Daily evidence digest

The daily evidence digest collates recently released reports and evidence – provision of these links does not imply endorsement nor recommendation.

Environmental contamination, vaccinations during COVID-19, research

Peer reviewed journals featured:

- Environmental contamination levels during prolonged isolation of an asymptomatic carrier here
- Methods for developing venous thromboembolism / pulmonary embolism thromboprophylaxis clinical guidelines for COVID-19 patients here
- Cancer history and mortality in hospitalised COVID-19 patients here
- Clinical characteristics and morbidity associated with COVID-19 in Detroit here
- A rapid implementation of an outpatient COVID-19 monitoring program in the US here
- Modelling study on isolation, testing, contact tracing, and physical distancing on reducing transmission of SARS-CoV-2 in different settings here
- A single-centre prospective cohort study on GM-CSF blockade with mavrilimumab in severe COVID-19 pneumonia and systemic hyper-inflammation here
- A position statement from the Union of the European Phoniatricians’ on voice, swallowing, speech and language, or paediatric audiology services here
- A perspective on COVID as a catalyst for educational transformation here
- An opinion piece on COVID-19 and improving research infrastructure and relevance here
- Insights into the US safety net revealed by COVID-19 here
- Effects of sterilisation with hydrogen peroxide and chlorine dioxide on the filtration efficiency of N95, KN95, and surgical face masks here
- Editorial reflecting on the implications of COVID on UK mental health care here
- A commentary on an aerosol prevention box for regional anaesthesia for eye surgery here
- An editorial on routine vaccination during COVID-19 here
- Seroepidemiologic study designs for determining SARS-COV-2 transmission and immunity here
- Commentary and video on geospatial digital monitoring of COVID-19 cases in Geneva here
- A feature on the limited utilisation of hastily constructed field hospitals in the US and UK here
- Links to an Intensive Care Society webinar that shared learnings and practices from frontline clinicians in the UK here

Letters and correspondence discussed:

- Overcoming fragmentation of health research in Europe here
- Disease and healthcare burden of COVID-19 in the US here
- Access to out-of-hours palliative and end-of-life care at home here
- COVID-19 mortality and latitude here
- Age-dependent effects in the transmission and control of COVID-19 epidemics here
Pre-peer review papers feature

- Modelling study on time frames to detect the impact of changing COVID-19 control measures [here]
- Analysis of health indicators to describe health systems' resilience to COVID-19 [here]
- Use of longitudinal immune profiling to explore pathogenesis [here]
- Impact of COVID-19 pandemic on cardiology services in a single centre in the UK [here]
- Development and validation of a tool to appraise guidelines on SARS-CoV-2 infection prevention strategies in healthcare workers [here]
- Reporting characteristics of peer-reviewed publications, pre-prints and registered studies on the COVID-19 pandemic [here]
- Impact of COVID-19 on safety culture at a large UK teaching hospital [here]

Twitter update 18th June

The research on low-dose dexamethasone steroid treatment as a part of the RECOVERY (Randomised Evaluation of COVid-19 thERapY) trial generated discussion on Twitter.

Trending #RECOVERY UK based trial with preliminary results showing low dose dexamethasone reduces deaths in patients hospitalised with COVID-19 who need ventilation [here], [here] and [here]. Statement from chief investigators including @PeterHorby [here].

Smaller randomised controlled trials previously published such as one [here] in @LancetRespirMed, showed promise but as @GaetanBurgio points out, according to NBCI only 12 studies are being performed on dexamethasone versus 222 for hydroxychloroquine [here].

The preliminary results have been met with waves of optimism, @EricTopol highlighting the promise of the repurposed drug improving survival [here], @Nature [here] and @WHO welcoming the initial trial results [here].

There is a significant volume of news coverage emerging internationally [here] and in Australia [here], but perspectives from clinicians in these articles point out that the quality of evidence still needs to be scrutinised before celebrating 'too early' and some tweeting about what this means for practice [here], with perspectives still continuing to emerge.