

WNF Report: Impact of Our Rapid Reviews

By Dr. Amie Steel, ND, PhD

WNF Coordinator of the Rapid Review Project

Senior Research Fellow, Faculty of Health, University of Technology Sydney (Australia)

In the early stages of the COVID-19 pandemic the World Naturopathic Federation undertook the task of collating important research evidence to inform policymakers, researchers and communities throughout the world. Due to the importance of timeliness, the WNF Research Committee decided to undertake ten Rapid Reviews on topics with the widest impact and relevance globally. These Rapid Reviews were published in a dedicated issue of the peer-reviewed journal [Advances in Integrative Medicine](#) in December 2020. Since publication, the impact of the work – both as a combined body of knowledge, and as individual reviews – has been beyond our expectations.

Examples of how this work has reached the general community includes information on a Wikipedia page about Echinacea [1] and another page about the Common Cold with reference to the role of Vitamin D [2]. There have also been news articles referencing the WNF Rapid Reviews which describe the value of Echinacea [3] and Elderberry [4] in boosting immunity and consider the potential value of zinc in COVID-19 [5].

The Rapid Reviews have also had important impacts on research activity during the pandemic. Most notably, *in vitro* studies have been published that examine the effect of Echinacea [6,7] and Elderberry [8] for the treatment of coronaviruses (including SARS-COV-2), and the results of these studies have been promising with the researchers suggesting they warrant progressing to human trials. A clinical trial examining Elderberry combined with reishi mushroom extract to reduce the duration and severity for respiratory tract infections in elderly populations was also published [9] and found that the treatment reduced the duration and severity, as well as reducing sleep disturbances. Our Rapid Reviews have also informed observational research, with one case series study examining the combined effect of quercetin, zinc, bromelain, and vitamin C on COVID-19 patients after diagnosis [10-12], another network pharmacology study exploring the potential for quercetin to be used to reduce COVID-19 acute kidney injury [11], and a third observational study exploring the impact of zinc deficiency on inflammation in COVID-19 [12].

Naturopathic communities in some countries have also taken the opportunity to share the published journal issue containing the Rapid Review, as well as the [White Paper on the Role of Naturopathy in a Pandemic](#) prepared by the WNF, with Health Ministers and other government representatives and decision-makers for health in their country. One such country is Australia, where the information has led to invitations from the Senior Policy Advisor for the Northern Territory and the Chief Allied Health Officer in South Australia to discuss the potential role of naturopathy in supporting the health system both in the case of a pandemic and more generally. In both of these instances, these conversations continue to progress and provide an opportunity for naturopathy to be better integrated into existing health services.

So, thank you to all of the naturopathic researchers and practitioners around the world who contributed to this project, the ripples will no doubt be felt for years to come. If you have updates on how the Rapid Reviews have impacted you in your country, we welcome you to share them with the WNF.

References

1. Wikipedia (2021). *Echinacea Purpurea*. Accessed on 26 Mar 2021. Available from <https://es.wikipedia.org/?curid=857000>
2. Wikipedia (2021) *Common Cold*. Accessed on 26 Mar 2021. Available from <https://en.wikipedia.org/?curid=92693>
3. Lader, A (2020) *4 herbs that may help boost your immune system naturally*. Business Insider, published on 28 Aug 2020. Accessed on 26 Mar 2021. Available from <https://www.msn.com/en-in/health/nutrition/4-herbs-that-may-help-boost-your-immune-system-naturally/ar-BB18tSyC?li=BB120Tbb&srcref=rss>
4. Hammond, AM and Cassetty, S. (2020) *Elderberry may be one of the best immune boosting fruits – heres how it can benefit your health*. MSN Insider, published on 20 Nov 2020. Accessed on 26 Mar 2021. Available from <https://www.msn.com/en-us/health/nutrition/elderberry-may-be-one-of-the-best-immune-boosting-fruits-here-s-how-it-can-benefit-your-health/ar-BB1bdk63?li=BBnba9O&srcref=rss>
5. Beil, L (2020) *Can supplements really help fight COVID-19? Here's what we know and don't know*. Science News, published on 16 Oct 2020. Accessed 26 Mar 2021. Available from <https://www.sciencenews.org/article/coronavirus-covid-19-supplements-vitamins-what-we-know>
6. Signer J, Jonsdottir HR, Albrich WC, Strasser M, Züst R, Ryter S, Ackermann-Gäumann R, Lenz N, Siegrist D, Suter A, Schoop R (2020). *In vitro virucidal activity of Echinaforce®, an Echinacea purpurea preparation, against coronaviruses, including common cold coronavirus 229E and SARS-CoV-2*. Virology journal. Dec;17(1):1-1. Available from <https://virology.biomedcentral.com/articles/10.1186/s12985-020-01401-2>
7. Bharadwaj S, El-Kafraway SA, Alandijany TA, Bajrai LH, Shah AA, Dubey A, Sahoo AK, Yadava U, Kamal MA, Azhar EI, Kang SG. *Structure-Based Identification of Natural Products as SARS-CoV-2 Mpro Antagonist from Echinacea angustifolia Using Computational Approaches*. Viruses. 2021 Feb;13(2):305. Available from <https://www.mdpi.com/1999-4915/13/2/305>
8. Boroduske A, Jekabsons K, Riekstina U, Muceniece R, Rostoks N, Nakurte I (2021). *Wild Sambucus nigra L. from north-east edge of the species range: a valuable germplasm with inhibitory capacity against SARS-CoV2 S-protein RBD and hACE2 binding in vitro*. Industrial Crops and Products. Mar 18:113438. Available from <https://www.sciencedirect.com/science/article/pii/S0926669021002028?via%3DIhub>
9. Gracián-Alcaide C, Maldonado-Lobón JA, Ortiz-Tikkakoski E, Gómez-Vilchez A, Fonollá J, López-Larramendi JL, Olivares M, Blanco-Rojo R (2020). *Effects of a Combination of Elderberry and Reishi Extracts on the Duration and Severity of Respiratory Tract Infections in Elderly Subjects: A Randomized Controlled Trial*. Applied Sciences.10(22):8259. Available from <https://www.mdpi.com/2076-3417/10/22/8259>
10. Ahmed A, Abdelseed H, Albalawi Y, Almutairi Y, Alsalameen E, Alkattan A (2020). *Evaluation of the Effect of Zinc, Quercetin, Bromelain and Vitamin C on COVID-19 Patients*. medRxiv. Available from <https://www.medrxiv.org/content/10.1101/2020.12.22.20245993v1>
11. Gu YY, Zhang M, Cen H, Wu YF, Lu Z, Lu F, Liu XS, Lan HY (2021). *Quercetin as a potential treatment for COVID-19-induced acute kidney injury: Based on network pharmacology and molecular docking study*. PloS one. 16(1):e0245209. Available from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0245209>
12. Gouda AS, Adbelruhman FG, Elbendary RN, Alharbi FA, Alhamrani SQ, Mégarbane B (2021). *A comprehensive insight into the role of zinc deficiency in the renin-angiotensin and kinin-kallikrein system dysfunctions in COVID-19 patients*. Saudi Journal of Biological Sciences. Available from <https://www.sciencedirect.com/science/article/pii/S1319562X21001984>