*Mark É Czeisler, Joshua F Wiley, Charles A Czeisler, Shantha MW Rajaratnam, Mark E Howard
mark.czeisler@fulbrightmail.org

Turner Institute for Brain and Mental Health, Monash University, Melbourne, VIC 3800, Australia (MÉC, JFW, CAC, SMWR, MEH); Institute for Breathing and Sleep, Austin Health, Melbourne, VIC, Australia (MÉC, SMWR, MEH); Department of Psychiatry (MÉC) and Division of Sleep and Circadian Disorders, Departments of Medicine and Neurology (CAC, SMWR), Brigham and Women's Hospital, Boston, MA, USA; Division of Sleep Medicine, Harvard Medical School, Boston, MA, USA (CAC, SMWR); Division of Medicine, University of Melbourne, Melbourne, VIC, Australia (MEH)

1 Pierce M, Hope H, Ford T, et al. Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. Lancet Psychiatry 2020; 7: 883–92.
2 Czeisler MÉ, Lane RI, Petrosky E, et al. Mental health, substance use, and suicidal ideation during the COVID-19 pandemic—United States, June 24–30, 2020. MMWR Morb Mortal Wkly Rep 2020; 69: 1049–57.
3 Fancourt D, Steptoe A, Bu F. Trajectories of anxiety and depressive symptoms during enforced isolation due to COVID-19 in England: a longitudinal observational study. Lancet Psychiatry 2020; 8: 141–49.
4 Czeisler MÉ, Wiley JF, Czeisler CA, Rajaratnam SMW, Howard ME. Uncovering survivorship bias in longitudinal mental health surveys. medRxiv 2021; published online Feb 1. https://doi.org/10.1101/2021.01.28.21250694 (preprint).
5 US Centers for Disease Control and Prevention, National Center for Health Statistics. Indicators of anxiety or depression based on reported frequency of symptoms during the last 7 days. Household Pulse Survey. 2020. https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm (accessed Dec 24, 2020).

Authors' reply

We share the sentiment of Mark É Czeisler and colleagues that sources of bias must be carefully considered to determine whether they are the cause of changes when monitoring longitudinal trends in data. However, neither our methods nor other UK data from the same period suggest that our findings are due to non-response bias.

Our decision to restrict the analytical sample to participants with three repeated measurements had a technical basis, to meet the minimum timepoints needed for use of free time scores in latent growth modelling. The sample was weighted only after sample selection to remove the risk of attrition that would otherwise potentially lead to an analytical sample with improved mental health. The percentage of participants with diagnosed mental illness in the analytical sample (6679 [18·3%] of 36520 participants) and excluded sample (724 [18·1%] of 4000 participants) was similar. Retention rates week-on-week in the study were high in the analytical sample (appendix). Although baseline Patient Health Questionnaire (PHQ) and Generalised Anxiety Disorder assessment (GAD) scores were both negatively correlated with the number of weeks observed (appendix of the Article), on further analysis the correlations were small (PHQ: Pearson's $r=-0.16$, GAD: $r=-0.12$). Additionally, our models applied full information maximum likelihood estimation, which uses the observed values to supplement loss of information due to missing data and has been shown to yield unbiased estimates of both parameters and their standard errors in simulation studies.[1]

Comparing our results to studies published after ours, including those of both longitudinal and repeated cross-sectional samples, the same pattern of improvements as shown in our data are found.[2,3] However, our study only covers the first 20 weeks of the pandemic in the UK following the start of lockdown in March 23, 2020. So we agree that the improvements seen in this time should not be taken as conclusions that individuals showed recovery in mental health after the shock of the pandemic. Further data from the UCL COVID-19 Social Study and other studies suggest that mental health worsened again in England (and across Great Britian) in the autumn of 2020 as virus prevalence increased and restrictions were once again tightened.[3] As the pandemic continues, monitoring of changes in mental health should be maintained to support planning and resources for mental health services.

We declare no competing interests.

*Daisy Fancourt, Andrew Steptoe, Feifei Bu
d.fancourt@ucl.ac.uk

Department of Behavioural Science and Health, University College London, London WC1E 7HB, UK (DF, AS, FB)

1 Schafer JL, Graham JW. Missing data: our view of the state of the art. Psychol Methods 2002; 7: 147.
2 Daly M, Sutin AR, Robinson E. Longitudinal changes in mental health and the COVID-19 pandemic: evidence from the UK Household Longitudinal Study. Psychol Med 2020; published online Nov 13. https://doi.org/10.1017/S0033291720004432.
3 Office for National Statistics. Coronavirus and the social impacts on Great Britain. 2021 https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandthesocialimpactsongreatbritain/5february2021 (accessed Feb 15, 2021).

People with mental illness should be included in COVID-19 vaccination

In *The Lancet Psychiatry*, Victor Mazareel and colleagues clearly defined the issues related to vaccination for people with psychiatric conditions.[1] In the United Arab Emirates (UAE), COVID-19 vaccination is well organised thanks to strong government leadership. However, during the early stages of the vaccination drive in December, 2020, the national press reported mental illness as an exclusion criterion for COVID-19 vaccination.[2] Subsequently, in January, 2021, we received email communication from the College of Medicine and Health Sciences, Al Ain about the inclusion and exclusion criteria for COVID-19 vaccination. This message had been