

Covid -19 Evidence Update

Summarized and appraised resources

08/01/2021

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 kgh-tr.library.service@nhs.net

News – Tocilizumab and Sarilumab	1
Royal College Guidance	2
NICE – new guidance - None	
COVID-19 Evidence alerts from McMaster Plus	4
Cochrane Systematic Review - None	
Evidence Aid	7
Common symptoms and clinical features of COVID-19 (multiple reviews)	7
Diabetes and COVID-19 (multiple reviews)	10
Patient reminder and recall interventions to improve immunization rates	12
Mutations to SARS-CoV-2 (research up to 31 May 2020)	13
Dynamed – latest updates	13
Useful Links	14

News

Tocilizumab and Sarilumab – preprint – not yet peer reviewed.

[Interleukin-6 Receptor Antagonists in Critically ill patients with Covid 19 – Preliminary report](#) REMAP-CAP Investigators, Anthony Gordon. MedRxiv (posted 7th January 2021)

Comments

[Expert reaction to preprint from REMAP-CAP trial looking at tocilizumab nad sarilumab in critically ill COVID-19 patients.](#) Science Media Centre

[NHS patients to receive COVID-19 treatments that could cut hospital time by 10 days.](#) Gov.uk

[Two more life-saving Covid drugs discovered.](#) BBC News

Royal College/Society Guidance and Point of Care Tools

Latest information and guidance

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

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

New NICE Guidance

No new guidance published since last bulletin.

[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
Nucleic-acid-amplification tests from respiratory samples for the diagnosis of coronavirus infections: systematic review and meta-analysis. <i>Hellou MM, Gorska A, Mazzaferri F, et al.</i> Clin Microbiol Infect
Use of Chest Imaging in the Diagnosis and Management of COVID-19: A WHO Rapid Advice Guide. <i>Akl EA, Blazic I, Yaacoub S, et al.</i> Radiology
Multi-organ point-of-care ultrasound for COVID-19 (PoCUS4COVID): international expert consensus. <i>Hussain A, Via G, Melniker L, et al.</i> Crit Care
Diagnostic Performance of Chest CT for SARS-CoV-2 Infection in Individuals with or without COVID-19 Symptoms. <i>De Smet K, De Smet D, Ryckaert T, et al.</i> Radiology
Rapid serological and SARS-CoV-2 RT-PCR assays: comparison performed simultaneously in symptomatic COVID-19 patients. <i>Paradiso AV, De Summa S, Loconsole D, et al.</i> J Med Internet Res
The accuracy of teleradiologists in diagnosing COVID-19 based on a French multicentric emergency cohort. <i>Nivet H, Crombe A, Schuster P, et al.</i> Eur Radiol
Etiology
Immunotherapy or other anti-cancer treatments and risk of exacerbation and mortality in cancer patients with COVID-19: a systematic review and meta-analysis. <i>Wang B, Huang Y</i> Oncoimmunology
Lack of association of antihypertensive drugs with the risk and severity of COVID-19: A meta-analysis. <i>Ren L, Yu S, Xu W, et al.</i> J Cardiol
Effects of Renin-Angiotensin-Aldosterone System (RAAS) Inhibitors on Disease Severity and Mortality in Patients with COVID-19: A Meta-analysis. <i>Zhang G, Wu Y, Xu R, et al.</i> J Med Virol
Renin-angiotensin system blockers and susceptibility to COVID-19: an international, open science, cohort analysis. <i>Morales DR, Conover MM, You SC, et al.</i> Lancet Digit Health
Primary Prevention
Airborne transmission of COVID-19 and the role of face mask to prevent it: a systematic review and meta-analysis. <i>Tabatabaeizadeh SA</i> Eur J Med Res
Hydroxychloroquine as pre-exposure prophylaxis for COVID-19 in healthcare workers: a randomized trial. <i>Rajasingham R, Bangdiwala AS, Nicol MR, et al.</i> Clin Infect Dis
Pragmatic Recommendations for Safety while Caring for Hospitalized Patients with

<p>Coronavirus Disease 2019 (COVID-19) in Low- and Middle-Income Countries. <i>Inglis R, Barros L, Checkley W, et al. Am J Trop Med Hyg</i></p>
<p>Pharmacologic Thromboprophylaxis and Thrombosis in Hospitalized Patients with COVID-19: A Pooled Analysis. <i>Patell R, Chiasakul T, Bauer E, et al. Thromb Haemost</i></p>
<p>Efficacy and Safety of the mRNA-1273 SARS-CoV-2 Vaccine. <i>Baden LR, El Sahly HM, Essink B, et al. N Engl J Med</i></p>
<p>Hydroxychloroquine as Postexposure Prophylaxis to Prevent Severe Acute Respiratory Syndrome Coronavirus 2 Infection : A Randomized Trial. <i>Barnabas RV, Brown ER, Bershteyn A, et al. Ann Intern Med</i></p>
<p>Prognosis</p>
<p>Maternal Coronavirus Infections and Neonates Born to Mothers with SARS-CoV-2: A Systematic Review. <i>Amaral WND, Moraes CL, Rodrigues APDS, et al. Healthcare (Basel)</i></p>
<p>COVID-19 and Adverse Pregnancy Outcome: A Systematic Review of 104 Cases. <i>Abou Ghayda R, Li H, Lee KH, et al. J Clin Med</i></p>
<p>Clinical Prediction Guide</p>
<p>Development and external validation of a prognostic tool for COVID-19 critical disease. <i>Chow DS, Glavis-Bloom J, Soun JE, et al. PLoS One</i></p>
<p>The low-harm score for predicting mortality in patients diagnosed with COVID-19: A multicentric validation study. <i>Soto-Mota A, Marfil-Garza BA, Martinez Rodriguez E, et al. J Am Coll Emerg Physicians Open</i></p>
<p>Derivation and validation of a prognostic model for predicting in-hospital mortality in patients admitted with COVID-19 in Wuhan, China: the PLANS (platelet lymphocyte age neutrophil sex) model. <i>Li J, Chen Y, Chen S, et al. BMC Infect Dis</i></p>
<p>Treatment</p>
<p>The Effects of Traditional Chinese Medicine as an Auxiliary Treatment for COVID-19: A Systematic Review and Meta-analysis. <i>Zhou LP, Wang J, Xie RH, et al. J Altern Complement Med</i></p>
<p>Early use of nitazoxanide in mild Covid-19 disease: randomised, placebo-controlled trial. <i>Rocco PRM, Silva PL, Cruz FF, et al. Eur Respir J</i></p>
<p>The Effect of Cognitive Behavioral Therapy on Depression, Anxiety, and Stress in Patients With COVID-19: A Randomized Controlled Trial. <i>Li J, Li X, Jiang J, et al. Front Psychiatry</i></p>
<p>Evaluating the effects of Intravenous Immunoglobulin (IVIg) on the management of severe COVID-19 cases: A randomized controlled trial. <i>Tabarsi P, Barati S, Jamaati H, et al. Int Immunopharmacol</i></p>
<p>Randomized double-blinded placebo-controlled trial of hydroxychloroquine with or without azithromycin for virologic cure of non-severe Covid-19. <i>Omrani AS, Pathan SA, Thomas SA, et al. EClinicalMedicine</i></p>
<p>A multicenter, randomized, open-label, controlled trial to evaluate the efficacy and tolerability of hydroxychloroquine and a retrospective study in adult patients with mild to moderate coronavirus disease 2019 (COVID-19). <i>Chen CP, Lin YC, Chen TC, et al. PLoS One</i></p>
<p>Efficacy and Safety of Favipiravir, an Oral RNA-Dependent RNA Polymerase Inhibitor, in Mild-to-Moderate COVID-19: A Randomized, Comparative, Open-Label, Multicenter, Phase 3 Clinical Trial.</p>

<p><i>Udwadia ZF, Singh P, Barkate H, et al. Int J Infect Dis</i></p> <p>Efficacy and Safety of Lopinavir/Ritonavir for Treatment of COVID-19: A Systematic Review and Meta-Analysis.</p> <p><i>Alhumaid S, Mutair AA, Alawi ZA, et al. Trop Med Infect Dis</i></p> <p>A systematic review of corticosteroid treatment for noncritically ill patients with COVID-19.</p> <p><i>Shuto H, Komiya K, Yamasue M, et al. Sci Rep</i></p> <p>Safety of Hydroxychloroquine Among Outpatient Clinical Trial Participants for COVID-19.</p> <p><i>Lofgren SM, Nicol MR, Bangdiwala AS, et al. Open Forum Infect Dis</i></p> <p>Corticosteroids for Patients With Coronavirus Disease 2019 (COVID-19) With Different Disease Severity: A Meta-Analysis of Randomized Clinical Trials.</p> <p><i>Pasin L, Navalesi P, Zangrillo A, et al. J Cardiothorac Vasc Anesth</i></p> <p>Baricitinib plus Remdesivir for Hospitalized Adults with Covid-19.</p> <p><i>Kalil AC, Patterson TF, Mehta AK, et al. N Engl J Med</i></p> <p>Efficacy and safety of tocilizumab in COVID-19 patients: A living systematic review and meta-analysis.</p> <p><i>Tleyjeh IM, Kashour Z, Damlaj M, et al. Clin Microbiol Infect</i></p> <p>Randomized Controlled Open Label Trial on the Use of Favipiravir Combined with Inhaled Interferon beta-1b in Hospitalized Patients with Moderate to Severe COVID-19 Pneumonia.</p> <p><i>Khamis F, Al Naabi H, Al Lawati A, et al. Int J Infect Dis</i></p> <p>Treating COVID-19 With Hydroxychloroquine (TEACH): A Multicenter, Double-Blind Randomized Controlled Trial in Hospitalized Patients.</p> <p><i>Ulrich RJ, Troxel AB, Carmody E, et al. Open Forum Infect Dis</i></p> <p>Corticosteroid use in COVID-19 patients: a systematic review and meta-analysis on clinical outcomes.</p> <p><i>van Paassen J, Vos JS, Hoekstra EM, et al. Crit Care</i></p> <p>Tocilizumab in Patients Hospitalized with Covid-19 Pneumonia.</p> <p><i>Salama C, Han J, Yau L, et al. N Engl J Med</i></p> <p>Safety and efficacy of inhaled nebulised interferon beta-1a (SNG001) for treatment of SARS-CoV-2 infection: a randomised, double-blind, placebo-controlled, phase 2 trial.</p> <p><i>Monk PD, Marsden RJ, Tear VJ, et al. Lancet Respir Med</i></p>

[Cochrane Evidence on COVID-19: a roundup](#)

No new reviews published since 23rd Dec.

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.

Common symptoms and clinical features of COVID-19 (multiple reviews)

Added January 5, 2021

What is this? A large number of studies have reported on the common symptoms and clinical features of COVID-19. These are the subject of many rapid reviews, which are summarised here. More details on the reviews, including citations and links to the full reviews, are available lower down this page.

What was found: At the time of these reviews, fever, cough, fatigue, myalgia (muscle aches and pains) and shortness of breath were the most common clinical features of COVID-19. Several reviews also reported diarrhoea and vomiting.

In the living Cochrane review by Struyf (search done on 27 April 2020), the four categories of clinical features associated with COVID-19 were systemic, respiratory, gastrointestinal and cardiovascular. Overall, the review concluded that individual signs and symptoms generally appeared to have very poor diagnostic properties. Only six symptoms (cough, sore throat, fever, myalgia or arthralgia, fatigue, and headache) had a sensitivity of $\geq 50\%$. Fever, myalgia/arthralgia, fatigue and headache had a specificity of $>90\%$ and therefore may indicate a substantially increased likelihood of COVID-19 disease.

Several reviews noted that bilateral lung involvement was frequently reported and a combined summary of review of chest CT scans is available [here](#).

Comorbidities were often reported with COVID-19 infection. The most common comorbidities and indicators for more severe course of disease were cerebrovascular disease, cardiovascular disease (in particular hypertension) and [diabetes](#).

At the time of the Cao review (search up to 1 March 2020), almost one-third of COVID-19 patients required intensive care, with acute respiratory distress syndrome (ARDS) being the most frequent clinical presentation. Other severe clinical presentations included acute cardiac injury, acute renal injury, shock and multiple organ dysfunction syndrome (MODS).

Common laboratory findings included non-specific biochemical markers of infection and inflammation, including white blood cell and/or platelet abnormalities, and inflammatory markers. At the time of the Zhu review (search done on 16 March 2020), a range of abnormal biochemical markers including cardiac enzymes, and markers associated with liver function and renal function, had been identified for COVID-19 patients.

The studies included in the He review (search up to 20 May 2020) showed that approximately one in six confirmed COVID-19 cases were asymptomatic, that asymptomatic patients may have abnormal laboratory and imaging findings, and that nearly half developed symptoms later in the infection. In children, the proportion of cases with asymptomatic infection was higher than for other age groups.

What are the reviews:

Citation: Adhikari SP, Meng S, Wu YJ, et al. *Epidemiology, causes, clinical manifestation and diagnosis, prevention and control of coronavirus disease (COVID-19) during the early outbreak period: a scoping review*. *Infectious Diseases of Poverty*. 2020 Mar;9(1):29.

In this rapid review, the authors searched for studies on the epidemiology, causes, clinical diagnosis, prevention and control of COVID-19. They restricted their search to articles published in English and Chinese and did their most recent search on 31 January 2020. They included 65 studies, covering epidemiology (19 studies), causes (25), clinical manifestation and diagnosis (9), and prevention and control (12).

Citation: Cao Y, Liu X, Xiong L, et al. *Imaging and clinical features of patients with 2019 novel coronavirus SARS-CoV-2: a systematic review and meta-analysis*. *Journal of Medical Virology*. 2020;92(9):1449-59.

In this rapid review, the authors searched for cross-sectional studies and case series on diagnosis and treatment of COVID-19. They restricted their searches to articles published in English and Chinese and searched up to 1 March 2020. They included 31 studies (total: 46,959 patients).

Citation: He J, Guo Y, Mao R, et al. *Proportion of asymptomatic coronavirus disease 2019: A systematic review and meta-analysis*. *Journal of Medical Virology*. 2021;93:820-30.

In this rapid review, the authors searched for observational studies of asymptomatic infection in COVID-19 patients. They did not restrict their searches by language of publication and searched up to 20 May 2020. They included 41 observational studies (total: 50,155 patients).

Citation: Hu Y, Sun J, Dai Z, et al. *Prevalence and severity of corona virus disease 2019 (COVID-19): A systematic review*. *Journal of Clinical Virology* 2020;127:104371.

In this rapid review, the authors searched for research into the prevalence and severity of illness for COVID-19 patients. They did not restrict their searches by language of publication and searched for articles published since 1 January 1980 on 10 March 2020. They included 21 studies (total: 47,344 patients), from China (20 studies) and Singapore (1).

Citation: Kaur N, Gupta I, Singh H, et al. *Epidemiological and clinical characteristics of 6635 COVID-19 patients: a pooled analysis*. SN Comprehensive Clinical Medicine. 2020 Aug;2(8):1048-52.

In this rapid review, the authors searched for studies reporting clinical features and demographic data for COVID-19 patients. They restricted their searches to articles published in English, between 1 December 2019 and 27 April 2020. They included 50 observational studies (total: 6635 patients).

Citation: Koh J, Shah SU, Chua PE, et al. *Epidemiological and Clinical Characteristics of Cases During the Early Phase of COVID-19 Pandemic: A Systematic Review and Meta-Analysis*. Frontiers in Medicine. 2020;7:295.

In this rapid review, the authors searched for observational studies of epidemiological and clinical characteristics of COVID-19. They restricted their searches to articles published in English or Mandarin between 1 January and 11 February 2020. They included 18 case reports, 8 cross-sectional studies and 3 case series (total: 578 patients). 24 of the studies were conducted in China.

Citation: Pormohammad A, Ghorbani S, Baradaran B, et al. *Clinical Characteristics, laboratory findings, radiographic signs and outcomes of 52,251 patients with confirmed covid-19 infection: a systematic review and meta-analysis*. Microbial Pathogenesis 2020 Oct;147:104390.

In this rapid review, the authors searched for observational studies reporting clinical features of COVID-19. They did not restrict their searches by language of publication and searched up to 28 February 2020. They included 80 retrospective studies from China (61,742 patients with confirmed COVID-19 infection).

Citation: Struyf T, Deeks JJ, Dinnes J, et al. *Signs and symptoms to determine if a patient presenting in primary care or hospital outpatient settings has COVID-19 disease*. Cochrane Database of Systematic Reviews. 2020;(7):CD013665.

In this living Cochrane review, the authors searched the Cochrane COVID-19 Study Register and the University of Bern COVID-19 living evidence database for studies of clinical signs and symptoms for diagnosing COVID-19 disease in primary care or hospital outpatient settings. They did not restrict their searches by language of publication and did the search on 27 April 2020. They included 16 studies (7706 patients) and identified an additional 40 ongoing studies.

Citation: Zhu J, Zhong Z, Ji P, et al. *Clinicopathological characteristics of 8697 patients with COVID-19 in China: a meta-analysis*. Family Medicine and Community Health. 2020;8(2):e000406.

In this rapid review, the authors searched for cohort studies, cross-sectional studies and case series reporting clinical symptoms or laboratory outcomes in >40 COVID-19 patients. They did not restrict their searches by language of publication and searched for articles published online between 1 January 2020 and 16 March 2020. They included 55 observational studies from China (8697 patients).

Other reviews of this topic:

Citation: Balla M, Merugu GP, Patel M, et al. *COVID-19, Modern Pandemic: A Systematic Review From Front-Line Health Care Providers' Perspective*. Journal of Clinical Medicine Research. 2020 Apr;12(4):215-29.

Citation: Grant R, Malik MR, Elkholy A, et al. *A review of asymptomatic and sub-clinical Middle East Respiratory Syndrome Coronavirus Infections*. Epidemiologic Reviews. 2019;41(1):69-81.

Citation: Htun TP, Sun Y, Chua HL, et al. *Clinical features for diagnosis of pneumonia among adults in primary care setting: A systematic and meta-review*. Scientific Reports. 2019;9(1):7600.

Citation: Manabe T, Akatsu H, Kotani K, et al. *Trends in clinical features of novel coronavirus disease (COVID-19): A systematic review and meta-analysis of studies published from December 2019 to February 2020*. Respiratory Investigation. 2020;58(5):409-18.

Citation: Xu P, Sun GD, Li ZZ. *Clinical characteristics of two human-to-human transmitted coronaviruses: Corona Virus Disease 2019 vs. Middle East Respiratory Syndrome Coronavirus*. European Review for Medical and Pharmacological Sciences. 2020;24(10):5797-809.

Diabetes and COVID-19 (multiple reviews)

Added January 4, 2021

What is this? If a patient has comorbidities, such as diabetes, this may affect their risk of contracting COVID-19 and the severity of their disease. Several rapid reviews are summarised here. For more details including citations and links to the full reviews, please scroll down this page.

What was found: Pre-existing diabetes is associated with a higher risk of severe disease and mortality in COVID-19 patients.

There is some indication that age influences the increased risk of COVID-19 in people with diabetes, but the evidence from the included reviews is conflicting. Studies included in the Chowdhury review (search done up to 31 May 2020) identified a low risk of death from COVID-19 for type I diabetes patients under 40 years of age, but the Huang review (search done on 8 April 2020) found that the association between diabetes and poor COVID-19 outcomes was stronger in younger patients.

The Chowdhury review (search done up to 31 May 2020) found that diabetes was associated with an increased risk of infection generally but that there was uncertainty about whether type 1 diabetes increases the risk of COVID-19 infection. The authors suggested optimising glycaemic control to help with primary prevention and improving outcomes for COVID-19 patients with type 1 diabetes.

What are the reviews:

Citation: Abdi A, Jalilian M, Sarbarzeh PA, et al. *Diabetes and COVID-19: A systematic review on the current evidences*. Diabetes Research and Clinical Practice. 2020;166:108347.

In this rapid systematic review, the authors searched for observational studies, opinion pieces and reviews reporting diabetes in COVID-19 patients, which had been published up to 31 March 2020. They included 27 studies, 14 of which were retrospective, mostly from China (76,639 patients with some overlap). They included 18 studies in a meta-analysis.

Citation: Aggarwal G, Lippi G, Lavie CJ, et al. *Diabetes mellitus association with coronavirus disease 2019 (COVID-19) severity and mortality: a pooled analysis*. Journal of Diabetes. 2020;12(11):851-5.

In this rapid meta-analysis, the authors searched for studies evaluating associations between diabetes and severity of COVID-19 infection, which had been published up to 31 March 2020. They included 12 studies (2564 patients) that compared history of diabetes in severe and non-severe COVID-19 cases and 4 studies (618 patients) that reported the rate of diabetes in surviving and non-surviving COVID-19 patients.

Citation: Chowdhury S, Goswami S. *COVID-19 and type 1 diabetes: dealing with the difficult duo*. International Journal of Diabetes in Developing Countries. 2020;40(3):315-20.

In this rapid review, the authors searched for studies on type 1 diabetes and COVID-19. They searched the PubMed database for articles published up to 31 May 2020. They included 18 articles.

Citation: Desai R, Singh S, Parekh T, et al. *COVID-19 and diabetes mellitus: A need for prudence in elderly patients from a pooled analysis*. Diabetes & Metabolic Syndrome: Clinical Research & Reviews. 2020;14(4):683-5.

In this rapid review, the authors searched for studies reporting frequency of diabetes in COVID-19 patients. They searched for studies published between December 2019 and March 2020. They included 11 studies (2084 COVID-19 patients) and divided these into 2 groups depending on mean patient age: <50 years (1365 patients) and >50 years (107 patients).

Citation: Guo L, Shi Z, Zhang Y, et al. *Comorbid diabetes and the risk of disease severity or death among 8807 COVID-19 patients in China: A meta-analysis*. Diabetes research and clinical practice. 2020;166:108346.

In this rapid meta-analysis, the authors searched for studies of the association of diabetes with COVID-19 severity or mortality in adult patients in China. They restricted their searches to articles published in English or Chinese between 1 January and 30 May 2020. They included 9 studies (8807 COVID-19 patients, 1070 with diabetes), mostly from Hubei Province.

Citation: Huang I, Lim MA, Pranata R. *Diabetes mellitus is associated with increased mortality and severity of disease in COVID-19 pneumonia—a systematic review, meta-analysis, and meta-regression*. Diabetes & Metabolic Syndrome: Clinical Research & Reviews. 2020;14(4):395-403.

In this rapid review, the authors searched for studies of the association between diabetes and poor outcome in COVID-19 patients. They restricted their searches to articles published in English and did the final search on 8 April 2020. They included 30 studies (6452 patients), mostly from China.

Citation: Kumar A, Arora A, Sharma P, et al. *Is diabetes mellitus associated with mortality and severity of COVID-19? A meta-analysis*. Diabetes & Metabolic Syndrome. 2020;14(4):535-45.

In this rapid meta-analysis, the authors searched for case-control studies of the relationship between diabetes and COVID-19. They restricted their searches to articles published in English between 1 January 2020 and 22 April 2020. They included 33 studies (total: 16,003 patients) from China (30 studies), France (1) and the USA (2).

Citation: Parveen R, Sehar N, Bajpai R, et al. *Association of diabetes and hypertension with disease severity in covid-19 patients: A systematic literature review and exploratory meta-analysis*. Diabetes Research and Clinical Practice. 2020;166:108295.

In this rapid review, the authors searched for studies of the association between diabetes and hypertension and COVID-19. They restricted their searches to articles published in English up to 31 March 2020. They included 3 cohort studies and 4 case series (total: 2018 patients), all from China.

Patient reminder and recall interventions to improve immunization rates

Added January 4, 2021

Citation: Jacobson Vann JC, Jacobson RM, Coyne-Beasley T, et al. *Patient reminder and recall interventions to improve immunization rates*. Cochrane Database of Systematic Reviews. 2018;(1):CD003941.

What is this? COVID-19 vaccines are becoming available and existing research on how to improve the uptake of vaccination might be useful for policy makers.

In this Cochrane review, the authors searched for comparative effectiveness studies of patient reminder and recall interventions to improve uptake of immunizations. They restricted their searches to articles published in English and did the search in January 2017. They included 75 studies from ten countries.

A COVID-19 Global Evaluation Coalition brief that uses evidence from this review is available here[<http://www.covid19-evaluation-coalition.org/documents/VACCINES-Brief-2.pdf>]

What works: Patient reminder or recall interventions, including telephone and auto-dialer calls, letters, postcards, text messages, combination of mail or telephone, or a combination of patient reminder or recall with outreach, probably improve the proportion of participants who receive immunization.

Single-method reminders which improve uptake of immunizations are postcards, text messages and auto-dialer messages; while telephone calls and letters to patients are probably effective.

What doesn't work: Nothing noted.

What's uncertain: The effects of using reminder or recall messages via secure digital online patient portal systems are uncertain.

Mutations to SARS-CoV-2 (research up to 31 May 2020)

Added December 23, 2020

Citation: Abdullahi IN, Emeribe AU, Ajayi OA, et al. *Implications of SARS-CoV-2 genetic diversity and mutations on pathogenicity of COVID-19 and biomedical interventions*. Journal of Taibah University Medical Sciences. 2020;15(4):258-64.

What is this? Like other viruses, SARS-CoV-2, the virus that causes COVID-19, will mutate.

In this rapid review, the authors searched for studies describing mutations, genetic diversity and amino acid and strain variations of SARS-CoV-2. They restricted their searches to articles published in English between 31 December 2019 and 31 May 2020. They included 9 studies, which were from China (3 studies), Italy (2), Nigeria (1), UK (1) and USA (2).

What was found: At the time of this review, the included studies showed that SARS-CoV-2 had undergone significant mutations in non-structural proteins.

The authors recommended that continuous molecular surveillance of SARS-CoV-2 should be conducted given the critical importance of mutations.

Dynamed - [COVID-19 \(Novel Coronavirus\)](#)

Latest updates

6 JAN 2021

2 standard doses of adenovirus-vectored vaccine expressing SARS-CoV-2 spike protein (ChAdOx1 nCoV-19) may be 62% effective against COVID-19 in adults (Lancet 2020 Dec 8 early online) [View in topic](#)

6 JAN 2021

COVID-19 Vaccine (ChAdOx1-S [recombinant]) (COVID-19 Vaccine AstraZeneca) authorized for temporary supply by United Kingdom Department of Health and Social Care and MHRA for active immunization to prevent COVID-19 disease caused by SARS-CoV-2 virus in persons \geq 18 years old (United Kingdom MHRA Press Release 2020 Dec 30) [View in topic](#)

6 JAN 2021

mRNA-1273 SARS-CoV-2 Vaccine (Moderna COVID-19 Vaccine) receives authorization under interim order by Health Canada for use in persons \geq 18 years old for active immunization to prevent COVID-19 (Health Canada Press Release 2020 Dec 23) [View in topic](#)

6 JAN 2021

COVID-19 mRNA Vaccine BNT162b2 authorized for temporary supply by United Kingdom Department of Health and Social Care and MHRA for active immunization to prevent COVID-19 disease caused by SARS-CoV-2 in persons \geq 16 years old (United Kingdom MHRA Information for UK Healthcare Professionals 2020 Dec 31) [View in topic](#)

4 JAN 2021

results of lateral flow serological assays may change or become unreadable from 15 minutes to 24 hours after sampling (Lancet Respir Med 2020 Sep) [View in topic](#)

31 DEC 2020

history of bariatric surgery might be associated with reduced mortality and risk of invasive mechanical ventilation in adolescents and adults with obesity admitted to hospital with COVID-19 (Obes Surg 2020 Nov 18 early online) [View in topic](#)

31 DEC 2020

higher visceral fat associated with increased risk of both ICU admission and need for invasive mechanical ventilation in patients with COVID-19 (Obesity (Silver Spring) 2020 Dec 1 early online) [View in topic](#)

31 DEC 2020

extensive social distancing plus masks plus routine laboratory testing of asymptomatic persons every 3 days reported to reduce student infection with SARS-CoV-2 by 96% and faculty infection by 85% in college setting in United States (Ann Intern Med 2020 Dec 21 early online) [View in topic](#)

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](#)

For **access to online book resources** go to our catalogue at <https://kgh.koha-ptfs.co.uk>, Search for the book record by title, and then click on 'Click here to access online'. You will then be asked to login using your NHS OpenAthens username. If you don't have an OpenAthens account you can self register at <https://openathens.nice.org.uk/>

KGH Knowledge and Library Service

Phone: 01536 492862

Email: kgh-tr.library.index@nhs.net

Library Website:

<http://kghlibrary.koha-ptfs.co.uk>



[@KGHNHSLibrary](https://twitter.com/KGHNHSLibrary)

Would you like help to find information to support CPD and revalidation?
Or to receive personal alerts to articles and reports on topics of particular interest to you?

Ask us about **KnowledgeShare** to receive fortnightly emails highlighting relevant reports and articles