

Review of: "Real-World Efficacy of N95, Surgical, and Cloth Masks in Mitigating SARS-CoV-2 Respiratory Infections: A Comprehensive Comparative Study"

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Potential competing interests: No potential competing interests to declare.

In this work has been conducted a comprehensive comparative analysis of the real-world efficacy of N95, surgical, and cloth masks in reducing the transmission of respiratory infections. The topic is very interesting especially for the last global pandemic.

The introduction must be further expanded with many references on the diffusion in indoor ambient of the respiratory pathogen with or without mask. For example you could cite this interesting work through fluid dynamic analysis techniques on the diffusion of the SARS COV-2:

-Cravero C, Marsano D. Simulation of COVID-19 indoor emissions from coughing and breathing with air conditioning and mask protection effects. Indoor and Built Environment. August 2021. doi:10.1177/1420326X211039546

In that work a URANS CFD approach has been used to simulate the dispersion from the mouth of saliva droplet aerosol in closed environments with air conditioning systems. Lagrangian and Eulerian approaches have been used.

The method should be better explained despite it is very intuitive, but additional details must be provided. Moreover, you should provide the standards adopted and to cite some works that use the same method.

The results are presented clearly and show the more effectiveness of the N95 mask. Despite this work it is not particularly innovative, it reports quantitatively the different impact with the different typologies of masks.

The discussion and the conclusions are well supported by the results and well written.