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Letter to the Editor

Concern over reporting in the following review article



Dear Sir

Alschuler, L., Weil, A., Horwitz, R., Stamets, P., Chiasson, A., Crocker, R., Maizes, V. 2020. Integrative considerations during the COVID-19 pandemic. *Explore*.000. 1-3.

I refer to pg. 2, column 1 of the above-mentioned article specifically the section titled:

'During symptoms of infection or positive test for COVID-19' - under this heading and the subheading 'To avoid' I make specific reference to the listing: 'Echinacea angustifolia and E. purpurea'^{37,38}

It is of my opinion that the overt caution 'to avoid' the use of *Echinacea angustifolia* and *Echinacea purpurea* by the authors of this article is not objectively justified by the two references cited i.e. Ref #37 Burger *et al.* (1997) and Ref #38 Senchina *et al.* (2009).

I base my objection on the following grounds:

Burger *et al.* (1997) used fresh pressed juice and dried juice 'derived from the above ground parts' of *Echinacea purpurea* (full accepted name not published) – a review of the substantial contemporary published literature¹⁻⁵ on this topic since 1997 confirms that *Echinacea purpurea* provides substantial anti-inflammatory (down regulation of IL1- β , IL-6, IL-12 and TNF- α) action and also shows the inclusion of the upper parts and roots of *E. purpurea* extractions are essential for the anti-inflammatory effect. In this regard it appears that the authors have unfortunately omitted the latest data on this topic and referenced a single, dated study utilising an extract produced from above-ground parts only.

Senchina *et al.* (2009) demonstrated a weak effect of Echinacea extracts on the production of TNF- α and IL1 β which were not statistically significant, furthermore, the species of Echinacea utilised in this study was *Echinacea tennesseensis* (Tennessee coneflower) and not *Echinacea angustifolia* or *Echinacea purpurea* which are the species the authors caution against, citing Senchina *et al.* (2009) in support of such a caution against *E. angustifolia* and *E. purpurea* is thus in my opinion invalid.

In addition to the concerns over the use of the above two references, I draw your attention to other review articles on this topic with conclusions contrary to the caution issued by Alschuler *et al.* 2020, these being i.e. Aucoin *et al.* (2020)⁶, Brendler *et al.* (2020)⁷, de Abreu (2020)⁸ & Schapowal (2020).⁹ Finally, and of further interest, Signer *et al.* (2020) demonstrated that fresh *Echinacea purpurea* extract (upper parts and root) has virucidal action against SARS-CoV-2 and other coronaviruses *in vitro*.¹⁰

In summary, the data used to substantiate the caution on the use of *E. angustifolia* & *E. purpurea* by Alschuler *et al.* (2020) is insufficient

to justify such and warrants a more in-depth review of the related research which is contrary to this opinion.

Declaration

S.A Natural Products is a distributor of complementary medicines and health supplements in South Africa including Echinacea products.

References

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