Complementary and Alternative Medicine (CAM) and Autistic Spectrum Disorders

Feedback From Parents and Carers Following Child's CAM Intervention

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Executive Summary

- This report provides a summary of feedback gathered from the parents/carers of children diagnosed with an Autistic Spectrum Disorder, who have accessed complementary therapies to treat their children. This report has been produced as part of a network-wide study of the Children's Complementary Therapy Network (CCTN) UK.
- Autistic Spectrum Disorder (ASD) is an umbrella term used to denote a range of developmental disorders that all present similar characteristics and abnormalities, including: Classic Autism, Asperger's syndrome, and Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS).
- This study took place between July 2006 and June 2007 in the UK involving CAM practitioners
 who are CCTN members. A self-completed anonymous questionnaire was offered to
 parents/carers who were accessing complementary therapies for their children diagnosed
 with ASD.
- A total of 14 questionnaires were included in the analysis. All the questionnaires were completed by parents.
- The majority of the children reported on were males (10; 73.3%), 2 (13.3%) were females and 2 (13.3%) respondents did not specify the sex of the child. The mean average age of the children was 7.9 years; the oldest child was 13 and the youngest only 4 years of age.
- Over 70% of the children (10/14) received chiropractic therapy. Other therapies received included Bowen Therapy, Cranial Osteopathy and Homeopathy.
- Improvements in the children were reported in several different health and social areas after having received CAM, including: physical, emotional, behavioural, and social interaction.
- In various cases children were reported to have improved coordination, been calmer, more confident, with fewer temper tantrums, improved concentration, improved listening abilities, and with fewer rigid routines following a course of CAM intervention.
- Parents reported to have experienced secondary benefits, including improvements in their emotional, psychological and physical health as well as in learning new skills which they could then use at home with their child.
- There were clear limitations to this study that prevent it from being a robust piece of scientific evidence. Although the early indications of CAM use on children with ASD are positive, more robust and focused research is required.

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Complementary and Alternative Medicine (CAM) and Autistic Spectrum Disorders: Feedback from Parents/Carers Following Child's CAM Intervention

Introduction

This report provides a summary of feedback gathered from the parents/carers of children diagnosed with an Autistic Spectrum Disorder who had accessed Complementary and Alternative Medicines (CAM) to treat their children. The feedback was collected as part of a network-wide study of the *Children's Complementary Therapy Network* (CCTN) UK¹.

The CCTN is a UK based paediatric network developed to support the use of complementary therapies for children. The network is led by Freshwinds and provides a platform for sharing information about clinical practice, education, training and research. The CCTN currently has over 400 members worldwide, including complementary therapists, doctors, nurses, physiotherapists, occupational therapists, teachers, researchers and service developers.

Background

Autistic Spectrum Disorder (ASD) is an umbrella term used to denote a range of developmental disorders that all present similar characteristics and abnormalities. These include Classic Autism, Asperger's syndrome, and Pervasive Developmental Disorders Not Otherwise Specified (PDD-NOS, alternatively referred to as Atypical Autism) ². These are all collectively defined within the wider category of *Pervasive Developmental Disorders* (PDD) according to the World Health Organisation's International Classification of Diseases (ICD-10; 2007 version³).

The disorders across the autistic spectrum are characterised by three impairments, commonly referred to as the 'triad of impairments'. These impairments affect the person's social interaction, communication (verbal and non-verbal) and imagination ^{4, 5}. Due to the impairments associated with Classic Autism, for example, children with this diagnosis may demonstrate limited imagination, become abnormally withdrawn almost insular, and have tendencies to express repetitive behaviour patterns⁶. Classic Autism is a condition that usually develops before the age of 3 years and persists into adulthood. Recent records suggest that there are around half a million cases of ASD in the UK⁷.

The aetiology of ASD remains largely unknown but is likely to be multifaceted. Given this apparent knowledge gap, conventional treatments tend to focus on the presentations of the disorder (i.e. behaviour patterns). Due to the lack of a mainstream conventional treatment more and more parents are turning to complementary and alternative medicine (CAM) to treat their child⁸. A recent study suggests that the use of CAM in children with ASD is about twice as common in comparison to children without ASD⁹. This study also reported dietary-based therapies to have been the most common form of CAM used by the parents for their children with ASD. Seventy per cent of therapies used by the parents in the study included special diets and supplements; around three-quarters of these parents felt that these therapies were beneficial. Other studies have also reported positive results of CAM when used to treat children with ASD (see Piravej, 2009¹⁰ for discussion). Despite some successes, the evidence-base to support CAM use in ASD remains unclear¹¹.

The main purpose of the study addressed in this report is to assess the use and benefits of CAM in treating children with ASD, as well as to assess the secondary benefits felt by the parent/carer and family as a whole.

Design and Methodology

This study took place in the UK between July 2006 and June 2007. Data was collected using a self-completion anonymous questionnaire, which was offered to parents/carers whose children were diagnosed with ASD and were accessing CAM. They were given the choice to opt out of completing the questionnaire if they wanted to. Questionnaires were distributed via the CAM practitioners, who are CCTN members, after completion of 5 therapy sessions with the child (for some children this number of sessions varied depending on how many were scheduled and/or how many were required by the child). The CAM practitioners were allowed to assist the parents/carers in understanding the questionnaire. The identity of the CAM practitioner remained anonymous. Parents/carers were given the choice to either return the completed questionnaires directly to the CCTN or to return them to the CAM practitioner to be forwarded to the CCTN.

The questionnaire was based on the triad of impairments usually seen in children with ASD. The questionnaire was designed to be completed by a parent/carer and consisted of three parts (a copy of the questionnaire can be provided on request).

- i. Part 'A' recorded background information of the child: age, sex, type of autism, role of the person completing the questionnaire, and details of the therapy/therapies received by the child. Part 'A' also asked the parent to identify any changes made to the child's lifestyle, medical care, social support and educational support concurrent with receiving the complementary therapy (i.e. factors in addition to the introduction of CAM that may have contributed to changes observed in the child).
- ii. Part 'B' recorded the changes observed in the *child* since commencing CAM therapies. Part 'B' consisted of two sections. The first section included questions regarding general changes in the child's physical/emotional health, behaviour and communication, as well as enquiring about adverse reactions, the child's comments about the therapy, and any changes in the child reported by their school teachers. The second section asked the parent/carer to identify specific problems (from a list of 40 individual problems) that their child was experiencing before having the CAM therapy and then, from the same list, to identify problems that had improved since having the CAM therapy.
- iii. Part 'C' of the questionnaire relates to changes observed in the *family* as a result of the child receiving CAM therapies. The first five questions enquired about new skills learned by the parent to use with their child, improvements in family relationships, improvements in family life, the parent's ability to cope as a carer and the parent's sense of feeling supported in their role as a carer. These were followed by 39 different criteria from which the parent/carer could indicate their own problems before their child received CAM treatments

and which problems improved afterwards. Opportunity was provided at the end of the questionnaire for respondents to provide additional information, both positive and negative comments.

The report will now turn to present the results of the questionnaire data collected before moving on to discuss these findings and draw conclusions.

Results

A total of 36 questionnaires were received. Unfortunately, 22 of these were not suitable and so were excluded from the final analysis. Reasons for questionnaire exclusion included: it was not clear whether the child had been diagnosed with ASD, the questionnaire responses were of a poor or incomplete standard, or the child's therapy had not been reported.

Data from the 14 accepted questionnaires have been analysed and are presented under the following headings. All data should be treated with caution because of this small sample size.

Background information

Of the completed questionnaires, 11 (78.6%) were completed by Mothers; 2 (14.3%) were completed by Fathers whilst 1 (7.1%) did not specify. This data is presented in Table 1.

Table 1. Role of questionnaire respondent

Person completing the questionnaire	Number (n)	Proportion of children (%)
Mother	11	78.6
Father	2	14.3
Did Not Specify (DNS)	1	7.1
Total	14	100.0

Data in Table 2 presents the background information of the children. Of the 14 completed questionnaires, the majority of the children reported on were male (10/14; 71.4%), 2 (14.3%) were females and 2 (14.3%) respondents did not specify. The mean average age of the children was 7.9 years; the oldest child was 13 and the youngest only 4 years of age.

When asked to report the specific type of ASD that the child had been diagnosed with, 7 of 14 respondents (50.0%) did not specify a type. 4 respondents (28.6%) simply reported ASD as their child's type of autism. Specific types of ASD reported included the following: Classical Autism (2/14; 14.3%), and Asperger's (1/14; 7.1%).

Table 2. Background information of children within the study

Background Information	Number (n)	Proportion of children (%)		
Gender				
Male	10	71.4		
Female	2	14.3		
DNS	2	14.3		
Type of Autism				
ASD (did not specify particular type)	4	28.6		
Classical Autism	2	14.3		
Asperger's	1	7.1		
DNS	7	50.0		

Table notes: DNS = Did Not Specify (of which 4 stated 'no' child's autism had not been given a specific name)

Data in Table 3 presents information on the types of complementary therapy that the children had received, the question posed was an open-response format and so percentages are reported for both proportions of total responses and proportions of total children.

Table 3. Types of complementary therapy received by the children

Person completing the questionnaire	Number of	Proportion of	Proportion of
	responses (n)	responses (%)	children (%)
Chiropractic	10	62.5	71.4
Bowen Therapy	4	25.0	28.6
Cranial Osteopathy	1	6.3	7.1
Homeopathy	1	6.3	7.1
Total	16	100.0	-

Table notes: Open question format. Two children reported to have received a combination of CAM (one received Chiropractic and Cranial Osteopathy; one received Homeopathy and Bowen Therapy).

According to the data, the majority (10/14; 71.4%) of children reported on in the study received Chiropractic therapy of which one also received Cranial Osteopathy. A further 4 (28.6%) children received Bowen therapy, of which one also received Homeopathy.

Data in Table 4 report on the number of complementary therapy sessions each child had attended. Over half of children (7/14; 50.0%) had received 10 or more sessions, 4 children (28.6%) were reported to have attended less than 10 sessions (3/14 respondents did not specify). A time period for these sessions was not specified.

Table 4. Number of complementary therapy sessions attended

Number of therapy sessions attended by child	Number of responses (n)	Proportion of children (%)
Less than 10	4	28.6
10 or more	7	50.0
DNS	3	21.4
Total	14	100.0

Table notes: DNS = Did Not Specify

Of the 14 children reported on in this study, around one-fifth (3/14, 21.4%) were reported to have received other therapies elsewhere. These other therapies included: sensory integration therapy,

chelation therapy (removal of heavy metals e.g. mercury from the body), speech and language therapy, music therapy, and ABA (Applied Behaviour Analysis) therapy.

Changes made for the child in addition to the introduction of CAM

A half of all respondents (7/14, 50.0%) reported having made changes to their child's lifestyle concurrent with receiving complementary therapies (7/14, 50.0% reported no such additional changes). Table 5 includes the types of lifestyle changes made. Of the 7 reporting having made lifestyle changes, 5 children (71.4%) were reported to have been taking vitamin supplements and 4 children (57.1%) were reported to have made other dietary changes.

Table 5. Lifestyle changes made for child receiving complementary therapies

Lifestyle change made	Number of responses (n)	Proportion of children (%)
Change to child's lifestyle reported	7	50.0
No change to child's lifestyle reported	7	50.0
Total	14	100.0
Types of lifestyle changes reported:		
Vitamin supplements	5	71.4
Diet	4	57.1

Table notes: 'Types of lifestyle changes reported' in response to open question format, subsequently coded; hence sum of responses (n=9) is greater than sum of those reporting lifestyle changes to have been made (n=7).

Respondents were also asked to report on changes made to the child's medical, educational and or social support concurrent with receiving complementary therapies. Of the total, 64.3% of children (9/14) were reported not to have experienced any such changes (one respondent did not specify a response, 7.1%). The remaining 4 respondents (21.4%) all reported educational changes to have been made. These changes included: introduction of a 'classroom assistant one-to-one 10 hours per week' and changed school to either a 'special needs school' or 'Private education'.

Table 6. Changes made to the child's medical/educational/social network

Changes made if any	Number (n)	Proportion of children (%)
Educational changes	4	21.4
No changes	9	64.3
DNS	1	7.1
Total	14	100.0

Changes observed in the child

This section of the results turns to look at responses provided to part 'B' of the questionnaire, specifically the changes that respondents identified in their children since commencing CAM treatments.

In response to a general question regarding physical health, 71.4% of respondents (10/14) reported observing changes in their child's physical health since receiving CAM (the remaining 4 respondents,

28.6%, reported noticing no such changes). Examples provided by respondents with regards to types of physical health changes included having: "better balance" (4 reported this) and "better coordination" (4 also reported this).

Table 7. Changes reported by respondents to have been identified in the child following treatment

Changes identified by parent	Yes		No		Did Not Specify	
	n	%	n	%	n	%
Changes in child's physical health	10	71.4	4	28.6	0	-
Changes in child's emotions	13	92.9	1	7.1	0	-
Changes in child's behaviour or interaction	12	85.7	2	14.3	0	-
Changes in child's communication	8	57.1	5	35.7	1	7.1

Table notes: n = number of respondents

According to the data in Table 7, 92.9% of respondents (13/14) reported observing a change in their child's emotions after having received complementary therapy. Examples provided by respondents of emotional changes they had observed in their child included: the child being "calmer" (5 respondents reported this), and "more confident" (3 respondents reported this).

Around 86% of respondents (12/14) reported observing changes in their child's behaviour or interaction with other people, after having received CAM. The 2 remaining respondents reported not to have noticed any such change. Comments relating to social engagement were reported by 10 respondents to have been the behavioural change observed in their child (e.g. "more sociable", "interacts more appropriately... asking questions and engaging in conversation").

Over half of respondents (8/14) reported having observed improvements in their child's communication skills. Of the remaining respondents, 5 reported no such improvements, whilst 1 respondent did not provide a response. Comments relating to verbal communication having improved were reported most often, 8 respondents made such comments, and examples of these comments include: "social communication has improved in terms of initiating speech and talking in context", and "more talkative, better at explaining what he means".

When asked to indicate if their child had made any comments about having the therapy, of the 14 respondents, 6 (42.9%) children were reported to have made positive comments. Examples of verbatim comments from parents include: "She enjoyed them", "He looks elated", "[He's] always asking when we are going next", and "Says he feels better and faster".

Respondents were asked to report any comments that had been made to them by their child's school teacher. Six respondents (42.9%) reported that their child's teacher had made a positive comment about their child since receiving CAM. Examples of comments made included the following: "Seen more interaction with other children and more talkative in class", "altogether a nicer and more pleasant child to be around" and "Better control of pencil... better coordination [in] sports".

One respondent out of fourteen reported that their child had had a negative or adverse reaction to the complementary therapy. No further details were provided regarding the extent of this reaction, what was entailed, or what this resulted in.

Problem improvement

Figure 1 presents the data from the 40 child problem/improvement criteria, as reported on by the parents. These criteria have been organised thematically into 6 categories: physical, rituals and rigidity, self, behavioural, social interaction, and social communication.

With regards to *physical* problems that children were reported to have suffered with, and whether these had improved following the use of complementary therapies, the data in Figure 1 reveal a high proportion reporting improvements in their child's co-ordination. Nine of the ten respondents (90.0%) who identified their child's co-ordination as a previous problem reported improvements to have occurred following CAM. Fits and diarrhoea were the only criteria within this category not to have reported to have shown improvement following CAM intervention.

In relation to improvements in *rituals and rigidity* of behaviour following CAM treatment, improvements were observed in the 2 children that were reported to have suffered with the symptom of rigid routines. Of the 5 children reported to have experienced problems with becoming distressed by change, 4 (80.0%) were reported to have exhibited signs of improvement.

When asked to indicate specific *self* related problems that their child had suffered with and whether these had improved following the use of complementary therapies, a high proportion of respondents reported improvement in confidence problems. Seven (of eight, 87.5%) reported as having problems with confidence improved following complementary therapy. All *self* related problems specified in Figure 1 were reported to have been improved in at least 2 cases through the use of CAM.

When asked to indicate specific *behavioural* problems that their children had suffered with and whether these had improved following the use of complementary therapies. Of the 10 respondents who reported general behaviour to have been a problem prior to CAM intervention, 8 (80.0%) observed improvement in this. Seven of the nine (77.8%) respondents that reported temper tantrums to have originally been a problem reported improvements following treatment. All problems included in the behavioural category in Figure 1 were reported to have been improved in at least one case following the use of complementary therapy.

All social communication and social interaction problems were reported to have been improved in at least two cases of the child exhibiting problems in these areas. Specifically, impaired play (5/5, 100.0%), dislikes physical contact (2/2, 100.0%), listening (11/13, 84.6%), verbal communication (4/5, 80.0%), non-verbal communication (4/5, 80.0%), and social interaction (8/10, 80.0%) were reported to have improved following CAM intervention.

Figure 1. Number of children reported to have improved following complementary therapy, by type of problem (includes proportion of children having improved on initial problem)

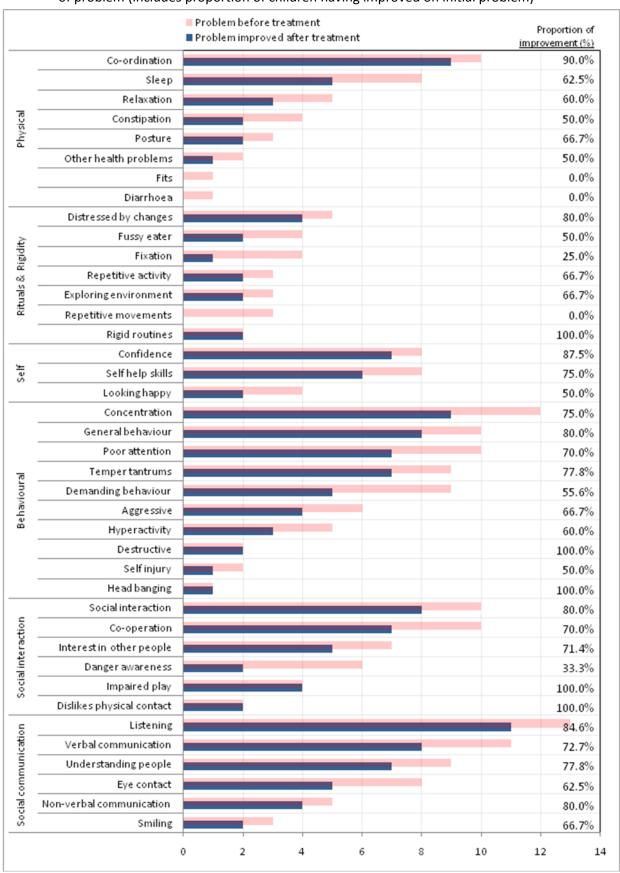


Figure notes: Proportion of improvement equates to % of respondents reporting an initial problem to have improved following their child receiving complementary therapy.

Changes in the family

The following results look at the secondary benefits for families of a child diagnosed with ASD following the child's experience of complementary therapies (Part C of the questionnaire).

According to data in Table 8 a high proportion of respondents, 9/14 (64.3%) reported having learned new skills from the therapist treating their child that they could continue to use with their child at home. Four of these respondents expanded further to state that the skills they had learned were exercises that could be performed with their child outside of therapy sessions.

Table 8. Benefits experienced by parents following child's complementary therapy treatment

Benefits experience by parent	Y	Yes		No		Did Not Specify	
	n	%	n	%	n	%	
Learnt new skills	9	64.3	2	14.3	3	21.4	
Improved family relationships	6	42.9	6	42.9	2	14.3	
Improved family life	10	71.4	1	7.1	3	21.4	
Cope as carer	8	57.1	3	21.4	3	21.4	
Feel supported	8	57.1	3	21.4	3	21.4	

Table notes: n = number of responses

Forty per cent (6/14) of parents reported that their child's complementary therapy sessions had helped to improve family relationships. The parents whom reported such improvement made further comments in support of their response. Examples of verbatim comments include: "[the] relationship between children has improved" and "[Our child] is happier, so is my husband and so am I so our family situation is altogether improved".

A high proportion of respondents (10/14, 71.4%) reported that complementary therapies received by their child had helped to improve family life. Expanding on these answers, 4 respondents stated that it had been easier to go out since their child had received the therapy. Examples of verbatim comments include: "[Our child] doesn't get as stressed when visiting new places", "We can take [child's name] anywhere now, the cinema, out to meals etc and know he will be a good boy" and one respondent stated that they were "more able to go out without temper tantrums".

Over half of respondents (8/14, 57.1%) reported that they had felt better able to cope in their role as carer, as a result of their child receiving CAM. Furthermore, over half of respondents (8/14, 57.1%) also reported that they felt more supported in their role as a carer since their child had received complementary therapy.

Figure 2 presents the data from 39 individual criteria from which the parent/carer was asked to identify if they themselves had experienced problems and if this had improved since their child had started to receive complementary therapies. The criteria have been coded thematically into 6 different over-arching categories: Physical health, Psychological health, Emotional health, Social health, Family health, and Interaction with child.

Figure 2. Number of parents reporting to have made improvements following child's complementary therapy treatment, by type of problem.

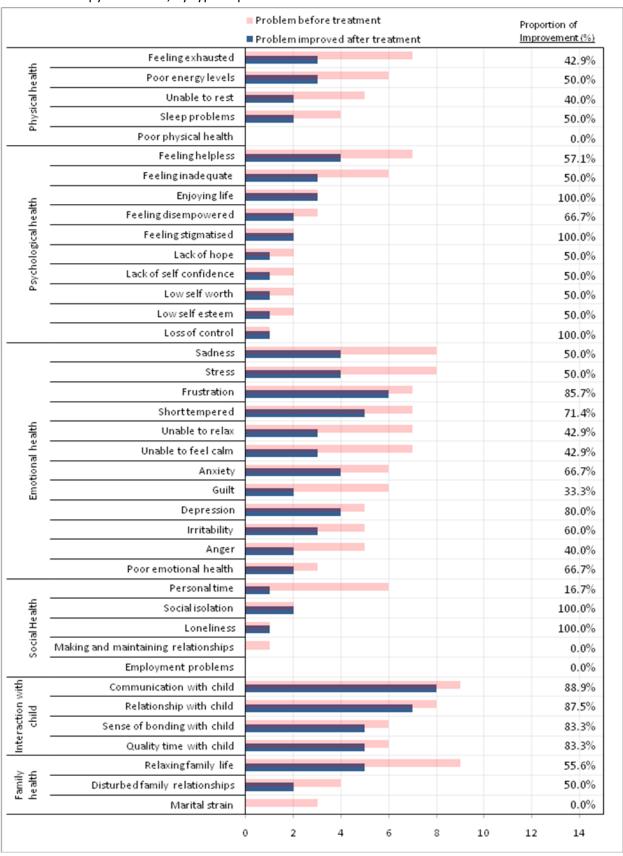


Figure notes: Proportion of improvement equates to % of respondents reporting an initial problem to have improved following their child receiving complementary therapy.

In looking at the individual criteria for physical health, of those criteria where problems were reported prior to the involvement of CAM there were at least 2 cases of improvement in all criteria following CAM intervention. In particular, of the 6 respondents that reported poor energy levels to have been a problem, 3 (50.0%) reported improvements. Two of four (50.0%) respondents reported sleep problems to have improved following CAM intervention.

In terms of carers' psychological health, all criteria that were reported on presented improvement in at least one case following their child's access to CAM. Of particular note, 100% (3/3) of respondents reported improvements in the 'enjoying life' criterion following their child's treatment. Also, of the 2 respondents reporting to have experienced problems of 'feeling stigmatised', both reported improvement. Furthermore, 4 (out of 7; 57.1%) respondents reported improvements in their feelings of helplessness.

Improvements were reported by at least 2 respondents in every criterion of emotional health. Just over 85% (6/7) of respondents who had reported 'frustration' as a problem prior to CAM intervention reported this to have subsequently improved following their child's treatment. Eighty per cent (4/5) of respondents reported their feeling of 'depression' to have improved. Seventy-one per cent (5/7) of respondents reported their 'short tempered' feelings had improved.

In terms of the respondents' social health, 100% (2/2) of those who reported 'social isolation' to have been a problem indicated that they had experienced an improvement since their child's CAM intervention.

Improvements were reported for all problem criteria relating to the carer's interaction with the child. In particular, 88.9% of respondents (8/9) reported that communication with their child had improved following their child's CAM intervention. Also, 7 (of 8; 87.5%) respondents reported their relationship with their child to have improved.

Regarding the theme of family health, 5 respondents (of 9, 55.6%) reported improvements in achieving a 'relaxing family life' following their child's CAM intervention. Two respondents (of 4, 50.0%) reported experiencing improvements in 'disturbed family relationships'.

Table 9 contains the responses of parents to the opportunity (at the end of the questionnaire) to write comments on how things had changed for their child and family following CAM intervention.

Table 9. Verbatim comments from questionnaire respondents

Comment 1	I believe that this treatment has contributed to a holistic approach to supporting [my
	child's] development.
Comment 2	[My child] is happy all the time now and enjoys his life very much. We still have some
	trying times but generally all our lives are better.
Comment 3	Realisation that there is hope and my child does have a future just like any other child.
	Something that this treatment has opened my eyes to.
Comment 4	He is a changed boy. A much happier boy & family life has greatly improved.
Comment 5	This is very thought provoking and too simplistic as [my child's] maturing all the time
	anyway.
Comment 6	[My child's] confidence has been restored last year both he and I were very traumatised
	by school. Thanks now to the support and [that] others understand [my child] is not
	being naughty our confidence has grown and we now have fun again.
Comment 7	[My child] has made significant improvements since commencing Bowen, he very much
	enjoys his time there, although he has also experienced a number of life changes since
	the start of Bowen which could also attribute to his improvements.
Comment 8	My son actually seems to be listening now sometimes he still gets a bit hyped but he
	soon settles down and is back to his old self.

^[] brackets have been added to remove the child's name from the comments, and to provide clarity to verbatim quote where required.

Having presented the questionnaire results the report will now move on to discuss and draw out conclusions from the key findings of this study.

Discussion

This section will begin with a brief summary of the key findings from this parent/carer feedback study of the benefits and uses of complementary therapy for children with an Autistic Spectrum Disorder (ASD). The report will then return to the original study objectives to discuss their achievement.

The results from this study suggest that positive outcomes were experienced by children, and their families, following CAM intervention. To recap, nearly 72% of respondents reported their child's physical health to have improved following receipt of CAM. In particular, complementary therapies were reported to have alleviated problems in children's coordination and body balance. Given that the majority of children in this study received Chiropractic therapy, which is a musculoskeletal directed therapy, it is conceivable that physical health improvements may well have been linked to this CAM intervention. Physical health, whilst not included in the triad of impairments in ASD, remains a key aspect of a child's overall wellbeing.

Over 90% of parents reported their child's emotional health to have improved following a course of complementary therapy. In particular, the child's self perception and outlook seemed to have altered following treatment in so far as many reported being calmer and more confident. Emotions and behaviour are said to be closely linked, with this in mind, a similarly large proportion of parents (over 86%) reported that their child's behaviour or interaction with other people had improved following CAM intervention. Parents in this study frequently reported that their child had improvements in social engagement behaviours (e.g. communication and interaction), temper tantrums, concentration, and rigid routines since receiving complementary therapy.

In addition to the children's direct benefits from the use of CAM, there are also the wider more vicarious aspects of the therapies to reflect on. Due to the nature of ASD, the behaviour of children with the condition can often cause disruption to the family environment; lessening this disruption can have a major impact on home life and for all those involved. Within this study, over 70% of respondents reported an improved family life following their child's treatment with CAM. In terms of the specific secondary benefits experienced by parents following their child's CAM treatments, positive improvements were recorded in parents' emotional, psychological and physical health as well as their interaction with their child.

Around 65% of parents reported to have learned new skills from the therapists delivering their child's complementary therapies. The potential benefits of this include the parents being able to conduct basic CAM therapies at home with their child. The learning of new skills helps to empower the parent in caring for their child in between specialist therapy sessions and perhaps even reduces the number of specialist sessions needed. In applying these skills at home parents/carers also have a new and positive means of interacting with their child. There are also the financial savings and ease-of-access benefits to consider when teaching techniques that can be performed by the parent at home. Over half of the respondents (57.1%) reported that they had felt better able to cope in their role as a carer for their child due to the complementary therapy sessions being accessed by their child.

Also worth considering are the beneficial impacts CAM can have on the schooling of children with ASD. Encouragingly, 43% of parents reported that their child's teacher had made a positive comment about their child since receiving CAM, including improved interaction and coordination.

The primary objective of this study was to assess the use and potential benefits of CAM interventions for children with ASD. The means by which this study was conducted required parents/carers to complete a feedback questionnaire identifying their own and their child's experiences before and after CAM intervention. As a small scale study it is beyond the scope of this report to stake any definitive claims regarding the use of complementary therapies by children diagnosed with ASD. However, positive results have been seen and should not be disregarded. More robust research is required in order to continue building an evidence base and move closer to verifying the benefits that have been identified here.

The second objective of this study was to assess whether benefits were experienced by the parents/carers and families of children with ASD receiving complementary therapies. Within the scope of this study, this objective has been achieved. Within the scope of wider populations, this objective again is an ongoing one. The responses given by parents in this study provide evidence that at least suggests such benefits can and have been experienced. Ultimately, it seems conceivable that if a child with ASD within a particular household can be treated with CAM and becomes less disruptive as a result, then the quality of that family's life would concordantly benefit. The child, however, is only ever one factor within family life.

Conclusions

Positive results have been recorded in this study regarding the use of complementary therapies for treating children diagnosed with an Autistic Spectrum Disorder. Parents have reported a number of their child's symptoms and problems to have improved following a course of complementary therapy. There are obvious limitations to this study that prevent it from being a robust piece of scientific evidence proving the use of complementary therapies to be effective in the treatment of children with ASD. However, this has still been a very worthwhile exercise in at least identifying a starting point and providing an indication for the use of complementary therapies with this group of children. For the parents and children who took part in this study, the benefits were evident. More robust evidence is required if more parents are to be encouraged to seek CAM in the treatment of their child with ASD.

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