COVID-19 Critical Intelligence Unit

Daily evidence digest

5 May 2020

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

Drug treatments, restarting surgeries, and populations-in-focus

Peer reviewed journals:

- The Lancet journals feature:
 - Small case series describing vascular perfusion abnormalities not previously described, which may shed light on hypoxaemia related to COVID-19 here
 - o Fewer cancer diagnoses during the COVID-19 epidemic in the Netherlands here
 - Correspondence about BCG vaccine's immunomodulatory properties and that RCTs are underway in the Netherlands and Australia <u>here</u>
- Organisational model for ventilator-weaning and early rehabilitation to deal with post-ICU impairments with severe COVID-19 here
- Rapid systematic reviews on school closure and management practices during coronavirus outbreaks here; and clinical trials of chloroquine and hydroxychloroquine here
- International survey on the impact of COVID-19 on neurosurgeons and the strategy for triaging non-emergency operations here
- The NEJM features three studies regarding angiotensin-converting—enzyme (ACE) inhibitors <u>here</u> and angiotensin-receptor blockers (ARBs) <u>here</u> and <u>here</u>
- The NEJM also features a paper on early detection of COVID-19 through a citywide pandemic surveillance platform here
- Articles from the JAMA network include:
 - o A study investigating contact tracing and transmission dynamics in Taiwan here
 - o Insights on public health measures and the reproduction number (R0 and Rt) here
 - Commentary on the use of hospital-at-home to support COVID-19 surge capacity here

Centre for Evidence-Based Medicine released a rapid review on vitamin D for treatment or prevention in COVID-19 <a href="here: negative such as optimal screening questions at triage; and potential harms of community management here: and an editorial on the potential use of tocilizumab here

Reports:

- The UK Faculty of Occupational Medicine have published a statement on COVID-19 deaths amongst Black, Asian and minority ethnicity (BAME) healthcare workers here
- First People's Disability Network Australia have published principles and recommendations on ethical decision-making for First Peoples living with disability during COVID-19 here
- A United Nations Policy Brief on the impact of COVID-19 on older persons and directions for addressing issues <u>here</u>
- An overview from the US CDC on the SARS-CoV-2 Sequencing for Public Health Emergency Response, Epidemiology, and Surveillance (SPHERES) consortium here



Guidance:

- The Extracorporeal Life Support Organization has published COVID-19 interim guidelines on the use of ECMO here
- The National Institute for Health and Care Excellence published guidelines on: managing children and young people who are immunocompromised, indicating that COVID-19 is no worse in immunocompromised children here; and antibiotic management for pneumonia in adults in hospital here
- The UK Faculty of Intensive Care Medicine, Intensive Care Society, Association of Anaesthetists, and Royal College of Anaesthetists published a statement on restarting planned surgery in the context of the COVID-19 pandemic here
- New statements on the reintroduction of elective surgery from four surgical societies: Australian
 and New Zealand Society of Cardiac and Thoracic Surgeons; Australian Society of Plastic
 Surgeons; Australian and New Zealand Association of Paediatric Surgeons; and the Australian
 and New Zealand Society for Vascular Surgery here

Twitter activity

Behavioural Science

Tweets on behavioural science in COVID-19 have been building momentum over previous weeks. A news outlet has published an opinion piece from University of Sydney researchers here, with limited evidence available around 'behavioural fatigue' during COVID-19 and suggesting evidence based behavioural strategies will be key for momentum. Additional perspectives and key blogs on using social and behavioural science to support the COVID-19 response from @Nature here and from @PractHealthPsy here.

Contact tracing and smart phones - international perspective

An international spotlight on smart phone applications for contact tracing continues, with an editorial from @nature here suggesting the approach lacking demonstrable value. @EricTopol points to further reading with unaddressed aspects of digital tracing here and here. Similarly, the BMJ provides grassroots and potentially scalable contact tracing initiatives here. Surveillance apps may also show promise for measuring resting HR to identify emerging clusters, with learnings from @detect_Study. @RACGP have released a COVIDSafe app fact sheet here.

Atypical COVID-19 presentations

Experience from ICU doctors are being reported in news articles here and here, on the atypical nature of a subset of COVID-19 patients that gain worsening symptoms through a hyper-inflammatory response, while others develop 'happy' or silent hypoxia. The @BMJ_latest links to a blog that summarises key aspects of COVID19 and manifestations of effects on multiple organs here.



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