



Covid-19 Evidence Update Summarized and appraised resources 10/08/2021

The following resources are available via electronically or in print. Please follow links to access full text online, or contact the library if you have any difficulties with the links.

The resources included in this update are summaries or critically appraised articles. If you would like a more specific search conducted please email <u>kgh-tr.library.service@nhs.net</u>

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Royal College/Society Guidance and Point of Care Tools

Latest information and guidance

NICE <u>COVID-19 rapid guideline: managing COVID-19</u> (NG191) Published 23/03/2021 Rapid guidelines and evidence summaries <u>Speciality guides (NHS England and NHS Improvement</u> <i>advice has moved here</i>)	NHS England and NHS Improvement <u>Secondary care</u> (Includes Prevention, Infection control, Assessment, Management, Discharge, Isolation, Estates and facilities, Finance, Workforce, Cancer)
Royal College of Emergency Medicine <u>Covid-19 resources</u>	Association for Palliative Medicine Covid 19 and Palliative, End of Life and Beareavement Care
Royal College of General Practitioners	Royal College of Obstetrics & Gynaecologists
<u>COVID-19</u>	Coronavirus (COVID-19), pregnancy and women's health
Royal College of Paediatrics and Child Health	Royal College of Pathologists
<u>Key topics COVID 19</u>	<u>COVID-19 Resources Hub</u>
Royal College of Psychiatrists	Royal College of Surgeons
<u>COVID-19: Community mental health settings</u>	<u>COVID 19 Information Hub</u>
Royal Pharmaceutical Society	British Society of Echocardiography
COVID-19	<u>COVID-19 clinical guidance</u>
British Society of Gastroenterology	British Society for Haematology
COVID 19 updates	<u>COVID-19 Updates</u>

British Society for Rheumatology COVID-19 updates for members	Combined Intensive Care Society, Association of Anaesthetists, Royal College of Anaesthetists, Faculty of Intensive Care Medicine guidance <u>Clinical Guidance</u>
BMJ Best Practice <u>Coronavirus disease 2019 (COVID-19)</u> <u>Management of coexisting conditions in the context of</u> <u>COVID-19</u>	DynaMed <u>Covid 19 (Novel Coronavirus)</u> <u>Covid-19 and Pediatric Patients</u> <u>Covid 19 and Special Populations</u> <u>Covid-19 and Patients with Cancer</u> <u>Covid-19 and Cardiovascular Disease Patients</u> <u>Covid-19 and Patients with Chronic Kidney Disease and</u> <u>End-stage renal Disease</u> <u>Covid-19 and Pregnant Patients</u> <u>Covid-19 and Pregnant Patients</u> <u>Covid-19-associated Coagulopathy</u>
Don't forget the bubbles An evidence summary of paediatric Covid-19 literature Covid-19 – a seslection of evidence based summaries and articles.	

New NICE Guidance

COVID-19 rapid guideline: vaccine-induced immune thrombocytopenia and thrombosis (VITT).

National Institute for Health and Care Excellence (NICE); 2021.

https://www.nice.org.uk/guidance/ng200

[Guideline covers vaccine-induced immune thrombocytopenia and thrombosis (VITT), a syndrome which has been reported in rare cases after COVID-19 vaccination. VITT may also be called vaccine-induced prothrombotic immune thrombocytopenia (VIPIT) or thrombotic thrombocytopenic syndrome (TTS). Because VITT is a new condition, there is limited evidence available to inform clinical management, identification and management of the condition is evolving quickly as the case definition becomes clearer.] *Freely available online*

New Guidance and Reports from other sources

<u>COVID-19:</u> guidance on protecting people defined on medical grounds as extremely vulnerable.

Department of Health and Social Care (DHSC); 2021.

https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-personsfrom-covid-19/

[Updated 21 July 2021: Added information about vaccinations for eligible children and young people.] *Freely available online*

COVID-19 and Type 1 Diabetes: Addressing Concerns and Maintaining Control.

DiMeglio LA. *Diabetes Care* 2021;:dci210002.

[This overview article discusses the impact on chronic diseases such as type 1 diabetes as the signs and symptoms of COVID-19 were first characterised and the available evidence which has shown this population has been acutely affected by COVID-19 in multiple ways.]

Freely available online

Best Practice Standards for the delivery of NHS Infection Services in the United Kingdom.

British Infection Association; 2021.

https://www.rcpath.org/uploads/assets/bf282858-71b9-426d-

9d50d520e8184e01/BIAInfectionServicesStandardsDocumentFINALJune2021.pdf

[Prepared by the British Infection Association Clinical Services Committee in conjunction with the Royal College of Physicians Infectious Diseases Joint Specialist Committee and the Royal College of Pathologists' Specialty Advisory Committee April 2021. This document sets out seven standards. These are written to be practical and flexible according to the diverse ways in which infection expertise may be required across the NHS.] *Freely available online*

CSP COVID-19 Rehabilitation Standards: Covid-19 community rehabilitation: physiotherapy service delivery. Chartered Society of Physiotherapy; 2021.

https://www.csp.org.uk/publications/covid-19-community-rehabilitation-physiotherapy-service-delivery

[The standards apply to anyone with rehabilitation needs who has acute Covid-19 or Long Covid, and their families and carers. Version 2 of these standards has been updated to take into account updated guidance and emerging evidence including people's lived experiences.]

Freely available online

Reflex (genotyping) assays for identification of priority SARS-CoV-2 variants of concern.

Department of Health and Social Care (DHSC); 2021.

https://www.gov.uk/government/publications/reflex-genotyping-assays-for-identification-of-priority-sars-cov-2-variants-of-concern/

[Guidance on use of reflex (genotyping) assays for identification of priority SARS-CoV-2 variants of concern.] *Freely available online*

SARS-CoV-2 variant of concern diagnostic assurance.

Department of Health and Social Care (DHSC); 2021.

https://www.gov.uk/government/publications/sars-cov-2-variant-of-concern-diagnostic-assurance/sars-cov-2-variant-of-concern-diagnostic-assurance/

[Guidance on raising performance concerns when a coronavirus (COVID-19) test product is impacted by a variant of concern (VOC) or variant under investigation (VUI).] *Freely available online*

SARS-CoV-2 variants of public health interest.

Public Health England (PHE); 2021. <u>https://www.gov.uk/government/publications/sars-cov-2-variants-of-public-health-interest</u> [Details of the variants of public health interest.] *Freely available online*

WHO recommends continuing breastfeeding during COVID-19 infection and after vaccination.

World Health Organization (WHO); 2021.

https://www.euro.who.int/en/media-centre/sections/press-releases/2021/who-recommends-continuingbreastfeeding-during-covid-19-infection-and-after-vaccination

[The virus that causes COVID-19 has not been detected in breastmilk, according to a limited number of studies to date, indicating that it is safe to carry on breastfeeding, while taking recommended precautions, even if a mother develops COVID-19. Vaccinating a breastfeeding mother to protect her from COVID-19 poses no risk to her infant. Breastfeeding mothers who have received the vaccine have antibodies in their milk, which could help to protect their babies from infection with the virus.]

Freely available online

Covid-19 Evidence Alerts from McMaster Plus

COVID-19 Evidence Alerts to current best evidence for clinical care of people with threatened, suspected or confirmed COVID-19 infection. Reports are critically appraised for scientific merit, and those with acceptable scientific merit are appraised for relevance and importance by frontline clinicians. The studies listed below meet their criteria for quality. The site also lists other studies published which do not meet their criteria, or do not belong to a study category they appraise. (More information available).

Diagnosis
Evaluation of RNA Extraction-Free Method for Detection of SARS-CoV-2 in Salivary Samples for Mass
Screening for COVID-19.
Mahmoud SA, Ganesan S, Ibrahim E, et al. Biomed Res Int
Diagnostic accuracy of rapid antigen tests in asymptomatic and presymptomatic close contacts of
individuals with confirmed SARS-CoV-2 infection: cross sectional study.
Schuit E, Veldhuijzen IK, Venekamp RP, et al. BMJ
Low performance of a SARS-CoV-2 point-of-care lateral flow immunoassay in symptomatic children
during the pandemic.
Scotta MC, de David CN, Varela FH, et al. J Pediatr (Rio J)
Performance of RT-PCR on Saliva Specimens Compared With Nasopharyngeal Swabs for the Detection
of SARS-CoV-2 in Children: A Prospective Comparative Clinical Trial.
FougÃ [¨] re Y, Schwob JM, Miauton A, et al. Pediatr Infect Dis J
Effects of Patient Characteristics on Diagnostic Performance of Self-Collected Samples for SARS-CoV-2
Testing.
Smith-Jeffcoat SE. Koh M. Hoffman A. et al. Emerg Infect Dis
Diagnostic accuracy and inter-observer agreement with the CO-RADS lexicon for CT chest reporting in
COVID-19
Nair AV, McInnes M, Iacob B, et al. Emerg Radiol
Accuracy and cost description of rapid antigen test compared with reverse transcriptase-polymerase
chain reaction for SARS-CoV-2 detection
lakohsen KK lensen IS Todsen T et al. Dan Med L
The Risk of Allergic Reaction to SARS-CoV-2 Vaccines and Recommended Evaluation and Management:
A Systematic Review Meta-analysis GRADE Assessment and International Consensus Approach
Greenhawt M. Abrams FM. Shaker M. et al. LAllergy Clin Immunol Pract
Real-World Evidence: The Low Validity of Temperature Screening for COVID-19 Triage
Panäf BC Lones H. Furtunescu F. et al. Front Public Health
Peablife evaluation of a COVID-19 rapid antigen detection test in bospitalized children
Eleftheriou I. Dasoula F. Dimonoulou D. et al. I. Med Virol
Comparing the diagnostic accuracy of point of care lateral flow antigen testing for SARS CoV 2 with RT
Comparing the diagnostic accuracy of point-of-care lateral now antigen testing for SARS-COV-2 with RT-
Laber W. Lammel O. Siebenhofer A. et al. EClinical Modicine
Polative consitivity of anterior pares and pasenhary goal suchs for initial detection of SARS CoV 2
<u>Relative sensitivity of antenor nares and nasopharyngeal swabs for initial detection of SARS-Cov-2</u>
They V. O'Learny TL Dies One
Zhou Y, O Leary IJ PLOS One
Performance and Operational Evaluation of the Access Bio Carestart Rapid Antigen Test in a High-
Inroughput Drive-Inrough Community Testing Site in Massachusetts.
Pollock NR, Tran K, Jacobs JR, et al. Open Forum Infect Dis
Performance of the Innova SARS-CoV-2 antigen rapid lateral flow test in the Liverpool asymptomatic
testing pilot: population based cohort study.
GarcAa-FiA±ana M, Hughes DM, Cheyne CP, et al. BMJ
Diagnostic Performance of COVID-19 Reporting and Data System Classification Across Residents and
Radiologists: A Retrospective Study.
KoAYar TunA§ M, KiAY N, A°nce O, et al. J Comput Assist Tomogr
Clinical Prediction Guide

The Prognostic Accuracy of National Early Warning Score 2 on Predicting Clinical Deterioration for Patients With COVID-19: A Systematic Review and Meta-Analysis.

Zhang K, Zhang X, Ding W, et al. Front Med (Lausanne)

Predicting clinical outcomes among hospitalized COVID-19 patients using both local and published models.

Galanter W, RodrÃguez-FernÃindez JM, Chow K, et al. BMC Med Inform Decis Mak

<u>Clinical Frailty Score (CFS) versus Hospital Frailty Risk Score (HFRS) for predicting mortality and other</u> adverse outcome in hospitalized patients with COVID-19: Spanish case series.

Ramos-Rincon JM, Moreno-Perez O, Pinargote-Celorio H, et al. Int J Clin Pract

Association between risk of VTE and mortality in patients with COVID-19.

Chen S, Zheng T, Wang S, et al. Int J Infect Dis

Admission Braden Scale Score as an Early Independent Predictor of In-Hospital Mortality Among Inpatients With COVID-19: A Retrospective Cohort Study.

Lovicu E, Faraone A, Fortini A Worldviews Evid Based Nurs

<u>Performance Analysis of the National Early Warning Score and Modified Early Warning Score in the</u> Adaptive COVID-19 Treatment Trial Cohort.

Colombo CJ, Colombo RE, Maves RC, et al. Crit Care Explor

Clinical significance of prognostic nutrition index in hospitalized patients with COVID-19: Results from single-center experience with systematic review and meta-analysis.

Rashedi S, Keykhaei M, Pazoki M, et al. Nutr Clin Pract

Application of validated severity scores for pneumonia caused by SARS-CoV-2.

Esteban Ronda V, Ruiz Alcaraz S, Ruiz Torregrosa P, et al. Med Clin (Engl Ed)

Initial prehospital Rapid Emergency Medicine Score (REMS) to predict outcomes for COVID-19 patients. Bourn SS, Crowe RP, Fernandez AR, et al. J Am Coll Emerg Physicians Open

Etiology

Dipeptidyl Peptidase-4 Inhibitors and COVID-19-Related Deaths among Patients with Type 2 Diabetes Mellitus: A Meta-Analysis of Observational Studies.

Patoulias D, Doumas M Endocrinol Metab (Seoul)

Influence of angiotensin converting enzyme inhibitors/angiotensin receptor blockers on the risk of allcause mortality and other clinical outcomes in patients with confirmed COVID-19: A systemic review and meta-analysis.

Jia N, Zhang G, Sun X, et al. J Clin Hypertens (Greenwich)

<u>Cardiovascular drugs and COVID-19 clinical outcomes: a living systematic review and meta-analysis.</u> Asiimwe IG, Pushpakom S, Turner RM, et al. **Br J Clin Pharmacol**

Primary Prevention

Evaluation of the safety profile of COVID-19 vaccines: a rapid review.

Wu Q, Dudley MZ, Chen X, et al. BMC Med

Safety and Effectiveness of SARS-CoV-2 Vaccines: A Systematic Review and Meta-Analysis.

Ling Y, Zhong J, Luo J J Med Virol

Efficacy and effectiveness of COVID-19 vaccines against SARS-CoV-2 infection: interim results of a living systematic review, 1 January to 14 May 2021.

Harder T, Koch J, Vygen-Bonnet S, et al. Euro Surveill

Efficacy and Safety of COVID-19 Vaccines in Phase III Trials: A Meta-Analysis.

Cheng H, Peng Z, Luo W, et al. Vaccines (Basel)

<u>Safety, tolerability, and immunogenicity of an inactivated SARS-CoV-2 vaccine (CoronaVac) in healthy</u> <u>children and adolescents: a double-blind, randomised, controlled, phase 1/2 clinical trial.</u>

Han B, Song Y, Li C, et al. Lancet Infect Dis

Prognosis

Risk of acute myocardial infarction and ischaemic stroke following COVID-19 in Sweden: a selfcontrolled case series and matched cohort study.

Katsoularis I, Fonseca-RodrÃguez O, Farrington P, et al. Lancet

Global burden of acute myocardial injury associated with COVID-19: A systematic review, meta-

analysis, and meta-regression.

Abate SM, Mantefardo B, Nega S, et al. Ann Med Surg (Lond)

Outcomes of SARS-CoV-2 infection in patients with pulmonary sarcoidosis: A multicenter retrospective research network study. Hadi YB, Lakhani DA, Naqvi SFZ, et al. Respir Med Adverse pregnancy outcomes, maternal complications, and severe illness among U.S. delivery hospitalizations with and without a COVID-19 diagnosis. Ko JY, DeSisto CL, Simeone RM, et al. Clin Infect Dis Risk Factors for Death Among the First 80 543 COVID-19 Cases in China: Relationships Between Age, Underlying Disease, Case Severity, and Region. Zhang Y, Luo W, Li Q, et al. Clin Infect Dis Differential impact of COVID-19 in pregnant women from high-income countries and low- to middleincome countries: A systematic review and meta-analysis. Gajbhiye RK, Sawant MS, Kuppusamy P, et al. Int J Gynaecol Obstet The Society for Obstetric Anesthesia and Perinatology (SOAP) COVID-19 Registry: An analysis of outcomes among pregnant women delivering during the initial SARS-CoV-2 outbreak in the United States. Katz D, Bateman BT, Kjaer K, et al. Anesth Analg Mortality and associated risk factors of COVID-19 infection in dialysis patients in Qatar: A nationwide cohort study. Ghonimi TAL, Alkad MM, Abuhelaiqa EA, et al. PLoS One A Systematic Review and Meta-analysis of COVID-19 in Kidney Transplant Recipients: Lessons to be Learned. Kremer D, Pieters TT, Verhaar MC, et al. Am J Transplant Racial disparities in COVID-19 associated pulmonary embolism: A multicenter cohort study. Metra B, Summer R, Brooks SE, et al. Thromb Res High risk groups for severe COVID-19 in a whole of population cohort in Australia. Liu B, Spokes P, He W, et al. BMC Infect Dis Clinical Characterization and Prediction of Clinical Severity of SARS-CoV-2 Infection Among US Adults Using Data From the US National COVID Cohort Collaborative. Bennett TD, Moffitt RA, Hajagos JG, et al. JAMA Netw Open The impact of Parkinson's disease on manifestations and outcomes of Covid-19 patients: A systematic review and meta-analysis. El-Qushayri AE, Ghozy S, Reda A, et al. Rev Med Virol Treatment Ivermectin for preventing and treating COVID-19. Popp M, Stegemann M, Metzendorf MI, et al. Cochrane Database Syst Rev Comparing the effectiveness of Atazanavir/Ritonavir/Dolutegravir/Hydroxychloroquine and Lopinavir/Ritonavir/Hydroxychloroquine treatment regimens in COVID-19 patients. Kalantari S, Fard SR, Maleki D, et al. J Med Virol Doxycycline for community treatment of suspected COVID-19 in people at high risk of adverse outcomes in the UK (PRINCIPLE): a randomised, controlled, open-label, adaptive platform trial. Butler CC, Yu LM, Dorward J, et al. Lancet Respir Med Plasma convalescent decrease mortality in COVID-19 patients: a systematic review and meta-analysis. Yuwono Soeroto A, Purwiga A, Alam A, et al. Eur Rev Med Pharmacol Sci Favipiravir and Hydroxychloroquine Combination Therapy in Patients with Moderate to Severe COVID-19 (FACCT Trial): An Open-Label, Multicenter, Randomized, Controlled Trial. Bosaeed M, Mahmoud E, Alharbi A, et al. Infect Dis Ther Efficacy of Integrated Traditional Chinese and Western Medicine for Treating COVID-19: A Systematic Review and Meta-Analysis of RCTs. Yin B, Bi YM, Sun L, et al. Front Public Health Extracorporeal Membrane Oxygenation Used in Acute Respiratory Distress Syndrome with COVID-19: A Systematic Review and Meta-Analysis. Kusumawardhani N, Dewi IP, Dharmadjati BB J Saudi Heart Assoc Interventions for the prevention of persistent post-COVID-19 olfactory dysfunction. Webster KE, O'Byrne L, MacKeith S, et al. Cochrane Database Syst Rev

<u>A telerehabilitation programme in post-discharge COVID-19 patients (TERECO): a randomised</u> controlled trial.

Li J, Xia W, Zhan C, et al. Thorax

<u>Effect of Canakinumab vs Placebo on Survival Without Invasive Mechanical Ventilation in Patients</u> Hospitalized With Severe COVID-19: A Randomized Clinical Trial.

Caricchio R, Abbate A, Gordeev I, et al. JAMA

EFFECTIVENESS OF PULMONARY REHABILITATION IN INTERSTITIAL LUNG DISEASE INCLUDING CORONAVIRUS DISEASES: A SYSTEMATIC REVIEW AND META-ANALYSIS.

Reina-Gutierrez S, Torres-Costoso A, Martinez-Vizcaino V, et al. Arch Phys Med Rehabil

Dapagliflozin in patients with cardiometabolic risk factors hospitalised with COVID-19 (DARE-19): a randomised, double-blind, placebo-controlled, phase 3 trial.

Kosiborod MN, Esterline R, Furtado RHM, et al. Lancet Diabetes Endocrinol

Association of calcium channel blocker use with clinical outcome of COVID-19: A meta-analysis.

Alsagaff MY, Mulia EPB, Maghfirah I, et al. Diabetes Metab Syndr

Systematic review and meta-analysis of tracheostomy outcomes in COVID-19 patients.

Ferro A, Kotecha S, Auzinger G, et al. Br J Oral Maxillofac Surg

Umifenovir in hospitalized moderate to severe COVID-19 patients: A randomized clinical trial.

Alavi Darazam I, Shokouhi S, Mardani M, et al. Int Immunopharmacol

<u>Comparison of Associations between Glucocorticoids Treatment and Mortality in COVID-19 Patients</u> and SARS Patients: A Systematic Review and Meta-Analysis.

Li J, Liao X, Zhou Y, et al. Shock

Standard prophylactic versus intermediate dose enoxaparin in adults with severe COVID-19: a multicenter, open-label, randomized controlled trial.

Perepu US, Chambers I, Wahab A, et al. J Thromb Haemost

Anakinra in hospitalized non-intubated patients with coronavirus disease 2019: a systematic review and meta-analysis.

Barkas F, Ntekouan SF, Kosmidou M, et al. Rheumatology (Oxford)

Investigation of plasma exchange and hemoperfusion effects and complications for the treatment of patients with severe COVID-19 (SARS-CoV-2) disease: a systematic scoping review.

Mousavi-Roknabadi RS, Haddad F, Fazlzadeh A, et al. J Med Virol

Effect of prone position on respiratory parameters, intubation and death rate in COVID-19 patients: systematic review and meta-analysis.

Behesht Aeen F, Pakzad R, Goudarzi Rad M, et al. Sci Rep

Does methylprednisolone reduce the mortality risk in hospitalized COVID-19 patients? A meta-analysis of randomized control trials.

Hasan SS, Kow CS, Mustafa ZU, et al. Expert Rev Respir Med

Telmisartan for treatment of Covid-19 patients: An open multicenter randomized clinical trial.

Duarte M, Pelorosso F, Nicolosi LN, et al. EClinicalMedicine

Ivermectin to prevent hospitalizations in patients with COVID-19 (IVERCOR-COVID19) a randomized, double-blind, placebo-controlled trial.

Vallejos J, Zoni R, Bangher M, et al. BMC Infect Dis

Azithromycin versus standard care in patients with mild-to-moderate COVID-19 (ATOMIC2): an openlabel, randomised trial.

Hinks TSC, Cureton L, Knight R, et al. Lancet Respir Med

Statin use and mortality in COVID-19 patients: Updated systematic review and meta-analysis.

Kollias A, Kyriakoulis KG, Kyriakoulis IG, et al. Atherosclerosis

A multi-center phase II randomized clinical trial of losartan on symptomatic outpatients with COVID-19. Puskarich MA, Cummins NW, Ingraham NE, et al. EClinicalMedicine

Efficacy and Safety of Hydroxychloroquine for Hospitalized COVID-19 Patients: A Systematic Review and Meta-Analysis.

Hernandez AV, Phan MT, Rocco J, et al. J Clin Med

Effect of prone versus supine position in COVID-19 patients: A systematic review and meta-analysis. Chua EX, Zahir SMISM, Ng KT, et al. J Clin Anesth

Cochrane Systematic Reviews

Cochrane Evidence on COVID-19: a roundup

Remdesivir for the treatment of COVID-19 Kelly Ansems, et al

Implications for practice

We found moderate-certainty evidence that remdesivir probably has little or no effect on all-cause mortality at up to 28 days in hospitalised individuals with moderate and severe COVID-19. We were unable to perform meta-analysis of clinical improvement parameters, but considering the data provided, remdesivir may have little or no effect on the duration to liberation from invasive mechanical ventilation. We are uncertain whether remdesivir increases or decreases the chance of clinical improvement in terms of duration to liberation from supplemental oxygen at up to day 28 given the very low certainty of the evidence. We found low-certainty evidence that remdesivir may decrease the risk of new need for invasive mechanical ventilation. However, we are very uncertain whether remdesivir affects the overall risk for clinical worsening. Remdesivir probably decreases the rate of serious adverse events; however, due to inconsistent reporting of safety data, the evidence regarding the effect of remdesivir is very uncertain whether there is a possible benefit of remdesivir for the treatment of COVID-19 patients receiving low-flow oxygen therapy only.

Ivermectin for preventing and treating COVID-19

Maria Popp et al

Implications for practice

Based on the current very low- to low-certainty evidence, we are uncertain about the efficacy and safety of ivermectin used to treat people with COVID-19 in the inpatient and outpatient settings and to prevent a SARS-CoV-2 infection in people after having high-risk exposure. There is also no evidence available from the study pool as to which is the best dose and regimen of ivermectin. Overall, the reliable evidence available does not support the use ivermectin for treatment or prevention of COVID-19 outside of well-designed randomized controlled trials (RCTs). With respect to the number of identified studies in trial registries and with accordance to the living approach of this review, we will continually update our search and include eligible trials.

Interventions for the prevention of persistent post-COVID-19 olfactory dysfunction

Katie Webster et al

Implications for practice

At present there are very few data to assess the effects of interventions on preventing persistent olfactory dysfunction following COVID-19. The only evidence available is for intranasal steroids, and this is of very low certainty, based on one study. Therefore, we are unable to draw any conclusions regarding the efficacy - or potential

adverse effects - of intranasal steroids at preventing persistent olfactory dysfunction following COVID-19 infection. As this is a living systematic review, the data will be updated regularly as new evidence becomes available.

Evidence Aid

https://evidenceaid.org/evidence/coronavirus-covid-19/

This evidence collection contains plain-language summaries of high-quality research which are available in English, and translated into French, Spanish, Portuguese, Arabic and Chinese (simplified and traditional).

The collection includes summaries of systematic reviews that might be relevant to the direct impact of COVID-19 (including reviews of emerging research, as well as existing reviews of relevant interventions) on health and other outcomes, the impact of the COVID-19 response on other conditions, and issues to consider for the recovery period after COVID-19.

Ivermectin for prevention or treatment of COVID-19 is not supported outside of randomized trials (search up to 26 May 2021)

Added August 3, 2021

Citation: Popp M, Stegemann M, Metzendorf M-I, et al. *Ivermectin for preventing and treating COVID-19*. Cochrane Database of Systematic Reviews. 2021;(7):CD015017.

What is this? Ivermectin has been suggested for the prevention and treatment of COVID-19.

In this Cochrane review, the authors searched for randomized trials of ivermectin to prevent SARS-Cov-2 infection or to treat COVID-19. They did not restrict their searches by language of publication and did the search up to 26 May 2021. They included 1 prevention trial (304 participants) and 13 treatment trials (1374 participants) and identified an additional 31 ongoing trials and 18 studies that are awaiting classification or assessment.

What works: Nothing noted.

What doesn't work: Nothing noted.

What's uncertain: The efficacy and safety of ivermectin for preventing or treating COVID-19 are uncertain and the authors concluded that the reliable evidence available does not support the use of ivermectin for treatment or prevention of COVID-19 outside of well-designed randomized trials.

Dementia and COVID-19 (multiple reviews)

Added July 26, 2021

What is this? The COVID-19 pandemic and its associated measures, including social and environmental restrictions, are placing a strain for people with dementia and their carers.

Some reviews are summarised here. More details, including citations and links to the full reviews, are available further down this page.

What was found: The Simonetti review (search done in June 2020) found that anxiety, agitation and apathy were psychological traits of dementia that worsened during the COVID-19 pandemic due to isolation and environmental restrictions. The included studies suggested that patient management should ideally rely on non-pharmacological strategies (e.g. stress reduction, care-giver support and training, and environment-targeted interventions) but this was challenging under pandemic restrictions.

The Alves review (search done in April 2020) found that the use of technology (e.g. friendly online platforms and application robots) can be a useful alternative to conventional assistance for people with dementia and their caregivers during the COVID-19 pandemic. Potential benefits included improved mood, increased mobility, decreased social isolation and integration of outcomes with more general medical support, as well as development of a sense of competence and improved well-being for caregivers.

The González-Fraille review (search done on 10 April 2020) found that remotely delivered interventions for informal caregivers including support, training or both may slightly reduce caregiver burden and improve caregiver depressive symptoms, when compared with provision of information alone.

The Bolt review (search done in May 2020) provides recommendations for the palliative care of people with dementia living in long-term care facilities during the COVID-19 pandemic, for the physical, psychological, social, spiritual and ethical aspects of care, advance planning, structure and processes of care and care of the dying and their bereaved families.

What are the reviews:

Citation: Alves GS, Casali ME, Veras AB, et al. <u>A Systematic Review of Home-Setting Psychoeducation</u> <u>Interventions for Behavioral Changes in Dementia: Some Lessons for the COVID-19 Pandemic and Post-</u> <u>Pandemic Assistance</u>. Frontiers in Psychiatry. 2020;11:577871.

In this systematic review, the authors searched for studies of interventions for easing behavioural and psychosocial symptoms in dementia burden for dementia patients and their caregivers in a home setting. They restricted their searches to articles published in English between January 2010 and April 2020. They included 43 studies (including 33 randomised trials).

Citation: Bolt S, van der Steen J, Mujezinović I, et al. <u>Practical nursing recommendations for palliative care</u> for people with dementia living in long-term care facilities during the COVID-19 pandemic: A rapid scoping <u>review</u>. International Journal of Nursing Studies. 2021;113:103781.

In this rapid scoping review, the authors searched for literature that would inform recommendations for nursing staff providing palliative care for people with dementia living in long-term care facilities during the COVID-19 pandemic. They restricted their searches to articles published in English or Dutch between December 2019 and May 2020. They found 23 relevant documents on which to base recommendations.

Citation: González-Fraile E, Ballesteros J, Rueda J-R, et al. <u>*Remotely delivered information, training and support for informal caregivers of people with dementia*</u>. Cochrane Database of Systematic Reviews. 2021;(1):CD006440. **Free to view:** No.

In this Cochrane review, the authors searched for randomised trials of remotely delivered interventions that aimed to reduce burden and improve the quality of life for informal caregivers of people with dementia. They restricted their searches to articles published in English between 1995 and 2020 and did the search on 10 April 2020. They included 26 studies (2367 participants) and identified an additional 13 ongoing studies and 3 studies awaiting classification. A podcast for this review is available here [www.cochrane.org/podcasts/10.1002/14651858.CD006440.pub3] **Citation:** Simonetti A, Pais C, Jones M, et al. <u>Neuropsychiatric symptoms in elderly with dementia during</u> <u>COVID-19 pandemic: definition, treatment, and future directions</u>. Frontiers in Psychiatry. 2020;11:579842.

In this systematic review, the authors searched for studies on COVID-19 and dementia, and recommendations to manage and treat neuropsychiatric symptoms. They restricted their searches to articles published in English between March 2020 and June 2020. They included 20 studies.

Sleep problems and COVID-19 (search up to February 2021)

Added July 26, 2021

Citation: Alimoradi Z, Broström A, Tsang HWH, et al. <u>Sleep problems during COVID-19 pandemic and its'</u> <u>association to psychological distress: A systematic review and meta-analysis</u>. EClinicalMedicine. 2021;36:100916..

What is this: COVID-19 has impacted on the mental health of healthcare professionals, the general population and COVID-19 patients, and may be associated with sleep problems.

In this systematic review, the authors searched for observational studies that assessed sleep problems arising from the COVID-19 pandemic. They restricted their searches to peer-reviewed articles published in English since December 2019 and did the most recent search on 19 February 2021. They included 168 cross-sectional, 4 case-control and 5 longitudinal design papers (total: 345,270 participants from 39 countries).

What was found? At the time of the review, the meta-analyses of the included studies found corrected pooled estimated prevalence of sleep problems of 31% among healthcare professionals, 18% among the general population and 57% among COVID-19 patients.

At the time of the review, the included studies showed that sleep problems were associated with depression and anxiety among healthcare professionals, the general population and COVID-19 patients.

Rehabilitation after COVID-19 (search up to 7 May 2020)

Added July 23, 2021

Citation: Goodwin VA, Allan L, Bethel A, et al. <u>*Rehabilitation to enable recovery from COVID-19: a rapid</u></u> <u>systematic review</u>. Physiotherapy. 2021;111:4-22.</u>*

What is this? Some patients with COVID-19 may require rehabilitation interventions to help with their recovery.

In this rapid review, the authors searched for systematic reviews, randomized trials and qualitative studies that had assessed rehabilitation interventions for patients with severe respiratory illness requiring intensive or critical care, such as Severe Adult Respiratory Syndrome (SARS). They did the search up to 7 May 2020. They included 24 systematic reviews, 11 randomized trials and 8 qualitative studies.

What was found: At the time of this review, the included studies found no studies that had evaluated the benefits of rehabilitation interventions for COVID-19 patients.

However, evidence from evaluations of rehabilitation for people recovering from other severe respiratory illness (which may be similar to the effects for COVID-19 patients) showed that progressive exercise programs, early mobilization and multicomponent interventions delivered in ICU can improve functional independence and walking; nutritional supplementation in addition to rehabilitation in the post-ICU hospital

setting may improve performance of activities of daily living; and that people receiving rehabilitation valued the services which engendered hope and confidence.

Rehabilitation during and after COVID-19 (search up to April 2020)

Added July 23, 2021

Citation: Agostini F, Mangone M, Ruiu P, et al. <u>*Rehabilitation setting during and after Covid-19: An overview</u></u> <u>on recommendations</u>. Journal of Rehabilitation Medicine. 2021;53(1):jrm00141.</u>*

What is this: Some patients with COVID-19 may require rehabilitation to help with their respiratory and motor functions.

In this systematic review, the authors searched for studies of rehabilitative approaches for COVID-19 patients in the acute and post-acute phases of illness. They restricted their searches to articles published in English or Chinese between January and April 2020. They included 31 articles.

What was found? At the time of the review, the included studies showed a need for an integrated rehabilitation approach, providing neuromuscular, cardiac, respiratory and swallowing interventions, as well as psychological support to improve the quality of life of COVID-19 patients.

At the time of the review, the included studies showed that neuromuscular and respiratory rehabilitation, along with psychological support were important for acute rehabilitation and suggested that respiratory rehabilitation should not be recommended for severe unstable COVID-19 patients.

At the time of the review, the included studies showed that aerobic exercise; strength, balance and respiratory training; and psychological support were important rehabilitation interventions in post-acute rehabilitation.

At the time of this review, the included studies showed that the role of long-term rehabilitation interventions for COVID-19 patients was uncertain, but the authors of the review identified a role for self-management strategies and telerehabilitation.

Dynamed - COVID-19 (Novel Coronavirus)

Latest updates

Drug/Device AlertUpdated 3 Aug 2021

FDA revises Emergency Use Authorization for casirivimab and imdevimab (REGEN-COV) to include postexposure prophylaxis of COVID-19 in persons \geq 12 years old and weighing \geq 40 kg at high risk for progression to severe COVID-19 (including hospitalization or death) (FDA Press Release 2021 Jul 30)

View in topic

EvidenceUpdated 29 Jul 2021

learning disabilities, Down syndrome, and cerebral palsy each associated with increased risks of COVID-19-related hospitalization and death in persons \geq 16 years old in England (BMJ 2021 Jul 14)

EvidenceUpdated 28 Jul 2021

FDA revises Janssen (Johnson & Johnson) COVID-19 vaccine fact sheets for healthcare providers and vaccine recipients to include information about increased risk of Guillain-Barre syndrome during first 42 days following vaccination (FDA Press Release 2021 Jul 13)

View in topic

EvidenceUpdated 28 Jul 2021

COVID-19 mRNA vaccine Moderna (Spikevax) receives expanded authorization by European Commission to include children and adolescents aged 12-17 years (European Medicines Agency Press Release 2021 Jul 23)

View in topic

EvidenceUpdated 27 Jul 2021

in persons ≥ 16 years old in England, effectiveness of 2 doses of BNT162b2 (Pfizer-BioNTech) vaccine may be 88% against symptomatic SARS-CoV-2 infection with B.1.617.2 (delta) variant (N Engl J Med 2021 Jul 21 early online)

View in topic

EvidenceUpdated 27 Jul 2021

in persons \geq 16 years old in England, effectiveness of 2 doses of ChAdOx1 nCoV-19 (Oxford-AstraZeneca) vaccine may be 67% against symptomatic SARS-CoV-2 infection with B.1.617.2 (delta) variant (N Engl J Med 2021 Jul 21 early online)

View in topic

EvidenceUpdated 20 Jul 2021

first dose of Pfizer-BioNTech RNA vaccine (BNT162b2) vaccine may reduce risk of SARS-CoV-2 infection in pregnant women in Israel (JAMA 2021 Jul 12 early online)

View in topic

EvidenceUpdated 20 Jul 2021

inactivated SARS-CoV-2 vaccine (CoronaVac) may be 66% effective against SARS-CoV-2 infection and 86% effective against death \geq 14 days after second dose in adults in Chile (N Engl J Med 2021 Jul 7 early online)

View in topic

EvidenceUpdated 20 Jul 2021

inactivated SARS-CoV-2 vaccine (CoronaVac) may be 85% effective against symptomatic COVID-19 and 100% effective against COVID-19-related death in adults \leq 59 years old in Turkey (Lancet 2021 Jul 17)

View in topic

EvidenceUpdated 20 Jul 2021

compared to days 1-12, estimated effectiveness of Pfizer-BioNTech mRNA vaccine (BNT162b2) at days 13-24 after first dose in Israel to prevent SARS-CoV-2 infection 51% and symptomatic COVID-19 54% in persons \geq 16 years old (JAMA Netw Open 2021 Jun 1)

View in topic

BMJ Best Practice

Coronavirus disease 2019

05 Aug 2021

What's new at this update

NICE publishes new guidance on vaccine-induced immune thrombocytopenia and thrombosis

- The UK National Institute for Health and Care Excellence has published a new rapid COVID-19 guideline to help healthcare professionals identify and treat patients who develop vaccine-induced immune thrombocytopenia and thrombosis (VITT) after receiving a COVID-19 vaccination. The guideline outlines how to identify people with suspected VITT, as well as the investigations used to confirm the diagnosis and treatment options.
- See the Complications section for more information.

FDA authorises casirivimab/imdevimab for prevention of COVID-19

- The US Food and Drug Administration has extended the emergency-use authorisation of casirivimab/imdevimab to include post-exposure prophylaxis in adults and children 12 years of age and older who are at high risk for progression to severe disease, provided the patient meets certain criteria. Prophylaxis with casirivimab/imdevimab is not a substitute for vaccination. The treatment remains authorised for the treatment of mild to moderate disease in high-risk patients.
- See the Emerging section for more information.

EMA warns of Guillain-Barre syndrome with Janssen COVID-19 vaccine

- The European Medicines Agency has recommended adding a warning about the rare risk of Guillain-Barre syndrome to the prescribing information of the Janssen COVID-19 vaccine. The agency believes a causal relationship to the vaccine is possible, and previously recommended adding a similar warning to the prescribing information of the AstraZeneca COVID-19 vaccine.
- See the Prevention section for more information.

EMA authorises use of Moderna COVID-19 vaccine in young people aged 12 to 17 years

- The European Medicines Agency has authorised the use of the Moderna vaccine, also known as Spikevax[®] in some countries, in young people aged 12 to 17 years. The vaccine is currently authorised for use in adults, and use in this new age group will be the same as for adults.
- See the Prevention section for more information.

CDC warns that vaccinated people with breakthrough infections can spread the Delta variant

• The US Centers for Disease Control and Prevention has announced that new data suggest that vaccinated people with breakthrough infections due to the Delta variant and unvaccinated people carried equal viral

loads and were equally likely to pass on their infections. As a consequence, the CDC has updated its mask guidelines to recommend that vaccinated people should also now wear a mask in indoor settings.

<u>21 Jul 2021</u>

Guidelines recommend measures to manage acute and chronic conditions during the COVID-19 pandemic: updated

Further guidelines have been published to inform the management of patients with coexisting conditions during the COVID-19 pandemic.

New this update:

- Considerations for perinatal care (updated)
- Considerations for newborn care (updated)
- Considerations for patients receiving systemic anti-cancer therapy (updated)
- Routine immunisation (updated)
- Considerations for patients who require anticoagulation (updated)
- Considerations for management of patients in community psychiatry services (updated)
- Considerations for mental health of adults (updated)
- Considerations for mental health of children and adolescents (updated)
- Considerations for mental health of healthcare workers (updated)
- Considerations for elective surgery (updated)
- Potential impact of COVID-19 pandemic on diagnosis and management of other conditions (updated)
- Acute lymphocytic leukaemia (updated)
- Acute myelogenous leukaemia (updated)
- Chronic lymphocytic leukaemia (updated)
- Chronic myelogenous leukaemia (updated)
- Cirrhosis (updated)
- Mucormycosis (new)
- Non-Hodgkin's lymphoma (updated)

Useful Links

BMJ – latest news and resources for COVID-19 Cochrane Library Coronavirus (COVID-19): evidence relevant to critical care Elsevier - Novel Coronavirus Information Center – Elsevier European Centre for Disease Prevention and Control GOV.UK Health protection Scotland New England Journal of Medicine NHS UK Oxford University Press Patient.Info



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