

Editorial

‘Complementary and Alternative Medicine’ population based studies: a growing focus on allergy and asthma

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The appeal of ‘Complementary and Alternative Medicine’ (CAM) has been clearly growing within the framework of the western health care systems. The World Health Organization estimates that 80% of the planet is using some form of CAM for their health care. Thus, most of the world’s population would actually consider the westernized form of medicine (allopathic) as ‘complementary’ or ‘alternative’ as it represents the departure from their traditional medicine. Although the term ‘alternative’ is commonly used in the literature for developing countries, the role of these modalities are primarily ‘complementary’ in the European Union (EU) and the United States, i.e., patients use them to complement the treatments offered by their conventional health care providers (1, 2).

Allergy, as reported in the 1997 International Study of Asthma and Allergies in Children (ISAAC), is one of the most common chronic disorders affecting human-kind with an ever-increasing prevalence that has been as high as 41% in some populations in the world and is one of the common reasons for the use of CAM. It is apparent that allopathic specialists such as allergists/clinical immunologists are commonly not receptive to their patients employing the use of CAM for the treatment of IgE-mediated allergies and other disorders associated to the atopic constitution (3) including asthma (4). While each one of us may have our own opinions about CAM, there is a growing secular trend

that appears to have started at the early part of this past century in the United States and even earlier in Europe in incorporating CAM into the general population’s daily care of chronic disorders such as allergies and asthma. Representative of this trend is a retrospective telephone survey performed in the United States on the use of 20 different CAM therapies that reflected an obvious increasing use of these modalities especially after World War II (the post ‘baby-boom era’) (5). It is becoming apparent that many of these CAM therapies are evolving as part of the health care systems of various member countries of the EU ranging from 20% in the Netherlands to 46% in Germany only to be surpassed by France with 49% (6).

The health care burden of IgE-mediated disorders has similarly been increasing not only for the insurance industry and government health plans, but even for ‘out of pocket expenses’ for CAM that at times can exceed the cost expended by health insurance. Given the increasing pressures to control healthcare spending in most countries, it is not surprising that attention is being focused on the cost effectiveness of CAM therapies (7). To do so we need studies and reliable information about the actual use of CAM in the various countries. In addition, we need to appreciate the impact of various ethnic and different cultural communities within these countries on CAM. While at the same time, determining the costs, efficacy and safety of the CAM

treatments. Despite the lack of such studies, changes are occurring in health systems regarding coverage of these CAM procedures. In fact, in the United States several health care insurance plans have already started to offer the option of additional coverage for CAM services while in several members of the EU there is growing debate over the existing coverage and the need to possibly cover them in the future. Schäfer's study (8) reflects an incredible percentage (more than 50%) of full or partial coverage for payment in Germany, of these services reflecting a large financial burden that has the potential to increase throughout the EU as well in the United States for the foreseeable future.

Correlating with the secular interest in CAM is the increased interest and awareness of CAM among the allopathic health care professionals. This has occurred over the past 30 years with these physicians seeking 'scientific integrity' of the various CAM modalities (9). Some studies have already reported the increasing acceptance of several popular CAM therapies into their general practices. As a result of their 'belief' of their efficacy, a growing number of these physicians have incorporated CAM modalities into their practices by referral to CAM providers (acupuncture, chiropractic, and massage) or actually performing them themselves (massage, chiropractic) (10). Interestingly, studies looking at patients with allergies and asthma with 'scientific integrity' are also mounting with evidence that some of these modalities may be effective and clearly that others will be found to be unsafe. However, additional epidemiological studies are required to identify the various use or misuse of CAM therapies and to better appreciate the health disparities that may arise from the ethnic and cultural diversity that would affect the frequency and outcomes of the types and content of the CAM practices used.

In the United States, a known 'international melting pot' for various peoples from all over the world, IgE-mediated allergies are the second most common reason for patients to seek the assistance of CAM (2). The most popular CAM treatments for asthma and allergies include herbs, acupuncture, various forms of body manipulation, and homeopathy (11, 12). Allergy CAM treatments can vary as reflected in the United Kingdom with CAM treatment modalities for asthma ranging from breathing techniques to herbal medicine (13). While in Israel, a society that has undergone rapid population growth of diverse populations with a central religious belief as well as industrial advancements mirroring the EU and the US over the past 50 years, respiratory complaints (15.9%) were also one of the two most frequent causes for CAM consultations (14). Contrasting with the United States and EU, the primary form of CAM in Israel appears to be primarily homeopathic interventions (34.6%). Thus, studies as the one in this issue of *Allergy* by Schäfer et al. reflects yet another very important information piece of puzzle that

complements the existing literature in order to provide a better understanding of the different CAM modalities in use by different cultures for 'allergies'.

In the Schäfer study (8), the authors found that four procedures accounted for almost all of the CAM procedures in Germany as they relate to IgE-mediated allergy, the atopic eczema/dermatitis syndrome (AEDS) (3) and asthma that included homeopathy, autologous blood injection, acupuncture and bioresonance. However, a drawback of the study was not including herbal interventions because it is known that in Germany this modality is extremely popular. There are strict governmental regulations requiring a 'prescription' from health-care practitioners in order to obtain herbal products. Herbal remedies would apparently be extremely common for both allergic and nonallergic hypersensitivities and asthma as they have been reported to be used by 13% of subjects in Hamburg, Germany for the treatment of 'breathing problems' (15).

When comparing the results to the United States, distinct similarities and differences appear in the use of CAM agents in patients with IgE-mediated allergy. The range of CAM interventions in the United States have a broader range that include acupuncture, herbal therapy, chiropractic, dietary management, probiotics, psychological counseling, homeopathy and other unusual allergy therapies. Specifically patients in the United States appear to treat their 'allergic rhinosinusitis' with various forms of dietary management, herbal therapy, exercise, and chiropractic (16).

Acupuncture has shown promising results for adult postoperative dental pain as well as chemotherapy-induced nausea and vomiting. Although acupuncture is apparently used in the United States and in Germany, as reflected in this study, as a therapeutic intervention for asthma, allergies, and AEDS, there are limited equivocal studies to support this procedure in the treatment of allergies (17) and asthma (18–20). Although limited studies on acupuncture do not support its use for AEDS while it has been suggested to be included in a comprehensive management program for sinusitis (20).

CAM modalities not in common use in the United States include bioresonance and autologous blood injections. Bioresonance, also called biophysical information therapy, has been unsuccessfully tried in various forms of allergy (23–27). Autologous blood injection is not performed in the United States for allergy as health regulations are extremely strict in regards to blood products since the advent of the Human Immunodeficiency Virus and AIDS (28). This form of treatment is restricted to hematological, oncologic and some autoimmune disorders. Homeopathy started as a derivative of a European form of treatment and was imported into the United States with the establishment of several schools of homeopathic medicine such as the Hahnemann Medical School in Philadelphia, Pennsylvania. In the treatment of allergy, homeopathic

studies with scientific integrity are lacking and several that have been performed have not been very supportive (29–31) or have produced discordant objective and subjective benefit in selected groups of patients (32, 33).

In addition, the socioeconomic parameters in the United States reflect similar findings to the present study that the patients seeking CAM appear to be more educated and report poorer health status. Therefore they do not seek CAM because of dissatisfaction of conventional medicine as reflected in Schäfer's study. Instead they find these health care alternatives to be more congruent with their own values, beliefs, and philosophical orientations toward health and life especially having a holistic orientation to health or having some form of a transformational experience that changed the individual perspective (34).

Because 'allergies' are a common reason for patients around the world to seek out CAM and the public is being deluged with media reports, convincing advertisements, and Internet claims, it would appear prudent that our specialty would clearly benefit from expanding our knowledge bases with scientifically well-designed studies. Such studies would unveil epidemiological, safety, clinical and cost effectiveness studies to provide a core direction toward incorporating 'scientific integrity' to the care of our patients. This would hopefully pave the way for the eventual development of 'complementary' guidelines for our specialty. We would then be able to provide the safest and most effective use of CAM therapies in the treatment of allergies while 'doctoring' (i.e., teaching) our patients confidently away from those that are unsafe and carry an unwarranted risk (35).

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