CORRELATION
Research in the Public Interest

MEDIA NOTICE

Social segregation of unvaccinated people is not scientifically justified

Ottawa, December 14, 2023

During the COVID-era, countries around the world segregated and discriminated against unvaccinated people, including by barring them from public venues where gatherings take place. These segregation policies were applied and promoted using the pretext of theoretical mathematical models with dubious or incorrect foundations, and were accompanied by widespread social scapegoating of unvaccinated people.

One prominent example was the *Canadian Medical Association Journal* (CMAJ)'s publication of an April 2022 article by Fisman et al. falsely claiming that unvaccinated individuals "disproportionately" contribute to the infection risk of vaccinated people, and all the more so as the unvaccinated minority are forced to reduce their contacts with the vaccinated majority.

In a new paper published today in the peer-reviewed journal *Cureus*, scientists at CORRELATION demonstrate that segregating unvaccinated people from the vaccinated majority can actually increase the severity of the epidemic among the vaccinated part of the population, and that these kinds of models should not be used to justify any form of segregation based on vaccination status.

The article, entitled "Viral respiratory epidemic modeling of societal segregation based on vaccination status", was authored by Joseph Hickey, PhD and Denis G. Rancourt, PhD, of the non-profit CORRELATION Research in the Public Interest (correlation-canada.org) based in Ottawa, Canada.

The article's general conclusion is:

> "In the two-population mixing-model framework, vaccination-status-based societal segregation can lead to substantially different and counter-intuitive epidemic outcomes depending on the type and degree of segregation, and depending on complex cultural and physical factors that co-determine infectious contact frequencies (i.e., the products βc). Negative epidemiological consequences can occur for either segregated group, irrespective of the deleterious health impacts of the policies themselves.
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> Given the lack of reliable empirical evaluations of needed infectious contact frequency values, the demonstrated outcome sensitivities to the infectious contact frequencies, and the intrinsic limitations of SIR models in this application, we cannot recommend that SIR modelling be used to motivate or justify segregation policies regarding viral respiratory diseases, in the present state of knowledge."

The paper was originally submitted to *CMAJ*, where it was rejected without peer-review by an academic editor (Dr. Matthew Stanbrook) who had a documented glaring conflict of interest with Dr. David Fisman whose work published in the CMAJ is shown by Hickey and Rancourt to be incorrect. Dr. Stanbrook recused himself. The paper was then submitted to *CMAJ Open*, which obtained two positive external peer reviews but rejected the paper on the basis of internal editorial and anonymous in-house statistician comments, including the erroneous assertion that the authors should have used the mathematically incorrect analysis method introduced into the pages of *CMAJ* by Fisman et al. The latter assertion was abandoned by *CMAJ Open* following Hickey and Rancourt's response, but the journal nonetheless decided not to publish on the stated basis that the paper was not suitable for their audience.

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Media enquiries to Dr. Joseph Hickey: jhick059@gmail.com