detailed as a means of confining the behavioural incident to a safer area. With small children, this removal procedure tended to involve lifting or carrying the child (“We had to carry him home screaming – two people, one at either end – like a log.”). In other instances, respondents reported removing the child by walking with them, usually with the assistance of another person (“We tried to walk him, standing either side holding his hands (one each), to a quiet area.”). Finally, restrictive physical interventions were employed as described above.

Adverse outcomes reported as consequences of the use of personal restraint for those carrying it out included injury and emotional and physical exhaustion. Reports frequently indicated factors that prevented the possibility of personal restraint use. The most common of these barriers was the size and strength of the child, which appeared to be exacerbated by a parent attempting to deal with the situation on their own (“He was too strong for me to hold”; “She is tall and I couldn’t regain control on my own.”).

Training in physical interventions

Despite high rates of restraint use, only 25% of respondents had actually had any training in how to restrain safely. Sixty per cent of this sub-group had been offered training, 33% had obtained it themselves and 7% had acquired training during their work. Where training had been provided, this had been made available through NHS services in 29% of cases, education in 21%, and social services in 7%; arrangements for training provision often appeared ad hoc. The training model used was identifiable in eight cases. Strategies for Crisis Intervention and Prevention (SCIP) was the most commonly accessed training \((n = 7)\), with Team Teach being the only other identifiable branded approach \((n = 1)\).

The training was rated as useful or very useful by 93% of those who had received it. There was no significant relationship between the severity of any of the child’s behaviours and whether or not parents received training.

While the vast majority of respondents who had been trained rated their training positively, a number of perceived limitations of the training were highlighted in the qualitative data. Collectively, these shortcomings were: the training was too basic; only a couple of techniques were taught; the training was too short; training consisted of a one-off session with no refresher session; there was no advice on how to prevent behaviour from escalating; the techniques taught were difficult to apply in the home setting; techniques taught required two people when often only one was present; and techniques taught could not be used in the community (“The training received was only one 2-h session. It seemed to focus on removing the child from the situation, which may have been helpful in school, but at home there is nowhere to remove them to; ‘It should have been more ongoing as he is not little anymore...so techniques have to change’; ‘The course was too basic and didn’t solve our problems or restore our confidence’).

Although only a quarter of respondents had received formal physical intervention training, it was clear that this did not reflect the perceived need for training amongst this group. Only 1% of those without training stated that they felt confident to continue without it, the remainder of the respondents feeling that training was necessary.

The reasons as to why parents had not accessed training are shown in Table 2; in the majority of cases, this was simply because none was available. Frustration at the general lack of acknowledgement of a need for parents to be trained was evident (“It has always amazed me that care staff are trained in many aspects of disability, but parents/carers are left to deal with it on their own”; “It seems to be assumed that, as parents, we don’t have the same restrictions as professionals (e.g. if we want to ‘sit’ on him, we can), whereas a professional...
requires something more ‘acceptable’ (and probably more effective’).

Those few parents who had actually received training as parents (and not via their jobs) tended to recount a far from easy process to obtaining it [‘It took over three years of searching! Majority of agencies stated that they could only help with children of adolescent age and above. I had to reach breaking point (a stay in a psychiatric unit) before receiving any advice and very limited training (one session)’].

Training and physical intervention use

Although not statistically significant, there was a trend for parents who had been trained in physical interventions to employ these more frequently. In the untrained group, 19% of parents reported never using physical interventions, 51% sometimes using them, and 30% using them frequently. The equivalent figures for the trained group were 11%, 22% and 55% respectively.

Discussion

The study showed that the majority of parents in the sample had been exposed to physical aggression, destructive and self-injurious behaviour from their children. Physical aggression usually resulted in serious injuries to carers in almost a quarter of the sample, and self-injury was serious or major in 11%. The severity of the behavioural incidents was graphically illustrated by the qualitative data. A number of parents indicated that exposure to such behaviours was associated with significant stress. The vast majority of parents had used physical interventions, with over a fifth employing them on a frequent basis; a variety of forms of both personal and mechanical restraint were employed. There were few correlates of physical intervention use, although older parents were less likely to use restraint.

Despite the high proportion of parents using physical intervention, only a quarter of the sample had received any training in these procedures. As a result, many of the interventions used were therefore designed by the parents themselves. The use of physical interventions known to be associated with high-risk of service user injury or fatality were reported by 17% of respondents. It is important to emphasize that, in the absence of both training and appropriate professional supports, no blame can be attached to parents either for the use of these dangerous procedures or for some of the questionable containment strategies reported.

Although most of those who had received training viewed it positively, some limitations were also reported. Those who had not received training cited a number of impediments to their doing so. There was a non-significant trend for those trained in physical interventions to use them more frequently. It could be that this reflects genuine need or the possibility that training in physical intervention promotes their usage. The data do not allow for further analyses of these possibilities.

It goes without saying that any training in physical intervention should only take place within the context of a clear positive behavioural support approach. Fortunately, there are clear, positive examples of how parent training in these wider support strategies can be effectively provided (Bambara et al. 2004), take account of carers’ existing strengths and needs, and be successfully accommodated into families’ existing daily routines (Albin et al. 1996). It is clear, however, that access to professional help within the present sample was comparatively and unacceptably low. It would be logical to conclude that better and more effective therapeutic support to families would reduce the use of reactive strategies. In this selected sample though, where the behaviours displayed by the children were often very severe, it is doubtful whether their use could be completely eliminated.

This being the case, the reasons as to why parents seem unable to access reactive training need further consideration. It is probable that the principal reason for this is that the legislative drivers that are at the forefront of improving training for staff are clearly not in place for natural carers. While this is clearly a critical variable, a number of other factors also appear to militate against parent training being delivered. In addition to the anxieties regarding vicarious liability discussed earlier, concerns exist about perceived conflicts with child legislation (although such concerns were more than adequately dealt with by Lyon, 1994), about whether teaching parents physical interventions may lead to an
increase in abusive practice, whether training can be effectively controlled or monitored in family homes, and whether carers have the physical competencies to be able to properly implement taught strategies (Green & Wray 1999; Shinnick & McDonnell 2003).

The issue of why physical intervention training causes so much concern over liability is of interest, particularly when it is considered that health trusts, for example, may train carers to conduct other intrusive and risky procedures (e.g. administering complex and risky medications) that do not appear to provoke the same level of concern or result in the same impasse. It is very clear from the present study that, regardless of whether or not carers are actually trained in physical interventions, they are going to use them out of necessity. The general health risks arising from the use of inappropriate physical interventions have already been alluded to, but it also seems possible that the risk of abuse may increase, rather than diminish, if training is not provided. While issues of monitoring and quality control may be higher in family settings, these worries apply equally well to staffed situations also. Trainers in physical intervention are familiar with concerns that technical fidelity may decrease rapidly post-training, and that staff recording of physical intervention use may be very unreliable (Baker & Bissimire 2000). Agencies therefore need to be concerned about the consequences of acts of omission, and not just of acts of commission. Although the evidence for the effectiveness of physical intervention training is somewhat equivocal (Allen 2001), the significant financial investment that this training attracts presumably means that both commissioners and providers feel it to be of some value. If this is the case, then failing to train natural carers is hard to justify on ethical grounds, and will be hard to defend on legal grounds should serious injury or fatality arise from a failure to provide a potentially effective intervention. A number of practical suggestions have been made regarding how parent training could be provided in a manner that protects all parties (Green & Wray 1999; Shinnick & McDonnell 2003).

Some limitations of the study need to be acknowledged. There are two principal concerns, both of which relate to the nature of the sample. First, the study only attracted a 25% response rate. Although a sample size of this magnitude is a concern, it is in accordance with rates typically obtained in postal surveys. Second, as the sample was self-selecting, no claims can be made that it was at all representative of the total population of natural carers supporting family members with learning disabilities and challenging behaviour. If anything, the sample was likely to be highly skewed in that parent members of this organization were perhaps more likely to be supporting individuals with more severe challenges and should be viewed as such. The themes arising from the research bear some comparison to previous work in this field, however (Qureshi 1990; Adams & Allen 2001), and it may be argued that this in itself lends some validity to the findings.

Future research needs to overcome the limitations of the present study by including a much broader sample of children and parents. This will enable the true rate of physical intervention use within family contexts to be established. Future studies should also examine the relative frequency of restraint use amongst different family members (i.e. parents and siblings); this is important, as mothers were the primary respondents in the present study. Finally, more evidence of the effectiveness of parent training in physical interventions needs to be collected in order to match the equivalent, developing literature regarding the effectiveness of training for paid carers (Allen 2001).

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