ANIL AGARWAL DIALOGUE 2022

AMBARISH SATWIK, VASCULAR SURGEON

Omicron: *Deus ex machina?*

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Simpson’s paradox

Delta CFR

1% for the naïve, 0.1 % for the immune.

Average fatality rate: 0.91%

New variant CFR

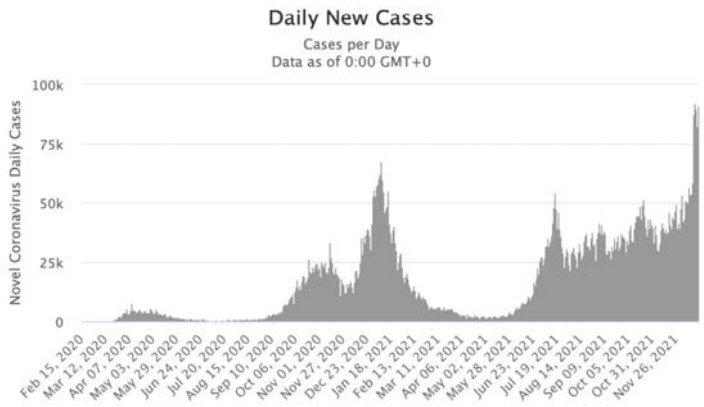
1.1% for the naïve, 0.3% for the immune.

Average fatality rate: 0.38%

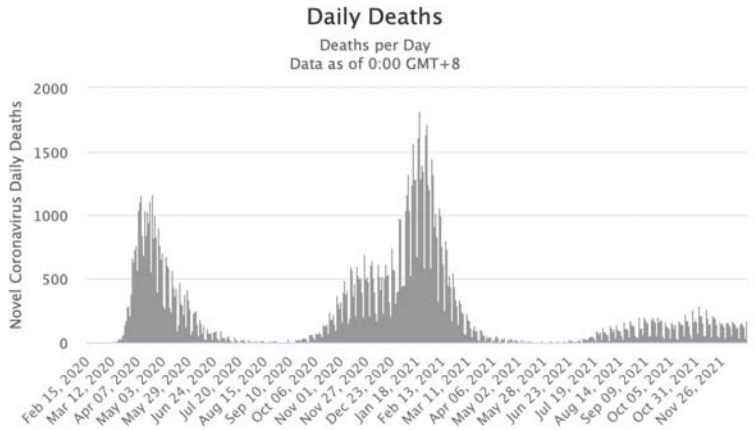
CFR, it seems has gone done by 60%

In fact, it’s up by 20%

Daily New Cases in the United Kingdom



Daily New Deaths in the United Kingdom



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Hospitalisations no longer a marker of severity.

New deaths attributed to Covid-19 in Denmark

Seven-day rolling average of new deaths

Source: Financial Times analysis of data from Johns Hopkins CSSE, World Health Organization, UK Government coronavirus dashboard, Government of Peru, Public Health France, Israeli Health Ministry, Slovenian Ministry of Health and the Swedish Public Health Agency.
Data updated February 12 2022 2.18pm GMT. Interactive version: ft.com/covid19

FINANCIAL TIMES

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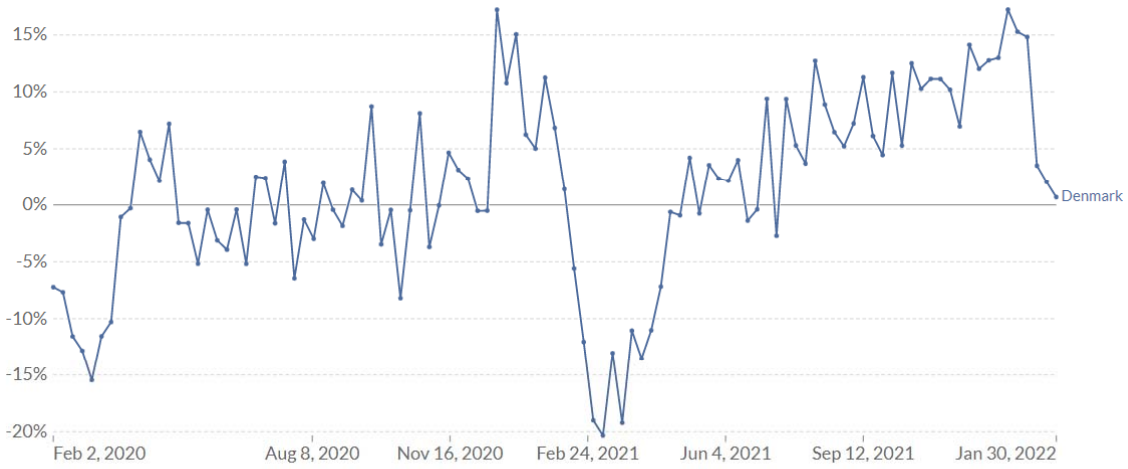
Excess mortality: Deaths from all causes compared to projection based on previous years

Our World in Data

The percentage difference between the reported number of weekly or monthly deaths in 2020–2021 and the projected number of deaths for the same period based on previous years. The reported number might not count all deaths that occurred due to incomplete coverage and delays in reporting.

LINEAR | LOG



Source: Human Mortality Database (2021), World Mortality Dataset (2021)

CC BY

Feb 2, 2020 — Jan 30, 2022

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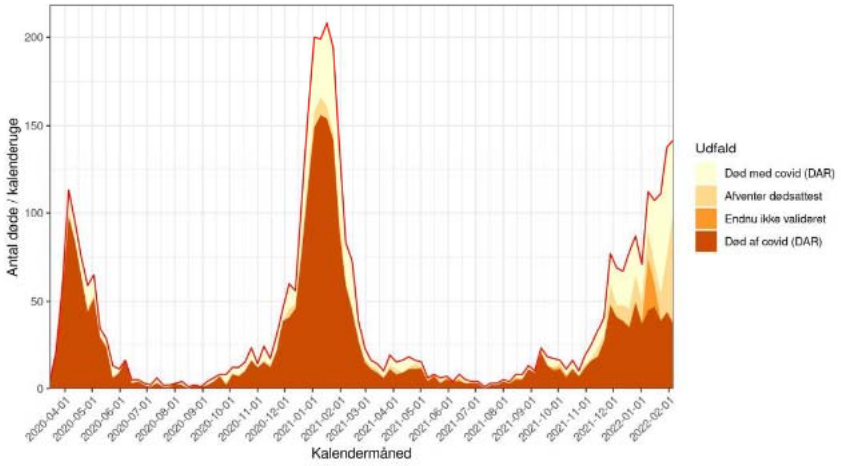
Figur 15. Covid-19: Deaths by and with Covid-19 based on death certificates, March 2020 to February 2022.

Figur 15. Covid-19: Dødsfald af og med Covid-19 baseret på dødsattester, marts 2020 til februar 2022



Natural immunity?

> Eur J Intern Med. 2021 Nov;93:112-113. doi: 10.1016/j.ejim.2021.08.005. Epub 2021 Aug 16.

ChAdOx1 nCoV-19 effectiveness during an unprecedented surge in SARS COV-2 infections

Ruma Satwik [1], Ambarish Satwik [2], Satendra Katoch [3], Satish Saluja [4]

Affiliations + expand

PMID: 34419309 PMCID: PMC8364816 DOI: 10.1016/j.ejim.2021.08.005

Free PMC article

Sir Ganga Ram Hospital is a tertiary care private hospital in New Delhi, having 4296 employees with equitable access to medical benefits, including investigations, medicines and hospitalisation.

Of these, from 16.1.21 to 30.4.21, 2716 received two doses, and 623 received a single dose of Covishield. 927 remained unvaccinated till 30.4.21.

20 received Covaxin or Pfizer and were excluded from our analysis.

Vaccine effectiveness for 2 doses of ChAdOx1 nCoV19 (Covishield) given at a median interval of 30 days was 28% for symptomatic infections, 67% for moderate to severe disease, 76% for supplemental-oxygen-therapy and 97% for deaths.

A single dose offered no protection in our study against symptomatic infections or any outcome of interest.

Previous infections with SARS-CoV-2 were significantly protective against all studied outcomes, with an effectiveness of 93% seen against symptomatic infections, 89% against moderate to severe disease and 85% against supplemental oxygen therapy.

All deaths occurred in previously uninfected individuals. This was higher protection than that offered by single or double dose vaccine.

Comments (562)

Previous Next

Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections

Sivan Gazit, Roei Shlezinger, Galit Perez, Roni Lotan, Asaf Peretz, Amir Ben-Tov, Dani Cohen, Khitam Muhsen, Gabriel Chodick, Tal Patalon

doi: https://doi.org/10.1101/2021.08.24.21262415

Posted August 25, 2021.

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COVID-19 SARS-CoV-2 preprints from medRxiv and

Results SARS-CoV-2-naïve vaccinees had a 13.06-fold (95% CI, 8.08 to 21.11) increased risk for breakthrough infection with the Delta variant compared to those previously infected, when the first event (infection or vaccination) occurred during January and February of 2021. The increased risk was significant ($P<0.001$) for symptomatic disease as well. When allowing the infection to occur at any time before vaccination (from March 2020 to February 2021), evidence of waning natural immunity was demonstrated, though SARS-CoV-2 naïve vaccinees had a 5.96-fold (95% CI, 4.85 to 7.33) increased risk for breakthrough infection and a 7.13-fold (95% CI, 5.51 to 9.21) increased risk for symptomatic disease. SARS-CoV-2-naïve vaccinees were also at a greater risk for COVID-19-related-hospitalizations compared to those that were previously infected.

CORRESPONDENCE

Protection against the Omicron Variant from Previous SARS-CoV-2 Infection

TO THE EDITOR: Natural infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) elicits strong protection against reinfection with the B.1.1.7 (alpha),[1,2] B.1.351 (beta),[1] and B.1.617.2 (delta)[3] variants. However, the B.1.1.529 (omicron) variant harbors multiple mutations that can mediate immune evasion. We estimated the effectiveness of previous infection in preventing symptomatic new cases caused by omicron and other SARS-CoV-2 variants in Qatar. In this study, we extracted data regarding coronavirus disease 2019 (Covid-19) laboratory testing, vaccination, clinical infection data, and references in the risk of exposure to SARS-CoV-2 infection in Qatar.[4]

To ensure that epidemiologically relevant reinfections were considered in the analysis, only documented infections with a PCR cycle threshold (Ct) value of 30 or less were included as cases in our study. (Reinfection often occurs with negligible symptoms and high Ct values, indicating reduced epidemiologic significance.)[5] We also estimated the effectiveness of previous infection in preventing hospitalization or death caused by reinfection.

The selection of the study population for

The effectiveness of previous infection in preventing reinfection was estimated to be 90.2% (95% confidence interval [CI], 60.2 to 97.6) against the alpha variant, 85.7% (95% CI, 75.8 to 91.7) against the beta variant, 92.0% (95% CI, 87.9 to 94.7) against the delta variant, and 56.0% (95% CI, 50.6 to 60.9) against the omicron variant (Table 1). Sensitivity analyses confirmed the

The scientific rationale for mandatory vaccination?

Pandemic of the unvaccinated?

HOME > POLITICS > POLITICS NEWS

SEPTEMBER 9, 2021 5:50PM ET

Biden to Anti-Vaxxers: 'Your Refusal Has Cost All of Us'

"We've been patient, but our patience is wearing thin," the president said of Americans who have yet to get fully vaccinated

By PETER WADE

President Joe Biden delivers remarks on the full FDA approval of the Pfizer-BioNTech coronavirus vaccine, in the South Court Auditorium on the White House campus, Monday, Aug. 23, 2021, in Washington. (AP Photo/Evan Vucci)

AP

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Republic Day 2022: Unvaccinated and children below 15 not allowed

According to a new government order, all those people who are unvaccinated and children below 15 years of age are not allowed to attend the parade.

Written by **Huma Siddiqui**
January 24, 2022 3:42:33 pm

The attendees will have to carry their double vaccination certificates. (Photo source: IE)

Are you going to watch the Republic Day Parade in person?

What are the new guidelines?

Pune: PMPML passengers on

The administration had earlier s
CM Ajit Pawar said the transport

Written by **Ajay Jadhav** | Pune |
January 18, 2022 2:54:46 pm

A ticket collector checking the vaccination status
Horizon)

With Covid cases continuing to increase
public transport bus service Pune Maha
(PMPML) has started to strictly impleme
those who have taken both doses of the

The administration had earlier sought s
public transport service following whic

Both Vaccine
Malls, Theatre

These decisions regarding vac
variant of COVID-19, two case
All India | Asian News International | Updated: De

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TRENDING


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11 Slides


Food
6 Amazing Health

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Community transmission and viral load kinetics of the SARS-CoV-2 delta (B.1.617.2) variant in vaccinated and unvaccinated individuals in the UK: a prospective, longitudinal, cohort study

Anika Singanayagam, Seran Hakki*, Jake Dunning*, Kieran J Madon, Michael A Crone, Aleksandra Koycheva, Nieves Derqui-Fernandez, Jack L Barnett, Michael G Whitfield, Robert Varro, Andre Charlett, Rhia Kundu, Joe Fenn, Jessica Cutajar, Valerie Quinn, Emily Conibear, Wendy Barclay, Paul S Freemont, Graham P Taylor, Shazaad Ahmad, Maria Zambon, Neil M Ferguson†, Ajit Lalvani†, on behalf of the ATACCC Study Investigators‡*

Summary

Background The SARS-CoV-2 delta (B.1.617.2) variant is highly transmissible and spreading globally, including in populations with high vaccination rates. We aimed to investigate transmission and viral load kinetics in vaccinated and unvaccinated individuals with mild delta variant infection in the community.

Lancet Infect Dis 2022; 22: 183–95

Published Online October 28, 2021

PASC/Long Covid

Long Covid now major cause of long-term job absence, say quarter of UK employers

Survey suggests debilitating condition could exacerbate labour shortages and slow economic growth

A quarter of UK employers say long Covid is now one of the main causes of long-term sickness absence among their staff, according to research that suggests the debilitating condition could be exacerbating labour shortages that are plaguing many parts of the economy.

A survey of 804 organisations, representing more than 4.3mn employees, found that one in four put it among the top three reasons for long-term absence, the Chartered Institute of Personnel and Development said on Tuesday, while half had staff who had suffered from long Covid in the past 12 months.

Meanwhile, a fifth of employers said they did not know whether any of their staff had experienced continuing symptoms from the virus, suggesting the problem was underestimated as a workplace issue.

Rachel Suff, senior policy adviser for employment relations at the CIPD, the professional body for human resources, said alarm bells would be "starting to ring" for employers who were already struggling to fill vacancies and risked a significant loss of talent if those affected were unable to stay in work.

Quarter of UK employers cite long COVID as driving absences – survey

LONDON (Reuters) – A quarter of British employers have cited long COVID as a main cause of long-term sickness absences, a survey by a professional body found on Tuesday, adding that it raised questions over how workers with the condition were being supported in their jobs.

British Prime Minister Boris Johnson is leading a strategy for the country to live with COVID, lifting restrictions as booster shots and the lower severity of the Omicron variant weaken the link between cases and death.

However, Britain is still averaging around 80,000 cases each day, and mild

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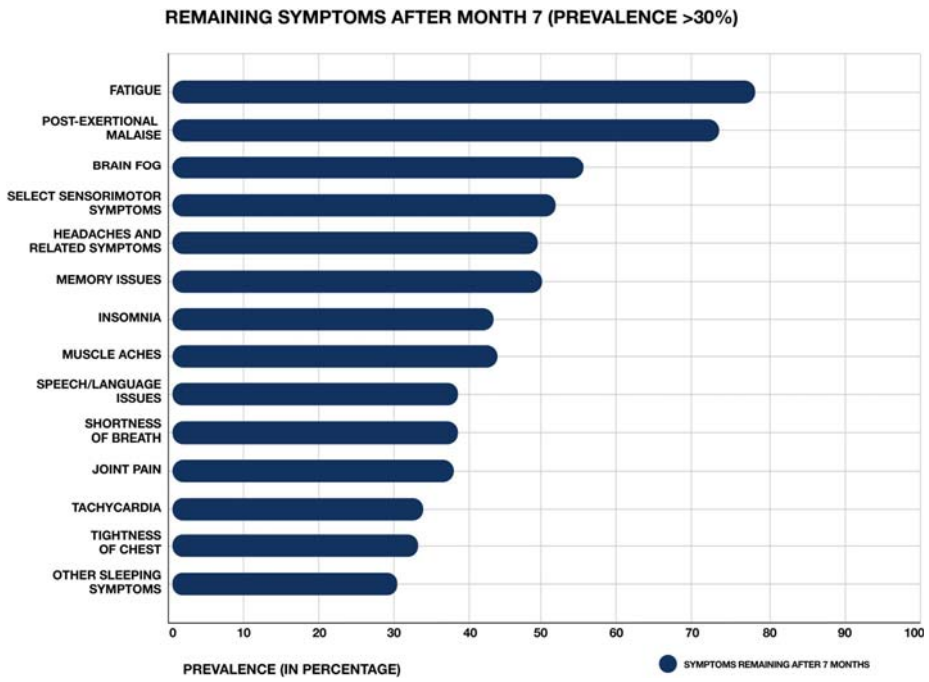

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Cell

CellPress
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Article

Multiple early factors anticipate post-acute COVID-19 sequelae

Yapeng Su,[1,2,3,28,*] Dan Yuan,[1,4,28] Daniel G. Chen,[1,5,28] Rachel H. Ng,[1,4] Kai Wang,[1] Jongchan Choi,[1] Sarah Li,[1] Sunga Hong,[1] Rongyu Zhang,[1,4] Jingyi Xie,[1,6] Sergey A. Kornilov,[1] Kelsey Scherler,[1] Ana Jimena Pavlovitch-Bedzyk,[7] Shen Dong,[8] Christopher Lausted,[1] Inyoul Lee,[1] Shannon Fallen,[1] Chengzhen L. Dai,[1] Priyanka Baloni,[1] Brett Smith,[1] Venkata R. Duvvuri,[1] Kristin G. Anderson,[3,9] Jing Li,[7] Fan Yang,[10] Caroline J. Duncombe,[11] Denise J. McCulloch,[12] Clifford Rostomily,[1] Pamela Troisch,[1] Jing Zhou,[13] Sean Mackay,[13] Quinn DeGottardi,[14] Damon H. May,[14] Ruth Taniguchi,[14] Rachel M. Gittelman,[14] Mark Klinger,[14] Thomas M. Snyder,[14] Ryan Roper,[1] Gladys Wojciechowska,[1,15]

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(Affiliations continued on next page)

SUMMARY

Post-acute sequelae of COVID-19 (PASC) represent an emerging global crisis. However, quantifiable risk factors for PASC and their biological associations are poorly resolved. We executed a deep multi-omic, longitudinal investigation of 309 COVID-19 patients from initial diagnosis to convalescence (2–3 months later), integrated with clinical data and patient-reported symptoms. We resolved four PASC-anticipating risk factors at the time of initial COVID-19 diagnosis: type 2 diabetes, SARS-CoV-2 RNAemia, Epstein-Barr virus viremia, and specific auto-antibodies. In patients with gastrointestinal PASC, SARS-CoV-2-specific and CMV-specific CD8$^+$ T cells exhibited unique dynamics during recovery from COVID-19. Analysis of symptom-associated immunological signatures revealed coordinated immunity polarization into four endotypes, exhibiting divergent acute severity and PASC. We find that immunological associations between PASC factors diminish over time, leading to distinct convalescent immune states. Detectability of most PASC factors at COVID-19 diagnosis emphasizes the importance of early disease measurements for understanding emergent chronic conditions and suggests PASC treatment strategies.

INTRODUCTION

Around 31%–69% of COVID-19 patients suffer from post-acute sequelae of COVID-19 (PASC) (Groff et al., 2021), or long COVID, which is defined (Centers for Disease Control and Prevention, 2021) as a range of new, returning, or ongoing health problems people can experience four or more weeks following initial SARS-CoV-2 infection (Huang et al., 2021; Nalbandian et al., 2021). PASC may include memory loss, gastrointestinal (GI) distress, fatigue, anosmia, shortness of breath, and other symptoms. PASC has been associated with acute disease severity (Blomberg et al., 2021) and is suspected to be related to