

Use of Complementary and Alternative Medicines (CAM) Amongst Children and Adults



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Introduction

Complementary and alternative medicine is defined as the 'diagnosis, treatment and or prevention which complements mainstream medicine by contributing to a common whole, by satisfying a demand not met by orthodoxy or by diversifying the conceptual framework of medicine. It is also identified as a general term which can be used to represent a group of diverse medical modalities, practices, and products [1]. WHO defines CAM as a broad set of healthcare practices that are not integrated into the dominant healthcare system. The use of complementary and alternative medicine (CAM) is widely documented in the literature. The concern is that CAM may interfere with mainstream medicine and it is difficult to know to what extent. Without knowing the extent, CAM use is prevalent in children, especially the vulnerable children. Little is known about the difference between healthy and chronically ill children with a focus on prevalence, reasons for use/non-use, costs, adverse effects (AE) and socio-demographic factors [2].

CAM popularity has risen in the last decade. Information about its use by pediatric patients in palliative care is still scarce [3]. The systematic review is available from 2000-2001 to estimate CAM prevalence in US. Through surveys on CAM in general, the average one-year prevalence of use of CAM was 41.1% and the average lifetime prevalence was 51.8%. Herbal medicine was the most popular CAM, followed by homeopathy, aromatherapy, massage and reflexology [4]. In addition, a National estimate of the use of complementary health approaches among children aged 4–17 years in the United States is presented via this report. Selected modalities are compared for 2007 and 2012 to examine changes over time [5].

United States is using Complementary and alternative medicine (CAM) widely. It is used in conjunction with conventional medicine. Some CAM practitioners recommend against vaccination, and children who saw naturopathic physicians or chiropractors were less likely to receive vaccines

and more likely to get vaccine-preventable diseases. Nothing is known about how child CAM usage affects influenza vaccination [6].

Examining the prevalence and predictors of complementary and alternative medicine (CAM) use was the purpose of some studies. Also, parental perceptions of CAM efficacy in a large, geographically diverse sample of children with Autism Spectrum Disorders (ASD) [7] were the subject of some studies.

The usage of complementary and alternative medicines in an outpatient pediatric neurology clinic, and to assess family attitudes toward the efficacy of complementary and alternative medicines versus prescription medications was studied as part of the research by some scientists. Complementary and alternative medicine is an important element of the modern health care landscape. There is limited information about whether and to what extent, families perceive its utility in childhood neurological disorders [8].

A national estimate of the use of complementary health approaches among children aged 4–17 years in the United States was presented via a report. Selected modalities were compared for 2007 and 2012 to examine changes over time [9].

Prevalence of Medical pluralism throughout the Western world became popular in spite of efforts to legitimize Western biomedical healthcare use "conventional medicine" and thereby relegate all non-physician-related forms of healthcare to the "other" category. These "other" practitioners have been referred to as "unconventional", "alternative" and "complementary", among other terms throughout the past half century [10].

One study indicated that CAM use was high among pediatric specialty clinic outpatients and was much greater in the western than in the central hospitals in Canada. Most respondents felt that their CAM use was helpful with few or no harms associated. The most common CAM products currently used were multivitamins/

minerals, herbal products, and homeopathic remedies. The most common CAM practices currently used are massage, chiropractic, relaxation, and aromatherapy [11]. Use of complementary and alternative medicines (CAM) in children is general and is possibly increasing. The study was conducted in Germany over a four week period in 2004 and they found that main reasons for use was to strengthen the immune system, physical stabilization and to increase healing chances/maintain health. Also, CAM use was high and most parents would recommend certain CAM (94%). Moreover, 79% of the users informed a physician about CAM use and side effects were rarely reported (4%) [12].

Complementary and alternative medicine (CAM) is widely used in the European Union (EU) as suggested by studies. Herbal medicine was most commonly reported and CAM users were mainly women. In addition, the most common reason to use CAM was dissatisfaction with conventional care to management of musculoskeletal problems [13].

The use of Complementary and alternative medicine (CAM) for pediatric asthma is increasing and previous studies linked CAM use with decreased adherence to conventional asthma medicines. However, these studies were limited by cross-sectional design. Moreover, many families incorporated different health belief systems simultaneously to control asthma. As CAM use becomes more prevalent, it is important for physicians to ask about CAM use in a nonjudgmental fashion [14].

One systematic review was done to estimate the prevalence and use of complementary and alternative medicine (CAM) in UK and was done between 1st January, 2000 to 7th October, 2011. The most popular CAM herbal medicine was followed by homeopathy, aromatherapy, massage and reflexology. In addition, healthcare professionals should responsibly advise their patients about the use of CAM [4].

Complementary and alternative medicine therapies are associated with mental health in post disaster environment and interview was done between 2010 and 2012 as a cross-sectional study. The most common CAM therapies were multivitamins, aromatherapy and massage and were protective for depression [15].

Complementary and alternative therapies are used in cases of childhood cancer. One study was done by cross-sectional design, questionnaire and face-to-face interviews. They found that the mean age of the children was 8 years and prevalence of use of CAM among parent's children with cancer was not negligible. In addition, the researchers' belief that health professionals must be informed about the use of CAM and its methods and given information about use of CAM with conventional treatment [16].

Yoga offers one possible way of reducing stress which can be assumed as a global public health problem. Looking at studies from 2011 to May 2013 and examining whether yoga can be an efficacious approach for managing stress was purpose of one study. A systematic search of Medline, CINAHL, and Alt Health Watch databases was conducted for quantitative

articles involving all schools of yoga. A total of 17 articles met the inclusion criteria. Six of these were from the United States, 3 from India, 2 from the United Kingdom and 1 each from Australia, Brazil, Germany, Iraq, Sweden, and Taiwan. Of the 17 studies, 12 demonstrated positive changes in psychological or physiological outcomes related to stress. Despite the limitations, not all studies used a randomized controlled design, had smaller sample sizes, had different outcomes, had non-standardized yoga intervention, and had varying lengths. Yoga appeared to be a promising modality for stress management [17]. Reports showed that Complementary and alternative medicine (CAM) utilization in breast cancer patients was high. There are few reports on CAM practices in breast cancer patients specifically during radiation. This prospective, multi-institutional study was conducted to define CAM utilization in breast cancer during definitive radiation [18].

Complementary and alternative medicine (CAM) therapies create beneficial and detrimental perioperative conditions for Ambulatory surgery patients. So, to improve knowledge of CAM effects in dermatologic surgery they allowed dermatologists to potentially capitalize on therapeutic actions and potential benefit including that of bromelain, honey, vitamin C, chamomile, aloe vera gel, grape seed extract, zinc, turmeric, calendula and lavender oil [19].

The systematic reviews and analyses represent patient satisfaction for CAM like flaxseed for hypertension, ginger for pregnancy-induced nausea, agnus castus for premenstrual complaints and fever. Few were for migraine prevention. On the other hand, adverse event has been inconclusive with some CAM herbals which were used to treat diseases for example, Aloe vera in the treatment of psoriasis, cranberry in cystitis prevention, Echinacea for the prevention of common cold and pomegranate for the prevention/treatment of cardiovascular problems [20].

Increasing interests to complementary and alternative medicine (CAM) are seen in chronic inflammatory bowel disease (IBD) that conventional therapies do not show any symptomatic relief or control disease and may cause side effects [21].

More than 30% of patients do not respond to pharmacologic interventions for headache, so as a result such patients started to utilize CAM therapy to manage headache and avoid side effects of medication. Examples include nutritional therapies like herbal remedies and vitamin or mineral supplementation and relaxation therapy, biofeedback therapy, cognitive-behavioral therapy which were included as behavioral treatments [22,23].

The identification of Complementary and alternative medicine (CAM) as therapy that is not included under conventional medicine was used to treat multiple sclerosis (MS) patients but because of the complexity and potential severity of the disease, parents were advised to be careful to use it.

Hence, we can conclude that physicians need to understand and know about the use of CAM amongst the patients-both children as well as the adults.

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