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## Review



## A Systematic Review on Alternatives Medicines for Prevention of Asthma Disease

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	<b>Abstract</b>
Published on: 20 May 2025	<p>The term "alternative medicine" describes a variety of medical procedures and supplies that are typically excluded from mainstream Western medicine. These include of yoga, breathing exercises, acupuncture, homeopathy, herbal treatment, Ayurveda, and Traditional Chinese treatment (TCM). These systems emphasize preventive treatment and the balance of body systems as part of their holistic therapeutic approach. Airway inflammation, bronchial hyperresponsiveness, and reversible airflow restriction are the hallmarks of asthma, a chronic respiratory disease. Millions of individuals worldwide are impacted, and it has a major negative influence on their quality of life. Leukotriene modifiers, beta-agonists, and inhaled corticosteroids are examples of conventional therapy methods that have shown successful in reducing symptoms and averting asthma flare-ups. However, long-term reliance, adverse effects, and financial hardship are common with these treatments. As a result, alternative medicine systems are becoming more and more popular as supportive or supplemental treatments for asthma. Herbal medicine is among the most widely explored alternative approaches for asthma. Several plants and their extracts have been traditionally used for their anti-inflammatory and broncho dilatory effects. Notable examples include Adhatoda vasica (vasaka), known for its ability to clear bronchial secretions; Tylophora indica, used for its immunomodulatory properties; and Glycyrrhiza glabra (liquorice), which possesses anti-inflammatory effects. These herbs may help reduce the frequency and severity of asthma symptoms, though more scientific studies are required to confirm their safety and efficacy.</p>
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	<b>Keywords:</b> Adhatoda Vasica, Asthma, Tylophora, Liquorice, alternative medicine, western medicine.

## INTRODUCTION

Alternative medicine is a type of any health care remedy or a system which is not accepted generally in the modern biomedicine or therapies that are usually offered in place of or as a substitute for the conventional therapies. The various alternatives therapies used as; homeopathy, acupuncture, naturopathy, herbal medicine, diet fads, folk medicine, faith healing, Ayurveda medicines, chiropractic, yoga, massage therapy. Courses in the alternative medicine are also known as complementary medicine; private medical insurance agencies increasingly include the alternative medicine options among their coverage. In many countries alternative medicines and the therapies are visually regulated with almost no requirements to prove the efficacy or long-term safety. Alternative medicines industries are booming and many companies selling alternative medicines appear to have escalating share prices on the world stock market [1]. The term complimentary medicine and the alternative medicine refer to a set of healthcare practices that are a not part of the countries on traditional or the conventional medicine are not fully integrated into the dominant healthcare system. In some countries they are used interchangeably with traditional medicine in some countries. The public is becoming aware of the alternative medicine therapies through all forms of the media and large proportion of the public self-prescribed alternative medicines and also by visiting the alternative practitioner in Europe, The United States, and Australia [2]. Many patients consult their doctor or the alternative healthcare providers such as the naturopath, herbalists, chiropractors, homeopath and the practitioners of Chinese or the ayurveda medicine for the alternative medicine therapy. Paediatricians are becoming usually more open to alternative medicine. Forty two percent of Canadians use alternative medicines therapies. Alternative medicines are used not so much because of their dissatisfaction with the conventional medicine but largely because that they find these healthcare alternatives to be more congruent with their own values and beliefs towards health and life. The therapies have experienced the highest increase in use including the homeopathy, energy healing, massage, megavitamins, self help groups, folk remedies and herbal medicines [3].

### Effectiveness of alternative medicines

Alternative medicine has a widespread use by over 40 percent of the total U.S population which has been a considerable challenge to the conventional health care practitioner which has shown a necessity to appreciate the different healing approaches of conventional medicines and many complementary and alternative therapies and the understanding of how these differences affect the treatment approaches and the measurement outcomes.[4] In addition one must understand how the conventional research methodologies and the evidence reporting limit or conflict with the ability to accurately assess the effectiveness of alternative therapies and where to find reliable information about such therapies.[5] Effectiveness also reflects the aspects of placebo or the expectancy effect. Due to the costs, safety issues and the dominance of the pharmaceutical interventions, the demonstrating efficacy relied heavily on a single tool for the measurement of a biological therapeutic effect– Randomized controlled clinical trial (RCT). The RCT approach to determining of all the clinical merits of the alternative invention are usually important, given the highly individualized and the multifaceted treatment protocols typically employed. [6] The RCT research technique usually tests a well specified and standardized treatment, delivered uniformly in a standard setting to specified subjects, designed for those who ideally have only the target condition being treated and also includes agreements with subjects to comply and adhere to the protocol usually for a reward. Due to this design the efficacy studies specifically exclude the multiple, real world clinical factors which include the approach to the patient, treatment setting, life style issues and the adherence to medication protocol.[7] The model of the single intervention clinical trials are more useful for the pharmaceutical treatments than for assessing the outcomes of the most alternative medicine therapies where treatment protocols are tailored to individuals rather than a standard group of subjects. Assessment of the alternative therapy effectiveness may require a different approach for the gathering and interpreting evidence. In the clinical world of the alternative practices the treatment is not typically single drug or intervention, but is a complex therapeutic modality that also may involve physical and emotional interaction with the therapist.[8]

### Assessing the effectiveness

Assessment depends on the clinician's healing paradigm, such as the biomedical, homeopathic, or naturopathic. The effect of philosophy of healing such as self-healing, systems approach, balance and holism; the effect of clinician-patient relationship; the set of therapeutic methods used to enhance the healing process all the three effects play an important role in the assessment of alternative medicines and complementary medicines treatments' effectiveness.[9] The healing philosophy on the evaluation of the outcomes is usually offered by the homeopathy. In some cases, the clinicians strongly reject the scientific conclusions of the effectiveness of homeopathy therapy because the non-material nature of homeopathic remedies is outside the conventional scientific paradigm and is dismissed as placebo. [5,9]

**Table 1: Examples For the Assessments of Effectiveness of Alternative Therapies**

Disease	Herbal Ingredients and treatments	Mechanisms	
Alzheimer's disease	Ginkgo	Low to moderate	Uncertain
Anxiety	Kava, relaxation, aromatherapy	Moderate	Positive
Asthma	Hypnosis, homeopathy, yoga	Low to moderate	Positive
Eczema	Prime rose oil, Chinese herbs	Moderate	Uncertain
Back pain	Acupuncture, massage, manual therapy	Moderate	Positive
Chronic Fatigue	Exercise, herbals, homeopathy	Low to moderate	Positive
Constipation	Biofeedback, massage, herbals	Low to high	Positive
Depression	St. john's worth, relaxation, music	Low to high	Positive
Fibromyalgia	Exercise, homeopathy, biofeedback	Low to moderate	Positive
Hypercholesterolemia	Diet, garlic, gaur gum, red yeast rice	High	Positive
Insomnia	Kava, valerian, relaxation, melatonin	Moderate	Positive
Migraine	Acupuncture, bio feedback, feverfew	Moderate	Positive
Osteoarthritis	Acupuncture, devil's drow, glucosamine	Moderate	Positive
Palliative care	Acupuncture, healing touch	Low	Positive

**Principles of healing of various alternative therapies**

The complementary and the alternative medicines therapeutic systems emphasize some or all of the following principle to a greater degree than the conventional medicines. Effective integration of these therapies and also the conventional care must rest on the acknowledgment, appreciation and application of these principles in patient-centred context. They provide a framework for understanding the complementary and alternative therapy approaches to healing that contrast with the biomedical model of care: Emphasize effective communication between the patient and healer, which builds the trust and hence promotes integration; Promote the body's self-healing abilities[10], Emphasize the self-care and empowerment of the patient in the healing process Recognize the mind, body and spirit as interactive and inseparable; Address underlying causes of illness-including the environmental emotional and spiritual factors rather than just the clinical manifestations. Prevent ill health by remaining in balance and harmony with the psychosocial and physical environment; Enhance wellness with the optimal diet, exercise and reduced stress life style; Individualize the treatment to particular patient, rather than focusing on the disease condition; Emphasize the use of natural non- pharmaceutical substances or non-surgical techniques in the care of patient; Appreciate the electromagnetic and energetic nature of the human organism and the importance of vitality in healing; Acknowledge the healing journey and that the return to wholeness can be a gentle and gradual and developmental process.[10, 11]

**Various alternative therapies****Ayurveda**

Ayurveda (Ayush=life, vid=wisdom-Sanskrit) is the ancient medical systems within ancient Vedic tradition offering the wealth of knowledge for meaning full life and health. Ayurveda, part of Atharvaveda, the last one of the four Vedas is timeless and unbounded it has relevance even to the present day. The philosophy of Ayurveda believes that everything in this universe is composed of five elements, the panchabhootas. They, in turn constitute the three doshas or bio-energetic forces that govern our health and determine our constitution. Mental and the spiritual health are determined by the trigunas or psychic forces. The modern risk factor hypothesis pales into insignificance in the view of most elaborate knowledge in Ayurveda.[12]

**Homeopathy**

Homeopathy is defined as the therapeutic method using preparation of substances whose effect when administered to healthy subjects correspond to the manifestations of the disorder (symptoms, clinical signs and pathological states) in the individual patient.[13] Homeopathy as an alternative and complementary medicine and a holistic medicine can solve some of the modern medical problems. This method was developed by-Samuel Hahnemann (1755-1843) a German physician in 1810 and treatment for diseases with about 3,000 homeopathic remedies was addressed based on the golden principles and now it is practiced throughout the world. Homeopathy is based on two main principals. The first principle- 'like cures like principle', states that patients with particular signs and symptoms can be helped by a homeopathic remedy that produces their signs and symptoms in healthy individuals. The second principle states that homeopathic remedies retain the biological activity after repeated dilution and succession even when diluted beyond Avogadro's number.[14]

### Acupuncture

Acupuncture means “To puncture with a needle”. The term acupuncture implies two different words from Latin: *acus* means needle and *puncture* means insertion. It is the best known of alternative and complementary therapies. Acupuncture is a treatment method that originated more than 3,000 y ago in China and also practiced in most of the world. Traditional Chinese medicine defines acupuncture as: the stimulation of certain points on or near the surface of the human body through any technique of point of stimulation with or without the insertion of needles, these include the use of electrical, magnetic, light and sound energy, cupping and moxibustion (the burning on or over the skin of selected herbs), to normalize the physiologic functions or to treat various conditions of the human body.[15,16]

### Naturopathy

Naturopathic medicine is a distinct method of primary health care-an art, science, philosophy and practice of diagnosis, treatment and prevention of illness. It is a distinct type of primary health care medicine that usually blends age-old healing traditions with scientific advances and current research. It is guided by unique set of principles that recognize the body's innate healing capacity, emphasize the disease prevention and encourage individual responsibility to obtain optimal health. [17-18]

Principles of naturopathic medicine:

- The healing power of nature–naturopathic recognizes the body's natural healing ability and trusts that the body has the innate wisdom and intelligence to heal itself given the proper guidance and tools.
- Identify and treat causes–ND's attempt to identify and treat the underlying causes of illness, rather than focusing on individual presenting symptoms.
- First do no harm– NDs begin with minimal interventions and proceed to higher level interventions only as determined necessary.
- Doctor as teacher–ND's educate patients, involve them in the healing process and emphasize the importance of doctor-patient relationship.
- Treat the whole person– naturopathic medicine takes into account all aspects of an individual's health including physical, mental, emotional, genetic, environmental, social and spiritual factors.
- Prevention–naturopathic medicine emphasizes optimal wellness and the prevention of disease. [19-22]

### Yoga

Yoga is specified as a mind and body therapy comprising of various breathing and relaxation techniques. This includes the meditation, postures and phrase recitation to improve the mental illness and physical illness. Yoga Nidra is a type of relaxation technique, a form of sleep to attain a form of blissful awareness which is not attained with other forms of yoga. Iyengar yoga usually helps in postural alignment and movement; this usually promotes the use of blocks, mats, blankets and belts.[23] Hatha yoga incorporates yoga postures (asanas), breathing exercises (pranayama's), meditation (Dyana), balancing of opposite properties (heat/activation with cool/calming) for mental health development, Kripalu and mindfulness-based stress reduction also include in the Yoga. Sudarshan kriya yoga helps in rhythmic breathing techniques performed within sitting posture eyes and mouth kept closed. Yoga is used to treat various diseases and disorders like anxiety, depression, menstrual irregularity, fibromyalgia, hypertension and stress also used in the treatment of cancer. [24-25-26]

### Herbal medicine

Herbal medicines are the use of medicinal plants for the prevention and treatment of various diseases. Herbal medicine is mainly based on the remedies those containing active principles at very low concentrations, or relying on magical-energetic principles. [27-28] Traditional medicines are summing total of practices based on theories, belief and experience of different cultures and times used in the maintenance of health mainly in the prevention, diagnosis, improvement and treatment of illness. The mind body medicine is considered as alternative or the complementary mode of traditional western medicine and various modes used are a part of the mind body connection. A successful treatment using these herbal medicines and the assessment of efficacy is not different from that of conventional medicine. Herbal medicinal plants are used in the treatment of various types of diseases such as Garlic (*Allium sativum* L.) used for the treatment of Influenza and Diarrhoea etc. [29-30]

### Massage therapy

Massage therapy is mainly used to manage a health condition or to increase the wellness, by manipulating the soft tissues of the body. Massage therapy is defined as the soft tissue manipulation mainly for the therapeutic purposes done by the trained therapists. This therapy is mainly used to relieve pain. Massage therapy has been followed using the mechanical devices in addition to the therapists, applied to single or multiple body parts. Swedish/classical. [31] Massage is the main type of massage therapy in several countries, clinical massage and sports massage is mainly used for muscle spasms. Other various massage therapies are Shiatsu, Rolfing, reflexology and craniosacral therapy. Massage therapies are mainly used to treat several types of pain such as low

back pain, shoulder pain, neck pain and pain from osteoarthritis of the knee and headache. Massage therapy is also known to be the adjunctive therapy to help prepare the patient for exercise or any other interventions. Massage therapy is rarely administered as main treatment. [32-33]

### Introduction About Asthma

**Asthma** is a long-term inflammatory disease of the airways of the lungs. It is characterized by variable and recurring symptoms, reversible airflow obstruction, and easily triggered bronchospasm. Symptoms include episodes of wheezing, coughing, chest tightness, and shortness of breath. These may occur a few times a day or a few times per week. Depending on the person, asthma symptoms may become worse at night or with exercise. [34-35] Asthma is thought to be caused by a combination of genetic and environmental factors. Environmental factors include exposure to air pollution and allergens. Other potential triggers include medications such as aspirin and beta blockers. Diagnosis is usually based on the pattern of symptoms, response to therapy over time, and spirometry lung function testing.[36]

### Alternative Medicines For Asthma

#### Ayurvedic Remedies for Asthma

##### Honey And Cloves

To strengthen the lungs, a mixture of cloves (at least 7-8) and banana needs to be kept overnight and eaten the next day. Follow this up, after an hour (nothing to be consumed during the time), with a little hot water and honey. This is very helpful for those suffering from chronic bronchial asthma.[37]



**Fig 1: Honey and Cloves**

##### Nightshade/Kanteli

7 to 14 ml of the juice made from the whole plant or the fruits of the Yellow-berried Nightshade or Kanteli, as it's called in Hindi, Katakari in Sanskrit, can be consumed twice a day to relieve and ease symptoms of asthma.[38]

##### Herbal Tea

Herbal tea made by blending Ajwain, Tulsi, pepper, and ginger is useful natural expectorant for asthmatics. [39]

##### Panchakarma

Panchakarma, that involves 5 (panch) actions of therapeutic treatment (karma), is very useful for asthmatic patients. It is a detoxification process that takes a person through 5 stages that involves the uses of herbs, herbal oils, medicated milk, and other Ayurvedic medicines. [40]

##### Adulsa

Aside from treating a variety of other diseases, Adhota that also goes by the name Malabar nut tree or Adulsa in Hindi, is an Indian herb that's been used to help control bronchitis for quite some time. It's very effective as a cough remedy and for asthmatics.[41]

##### Curcumin

Curcumin, which is the yellow pigment that gives turmeric its colour, includes quite a few pharmacological and antioxidant components, of which, is its ability to inhibit inflammation. This naturally makes it a vital herb in the fight against Bronchial asthma.[42]



**Fig 4: Curcumin**

#### **Black Raisin**

With black resin, dates, long Pippali and honey, taken in equal quantity, make a paste. A teaspoon of the paste should be consumed mixed with warm milk in the morning and evening to help prevent asthma attacks.[43]

#### **Mustard Oil**

Rubbing or massaging brown mustard oil on a patient's chest is often used as a natural remedy for asthmatic conditions. It provides relief during an attack.[44]

#### **Honey And Onion**

To minimise congestion and reduce breathlessness during an asthmatic attack, mix some pepper, about 1 tsp of honey and a little onion juice in a glass and drink it slowly. It will help relieve some symptoms in a natural way before medication is required. [45]



**Fig 5: Honey & Onion**

#### **Honey And Bay Leaf**

To prevent asthma attacks during the night, have a glass of honey (1 tsp) and some Indian bay leaf powder (1 tsp) before going to bed.

Before trying any of these treatments it's important to understand that not everyone will respond to treatments in the same way. Hence, standard ayurvedic treatments are always individually formulated. The above treatments are not a substitute for standard medical diagnosis, personalised ayurvedic treatment or the recommendations from a qualified ayurvedic or regular physician. For specific treatment, it is advisable to always consult with qualified personnel. [46-47]

### Homeopathic Remedies in Asthma

Homeopathic treatments may help manage asthma symptoms. The American Lung Association say more than 26 million people in the United States have asthma, including more than 6 million children. While there is no cure for asthma, traditional treatment is effective for managing symptoms when a person is under the care of a qualified health practitioner. However, some people are interested in natural remedies, such as homeopathic medicine, to help manage and treat their asthma symptoms. [48-49]



**Fig 7: Homeopathic remedies in Asthma**

#### Some homeopathic remedies or plant extract

- Arsenicum album
- Tuberculinum
- Natrum sulphuricum
- Sulphur
- Pulsatilla Phosphorus
- Nux vomica Lycopodium
- Kali carbonicum

### Acupuncture On Treating Asthma

Acupuncture has been used to treat asthma in China and Western countries. Previous studies indicated that acupuncture could improve symptoms of asthma, lung function, and decrease medication dosages, and could be applied as an adjunct to conventional medications. Researchers find acupuncture effective for relieving allergic asthma, a type of asthma triggered by allergens (e.g., dust mites, Mold, pollen, foods). Symptoms include wheezing, difficulty breathing, itchy eyes, sinusitis, rhinitis, a general feeling of malaise, and sneezing. [50-51]



**Fig 8: Acupuncture on treating Asthma**

### Naturopathy

#### Reduce or Eliminate Food Allergens

Food allergies are often overlooked as asthma triggers, but they can be a major contributing factor.



As previously mentioned, food allergies are extremely common in those with asthma. Any food can be a potential allergen, which is why it's important to determine if you're suffering from any food allergies. This can be tested using a blood test or by an elimination diet, where you eliminate certain foods from your diet to test if your symptoms improve. [52-53]

### **Reduce or Eliminate Environmental Allergens**

The most common environmental allergens are found in most homes, and they may be worsening your asthma. The most typical environmental allergens include Mold, dust, pollen, and animal dander. The first step to eliminating environmental allergens is figuring out which allergens are affecting you and your body.[54]

### **Supplement with Omega-3**

Asthma causes your airways to swell, which means managing inflammation is an important step in mitigating asthma symptoms.

Fortunately, you can modify your diet to help decrease this inflammation and restore balance to your body. Omega-3 oils are an easy way to help manage your symptoms. [55-56]

### **Yoga Therapy For Asthma**

Monsoon season brings with it host of air and water borne diseases. Instances of Asthma attack are also on the rise. Monsoon or rainy season increases Mold and spores' content along with that the environmental pollutants tend to trigger an asthma attack and symptoms. Yoga advocates "Prevention is better than cure" All the yoga techniques help prevention of diseases and useful in the management of every kind of disorder or illness. [57-58]

### **Yoga Asanas for Asthma & Pranayama's**

Here's a list of yoga asanas for asthma & some pranayama's to help you counter asthma more effectively:

- Nadi Shodhan pranayama (Alternate Nostril Breathing technique)
- Kapal Bhati
- Ardha Matsyendrasana (Sitting Half Spinal Twist)
- Pawanmuktasana (Wind Relieving Pose)
- Setu Bandhasana (Bridge Pose)
- Bhujangasana (Cobra Pose)
- Adho Mukha Svanasana (Downward-Facing Dog Pose)
- Badhakonasana (Butterfly Pose) [59-60]

### **Herbal Medicines For Asthma**

#### **Turmeric**

You may already have this bright yellow spice in your pantry for cooking flavourful curries and other dishes. Turmeric gets its colour from curcumin. This natural colouring agent can also reduce inflammation. Turmeric may help with arthritis and even cancer. In relation to asthma, with mild to moderate asthma who took curcumin capsules for 30 days.[61]

#### **Ginseng and garlic**

Ginseng and garlic are common herbs and available in a variety of supplement forms. Ginseng is a plant from Asia that some people claim to have many health benefits Trusted Source, including the improvement of respiratory conditions. Garlic is also thought to have significant health benefits Trusted Source like reducing cholesterol and blood pressure. A small study Trusted Source done on rats connected the use of ginseng and garlic to the reduction of asthma symptoms.[62]

#### **Chinese herb combinations**

In the last few decades, researchers have studied the effectiveness of herbal combinations from traditional Chinese medicine for asthma. The combination called anti-asthma herbal medicine intervention (ASHMI) is one of them. This blend includes lingzhi (a mushroom), Gan Cao (licorice root), and Ku Shen (sophora root). Some claim that this combination of herbs can reduce airway constriction and inflammation, and keep your cortisol levels up, unlike steroid medications.[63]

#### **Black seed**

This spice is also known as *Nigella sativa*. Some studies Trusted Source suggest that it has medicinal benefits, including reducing asthma symptoms.



One study Trusted Source examined prior research on black seed and asthma to assess its effectiveness. The study concluded that prior research shows black seed may help asthma symptoms, inflammation, and airway function. [64, 65]

### Massage Therapy for Asthma

- In chronic cases, spend more time prone than supine. Prone position has been shown to improve ventilation and oxygenation.
- Hydrotherapy: facial steam 5 minutes to loosen mucus; heat to lower posterior intercostals and pectoralis before MFR / fascial work.
- Diaphragmatic Breathing.
- MFR / Fascial work to back. Be sure to focus on areas around respiratory muscles: lats, QL, intercostals
- General treatment to upper traps, levator scapula, serratus posterior superior, erector spinae, multifidi, posterior intercostals, quadratus lumborum to decrease hypertonicity and trigger points.
- Anterior and Lateral Spinous Challenge.
- Levator costarum treatment – These muscles run from transverse process of one vertebra to the angle of the rib below it, from C7-T11. place one thumb on the rib and other on the spinous process to provide lateral challenge. Have client take deep breaths.
- Supine, position for kyphosis if necessary.
- MFR to pects, skin rolling on abdomen.
- Warm up abdomen and diaphragm. Diaphragm release from lateral to the xyphoid and moving laterally.
- Massage treatment of pectoralis muscles, subclavius, serratus anterior and intercostals.
- Treat muscles that aid in respiration, cervical spine muscles – scalenes (attaches to ribs), SCM, upper trapz, lev scap, suboccipitals, post cervical muscles. [66-67]

## CONCLUSION

Alternative medicine has become popular and many of the professionals working in occupational and environmental medicine feel the need to learn about it and implement it. Many adults and children, several patients, ambulatory patients use alternative medicine in addition to the traditional therapies. A wide spread of increase in the use of alternative medicines and practicing has been noted in the recent years. There is a need for the alternative medicine industry and also its health professionals to improve its self-regulation and standards. The public has gained accurate information about the alternative medicines within the internet and alternative medicine websites where the safety and efficacy information are clearly presented. Several challenges have been set for the researchers to find more appropriate ways of studying the effectiveness of complementary and alternative therapies. Various alternative therapies are assigned to treat various diseases, most of the alternative therapies are used to treat various diseases which could be mentioned as problem with the conventional medicine therapy. CAM is and increasingly important system which implies good patient compliance.

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