

REVIEW

Treatment of the common cold with herbs used in Ayurveda and Jamu: monograph review and the science of ginger, liquorice, turmeric and peppermint

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Abstract

Background: The common cold is typically managed with decongestants, antihistamines, antitussives and antipyretics. In addition to these established medications, herbal ingredients have been used over centuries to help treat common cold symptoms. The Ayurveda and Jamu systems of medicine, originating from India and Indonesia, respectively, have leveraged herbal therapies to treat many illnesses.

Method: An expert roundtable discussion comprising specialists in Ayurveda, Jamu, pharmacology and surgery along with a literature review was conducted to evaluate the use of four herbs – ginger, liquorice, turmeric and peppermint – for common cold symptom management in Ayurvedic texts, Jamu publications and monographs from the World Health Organization, Health Canada and various European guidelines.

Discussion: Due to a lack of antivirals, common cold management revolves around maintaining personal hygiene and symptom management. Herbal medicines have been an integral part of many cultures worldwide.

Despite its growing acceptance, there is a perception that healthcare providers lack interest and may prevent patients from discussing the use of herbal medicines. Limited education and training may also widen the communication gap between patients and healthcare providers, hindering effective management.

Conclusion: Evaluation of scientific evidence and the standing in international monographs can offer perspectives on the use of herbal medicines for common cold management.

Keywords: complementary therapies, COVID-19, ginger, integrative medicine, liquorice, peppermint, turmeric, upper respiratory tract infections.

Citation

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Introduction

The common cold is a syndrome of upper respiratory symptoms caused by various viruses.¹ Symptoms of the common cold include sneezing, nasal discharge, nasal obstruction, cough, sore throat and malaise.² These symptoms typically last up to 1 week, with their severity peaking around the second to third day of infection.²

The common cold imposes a substantial disease and economic burden stemming from its high frequency, with an estimate of about six episodes per year in children under 2 years of age, and two to three episodes per year in adults, as well as from its impact on quality of life.^{1,3-5} In terms of economic impact, the common cold causes an estimated yearly loss of US\$40 billion directly through treatment costs and indirectly via loss of productivity.⁶

The common cold is generally mild and self-limiting.¹ Symptoms of the common cold are so well known that self-diagnosis is normal amongst individuals.² However, there are misuses of diagnosis testing and overuse of treatment prescriptions for suspected bacterial acute rhinosinusitis, which occurs at a very low incidence of less than 2% of all common colds.⁷ It is also important to be aware of the distinction between bacterial and non-bacterial acute rhinosinusitis, as incorrect antibiotic use may result in more harm than benefit and the potential risk of developing resistance.⁷

Management of the common cold

Due to lack of antiviral treatments targeting specific common cold viruses, prevention and treatment of the common cold typically revolves around maintaining personal hygiene and symptom management.^{1,7} Furthermore, as witnessed during the COVID-19 pandemic, face masks, physical distancing, travel restrictions and avoiding crowds may limit the spread of infectious diseases like influenza.⁸ Patients typically manage a common cold through self-care, using a range of over-the-counter therapies like antihistamines, antitussives, decongestants and antipyretics.⁵ Nasal irrigation is also recommended by the European Position Paper on Rhinosinusitis and Nasal Polyps (EPOS) 2020 to relieve symptoms of the common cold.⁹

Treatments and practices that are used concurrently with or in place of the conventional, mainstream medicine – broadly termed complementary and alternative medicines (CAM) – are gaining widespread popularity and acceptance worldwide.^{10–12} Amongst CAM, the use of herbal medicines has been an integral part of many cultures worldwide.¹³ It is estimated that up to four billion people rely primarily on herbal medicinal products for healthcare and medical practice.¹³ In addition, EPOS 2020 recommends the use of herbal medicines for the common cold because of their efficacy in controlling symptoms without the risk of major adverse events.⁹

Despite its growing usage and acceptance, there is a perception that healthcare providers lack interest in CAM,¹¹ which may prevent patients from exploring this option with their healthcare providers.^{11,12} Limited education and training on CAM may also widen the communication gap between patients and their healthcare providers, hindering effective patient management.¹¹ To overcome this barrier, physicians have acknowledged the need for a better understanding of CAM and its synergistic implementation into routine practice.¹¹

This review aims to provide a better understanding of the traditional and modern perspectives on some of the herbal ingredients putatively used for common cold

symptom management. In particular, we will discuss in this regard the principles of two traditional systems of medicine: Ayurveda and Jamu. As herbal ingredients form the core component of these systems, we evaluate four herbs used in the treatment of common cold symptoms: ginger (*Zingiber officinale*), liquorice (*Glycyrrhiza glabra*), turmeric (*Curcuma longa*) and peppermint (*Menthae piperitae*). Specifically, we will evaluate the evidence and their standing in local and international monographs for the management of the common cold and offer an overview on the future of herbal medicines in its treatment.

Methods

This review was developed following an expert virtual roundtable meeting comprising five specialists in Ayurveda, Jamu, pharmacology and surgery conducted in November 2021. Literature searches were conducted using search terms including “ginger”, “licorice”, “liquorice”, “turmeric”, “peppermint”, “Ayurveda” and “Jamu”. Only results relevant to the topic of the common cold were selected. Additional references focusing specifically on Ayurvedic texts, publications on Jamu, and monographs from World Health Organization (WHO), Health Canada and various European guidelines were also selected.

Review

Ayurveda and Jamu

Introduction to Ayurveda and Jamu

Ayurveda is a renowned traditional medical system originating from India.¹⁴ It aims to provide a holistic approach to health and personalized medicine as it comprises the physical, psychological, philosophical, ethical and spiritual components of health.¹⁵ Herbal ingredients are featured prominently in Ayurveda, and approximately 90% of Ayurvedic preparations are plant based.¹⁶

Indonesia holds the second largest biodiversity in the world after the Amazon rainforests.¹⁷ Indeed, of the medicinal plant species in Southeast Asia, nearly 80% can be found in Indonesia.¹⁸ With this rich source of medicinal plants, people from Indonesia widely use a traditional herbal medicine system called Jamu.^{17,18} Despite the increasing importance of modern conventional medicine, Jamu remains widely used across rural and urban areas of Indonesia by an estimated two-fifths of the population.^{17,18}

Ayurveda principles for the common cold

The basic principles of Ayurveda lie in the belief that the entire universe is composed of five elements: Prithvi (Earth), Jala (Water), Teja (Fire), Vayu (Air) and Aakash (Space or ether).¹⁴ These five elements, referred to as Pancha

Mahabhoota, are believed to form the three fundamental humours (tridoshas) of the human body in varying combinations.¹⁴ These three humours are Vata dosha, Pitta dosha and Kapha dosha, which control the fundamental functions of the body.¹⁴ Vata dosha regulates electrolyte balance, cellular transport and elimination of waste products.¹⁴ Pitta dosha regulates thermogenesis, optic nerve coordination, and satiety and thirst.¹⁴ Lastly, Kapha dosha provides lubrication to the joints.¹⁴ As the strength of each dosha is affected by conditions of the body and food consumed, Ayurveda is based on the belief that balance between the three doshas and other elements of nature is necessary to maintain a healthy body.¹⁴

The manifestation of a communicable viral infection can happen due to unstable air (Vayu), water (Jala), soil (Dasha) and season (Kala) elements.¹⁹ The initial stages of a viral infection, such as an upper respiratory tract infection like the common cold, starts off as an exogenous disease (Agantu Roga), which later progresses into a system disease (Nija Roga).²⁰ It can arise due to slow digestion (Mandagni) and lead to the production of toxins (Ama) in the body. As the bodily Ama accumulates, it blocks the channels of the body²¹ and eventually enters the deep tissues to clog the cell membranes, inhibits cellular communication and weakens the immune response.²²

The resulting disruption of the body doshas is described in Ayurvedic texts as the pathogenesis of salient common cold symptoms. For instance, the manifestation of cough (Kāsa) is explained by the obstruction of the Vata dosha afflicting the upward movement of air (Vayu), leading to a build-up in the head and neck region.²³ The contraction of the thorax and eyes is followed by a forced expulsion of air, giving rise to cough, which can be either dry or productive.²³ Rhinitis (Pratishyaya) is regarded in Ayurveda as one of the most important nasal diseases (Nasa Roga) as it is assumed to be the causative factor for other nasal diseases.²⁴ Ayurveda describes rhinitis as a condition where impairment of Vata dosha and Kapha dosha at the root of the nose produces secretions that flow down through the nose.²⁴

The treatment process in Ayurveda employs the Pancha Karma method,¹⁴ which comprises five actions or karmas that are used to remove toxins from body tissue.¹⁴ The five karmas are Vaman (forced emesis), Virechan (purgation using powders, pastes or decoctions), Basti (enemas prepared from medicated oils), Nasya (nasal administration of medicines such as decoctions, oils and fumes) and Rakta moksha (blood detoxification).¹⁴

Indonesian traditional beliefs on the common cold

Amongst several traditional theories surrounding the common cold is the 'cold weather theory', which regards

cold, in the context of the absence of heat, to be responsible for the illness.²⁵ In Indonesia, this belief takes the form of the concept known as Masuk Angin, or literally, trapped wind.²⁵ The symptoms of Masuk Angin include headache, nausea, fever, mild fatigue, vomiting and diarrhoea.²⁵

The concept of Masuk Angin in Indonesia may be related to the traditional Chinese medicine (TCM) belief that natural forces, including the wind, can disrupt bodily balance, leading to illness.^{25,26} In TCM, the wind is considered to manifest in the highest and the outer parts of the body such as the face, skin, sweat glands and lungs.²⁷ When classifying different types of infectious diseases, wind is the medium for transmission and can be 'passed from one to another'. Invasion of the wind weakens the body's immune defensive capabilities and causes a mismatch in the opening and closing of the pores.²⁷ This leads to the invasion of pathogens and, ultimately, to development of the common cold.²⁷

There are several traditional Indonesian treatments for Masuk Angin.²⁵ Jamu herbal remedies are commonly used to treat Masuk Angin and are readily available in most pharmacies and convenience stores across Indonesia – one remedy even carries the slogan, 'reject the wind'.²⁵ Jamu shares many aspects with TCM such as treating 'hot' illnesses with 'cold' remedies.²⁶ There are also other widely used traditional therapies, such as cupping and skin scraping (*kerokan*), which aim to remove the trapped wind through the skin surface.²⁵ These therapies, along with Jamu, operate with the principle of removing excess wind to regain balance within the body, similar to the concept of removing excess congestion in modern medicine.⁴

Herbal medicines for the common cold – Ayurveda and Jamu

As outlined above, herbal ingredients form the core component of both Ayurvedic and Jamu systems.^{16–18} Four herbs – ginger, liquorice, turmeric and peppermint – have been extensively used for the management of common cold symptoms in both Ayurveda and Jamu for thousands of years. Furthermore, regardless of the therapeutic systems and geographic differences, their pharmacological properties have now been confirmed through clinical evidence. Additionally, the following section will survey the use of these herbal ingredients in Ayurveda and Jamu and evaluate their standing in local and international monographs. The usage of herbs based on various therapeutic systems and their pharmacology is summarized in Table 1.

Ginger (*Zingiber officinale*)

Use in Ayurveda

In the Ayurvedic Pharmacopoeia of India, ginger is referred to as Śuṅṭhī (dried ginger) or Ārdraka (fresh

Table 1. Usage of herbs based on various therapeutic systems and their pharmacology.

Herb	Ayurveda	Jamu	Use in allopathic and modern guidelines	Pharmacology
Ginger <i>Zingiber officinale</i> (Śuṅṭhī, Ārdraka)	<p>Properties:</p> <p>Antitussive (Kaphahara)</p> <p>Cardioprotective (Hridya)</p> <p>Appetite stimulating (Dipana)</p> <p>Treatment for:</p> <p>Chronic obstructive pulmonary disease (Śvāsa)</p> <p>Pain (Śūla)</p> <p>Constipation (Vibandha)</p> <p>Flatulence (Ānāha)</p> <p>Inflammation (Śopha)</p> <p>Neck disorders (Kaṅṭharoga)</p>	<p>Treatment for:</p> <p>Headache</p> <p>Nausea</p> <p>Vomiting</p> <p>Influenza</p> <p>Cough</p> <p>Vertigo</p>	<p>Preventive medicine for nausea and vomiting and an adjunct treatment for inflammatory diseases</p> <p>Treatment for cold and flu symptoms</p> <p>As expectorant and antitussive to relieve symptoms of bronchitis, cough and colds</p>	<p>Anti-inflammatory activity</p> <p>Shogaol and ginger extracts inhibit cyclooxygenase and lipoxygenase activities</p>
Liquorice <i>Glycyrrhiza glabra</i> (Yaṣṭī)	<p>Properties:</p> <p>Strength (Balya)</p> <p>Purifies blood (Vatapittajit)</p> <p>Treatment for:</p> <p>Cough (Kāsa)</p> <p>Pulmonary tuberculosis (Kṣaya)</p> <p>Hoarseness (Svarabheda)</p> <p>Ophthalmological disorders (Chakshuksha)</p>	<p>Treatment for:</p> <p>Rheumatic diseases</p> <p>Cough with phlegm</p>	<p>Demulcent for sore throat, expectorant for cough and bronchial build-up</p> <p>As expectorant to relieve chest complaints including catarrhs, cough and bronchitis</p>	<p>Antitussive activity primarily attributed to glycyrrhizin, which accelerates tracheal mucus secretion</p> <p>Anti-inflammatory activity is attributed to corticosteroid-like activity of glycyrrhizin</p>
Turmeric <i>Curcuma longa</i> (Haridrā)	<p>Properties:</p> <p>Anthelmintic (Kṛmighna)</p> <p>Antileprotic (Kuṣhaghna)</p> <p>Skin complexion improving (Varṇya)</p> <p>Antidote (Viśaghna)</p> <p>Antidiabetic (Pramehanāśaka)</p>	<p>Treatment for:</p> <p>Asthma</p> <p>Hypertension</p> <p>Rheumatism</p>	<p>Treatment of flatulence, acidity and atonic dyspepsia</p> <p>Use in pain and inflammation due to rheumatoid arthritis, and treatment for asthma and cough</p>	<p>Anti-inflammatory activity due to curcumin and its derivatives for its ability to scavenge oxygen radicals</p>
Peppermint <i>Menthae piperitae</i> (Satva)	<p>Properties:</p> <p>Appetite stimulating (Dipana)</p> <p>Antitussive (Kaphahara)</p> <p>Oral hygiene improving (Mukha-śodhana)</p> <p>Digestive (Pācana)</p> <p>Analgesic (Śulaprasāmana and Vedanāsthāpana)</p> <p>Treatment for:</p> <p>Chronic fever (Jīrna jvara)</p> <p>Pain (Śūla)</p>	<p>Treatment for:</p> <p>Sore throat</p> <p>Antiseptic for oral germs</p>	<p>Relieve symptoms of cough and cold, muscle pain, irritable bowel syndrome and headache</p> <p>For treatment of fever, catarrhs and inflammation of the oral mucosa</p>	<p>Nasal cooling activity</p> <p>Menthol binds to TRPM8 to elicit cooling sensation</p> <p>Analgesic activity</p> <p>Menthol causes cooling sensation on skin via TRPM8 receptor activation</p> <p>Antispasmodic activity</p> <p>Peppermint inhibits activation of calcium channels, which in turn leads to smooth muscle relaxation</p>

TRPM8, transient receptor potential melastatin.

ginger).^{28,29} Ginger is described to have antitussive (Kaphahara), cardioprotective (Hridya) and appetite-stimulating (Dipana) properties and is traditionally used for relieving bronchial asthma and chronic obstructive pulmonary disease (Śvāsa), pain (Śūla), constipation (Vibandha), flatulence (Ānāha), inflammation (Śopha) and neck disorders (Kaṅtharoga).^{28,29}

Use in Jamu

Ginger is used extensively in Jamu, and the National Agency of Drug and Food Control in Indonesia has classified it as a priority plant for medicinal use.¹⁷ Uses of ginger in Jamu include treatment for headache, nausea and vomiting, influenza, cough, and vertigo.¹⁷

Pharmacology

Experimental studies have documented the pharmacological properties of ginger, including its anti-inflammatory properties. Shogaol and compounds from ginger extracts were shown to inhibit cyclooxygenase and lipoxygenase activities in a dose-dependent manner.³⁰ Both of these enzymes are involved in the metabolism of prostaglandin E₂ and leukotriene B₄, which are potent mediators of inflammation.³¹ As such, one manner by which ginger exhibits anti-inflammatory properties may be due to its inhibitory effect on the production of inflammatory molecules.^{30,31} Other possible mechanisms for ginger's anti-inflammatory activity may be via the inhibition of thromboxane synthase whilst raising prostacyclin level and inhibiting nitric oxide release.^{17,30,31}

Use in allopathic and modern guidelines

Ginger is used in modern medicine as a preventive medicine for nausea and vomiting and as an adjunct treatment for inflammatory diseases.³⁰ The anti-inflammatory property of ginger has been demonstrated in two clinical studies where injection of ginger extract and oral administration of ginger powder reported benefits in alleviating pain and swelling, respectively.³¹

The use of ginger for the treatment of cold are described in the Chinese and African pharmacopoeias and the German Commission E Monograph.^{32–34} The Health Canada natural health product monograph also states the use of ginger as an expectorant and antitussive to relieve symptoms of bronchitis, cough and colds.³⁵

Liquorice (*Glycyrrhiza glabra*)

Use in Ayurveda

The Ayurvedic Pharmacopoeia of India indexes the dried, unpeeled root of the liquorice plant as Yaṣṭī.²⁸ It is described to provide strength (Balya), treat ophthalmological disorders (Caksusya) and purify blood (Vatapittajit).²⁸ Ayurvedic uses of Yaṣṭī include treatment for cough (Kāsa), pulmonary tuberculosis (Kṣaya) and hoarseness of voice (Svarabheda).²⁸

Use in Jamu

Liquorice is traditionally used in Jamu for rheumatic diseases.¹⁷ It is described in the official Indonesian Traditional Medicine Formulary for use against cough with phlegm.³⁶

Pharmacology

Glycyrrhizin and glycyrrhetic acid in liquorice have been shown to have corticosteroid-like activity, whilst liquiritin and its derivatives from liquorice extract were also reported to demonstrate antitussive effects.^{17,37,38}

Use in allopathic and modern guidelines

The WHO monograph on selected medicinal plants mentions the use of liquorice as a demulcent for sore throat and as an expectorant for cough and bronchial mucus build-up.³⁹ The Health Canada natural health product monograph states the use of liquorice in herbal medicine as an expectorant to relieve chest complaints, including for catarrhs, cough and bronchitis.⁴⁰

Turmeric (*Curcuma longa*)

Use in Ayurveda

Turmeric is referred to as Haridrā in the Ayurvedic Pharmacopoeia of India.²⁸ It is described to possess anthelmintic (Kṛmighna), antileprotic (Kuṣhaghna), skin complexion-improving (Varṇya), antidote (Viśaghna) and antidiabetic (Pramehanāśaka) properties.²⁸ Turmeric is used as an anti-inflammatory medicine as well as a galactagogue in Ayurvedic medicine.⁴¹

Use in Jamu

Traditionally, turmeric is used in Jamu to treat many conditions, including asthma, hypertension and rheumatism.¹⁷

Pharmacology

The anti-inflammatory activity of turmeric has been demonstrated in studies of experimentally induced inflammation.⁴² The anti-inflammatory property of turmeric may be attributed to curcumin, believed to be the main anti-inflammatory constituent of turmeric, and its derivatives in scavenging oxygen radicals.⁴²

Use in allopathic and modern guidelines

The WHO monograph on selected medicinal plants states that the use of turmeric for the treatment of flatulence, acidity and atonic dyspepsia is supported by clinical data.⁴² The monograph also mentions its use in pain and inflammation caused by rheumatoid arthritis as well as for the treatment of asthma and cough.⁴²

Peppermint (*Menthae piperitae*)

Use in Ayurveda

Peppermint is indexed as Satva in the Ayurvedic Pharmacopoeia of India.⁴³ Satva is described to have

appetite-stimulating (Dipana), antitussive (Kaphahara), oral hygiene-improving (Mukha-śodhana), digestive (Pācana) and analgesic (Śulaprasāmana and Vedanāsthāpana) properties.⁴³ Traditional use of Satva in Ayurveda includes relieving chronic fever (Jirna jvara) and pain (Śūla).⁴³

Use in Jamu

The use of peppermint in Jamu as described in the Indonesian Traditional Medicine Formulary is for use against sore throat and as an antiseptic against oral germs.³⁶

Pharmacology

The cooling sensation and analgesic properties elicited by peppermint are attributed to menthol.⁴⁴ Menthol is widely used to relieve muscle and joint pains as this molecule stimulates analgesic effects.⁴⁴ In particular, menthol can bind and activate transient receptor potential melastatin 8 (TRPM8) ion channels, which play an essential role in detecting cold stimuli in peripheral sensory neurons.⁴⁴ Nerve fibres within the nasal mucosa are enriched with TRPM8 receptors.⁴⁵

According to several preclinical studies, peppermint leaf extract, peppermint oil and menthol have been reported to also possess antispasmodic effects.⁴⁶ The antispasmodic effect of peppermint on tracheal muscle cells is likely through the inhibition of calcium channels, which in turn leads to smooth muscle relaxation.⁴⁶

Use in allopathic and modern guidelines

The herbal monograph adopted by the European Medicines Agency Committee on Herbal Medicinal Products recommended the use of peppermint oil for symptomatic relief of mild tension-type headache based on well-established use in topical application and relief of symptoms in coughs and cold based on traditional use in inhalation, oral or cutaneous applications.⁴⁷ A study involving healthy volunteers observed a significantly reduced mean number of coughs following evoked stimulation in participants who were administered inhaled peppermint.⁴⁸ The German Commission E Monograph has supported the use of peppermint oil for the treatment of catarrh and inflammation of the oral mucosa.⁴⁹ The WHO monograph on selected medicinal plants states that the use of peppermint is clinically proven for irritable bowel syndrome and headache.⁵⁰ Other uses include treatment of fever, catarrh and cough.⁵⁰

Discussion

The inflammatory response is an important body defence mechanism during a viral cold infection for the prevention of spreading and killing of viruses.⁵¹ It is often characterized by excessive production of pro-inflammatory

cytokines such as IL-6, tumour necrosis- α and IL-1 β , giving rise to symptoms like cough, blocked nose, sore throat and fever.⁵¹ Curcumin, the active component of turmeric, is demonstrated to provide protection against inflammation via suppression of the NF- κ B, PPAR γ and TLR4 inflammation signalling pathways.⁵² Clinically, consumption of curcumin supplement was reported to reduce common cold symptoms and shorten cold duration, although the inflammatory cytokine levels are highly variable in acute disease like the common cold.⁵³ Similar clinical anti-inflammatory actions by ginger were observed and exemplified in chronic and severe respiratory conditions.^{54,55} Liquorice and peppermint were clinically demonstrated to be effective antitussive agents against cough^{48,56} as well as to possess anti-inflammatory actions via corticosteroid-like activity⁵⁷ and IL-10 modulation,⁵⁸ respectively.

In this review, we have surveyed the use of four herbal therapies – ginger, liquorice, turmeric and peppermint – for the management of symptoms of the common cold as approached by the Ayurveda and Jamu medicinal systems. Overall, we have uncovered that these herbs have been used for centuries to treat symptoms of the common cold. Recent studies have supported their use in complementing modern evidence-based medicine.

Furthermore, the use of these traditional herbal ingredients is supported by monographs from expert organizations such as WHO. However, whilst some studies may show limited objective benefit of inhaled aromatic ointments containing menthol for the common cold, the subjective benefits provided to patients have demonstrated improved sleep quality and accelerated recovery.⁵⁹ Furthermore, the use of these traditional herbal ingredients is supported by monographs from expert bodies such as WHO.

Despite the potential benefits of CAM, there are several issues surrounding the use of herbal ingredients for the treatment of the common cold in the general population. There are concerns regarding their safety as many herbal formulations are not tested or monitored with equal scrutiny as modern medicines.¹³ These concerns are exacerbated by the lack of standardization, inappropriate labelling and inadequate patient information.¹³ Hence, there is a need for regulatory bodies to proactively introduce measures to ensure patient safety in using herbal medicines.¹³

Conclusion

For centuries, the Ayurveda and Jamu systems of medicine, originating from India and Indonesia, respectively, have leveraged herbal therapies to treat many illnesses. Herbs form the foundation of Ayurveda and Jamu, and

ingredients like ginger, liquorice, turmeric and peppermint have been used for centuries to treat several symptoms of the common cold. Recently, pharmacological evidence has demonstrated that the benefits of these herbal ingredients may be attributed to their anti-inflammatory effects.

On top of their traditional uses, herbal ingredients have seen an upsurge in acceptance in both the developing and developed world. Herbal ingredients like ginger, liquorice, turmeric and peppermint have now been accept-

ed into local and international monographs as suitable treatments for common cold symptoms. Given the widespread patient usage of CAM, a better understanding of this treatment paradigm by healthcare providers can be instrumental in bridging patient communication to potentially improve patient care. To improve healthcare provider acceptance of CAM, education should focus on the identity and pharmacology of phytochemicals in many herbal medicines as well as the clinical effectiveness of such molecules towards treating illnesses like the common cold.

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