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RE: German Survey Finds CAM Little Used (18%) Among Children with Type 1 Diabetes

Dannemann K, Hecker W, Haberland H, et al. Use of complementary and alternative medicine in children with type 1 diabetes mellitus-prevalence, patterns of use, and costs. *Pediatric Diabetes*. 2008 Jun;9(3 Pt 1):228-235.

Children with chronic diseases are highly likely to use complementary and alternative medicine (CAM). Type 1 diabetes is one of the most common childhood chronic disorders. The use of CAM among children with diabetes has not been well studied. The purpose of this study was to characterize the prevalence of CAM in children with diabetes.

A survey was conducted at four pediatric diabetes centers in Germany (Leipzig, Berlin, Stuttgart, and Bonn) from November 2004 until December 2005. The parents self-completed the anonymous questionnaire for 346 children (age range 1-18 years, mean 11.9 years) who had Type 1 diabetes and depended on insulin. The questionnaire contained 57 questions that covered the use of conventional and alternative therapies. Parents were asked about CAM use, which CAM modalities were used, and their reasons and motivation for usage. They were also asked about their sources of information, provider, frequency and duration of use, costs, willingness to pay, and physicians' attitude.

Eighteen percent of the subjects reported using CAM at least once. Most of the subjects (69%) reported only using one or two CAMs, 29% reported using 3 or 4 different CAMs. The most popular CAMs were: homeopathy (used by 15% of the subjects) vitamins and minerals (used by 14% of the subjects), modified diet (used by 13% of the subjects), aloe vera (used by 7% of the subjects), and cinnamon (used by 6% of the subjects). All subjects who used CAM reported to use it simultaneously with insulin therapy. The majority (62%) informed their physician that they were using CAM. CAM was purchased without medical reimbursement in 95% of the cases. The majority of CAM users were motivated by the wish to try everything (78%) and by the conviction that CAM has fewer side effects (55%).

Almost half (47%) of the subjects reported that CAM had a smaller effect then insulin therapy. Most reported that the CAM did not have lasting effects on reducing blood glucose levels (67%) or hemoglobin A1c levels (72%). Forty-eight percent reported a short-term reduction in the daily insulin dose. More than half of the users noticed no changes at all (positive or negative) after CAM therapy. Friends and family were the greatest source for CAM information.

CAM therapies were used more often by subjects living in Western Germany, where people tend to be better educated and more financially well-off. Since the survey was conducted in four centers throughout Germany the authors believe that the results are generalizable to the entire German pediatric population. However, the results of this study may not be generalizable to the American pediatric population because CAM use could be different.

The authors conclude that CAM therapies to treat childhood diabetes is much lower than expected, considering that 28% of the general pediatric German population uses CAM. The authors hypothesize that the lower CAM use in children with Type 1 diabetes could be due to the fact that insulin is the only effective therapy and parents might expect CAM to be less helpful, so they don't use it. The authors discovered that the primary use for CAM in children with Type 1 diabetes was not better blood glucose control, but rather CAM was used to make the child feel better or prevent severe complications. The parents are not abandoning the use of insulin or questioning the need for it.

—Heather S. Oliff, PhD

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