

# Echinacea in the treatment and prevention of common colds and influenza



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## The Use of Echinacea in the Treatment and Prevention of Common Colds and Influenza

*Echinacea* is an indigenous wildflower of the United States (Ross, 2016). For centuries, Native Americans have used different species of *Echinacea* in herbal remedies to treat coughs, gastrointestinal issues, sore throats, and even toothaches (Ross, 2016). Over the last century, numerous studies have been conducted with the intent to understand *Echinacea*'s efficacy in treating and preventing the common cold across the lifespan.

Through such studies, *Echinacea* has proven to be a useful complementary alternative medicine (CAM) in the treatment and prevention of common colds and influenza (Rodanelli, 2018). Ross (2016) explains that on average, healthy adults experience 2 to 4 colds annually, while children average 6 to 10 (p. 54). Considering the reach of the common cold, health care providers should educate themselves on the use of *Echinacea* as symptomatic treatment. The aim of this paper is to review and appraise current research of *Echinacea* in treating and preventing the common cold and influenza, as it relates to providing health care.

### Literature Review

Ross (2016) researched *Echinacea* in the prevention of the common cold, in addition to the safety and efficacy of using *Echinacea*. The study was conducted using a randomized, double-blind, parallel, placebo-controlled clinical trial over a 4-month period (Ross, 2016, p. 54). The control group was instructed to take 0.9 ml of Echinaforce drops 3 times daily, equaling 2400 mg per day, for the prevention of the common cold (Ross, 2016, p. 56). The <https://assignbuster.com/echinacea-in-the-treatment-and-prevention-of-common-colds-and-influenza/>

placebo group was given the same instructions to administer the placebo medication. Additionally, if the participants had an active cold, dosages of placebo medication and Echinaforce drops were increased to 0.9 ml 5 times daily, equaling 4000 mg (Ross, 2016, p. 56).

The study found that the participants using the Echinaforce drops had 39 less colds and 178 less sick days over a 4 month period than the placebo group (Ross, 2016, p. 57). Furthermore, the *Echinacea* group had 35 fewer recurring colds than the placebo group (Ross, 2016, p. 57). The results provide a solid foundation for the safe and effective use of *Euchinacea* in prevention of the common cold.

While the study by Ross (2016) provides statistically significant evidence that *Echinacea* is effective and safe in providing immunostimulation to help prevent the common cold infection, there are two points of interest that may require further study. The first point needing further investigation is that the participants in the *Echinacea* group were found to be more susceptible to colds, based on the participant's history of colds. Further study is needed to this point to determine its significance on the results. Secondly, the use of other medications and CAMs during the course of the participant's colds was not examined to determine the effect of the colds duration.

Barth, Hovhannisyan, Jamalyan, and Narimanyan (2015) conducted a randomized, placebo-controlled, three-arm parallel-group, double-blind phase II trial using Kang Jang (KJ) oral solution to study the antitussive effects of *Justicia adhatoda*, *Echinacea purpurea* and *Eleutherococcus senticosus* when used in treating an acute upper respiratory tract infection

(URI). In the study, each group was instructed to take 30 ml of the oral solution for 5 days (Barth et al., 2015, p. 1196). The KJ group received the KJ oral solution that included the active ingredients *Justicia adhatoda*, *Echinacea purpurea* and *Eleutherococcus senticosus*. The active control group received over-the-counter bromhexine hydrochloride. The placebo group received an oral solution of similar smell, taste, color, and viscosity (Barth et al., 2015).

The effectiveness of the three oral solutions used in the study was measured using a cough scale of 0-10, no cough to severe cough, respectively. Overall, all three groups showed a reduction in cough at day 5 of treatment (Barth et al., 2015, p. 1198). However, the most significant finding of the study was that on the third and fourth day of treatment, greater cough relief was shown in the group treated with the KJ oral solution. This finding suggests that the combination of *Justicia adhatoda*, *Echinacea purpurea* and *Eleutherococcus senticosus* found in the KJ oral solution contributes to shorter duration URIs and provides greater antitussive effects than placebo and bromhexine hydrochloride (Barth et al., 2015).

Raus, Pleschka, Klien, Schoop, and Fisher (2015) researched the use of Echinaforce Hotdrink, a proprietary preparation of *Echinacea pupurea*, versus oseltamivir in the treatment of influenza. The researchers used a randomized, double-blind, parallel, double-dummy trial which included 2 groups that received either Echinaforce Hotdrink and oseltamivir placebo capsules or oseltamivir verum capsules and Echinaforce Hotdrink placebo over the course of 10 days (Raus et al., 2015). Throughout the course of the participant's influenza episode, influenza symptoms were detailed in a diary <https://assignbuster.com/echinacea-in-the-treatment-and-prevention-of-common-colds-and-influenza/>

using a rating score between 0-3, not present to severe, respectively. The data collected through the use of each diary indicated that the use of Echinaforce Hotdrink and oseltamivir capsules both decreased influenza symptoms. However, neither treatment was deemed more effective based on the lack of achievement of statistical significance (Raus et al., 2015). Further research should be conducted to determine effectiveness of both treatments on varying strains of the influenza virus.

Heitmann, Havnen, Hoise, and Nordeng's (2015) researched pregnancy outcomes after prenatal exposure to *Echinacea*. The researchers compared pregnancy outcomes of women who used *Echinacea* while pregnant and women who did not. The co-hort study examined pregnancy outcomes including preterm birth, low birth weight, small for gestation age, and any other malformation registered with the Medical Birth Registry of Norway (MBRN). Heitmann et al. (2015) determined that there is no increased risk of malformation or negative pregnancy outcomes if a fetus has been exposed to *Echinacea* while in the womb.

Tafazoli (2017) published a short report suggesting the use of *Echinacea* for refugees in refugee camps to help prevent and reduce complications from pneumonia and other URIs. Refugees are typically housed in crowded shelters, where pneumonia and other URIs pose a significant threat of outbreak. Consequently, these refugee camps are managed by humanitarian agencies that do not have the fiscal means to provide other preventative and curative treatments, such as immunizations and antibiotics. Based on the studies conducted by Ross (2016), Tafazoli (2017) indicates that *Echinacea*

offers an affordable and accessible option in increasing immunity among refugees.

## Discussion

Given that *Echinacea* is so widely used and available in the US; health care providers practicing in primary care should be abreast of the latest research in treating and preventing the common cold and influenza (Ross, 2016).

While the research is sound, *Echineacea* has only shown to be slightly more effective in treating common cold and influenza than placebo and other treatments (Raus et al., 2015). However, more significant results have shown that *Echinacea* is more effective than placebo in boosting immunity and subsequently preventing URIs and influenza (Ross, 2016).

Invariably weaknesses do exist within the research examined and more investigation is needed before *Echinacea* should be the first line CAM treatment for URIs and influenza. Not taken into account by the research is the efficacy of *Echinacea* compared to many other CAMs and over-the-counter URI and influenza treatments used for symptom management. Moreover, further research should delve into the safety and efficacy of using *Echinacea* on high-risk population groups and those with multiple co-morbidities. This is important because common colds and influenza can create more complicated sequela in clients with higher risk factors and co-morbidities. While *Echineacea* might be an acceptable treatment method for a healthy adult client based on the studies, other treatments may be more effective in treating URIs and/or influenza to prevent further complications in high-risk clients. However, *Echineacea* is proven to be safe and therefore

could potentially be used as a CAM for many client profiles, both healthy and high-risk (Ross, 2016).

## Conclusion

In conclusion, *Echineacea* is an acceptable CAM in the treatment and prevention of the common cold, URIs, and influenza. Evidence is strong in support of *Echinacea*'s safety as a treatment for cold and influenza episodes in healthy adults and has shown no risk to a fetus if exposed in vitro. With *Echineacea*'s affordability, accessibility, and low risk-to-benefit ratio, this CAM could be recommended for every client at the first sign of a stuffy nose. At best, the client's cold or influenza symptoms would be minimal and shorter in duration. But at worst, the client's symptoms persist as they would through an untreated course of infection.

## References

- Barth, A., Hovhannisyan, A., Jamalyan, K., & Narimanyan, M. (2015). Antitussive effect of a fixed combination of *Justicia adhatoda*, *Echinacea purpurea* and *Eleutherococcus senticosus* extracts in patients with acute upper respiratory infection: A comparative, randomized, double-blind, placebo-controlled study. *Phytomedicine*, 22 , 1195-1200. doi: 10. 1016/j. phymed. 2015. 10. 001
- Heitmann, K., Havnen, G. C., Holst, L., & Nordeng, H. (2016). Pregnancy outcomes after prenatal exposure to *Echinacea* : the Norwegian mother and child cohort study. *European Journal of Clinical Pharmacology*, 72, 623-630. doi: 10. 1007/s00228-016-2021-5

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- Raus, K., Pleschka, S., Klein, P., Schoop, R., & Fisher, P. (2015). Effect of Echinacea-based hot drink versus oseltamivir in influenza treatment: A randomized, double-blind, double-dummy, multicenter, noninferiority clinical trial. *Current Therapeutic Research, 77* , 66-72. doi: 10. 1016/j. curtheres. 2015. 04. 001
- Ross, S. (2016). *Echinacea purpurea* : A proprietary extract of *Echinacea purpurea* is shown to be safe and effective in the prevention of the common cold. *Holistic Nursing Practice, 30(1)*, 54-57. doi: 10. 1097/HNP. 0000000000000130
- Tafazoli, A. (2017). Herbal prevention of pneumonia epidemics in multinational refugee camps: *Echineacea* for refugees. *Swiss Journal of Integrated Medicine, 29* , 241-242. doi: 10. 1159/000477837