

The Use of Complementary and Alternative Medicine (CAM) in Children – Ignore at Our Peril

It is indeed a challenge to precisely define the term ‘complementary and alternative medicine’ or CAM. The National Institute of Health in the United States defines CAM as: ‘Complementary and Alternative medicine is a broad domain of resources that encompasses health systems, modalities and practices and their accompanying theories and beliefs, other than those intrinsic to the dominant health system of a particular society or culture in a given historical period.’ It may include cures and remedies perceived by their users as associated with positive health outcomes. What is clear, however, is that CAM therapies are used frequently for children and families may choose CAM for a variety of reasons including the perception the CAM therapies are more in their own control, because they see them on supermarket shelves and do not see them as different to prescribed therapies or if they wish to try an alternative where they feel that mainstream medicine has somehow failed them. Despite this trend of increased CAM use, many doctors are largely uninterested in the topic and often cannot give informed advice when families do raise the issue.

Some CAM are likely to be good therapies with important potential roles in health care of children. A rational, informed adult is clearly entitled to use any form of treatment, including CAM, for themselves. Special issues arise when parents choose to administer CAM to their children. By definition, Complementary medicine is used in conjunction with conventional medicine whereas alternative medicine is used in place of conventional medicine. It is suspected that the use of CAM is increasing in paediatrics but figures are sketchy. In 1992, 11% attending a Montreal-based paediatric clinic admitted to use of CAM. More recently studies in the UK and US show rates between 20%-47% of CAM can also be higher in certain populations, up to 70%, for example in those with chronic diseases like cancer, arthritis, cystic fibrosis. What is more important, however, is that a lot of complementary and alternative medicine therapies are not generally not accepted into the medical community due to a lack of sufficient evidence based assessment. However there are reputedly over 4000 articles when looking for evidence base in CAM.

CAM therapies in clinical situations

Epilepsy

With regard to epilepsy, studies showed no reduction in seizure frequency with relaxation therapy. Cognitive behavioral therapy has shown to reduce depression, reduce seizure frequency and improve quality of life scores. Yoga has also been shown to decrease the seizure frequency and duration in epilepsy. A ketogenic diet which is high in fats and low in carbohydrates and it is used in children who have drug-resistant epilepsy were placed on this diet. The number of seizures decreased by 1/3 as compared with a controlled group. This has been the first randomised controlled trial of this diet. A Cochrane review looking into acupuncture has not shown any studies which have suggested improvement of epilepsy. Another Cochrane review has shown no evidence that folic acid, thiamine, vitamin D or vitamin E improve seizure control or prevent side effects for people with epilepsy.

Autism

There are also many controversial alternative treatments for autism which include gluten or casein-free diet, vitamin supplementation and omega-3 fatty acid diet. There are also chelation therapies for heavy metals like mercury. None have proven benefit.

Headaches

CAM therapies are known for the treatment of migraine including acupuncture (now endorsed by the British Medical Association as a form of treatment), homeopathic remedies (as prescribed by a homeopath), manipulative therapies (including osteopathy and reflexology), relaxation methods, Magnesium, Vitamin B2, Co-Enzyme Q10 and ginger and herbal remedies (including Feverfew and Butterbur petasin).

Colic

Colic may affect up to 25% of all infants. It can be particularly frustrating for parents when a otherwise healthy infant has excessive crying for no apparent reason. Treatment modalities include natural health products (such as fennel, chamomile and peppermint), baby massage and interventions including infant soothing techniques. As parents desperately search for something to ameliorate crying symptoms in their infants with colic, infant massage has been found to be comparable to a crib vibrator in reducing crying in babies with colic. Indeed the decrease in crying noted may reflect the natural course of early infant crying.

Constipation

Constipation has been treated for many years with herbal medicines, abdominal massage therapy, acupuncture and biofeedback. Studies have shown there was no effect on colonic function in chronic constipation with acupuncture. Abdominal massage also appears to increase bowel movements and decrease stool incontinence.

Common colds

An average 3 year old child will suffer from up to 8 to 10 colds (URTI) per year. In studies reviewed, Echinacea alone did not reduce the duration or severity of the cold but did reduce nasal secretions. The overwhelming majority of Echinacea products have not been tested in clinical trials. Preparations based on the aerial parts of E. purpurea may have beneficial effects on cold symptoms in adults if started early but have not been shown to be effective in children.

Asthma

CAM treatments for asthma include herbal remedies (Ma huang, Shinpi-to, Tylophora indica, Ginkgo biloba, Coleus forskohli and coffee), nutritional supplements (Vitamins (pyridoxine, vitamin C), Minerals (Magnesium, selenium, salt restriction), others (omega-3 fatty acids), dietary changes (non-dairy, elimination diets), exercise (swimming, yoga breathing) and massage and spinal manipulation. There is no evidence for the use of spinal manipulative therapy or breathing exercises for asthma.

Urinary tract infections / bedwetting

Vaccinium macrocarpon (otherwise known as the humble cranberry) may decrease the number of symptomatic UTIs in particular with females with recurrent UTI. It may however cause diarrhoea and gastrointestinal in large amounts. Prolonged use may cause renal stone formation affects 15% of 5 year old and up to 5% of 10 year olds. There is weak evidence to support spinal manipulation and acupuncture as alternative methods of treatment. Hypnotherapy and psychotherapy also have been used as treatment modalities as has biofeedback. None have proved to be effective in enuresis. These are only a few examples of the different therapies that are encompassed by CAM. Although common place in certain cultures (Ayurveda in India), we also know is that the use of CAM is increasing in the developed world. The onus is therefore to subject this form of therapy to scientific testing and to be able to put definitive regulations and safety standards in place for these therapies. As doctors, we are finding that the use of CAM therapies in children is not an occasional fringe activity and thus it cannot be easily or safely ignored. It may not be easy for us to engage with health care paradigms that are quite foreign to our own medical training, but we owe it to our patients to attempt to do so and to be much more informed on the topic.

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