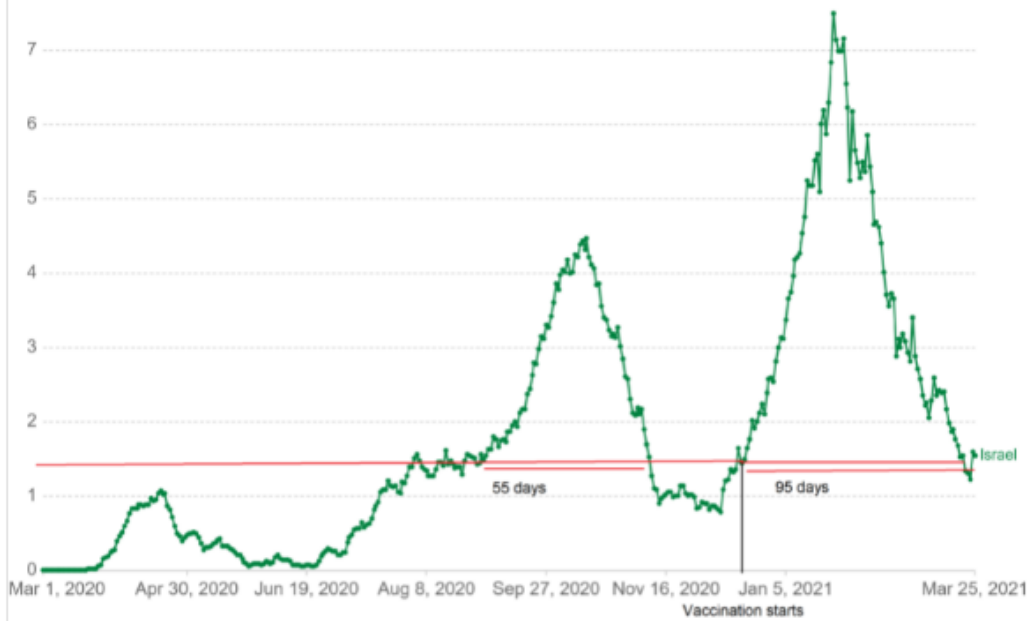


Figure 1 – Israel, Emirates, UK massively vaccinating

Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

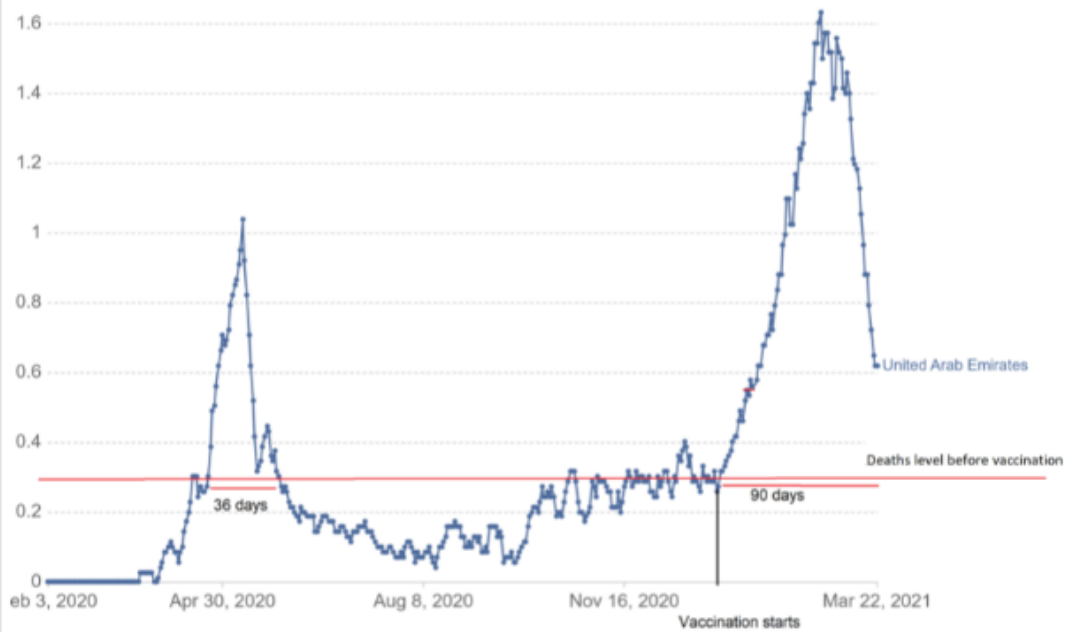


Source: Johns Hopkins University CSSE COVID-19 Data

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Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.



Source: Johns Hopkins University CSSE COVID-19 Data

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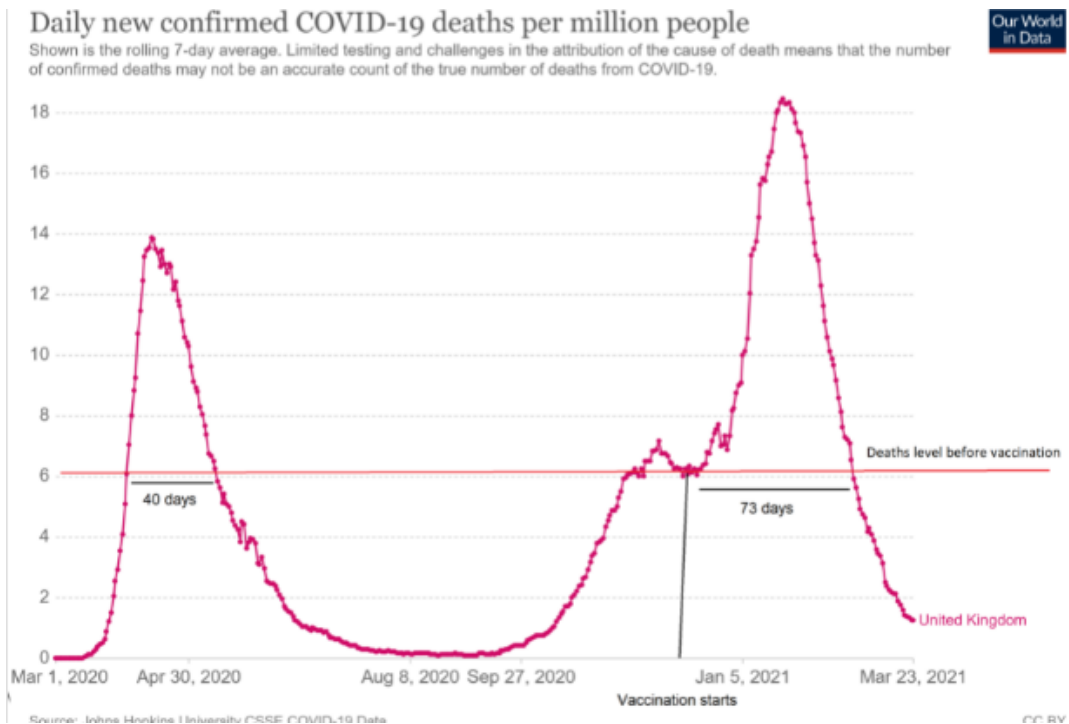
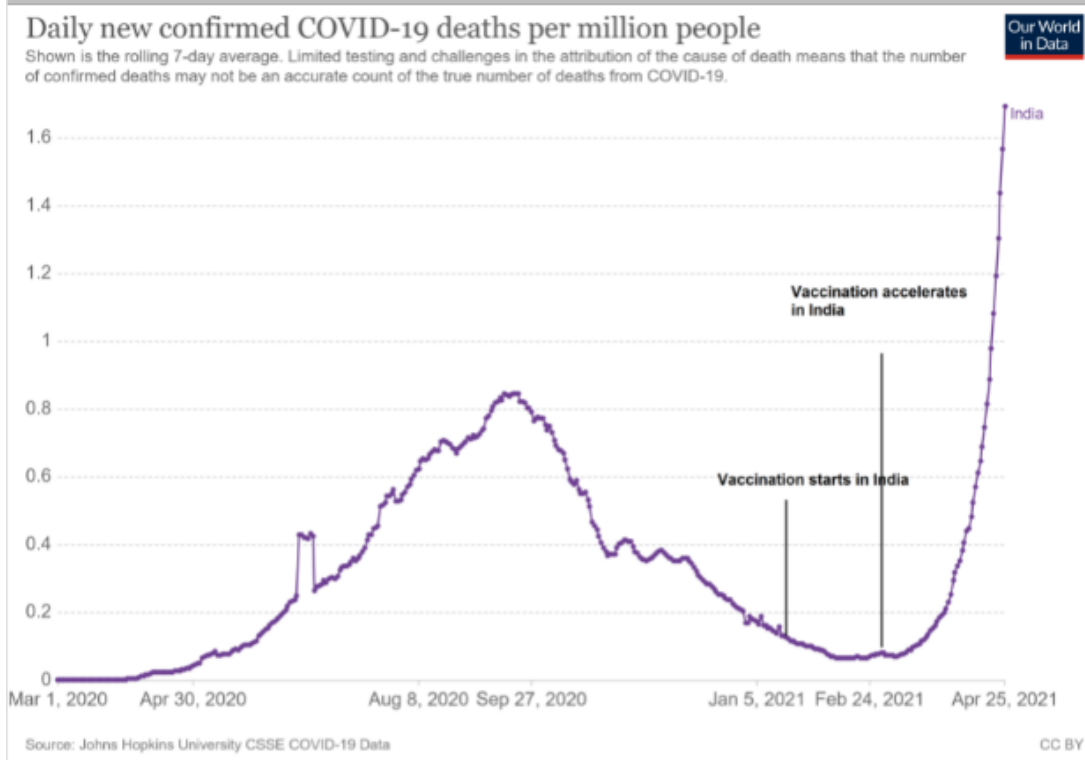
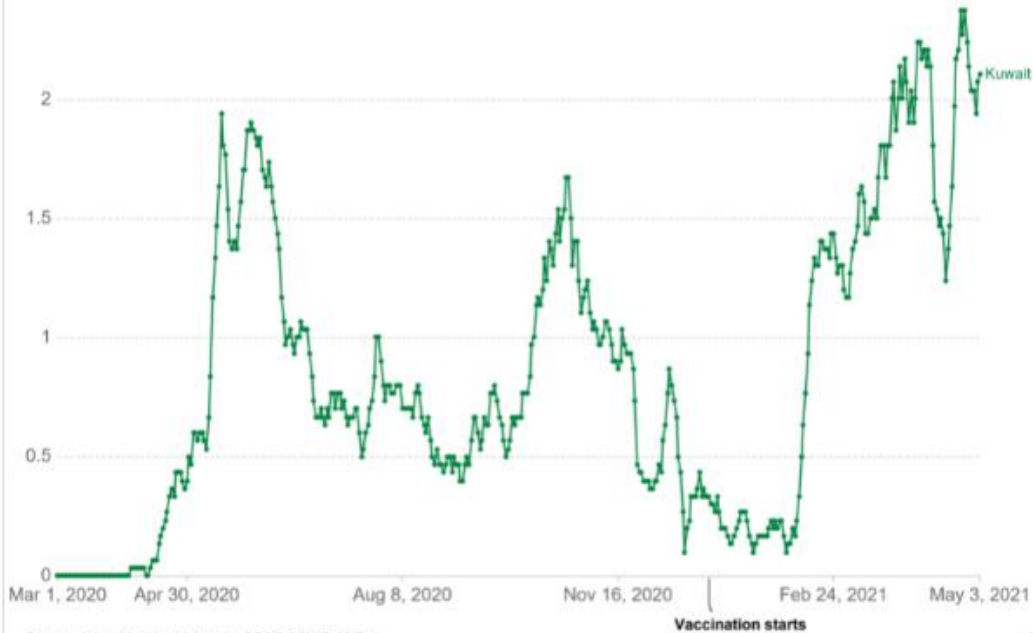


Figure 2 – Worst Covid phase in India, Kuwait and Bahrain coinciding with massive vaccination



Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

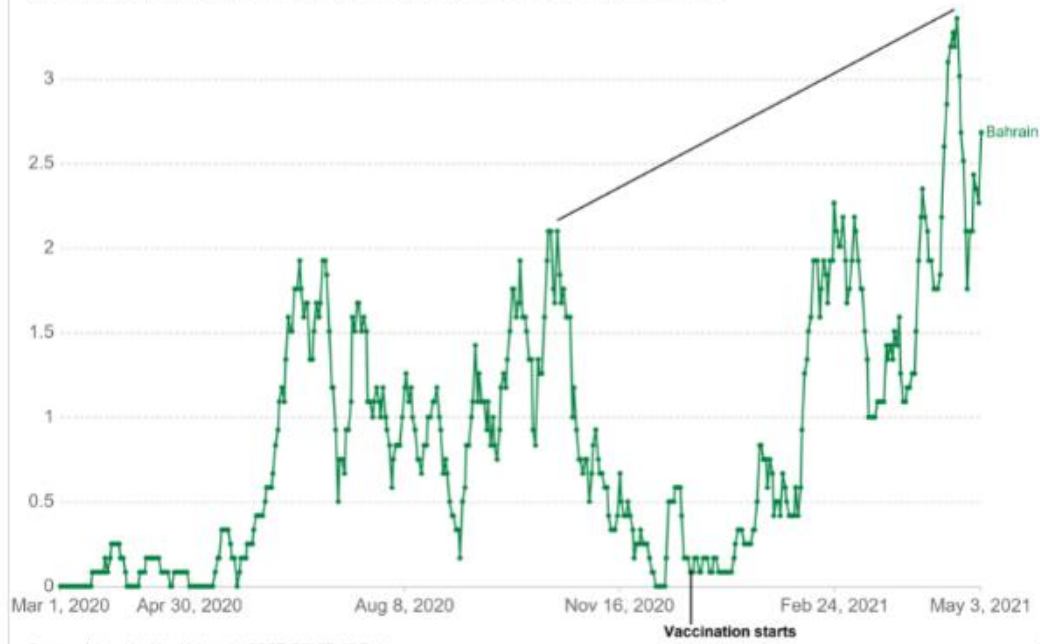


Source: Johns Hopkins University CSSE COVID-19 Data

CC BY

Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.



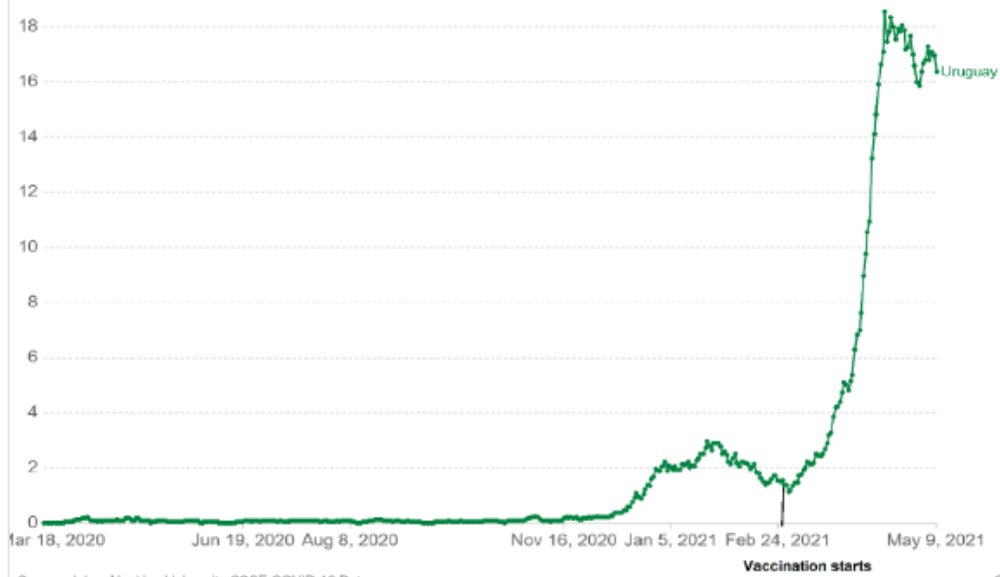
Source: Johns Hopkins University CSSE COVID-19 Data

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Figure 3 - Uruguay, Hongrie, Seychelles

Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

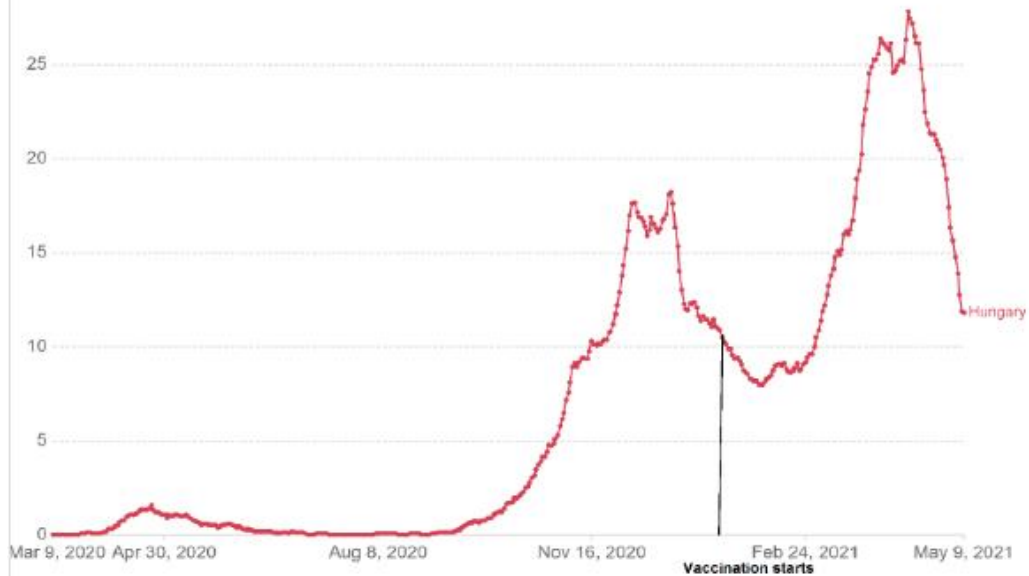


Source: Johns Hopkins University CSSE COVID-19 Data

CC BY

Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.



Source: Johns Hopkins University CSSE COVID-19 Data

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Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

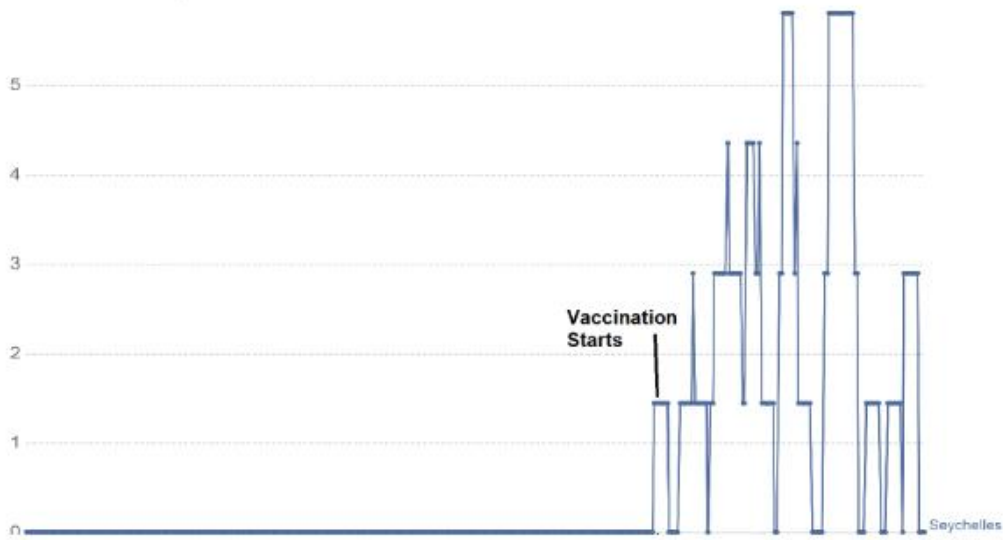
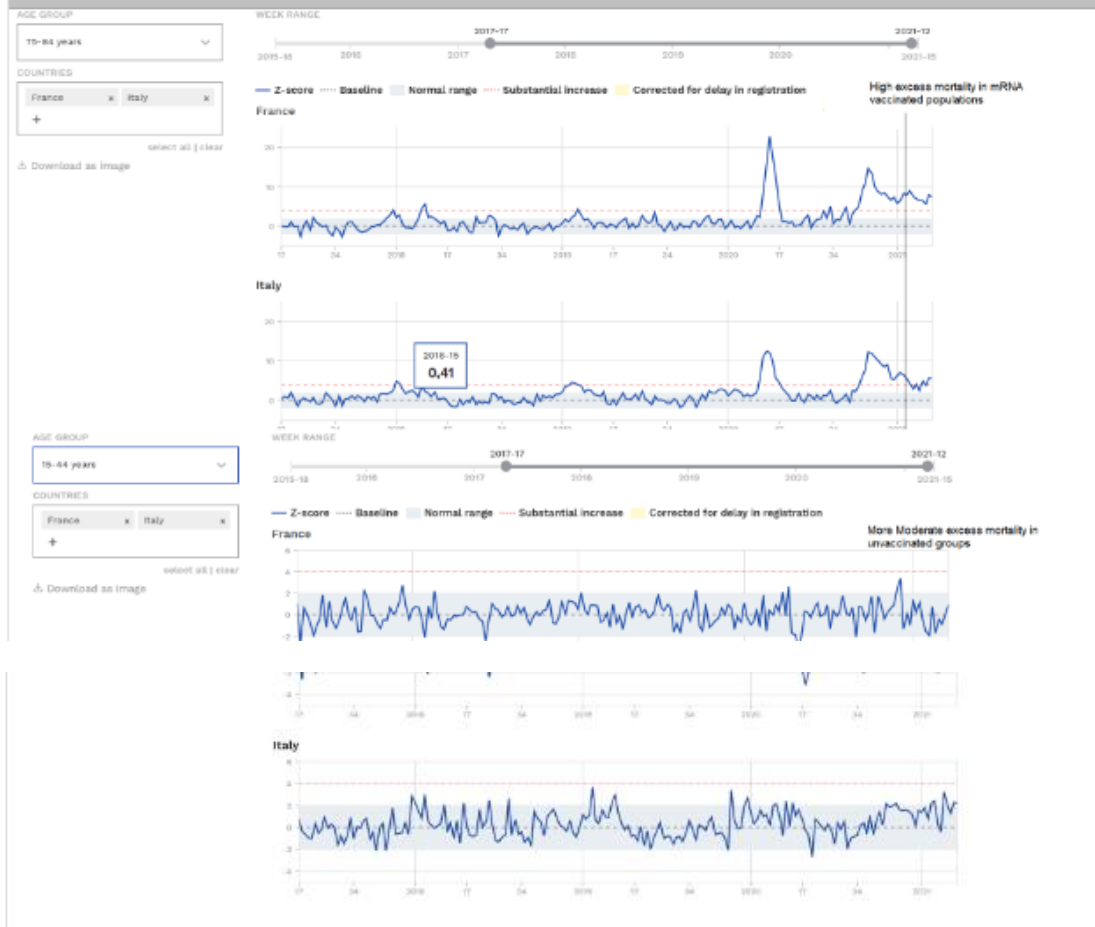


Figure 4 – Israel mortality rise after wave in young and elderly after vaccination and Belgium 45-64



Figure 5 – France and Italy excess mortality in mRNA vaccinated groups



3 countries that had brutal massive vaccination campaigns witnessed their worst epidemic mortality peak and their longest deadliest phase (figures 1, 2, 3, 4 and 5) in conjunction with vaccination campaign initiation.

In 2 of these cases, their covid mortality exceeded that for all the preceding 10 months of the epidemic. These countries are Israel, United Arab Emirates (UAE) and United Kingdom (UK). Israel used mRNA Pfizer, UK used mRNA Pfizer, Moderna and Astrazeneca, UAE used mRNA Pfizer, Sputnik and Sinopharm.

It is interesting to note that this deadly episode coinciding with vaccination happened in Israel and the UK under strict lockdown including non essential business closure and stay home mandates.

It is also troubling to see that Israel's mortality peak only follows its cases peak by 8 days instead of the usual 14 to 21 days or the 17 days observed in previous peak thus possibly hinting to a deadlier more striking infection or frailest population dying more than in

prior epidemic peak.

New mortality peaks seem to appear in Israel in ages 15-44 and 65+ after epidemic and after vaccination (figure 4). A similar situation appears in Belgium who had been spared since beginning 2021 coinciding with vaccination acceleration and its extension to 45-64 years old group with comorbidities. (figure 4)

Kuwait, Bahrain, Uruguay, Seychelles, Hungary, Monaco, Mongolia and to a lesser extent Chile are also facing a very high mortality coinciding again with massive vaccination 28 . More recently, India started a fast massive vaccination campaign late March 2021 coinciding once more with a severe rise in mortality as shown in figure 2, worse than all prior episodes combined

Italy, France and Estonia are observing an excess all cause mortality precisely in the age groups 75 to 84 that have been vaccinated mostly by mRNA Pfizer and Moderna and to some extent Astrazeneca (Figure 5).

Death coinciding with vaccination repeatedly does not establish causality but calls for fair complete independent investigations as suspicion is raised and numbers are alarming particularly that this failure adds to prior ones.

Reproducing the experiment, with a risk of reproducing results illustrated in (figures 1,2,3,4,5).

Israel, Emirates, UK, Kuwait, Bahrain, India, Uruguay, Seychelles and Chile chose to vaccinate massively, including in some cases, populations at low risk of severe disease 29 sometimes without prior control as to pre-existing on going covid infection or pre-existing covid natural cellular immunity [30, 31] .

This was done in disregard of a clear risk, benefit analysis for each individual, wasting vaccines that could have been made available to populations at risk in other parts of the world thus raising ethical, medical and scientific questions.

Requested investigation should explore how these vaccination campaigns failed to prevent this terrible outcome and if they contributed to it. All hypothesis should be explored including non-mutually exclusive hypothesis such as Antibodies Dependency Enhancement (ADE) [32, 33]., Enhanced Respiratory Disease (ERD) 34 35 , vaccines side effects, vaccinated population being more infectious, vaccination places being clustering places, counter productive effect on already naturally immunized population or over-inflated vaccine efficacy on some populations, pressure-selection ... Hospitalizations, appearances or increases of syndromes must all be documented...Deaths had to occur before acknowledging thrombosis risks, is it necessary to wait for all the rest?

Benefit/risk was ignored when low risk young and healthy populations were exposed, pressured, tempted to vaccinate with very limited benefit, some short-term risks and unknown long-term risks [36 37 38 39] .

Excess mortality and possible hospitalizations coinciding with vaccinated groups in several countries calls for exact investigations of short term overlooked or ignored issues in addition to longer term side effects that are yet to be discovered.

Any treatment must come with counter-indications and a clear risk benefit analysis for every group and for the community. There have been attempts to explain such failure and outcome by variants in UK, south America, and now India. Such variants did not have the same effect in other countries that were not massively vaccinating. It remains unclear if pressure – selection resulting from massive vaccination leads to selection of variants that elude vaccinal immunity, tests and possibly other measures. Such hypothesis give current observations must be considered carefully. If it is not the case then, careful attention must be paid to vaccine side effects on some sub-categories as the cause of such surges in mortality. Suspicion will remain until is explained in each of such cases causes of increased mortality. Vaccination maybe a tool that may help with such a pandemic, but an accurate risk benefit analysis must be done for each category, each vaccine and efficacy on circulating variants based on sufficient data. Massive vaccination independent of such analysis has shown to be a failure to avoid a significant mortality rise in many cases and calls urgently for a nuanced approach.

Reckless behavior of massive inconsiderate vaccination becomes more serious when vaccinating those who already contracted covid 19 as this population had been excluded from Pfizer and Moderna trials. Any population that has been excluded from the trial can only be vaccinated within a trial. If they are healthy their benefit from vaccination was already low. If they recovered there is hardly any theoretical benefit and no demonstrated benefit. Risks are present on the short and long term.

By vaccinating covid recovered individuals, in addition to putting them at risk, outside of any trial, a negative alteration of cellular immunity cannot be excluded which would be counterproductive for all.

While data accumulated to demonstrate diversity, efficacy, and higher performance in prevention of variant-related infections of naturally-acquired immunity, with demonstrated importance of Lymphocytes qualitative response and mucosal immunity role, while no strong evidence of correlates with serological antibody measures, avoiding or delaying such natural immunity to develop within lower risk population may result in increased or continued risks for all [40 41 42 43] .

Changes to protocols, changing duration between shots as suggested in some cases or adding a third shot as suggested in others must be done within same standards of

evidence requirements consistently and in many cases under a controlled trial approach measuring risks and benefits.

Any population for whom efficacy is not demonstrated can only be vaccinated within a proper clinical trial.

At the very least, this demonstrates that massive vaccination failed to show a visible effect at times when virus is circulating. High levels of mortality calls for an investigation to identify if it has not been counter-productive possibly making things worse and exposing individuals with little benefit to short and long term side effects.

By vaccinating massively including those with low benefit, in addition to exposing them to unnecessary risks from first vaccination and from eventually multiplication of vaccinations if new strains emerge requiring new vaccinations. This happening with multiple vaccines calls for caution with the process and for more adequate attention concerning each vaccine as well as vaccination multiplication with the same vaccine or a different one. Independent clinical trials would need to be done for such a serious matter to be handled upon extrapolations without sufficient data.

This massive vaccination was done disregarding individual risk/benefit sometimes in some countries without proper informed consent, possibly pressuring or tricking some to vaccinate exposing them to short term risks and unknown long-term risks without sufficient scientific and ethical basis. It was done disregarding solidarity between nations by vaccinating individuals who do not need it and for whom risks exceed benefits and it was done without careful control to minimize risks of pressure selection. The final outcome is that above mentioned countries had a terrible mortality wave and in the case of Israel high mortality episodes after the epidemic wave in groups 15-44 and 65+ and in Belgium excess mortality reappeared after several months of normality.

References –Βιβλιογραφία

28 - <https://ourworldindata.org/explorers/coronavirus-data-explorer?Metric=Confirmed+deaths&Interval=7-day+rolling+average&Relative+to+Population=true&Align+outbreaks=false&country=JP~ISR~TUR> [Accessed 26/03/2021 and 26/04/2021]

29 - O'Driscoll, M., Ribeiro Dos Santos, G., Wang, L. et al. Age-specific mortality and immunity patterns of SARS-CoV-2. Nature 590, 140–145 (2021). <https://doi.org/10.1038/s41586-020-2918-0>

30 - Wegene Borena, Zoltán Bánki, Katie Bates, Hannes Winner, Lydia Riepler, Annika Rössler, Lisa Pipperger, Igor Theurl, Barbara Falkensammer, Hanno Ulmer, Andreas Walser, Daniel Pichler, Matthias Baumgartner, Sebastian Schönherr, Lukas Forer, Ludwig Knabl, Reinhard Wà¼rzner, Dorothee von Laer, Jörg Paetzold, Janine Kimpel Follow-up study in the ski-resort Ischgl: Antibody and T cell responses to SARS-CoV-2 persisted for

up to 8 months after infection and transmission of virus was low even during the second infection wave in Austria - Medrxiv February

2021 <https://doi.org/10.1101/2021.02.19.21252089>

31 - Alison Tarke, et al. Negligible impact of SARS-CoV-2 variants on CD4+ and CD8+ T cell reactivity in COVID-19 exposed donors and vaccinees BioRxiv March 2021

doi: <https://doi.org/10.1101/2021.02.27.433180>

32 - Lee, W.S., Wheatley, A.K., Kent, S.J. et al. Antibody-dependent enhancement and SARS-CoV-2 vaccines and therapies. Nat Microbiol 5,1185–1191

(2020). <https://doi.org/10.1038/s41564-020-00789-5>

33 - Arvin, A.M., Fink, K., Schmid, M.A. et al. A perspective on potential antibody-dependent enhancement of SARS-CoV-2. Nature 584, 353–363

(2020). <https://doi.org/10.1038/s41586-020-2538-8>

34 - Flor M. Munoz, Jakob P. Cramer, Cornelia L. Dekker, Matthew Z. Dudley, Barney S. Graham, Marc Gurwith, Barbara Law, Stanley Perlman, Fernando P. Polack, Jonathan M. Spergel, Eva Van Braeckel, Brian J. Ward, Arnaud M. Didierlaurent, Paul Henri Lambert, Vaccine-associated enhanced disease: Case definition and guidelines for data collection, analysis, and presentation of immunization safety data, Vaccine January

2021, <https://doi.org/10.1016/j.vaccine.2021.01.055>.

35 - Patricio L. Acosta, Mauricio T. Caballero, Fernando P. Polack Brief History and Characterization of Enhanced Respiratory Syncytial Virus Disease Clinical and vaccine immunology March 2016 DOI: 10.1128/CVI.00609-15

36 - Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine Fernando P. Polack, M.D., Stephen J. Thomas, M.D., Nicholas Kitchin, M.D., Judith Absalon, M.D., Alejandra Gurtman, M.D., Stephen Lockhart, D.M., John L. Perez, M.D., Gonzalo Pérez Marc, M.D., Edson D. Moreira, M.D., Cristiano Zerbini, M.D., Ruth Bailey, B.Sc., Kena A. Swanson, Ph.D., et al. - December 31, 2020 N Engl J Med 2020; 383:2603-2615 DOI:

10.1056/NEJMoa2034577

37 - <https://clinicaltrials.gov/ct2/show/NCT04368728>

38 - <https://clinicaltrials.gov/ct2/show/NCT04470427>

39 - <https://clinicaltrials.gov/ct2/show/NCT04516746>

40 - SARS-CoV-2 genome-wide T cell epitope mapping reveals immunodominance and substantial CD8+ T cell activation in COVID-19 patients Science Immunology Apr 2021

DOI: 10.1126/sciimmunol.abf7550

41 - Hall V J et al. SARS-CoV-2 infection rates of antibody-positive compared with antibody-negative health-care workers in England: a large, multicentre, prospective cohort study (SIREN) The Lancet April 2021 DOI:[https://doi.org/10.1016/S0140-](https://doi.org/10.1016/S0140-6736(21)00675-9)

[6736\(21\)00675-9](https://doi.org/10.1016/S0140-6736(21)00675-9)

42 - Jagannathan P et al. Immunity after SARS-CoV-2 infections Nat Immunol April

2021 <https://doi.org/10.1038/s41590-021-00923-3>

43 - Dan J M et al. Immunological memory to SARS-CoV-2 assessed for up to 8 months after infection Science Feb 2021 DOI: 10.1126/science.abf4063