Complementary medicine incorporates the use of non-evidence-based complementary modalities into conventional (Western) medicine. Alternative medicines are approaches that are used in place of conventional medicine. Integrative medicine is the synthesis of conventional medical treatments with “evidence-based” complementary medical practices. When complementary approaches are incorporated into mainstream health care, it is called integrative health (IH). Among children and adults, IH is common despite not all therapies being safe and/or effective. Clinicians have suboptimal knowledge of their patients’ IH use because, in part, they do not know what questions to ask and/or do not have a standard intake form to collect an IH history, as recently demonstrated by an American Academy of Allergy, Asthma, and Immunology membership survey. To address this unmet need, a group of Complementary and Alternative Practice in Allergy Committee members and interprofessional collaborators reviewed the existing literature to locate IH history forms that could assist in identifying patients’ IH use. When none was located, the group created 3 templates for the systematic collection and documentation of IH practices: 2 general screening surveys that could be given to patients to complete before an appointment and a third template that provides the clinician with open-ended questions to help uncover IH practices in culturally diverse patient populations. Specialists, already acknowledged as skillful interviewers, can expand their patient-centered expertise by developing their own IH competencies. © 2017 American Academy of Allergy, Asthma & Immunology (J Allergy Clin Immunol Pract 2018;6:436-9)

Key words: Integrative health (IH); Integrative medicine (IM); Complementary and Alternative Medicine (CAM); Health history; Patient-provider communication; Shared decision making

INTEGRATIVE HEALTH

When unconventional nonprescription practices with evidence basis are used with conventional medical approaches, it is described as complementary medicine; when used in place of conventional medicine, unconventional approaches are labeled alternative. For the purpose of this paper, we will use the term “alternative” to indicate both alternative and/or complementary modalities. Integrative medicine and integrative health (IH) are the terms used to denote the purposeful coordination of conventional and unconventional approaches together.

Integrative health use in the United States

IH is healing-oriented care that “puts the patient at the center and addresses the full range of physical, emotional, mental, social, spiritual and environmental influences that affect a person’s health.”4 According to 2012 U.S. data, 33% of adults and 12% of children use IH.5 However, these rates increase to 47% when caregivers of children with chronic conditions were asked about IH use in the last 12 months.6 Although this high use alone would warrant the inclusion of IH interview questions, there is an even greater urgency considering that the safety and efficacy of natural therapies may be largely unknown and some supplements/herbal treatments can interact with other medications.7
Introduction and Methods

Objective

The objective of this study was to describe patient interest in alternative and IH approaches to care and to identify potential unmet needs in the creation of IH intake forms. This study was undertaken as part of the Integrative and Alternative Practice Committee (CAP) of the American Academy of Allergy, Asthma, and Immunology (AAAAI) through the American Academy of Allergy, Asthma, and Immunology (AAAAI) Membership Survey.

Methods

The survey, which was conducted from April 2018 to May 2018, was distributed to more than 5000 members (N = 420; 8% response rate). 23,24 Eighty percent of respondents indicated that a standard intake form to collect an IH history inclusive of IH. Why then is this not routine practice?

The Integrative and Alternative Practice Committee (CAP) reported the results of an American Academy of Allergy, Asthma, and Immunology (AAAAI) Membership Survey distributed to more than 5000 members (N = 420; 8% response rate). Eighty percent of respondents indicated that a standard intake form to collect an IH history inclusive of IH was missing from their practice.

Patients and clinicians do not discuss alternative or IH approaches

Patients may not voluntarily disclose use of alternative or IH modalities because their clinicians may not be seen as having interest or expertise in these areas. Also, patients are concerned that disclosure may threaten the therapeutic relationship and fear that clinicians will be frustrated or angered on learning about such use, or even ridicule patients’ decisions to use alternative or integrative approaches. In turn, clinicians do not ask about alternative or IH use, perhaps avoiding questions they feel ill-prepared to answer or circumventing their own feelings of disappointment or frustration when patients’ choose to use IH. Failure to recognize and reconcile conflicts in treatment preferences may lead to misalignment of patient and provider goals with patients abandoning treatments that empirical evidence suggests would benefit them in favor of untested and potentially unsafe IH.

IH AND THE HEALTH INTERVIEW

Complementary and Alternative Practice Committee survey identifies potential unmet needs

Recently, the Complementary and Alternative Practice Committee (CAP) reported the results of an American Academy of Allergy, Asthma, and Immunology (AAAAI) membership survey distributed to more than 5000 members (N = 420; 8% response rate). Eighty percent of respondents indicated interest in learning more about alternative and IH treatments. In addition, responses to the following questions identified potential unmet needs regarding IH history intake forms: 54.9% do not routinely ask their patients about IH use and 95.8% of respondents did not have a standard intake form to collect an IH history.

Although the survey may reflect response bias in that only clinicians interested in alternative and IH approaches participated, more than 400 members identified that a standard IH intake form, with the potential to aid in initiating important conversations with patients, was missing from their practice toolkit. Although these respondents may represent a small fraction of the entire membership, these early adopters could lead the way for future innovation in health history taking. Therefore, the committee members and interprofessional collaborators conducted a review of the literature to locate IH health history forms to meet this unmet need.

IH history collection tools

A review of the literature did not locate any IH history intake forms outside of one small trial that assessed the feasibility of collecting self-reported cardiology-specific dietary supplements using a simple computer interview application with a database backend for storage. 25 In addition, the review identified an electronic health record (EHR) that was successfully adopted for use in homeopathic practices. 26 However, it has been argued that conventional hospital or health care system EHRs are not suitable for alternative or IH documentation because practitioners do not have a shared understanding of practice-specific care. 27 Some conventional EHR software companies are offering automated modules with customizable templates to collect an IH history (“add-on”) at an additional cost. When available, these add-ons have focused on herbal and dietary supplements to the neglect of other alternative and IH practices. 28 Personal health records, with patients assuming responsibility for accessing, managing, and sharing their alternative and IH information, offer another approach. However, personal health records have had low rates of adoption due to patients’ concerns about privacy and providers’ concerns about the accuracy of the data. 29 In addition, attention should be paid to the side effects, complications, and interactions of herbal and dietary supplements with pharmaceutical medicines.

Where does this leave the allergist who would like to learn more about his or her patients’ alternative/IH use? To address this unmet need, committee members and collaborators created 3 templates for the systematic collection and documentation of such practices: 2 screening surveys that allow patients to self-report use of alternative/integrative modalities and a third template that provides the clinician with open-ended questions to help uncover traditional practices in culturally diverse patient populations.

THE IH INTAKE FORMS

Integrative Health Overview Checklist

Most IH practices fall into 2 broad categories: natural products and mind and body practices. A third domain is described by the National Center for Complementary and Integrative Health (NCCIH) as “other complementary health approaches.” 35 To provide a comprehensive evaluation of these 3 categories, we created the Integrative Health Overview Checklist (Appendix 1, available in this article’s Online Repository at www.jaci-inpractice.org). The Integrative Health Overview Checklist is a quick screening tool for patients to self-report practices that may warrant further discussion at the visit, such as to identify the specific purpose, type, and dose of natural product.

The Integrative Health Index of Natural Products

The Integrative Health Index of Natural Products (Appendix 2, available in this article’s Online Repository at www.jaci-inpractice.org) can be used as a stand-alone self-reported patient survey of specific natural products. Alternatively, the Integrative Health Index of Natural Products intake form can be used to collect more
detailed information about specific natural product reported on the Integrative Health Overview Checklist.

Cultural Health History-taking Aid

The World Health Organization estimates that 80% of the world’s indigenous population uses nonbiomedical approaches to treat symptoms and illnesses.\(^{30}\) Clinicians who provide care to cultural groups outside of their own may have limited knowledge of the traditional treatments used by that group. We therefore created the Cultural Health History-taking Aid (Appendix 3, available in this article’s Online Repository at www.jacionline.org) to obtain vital information about culturally specific orientations to health and illness,\(^{10,11,22}\) including alternative illness representations,\(^{31}\) preferences for nonconventional treatment,\(^{10,11,22}\) and opposition to conventional (Western) care.\(^{30}\)

How to use these tools

In 2008, the NCCIH launched the Time to Talk campaign to encourage patients, particularly those over the age of 50, and medical providers to discuss alternative approaches and IH. The campaign recommends that clinicians initiate the conversation if their patients do not. This can be done by including IH questions any time that a health history is taken, requesting that patients bring a comprehensive list of prescription, over-the-counter, herbal therapies, and other alternative and IH practices that they use. In busy practices, this data collection can be delegated to appropriately trained staff.\(^{32}\) This is most important to do when the individual is a new patient or when the symptoms or condition is newly developed.

For clinicians unfamiliar with these conversations, Borins\(^{33,34}\) offers this guidance: be respectful and nonjudgmental; discuss the science behind alternative and IH treatment options; speak with the IH providers treating your patients with the goal of including them as a bona fide member of the health care team; allow the safe use of IH even if efficacy has not been established or dissuade against risky practices. Shared decision-making approaches that support a therapeutic alliance, as well as the clinician’s willingness to be flexible, are needed if there is to be better alignment of patient preferences for treatment with clinician’s recommendations for guideline directed care.\(^{35}\)

Practices, particularly those that have the potential to cause drug-herb or herb-herb interactions, should be documented in the health record in the sections devoted to prescription medications and over-the-counter treatments, thus increasing the likelihood that other members of the health care team, such as pharmacists, will identify potential interactions and provide the appropriate patient counseling.\(^{35}\) Some patients have nonbiomedical explanatory models of health and illness, that is, an alternative (nonmedical) explanation for their symptoms, their condition, or their preferred treatments or healers (Appendix 3).

For example, a rash diagnosed as eczema by a clinician may have alternative nonmedical explanations from the patient’s perspective. For example, the rash may be characterized as an outward manifestation of “being run down” that reflects the patient’s perception of the body as a machine. Alternatively, a patient may attribute the rash to “stress” caused by an imbalance or disharmony in the life forces. Conversely, others may conceptualize the rash as a physical manifestation of a supernatural act. Accordingly, each would be treated differently: herbs and vitamins for the run-down, massage for the stressed, and a shaman to cast out spirits in the possessed. Some of these data might be appropriately recorded in the over-the-counter sections of the health record (eg, herbs and vitamins), whereas others (eg, religio-spiritual beliefs) might be best recorded in the social history, as long as there are prompts in place to remind the clinician to return to these unique beliefs and practices at future visits. In summary, no one method for collecting or documenting the IH history will be right for every practice. Clinicians should trial several approaches until one that works is established. It is our hope that these templates will make that procedure less error prone.

CONCLUSIONS

Adult patients and parents of children commonly turn to alternative medicine and IH practices to manage their disease or symptoms. The allergy specialty will need to be fully involved in developing their knowledge of IH,\(^{4,5,14}\) because few training programs address this.\(^{36,37}\) To gain that knowledge, providers can turn to trusted sources of information, such as PubMed, the National Institutes of Health’s NCCIH (https://nccih.nih.gov/), the National Library of Medicine (https://www.nlm.nih.gov/medlineplus/druginfo/herb_All.html), and the Natural Medicine Comprehensive Database (http://naturaldatabase.com). As a member benefit, the Natural Medicine Comprehensive Database has recently been made available free of charge to AAAAI members. In addition, book chapters devoted to this topic in allergy may prove instrumental.\(^{30}\)

Although this report originated from the AAAAI CAP workgroup, it is not to be construed as a recommendation from the AAAAI; these history-taking templates are simply being offered for consideration to the allergy community. Next steps might involve empiric testing of the templates to determine whether or not they solicit the necessary information to judge the significance of nonprescribed alternative products being used by individual patients, and if they do, whether this knowledge improves care. Allergists’ proficiency in delivering culturally sensitive patient-centered care is critically important for designing health and disease management plans. It is our hope that these templates support efforts aimed at expanding clinicians’ knowledge and expert practice beyond traditional allergy intake questioning.

REFERENCES


# APPENDIX 1. The Integrative Health Overview Checklist (patient-report)

<table>
<thead>
<tr>
<th>Mind &amp; Body Practices</th>
<th>How often?</th>
<th>Natural Products &amp; Biologically-Based Therapies</th>
<th>How often?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acupressure</td>
<td></td>
<td>Botanicals</td>
<td></td>
</tr>
<tr>
<td>Acupuncture</td>
<td></td>
<td>Dietary Supplements</td>
<td></td>
</tr>
<tr>
<td>Alexander technique</td>
<td></td>
<td>Herbs &amp; herbal products</td>
<td></td>
</tr>
<tr>
<td>Apitherapy</td>
<td></td>
<td>Minerals</td>
<td></td>
</tr>
<tr>
<td>Aquatic therapy</td>
<td></td>
<td>Probiotics</td>
<td></td>
</tr>
<tr>
<td>Aromatherapy</td>
<td></td>
<td>Special Diets</td>
<td></td>
</tr>
<tr>
<td>Art therapy</td>
<td></td>
<td>Vitamins</td>
<td></td>
</tr>
<tr>
<td>Biofeedback</td>
<td></td>
<td>Other:</td>
<td></td>
</tr>
<tr>
<td>Breathing exercises</td>
<td></td>
<td>Other Complementary Health Approaches</td>
<td>How often?</td>
</tr>
<tr>
<td>Buteyko</td>
<td></td>
<td>Ayurveda</td>
<td></td>
</tr>
<tr>
<td>Chiropractic manipulation</td>
<td></td>
<td>Homeopathy</td>
<td></td>
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<tr>
<td>Crystals</td>
<td></td>
<td>Hot/cold balance</td>
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<tr>
<td>Cupping therapy</td>
<td></td>
<td>Humoralism</td>
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<tr>
<td>Electromagnetic field manipulation</td>
<td></td>
<td>Naturopathy</td>
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<tr>
<td>Guided imagery</td>
<td></td>
<td>Spiritual guides</td>
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<tr>
<td>Hypnosis</td>
<td></td>
<td>Traditional Chinese Medicine</td>
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<tr>
<td>Laying on of the hands</td>
<td></td>
<td>Traditional healers</td>
<td></td>
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<tr>
<td>Light therapy</td>
<td></td>
<td>Other:</td>
<td></td>
</tr>
<tr>
<td>Magnets</td>
<td></td>
<td>Other Complementary Health Approaches</td>
<td>How often?</td>
</tr>
<tr>
<td>Massage</td>
<td></td>
<td>Other Complementary Health Approaches</td>
<td></td>
</tr>
<tr>
<td>Meditation</td>
<td></td>
<td>Other Complementary Health Approaches</td>
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<tr>
<td>Mental health counseling/talk therapy</td>
<td></td>
<td>Other Complementary Health Approaches</td>
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<tr>
<td>Mindfulness-based stress reduction</td>
<td></td>
<td>Other Complementary Health Approaches</td>
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<tr>
<td>Moxibustion</td>
<td></td>
<td>Other Complementary Health Approaches</td>
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<tr>
<td>Music therapy</td>
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<tr>
<td>Osteopathic manipulation</td>
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<td>Pilates</td>
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<tr>
<td>Prayer</td>
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<td>Other Complementary Health Approaches</td>
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<tr>
<td>Progressive muscle relaxation</td>
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<td>Other Complementary Health Approaches</td>
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<tr>
<td>Qi gong</td>
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<td>Other Complementary Health Approaches</td>
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<tr>
<td>Reiki</td>
<td></td>
<td>Other Complementary Health Approaches</td>
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<tr>
<td>Relaxation techniques</td>
<td></td>
<td>Other Complementary Health Approaches</td>
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<tr>
<td>Rolfing</td>
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<td>Other Complementary Health Approaches</td>
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<tr>
<td>Spinal manipulation</td>
<td></td>
<td>Other Complementary Health Approaches</td>
<td></td>
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<tr>
<td>Tai Chi</td>
<td></td>
<td>Other Complementary Health Approaches</td>
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<tr>
<td>Therapeutic touch</td>
<td></td>
<td>Other Complementary Health Approaches</td>
<td></td>
</tr>
<tr>
<td>Yoga</td>
<td></td>
<td>Other Complementary Health Approaches</td>
<td></td>
</tr>
</tbody>
</table>

**DIRECTIONS:** Some patients use complementary, alternative, or integrative health therapies. We would like to understand the variety of approaches you are using/have used in the past so that we can better help you manage your asthma and/or allergies. Please check all therapies you are currently using or have used in the past.
APPENDIX 2. The Integrative Health Index of Natural Products (patient self-report)

<table>
<thead>
<tr>
<th>Integrative Health Index of Natural Products (Patient Administered)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Allergies:</td>
</tr>
</tbody>
</table>

- Acai*
- Alfalfa*
- Aloe
- Aloe vera
- Aristolochic acids
- Asian ginseng
- Astragalus
- Bacillus coagulans
- Belladonna
- Bifidobacteria
- Bilberry*
- Biotin
- Bitter orange
- Black cohosh
- Black psyllium
- Black tea*
- Bladderwrack
- Blessed thistle
- Blond psyllium
- Blueberry*
- Blue-green algae
- Boron
- Bromelain
- Butterbur
- Calcium
- Calendula
- Cancell/Cantron/Protocol
- Cartilage (bovine or shark)
- Cassia
- Cat’s Claw
- Chamomile*
- Chasteberry*
- Chondroitin sulfate
- Chromium
- Cinnamon*
- Clove*
- Coenzyme Q10
- Colloidal silver products
- Cranberry*
- Creatine
- Dandelion*
- Devil’s claw
- DHEA
- Dong quai
- Echinacea
- Ephedra
- Essiac/Flor-essence
- Eucalyptus*
- European elder/Elderberry*
- European mistletoe
- Evening primrose oil
- Fenugreek*
- Folate or folic acid
- Feverfew
- Ginseng, American
- Ginseng, Panax
- Ginseng, Siberian
- Glucosamine hydrochloride
- Glucosamine sulfate
- Glucosamine hydrochloride
- Green tea*
- Hawthorn
- Hoodia
- Horse chestnut
- Horsetail
- Hyaluronic sulfate
- Iodine
- Iron
- Kava
- Lactobacillus
- Lacteal/amygdalin
- L-arginine
- Lavender
- Licorice*
- Licorice root*
- Lycium
- Magnesium
- Manganese
- Melatonin
- Milk thistle
- Mistletoe extracts
- Noni
- Passionflower
- PC-SPES
- Pennyroyal
- Peppermint*
- Phosphate salts
- Pomegranate*
- Propolis
- Red Clover
- Red yeast or red yeast rice*
- Roman chamomile*
- Saccharomyces boulardii
- S-adenosyl L-methionine (SAMe)
- Sage*
- Saw palmetto
- Selenium
- St. John’s Wort
- Sun’s Soup (selected vegetables)
- Thymus vulgaris
- Tincture of feverfew
- Wild Yam
- Wild Yam
- Yohimbe
- 5-HTP (oxitriptan)
- Other:

DIRECTIONS: Some patients use complementary, alternative, or integrative health therapies. This is a list of common natural products listed on the NCCIH and NIH Medline Plus: Herbal Medicine websites. We would like to understand the variety of approaches you are using/have used in the past so that we can better help you manage your asthma and/or allergies. Please check all therapies you are currently using or have used in the past.

*Although these items may be consumed as part of a diet, or used in the preparation of foods, we are interested in the use of these products for specific medicinal or health purposes.
APPENDIX 3. Cultural Health History-taking Aid (clinician-administered)

Integrative Health Cultural Health History-taking Aid (Clinician Administered)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date of Birth:</th>
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<tbody>
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</table>

To determine if symptoms or conditions have a non-biomedical explanatory model, ask open-ended questions. A non-biomedical model of care means that the patient has an alternative (non-medical) explanation for their symptoms, their condition or their preferred treatments or healers. For example, a rash associated with eczema may be seen as a supernatural mark caused by bad spirits that must be cast-out by a shaman.

Illness Representation
- How do you explain your current illness or symptoms?
- What do you think is the cause of your current illness or symptoms?
- Why do you think that you’re ill (or have symptoms) now?

Treatment Preferences
- What are the ways that your current illness or symptoms would be treated by members of your community?
- Who are the people in your community who would provide advice or treatment for your current illness or symptoms?
- What do you do to stay healthy?
- Is there anything that you should (or should not) eat, drink or do because of your current illness or symptoms?
- Is there anything that you should (or should not) eat, drink or do to stay healthy?
- What kinds of medications, home remedies, or other treatments have you already tried for this illness/these symptoms? Did this work?
- From whom (or where) did you receive these treatments?
- Are there any treatments that you have heard about that you want to try?

Orientation to Conventional (Western) Biomedical Care
- What kind of treatment do you want from me?
- How can I help you today?
- What do you like (not like) about Western medicine?
- Are there any Western treatments that you would never agree to? If yes, which ones and why?
- If I think you should take a prescription medicine for a short time, would you do it? Why or why not?
- If I think you should take a prescription medicine for a long time (or every day for the rest of your life), would you do it? Why or why not?

In the space below, please add patient views of treatment (conventional; integrative; alternative)

DIRECTIONS: (Read to patient). Some patients use complementary, alternative, or integrative health therapies. We would like to understand the variety of approaches you are using/have used in the past so that we can better help you manage your asthma and/or allergies. Please check all therapies you are currently using or have used in the past.