

Review of: "COVID-19 Crisis: Exploring Challenges, Opportunities, and Cautions"

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The paper examines the challenges posed by COVID-19, explores the opportunities that have arisen in its wake, and presents empirical data addressing the recurring question of why pandemics occur roughly every century. The study also discusses the use of nanomaterials in the treatment of infected patients, as well as the use of nanofilters and masks to lessen or eradicate the spread of the COVID-19 virus. Overall, the paper is well-explained, and it is aptly suited to a health science journal. I nonetheless have a few minor suggestions that might help fit the paper within the aims and scope of journals with diverse scientific goals:

(1) As described, the COVID-19 pandemic has brought challenges to the education system in India, but it has also created opportunities for innovation and resilience. For instance, Byju's, an Indian educational technology company, experienced several benefits from the pandemic and solidified its position as a key player in India's digital education ecosystem. Social isolation and uncertainty brought about by COVID-19 have taken their toll on mental health, but the pandemic has also fostered solidarity and empathy within communities. In the Introduction section, however, please elaborate on the significance of these data in current research fields related to statistical modeling objectives (with a mention of certain attributable studies, for instance: <https://doi.org/10.1371/journal.pone.0257112>, etc.).

(2) The paper elaborates that the COVID-19 pandemic has catalysed innovation and adaptation across various sectors, laying the groundwork for more effective pandemic preparedness in the future. The spread of influenza appears to be accelerated and amplified by air travel, and control measures to stop influenza transmission on cruise ships are required in order to lower morbidity and mortality. Preventive precautions to limit the spread of COVID-19 certainly include wearing facemasks, social distancing, and avoiding large gatherings, as highlighted in the study on public perception of safety measures. Also, post-COVID-19 precautions include social distancing, mask-wearing, avoiding gatherings, and hand hygiene. A few corroborative studies (e.g., <https://doi.org/10.3389/fmed.2020.00260>, etc.) should also be discussed in Section 3 so as to affirm the reliability of the principles behind considering these key steps.

(3) The study conducted a survey among diverse demographics in India to gauge opinions on the cyclical nature of pandemics. The paper concludes that historical patterns do not guarantee future occurrences of pandemics, and the interval between pandemics can vary widely. Predicting the timing and severity of future pandemics based solely on historical patterns oversimplifies the complex interplay of these factors. The results suggest that 71% of respondents believe that pandemics occur with a periodicity of around 100 years. From a sustainability perspective, how effective or useful such aspects can be in fostering novel energy optimization strategies in ecologically-disturbed locales (e.g.,

<https://doi.org/10.1111/jan.14543>, etc.) should also be substantially elaborated in Section 4 to exhibit the scope and field-scale applicability of the study's conclusions across geographic spectrums.