

# Use of complementary and alternative medicine (CAM) for children with brain injury in the UK.

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LETTERS TO THE EDITOR

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USE OF COMPLEMENTARY AND  
 ALTERNATIVE MEDICINE FOR  
 CHILDREN WITH BRAIN INJURY  
 IN THE UNITED KINGDOM

Dear Editor:

Recent evidence suggests that there are potentially high and increasing numbers of children with brain injury using

complementary and alternative medicine (CAM),<sup>1,2</sup> although there is a lack of information regarding CAM use in children with brain injury in the United Kingdom. However, the results of a recent survey provide some more information on the topic.

We collected data via a cross-sectional survey of parents of children with brain injury, recruited through Cerebra, Carmarthen, Wales, a charity of brain-injured children. Questionnaire packs were sent to a sample of 972 parents; 172 parents meeting the inclusion criteria responded. Seven

TABLE 1. COMPLEMENTARY AND ALTERNATIVE MEDICINE USE AMONG CHILDREN WITH BRAIN INJURY

<i>Therapy</i>	<i>Number (n = 98)</i>	<i>Percent</i>
Massage	22	22.4
Osteopath/cranial osteopathy	21	21.4
Aromatherapy	18	18.4
Omega 3 & 6 oil supplements	15	15.3
Homeopathy	14	14.3
Healing/Reiki	12	12.2
Reflexology	12	12.2
Nutritional supplements	6	6.1
Herbal/Chinese Medicine	5	5.1
Special/gluten-free diet	5	5.1
Acupuncture	5	4.1
Chiropractic	4	4.1
Indian head massage	4	4.1
Conductive education	3	3.1
Hyperbaric oxygen therapy	3	3.1
Advanced (Neuro Respiratory Therapy)	2	2.0
Bowen technique	2	2.0
Dore program <sup>a</sup>	2	2.0
Institute for Neuro-Physiological Psychology	2	2.0
Music therapy	2	2.0
Brainwave physiotherapy	1	1.0
Brushing therapy	1	1.0
Cranio sacral therapy	1	1.0
Hypnotherapy	1	1.0
Neurolinking	1	1.0
Play therapy	1	1.0
SCENAR	1	1.0
Shiatsu	1	1.0
Sunflower Method <sup>b</sup> (Combines CAM modalities and NLP)	1	1.0
Yoga	1	1.0

SCENAR, Self-Controlled Energy Neuro Adaptive Regulation, NLP, neurolinguistic programming.

<sup>a</sup>Dore is an individualized exercise program.

<sup>b</sup>The Sunflower Method is an individualized holistic program that combines complementary and alternative modalities, including cranial osteopathy, homeopathy, nutrition, and NLP.

(7) parents had 2 children with brain injury; thus, data were obtained for 179 children.

The children had a mean age of 7.92 (standard deviation [SD] = 4.51), and a mean age at diagnosis of 2.82 (SD = 3.27). Sixty percent (60%) of the children were male. The children had a diverse range of brain injuries including autism, cerebral palsy, global developmental delay, epilepsy, attention-deficit hyperactivity disorder, and acquired brain injury. Fifty-three percent (53%) of the children had multiple disabilities. The majority of parents were mothers (90%), were married or living with a partner (79%), were white/European (87%), and had educational qualifications (90%).

The study showed that 30 different types of CAM were reported, with the most popular being massage, osteopathy/cranial osteopathy, aromatherapy, omega 3 oil supplements, and homeopathy (Table 1). The median number of CAM therapies used was 2 (range 1–5). Children were more likely to have received CAM if their parents had formal educational qualifications, showed greater belief that individuals should participate in their own treatment and decision making, had greater belief in a holistic approach to health, used CAM themselves, and had tried more different types of CAM therapies. Child CAM use was not related to parental optimism or child characteristics. Eighty-seven (87) children (56%) had received CAM.

Prevalence rates of child's CAM use found in this study are similar to those of other studies, which found that 50% of children with autism and 56% of children with cerebral palsy have used CAM at some point in their life,<sup>3</sup> but they are significantly higher than prevalence rates found for children with ADHD and epilepsy, which range from 14% to 32%.<sup>4,5</sup> However, caution needs to be exercised when interpreting these results, in particular prevalence rates from this study, because the response rate was low and may be subject to response bias. The response rate was a major limitation to this study, but because participants were recruited through a third party, the reasons for the low response are not known. However, possible explanations include that (1) parents of children with brain injury are often very busy, giving them little time to participate in research; (2) because of recruitment methods required by the funders, we were unable to send reminders to parents; or (3) parents not using CAM for their child might have felt that the research was not relevant to them, and thus decided not to complete the questionnaire.

In conclusion, we suggest that given the potentially high number of children with brain injury using CAM, future re-

search should focus on examining the risks and benefits of CAM within this population.

## ACKNOWLEDGMENTS

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## REFERENCES

1. Ernst E. Prevalence of complementary/alternative medicine for children: A systematic review. *Eur J Pediatr* 1999;158:7–11.
2. McCann LJ, Newell SJ. Survey of paediatric complementary and alternative medicine use in health and chronic illness. *Arch Dis Child* 2006;91:173–174.
3. Hurvitz EA, Leonard C, Ayyangar R, Nelson VS. Complementary and alternative medicine use in families of children with cerebral palsy. *Dev Med Child Neurol* 2003;45:364–370.
4. Bussing R, Zima BT, Gary FA, Garvan CW. Use of complementary and alternative medicine for symptoms of attention-deficit hyperactivity disorder. *Psychiatr Serv (Chic)* 2002;53:1096–1102.
5. Gross-Tsur V, Lahad A, Shalev RS. Use of complementary medicine in children with attention deficit hyperactivity disorder and epilepsy. *Pediatr Neurol* 2003;29:53–55.

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