

NOTEWORTHY

# NOT TO BE APPLIED DURING A WORLDWIDE PANDEMIC

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The recent nature editorial (1) is certainly right that medicine's evidence pipeline need to be fixed. The COVID-19 pandemic resulted in many wasteful clinical trials that were too small to produce useful results. Also highly ranked journals damaged their reputation while we have never seen before such a wave of corrections and retractions (2).

Evidence based medicine itself failed as we needed to act fast without having any randomized clinical trial of virus spreading. The absence of evidence is not the evidence of absence. Unfortunately highly respected scientists turned out to fuel the infodemic and provided some politicians the arguments that they wanted to hear. The fundamental principles of evidence-based medicine has now some cracks as we could not decide based on studies (as we also do not have any study on the efficacy of parachutes).

We had millions of data points during the COVID-19 pandemic but we are still missing accurate surveillance. Epidemiological data from representative cohorts had the lowest funding priority, mobile communication networks were not sufficiently analysed, sequencing efforts came in only recently. Future science historians will have to decide if the pandemic could have been avoided; the extent it could have been mitigated or how treatment studies could have been better coordinated.

We are now being rescued by the progress of vaccination programs and not by a dogmatic belief system. Maybe the package insert of evidence based medicine should include a warning – not to be applied during a worldwide pandemic. It looks like we need bold changes (3).

## References

1. NN. Fix medicine's evidence pipeline. [nature. 2021;593:168.](https://doi.org/10.1038/nature.2021.593:168)
2. Abritis A, Marcus A, Oransky I. An “alarming” and “exceptionally high” rate of COVID-19 retractions. Account Res. 2021 <https://doi.org/10.1080/08989621.2020.1793675>

3. Morgan OW, Aguilera X, Ammon A et al. Disease surveillance for the COVID-19 era: time for bold changes. [The Lancet](#). 2021; in press.