

RECORD 1**The effect of small versus large clog size on emergency response time: A randomized controlled trial**Elbers P.W.G., de Grooth H.-J., 5.1.2e 5.1.2e*Journal of Critical Care* (2020) 60 (116-119). Date of Publication: 1 Dec 2020

Objectives: To assess the effect on healthcare professional emergency response time and safety of small compared to large clog size. **Design:** Randomized controlled trial. **Setting:** The intensive care unit of a single university medical centre in The Netherlands. **Participants:** Intensive care medicine professionals. **Interventions:** Participants were randomized to wear European size 38 clogs (US male size 6½, US female size 7½) or European size 47 clogs (US male size 13½, US female size 14½) clogs and were required to run a 125 m course from the coffee break room to the elevator providing access to the emergency department. **Main outcome measures:** The primary outcome was the time to complete the running course. Height, shoe size, self-described fitness, age and staff category were investigated as possible effect modifiers. **Secondary endpoints** were reported clog comfort and suspected unexpected clog-related adverse events (SUCRAEs). **Results:** 50 participants were randomized (25 to European size 38 clogs and 25 to size 47 clogs). Mean age was 37 years (SD 12) and 29 participants (58%) were female. The primary outcome was 4.4 s (95% CI -7.1; -1.6) faster in the size 5 clogs group compared to the size 12 clogs group. This effect was not modified by any of the predefined participant characteristics. No differences were found in reported clog comfort or SUCRAEs. **Conclusions:** European size 38 clogs lead to faster emergency response times than size 47 clogs. **Trial registration:** NCT04406220

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007446172&from=export>

RECORD 2**COVID-19 in critically ill patients in North Brabant, the Netherlands: Patient characteristics and outcomes**

Alewa F.E., van Mourik L., Broeders M.E.A.C., Paling A.J., de Jager C.P.C.

Journal of Critical Care (2020) 60 (111-115). Date of Publication: 1 Dec 2020

Purpose: Since the SARS-CoV-2 pandemic, countries are overwhelmed by critically ill Coronavirus disease 2019 (COVID-19) patients. As ICU capacity becomes limited we characterized critically ill COVID-19 patients in the Netherlands. **Methods:** In this case series, COVID-19 patients admitted to the ICU of the Jeroen Bosch Hospital were included from March 9 to April 7, 2020. COVID-19 was confirmed by a positive result by a RT-PCR of a specimen collected by nasopharyngeal swab. Clinical data were extracted from medical records. **Results:** The mean age of the 50 consecutively included critically ill COVID-19 patients was 65 ± 10 years, the mean BMI was 29 ± 4.7 and 66% were men. Seventy-eight percent of patients had ≥1 comorbidity, 34% had hypertension. Ninety-six percent of patients required mechanical ventilation and 80%



were ventilated in prone position. Venous thromboembolism was recognized in 36% of patients. Seventy-four percent of patients survived and were successfully discharged from the ICU, the remaining 26% died (median follow up 86 days). The length of invasive ventilation in survivors was 15 days (IQR 12–31). Conclusions: The survival rate of COVID-19 critically ill patients in our population is considerably better than previously reported. Thrombotic complications are commonly found and merit clinical attention. Trial registration number: NL2020.07.04.01

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007446340&from=export>

RECORD 3

The mortality and psychological burden caused by response to COVID-19 outbreak

Yusuf E., Tisler A.

Medical Hypotheses (2020) 143 Article Number: 110069. Date of Publication: 1 Oct 2020

The world is experiencing a severe COVID-19 outbreak. To control this outbreak, many governments in the world have imposed lockdown or quarantine measures. We hypothesize that these measures may cause additional mortality and morbidity in the (near) future due to delay in diagnosing diseases and other indirect effect on health (such as economic crisis). To support this hypothesis and to estimate the additional mortality that may linked to the COVID-19 controlling policy, we performed a step-by-step pragmatism approach. First, we chose a country (The Netherlands), and looked at the most common causes of mortality in this country. Then, we performed a literature study on the additional mortality when these causes were diagnosed late, and selected a paper with the most severe scenario. We also performed a literature study on the effect of economic crisis on additional mortality. The mortality data were then extrapolated to the demography of The Netherlands, and the results were compared with the present data on deaths directly due to COVID-19. Roughly, we forecast 388 additional deaths a week in The Netherlands in 5 years due to the direct and indirect effects of the lockdown measures. The most important implications of this hypothesis is that the additional mortality and increased mental health problem should be considered in evaluating the necessity of lock down and quarantine policy.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007071400&from=export>

RECORD 4

Symptomatology in head and neck district in coronavirus disease (COVID-19): A possible neuroinvasive action of SARS-CoV-2

Freni F., Meduri A., Gazia F., Nicastro V., Galletti C., Aragona P., Galletti B., Galletti F. *American Journal of Otolaryngology - Head and Neck Medicine and Surgery* (2020)

41:5 Article Number: 102612. Date of Publication: 1 Sep 2020

Objective: The aim of this manuscript is to investigate transversally Ear Nose Throat (ENT) symptoms COVID-19 infection correlated and to study the neurotropism and neuroinvasiveness of the virus in the head-neck district through the investigation of the sense of smell, taste, tearing, salivation and hearing. **Methods:** A total of 50 patients with laboratory-confirmed COVID-19 infection were included in our study. For each patient we evaluated the short version of the Questionnaire of Olfactory Disorders-Negative Statements (sQOD-NS), the Summated Xerostomia Inventory-Dutch Version (SXI-DV), The Standardized Patient Evaluation of Eye Dryness (SPEED), Schirmer test I, the Hearing Handicap Inventory For Adults (HHIA) and the Tinnitus Handicap Inventory (THI). All the tests we carried out were performed during the active phase of the symptomatology from COVID-19 (Condition A) and 15 after SARS-COV-2 RT-PCR test negative (Condition B). **Results:** A total of 46 patients (92%) had olfactory dysfunction related to the infection. The 70% of patients reported gustatory disorders. Cough, fever, headache and asthenia were the most prevalent symptoms. There was a statistically significant difference ($p < 0,001$) in sQOD-NS, SXI-DV, SPEED, Schirmer test, HHIA and THI between Condition A and Condition B. **Conclusions:** In our population there was an alteration of the sense of taste, of the sense of smell, dry eyes and of the oral cavity and an auditory discomfort, symptoms probably linked to the neurotropism of the virus. Furthermore, anosmia, dysgeusia and xerostomia are early symptoms of COVID-19, which can be exploited for an early quarantine and a limitation of viral contagion.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006790948&from=export>

RECORD 5

Population-level COVID-19 mortality risk for non-elderly individuals overall and for non-elderly individuals without underlying diseases in pandemic epicenters

Ioannidis J.P.A., Axfors C., Contopoulos-Ioannidis D.G.

Environmental Research (2020) 188 Article Number: 109890. Date of Publication: 1 Sep 2020

Objective: To provide estimates of the relative rate of COVID-19 death in people <65 years old versus older individuals in the general population, the absolute risk of COVID-19 death at the population level during the first epidemic wave, and the proportion of COVID-19 deaths in non-elderly people without underlying diseases in epicenters of the pandemic. **Eligible data:** Cross-sectional survey of countries and US states with at least 800 COVID-19 deaths as of April 24, 2020 and with information on the number of deaths in people with age <65. Data were available for 14 countries (Belgium, Canada, France, Germany, India, Ireland, Italy, Mexico, Netherlands, Portugal, Spain, Sweden, Switzerland, UK) and 13 US states (California, Connecticut, Florida, Georgia, Illinois, Indiana, Louisiana, Maryland, Massachusetts, Michigan, New Jersey, New York, Pennsylvania). We also examined available data on COVID-19 deaths in people with



age <65 and no underlying diseases. Main outcome measures: Proportion of COVID-19 deaths in people <65 years old; relative mortality rate of COVID-19 death in people <65 versus ≥65 years old; absolute risk of COVID-19 death in people <65 and in those ≥80 years old in the general population as of June 17, 2020; absolute COVID-19 mortality rate expressed as equivalent of mortality rate from driving a motor vehicle. Results: Individuals with age <65 account for 4.5–11.2% of all COVID-19 deaths in European countries and Canada, 8.3–22.7% in the US locations, and were the majority in India and Mexico. People <65 years old had 30- to 100-fold lower risk of COVID-19 death than those ≥65 years old in 11 European countries and Canada, 16- to 52-fold lower risk in US locations, and less than 10-fold in India and Mexico. The absolute risk of COVID-19 death as of June 17, 2020 for people <65 years old in high-income countries ranged from 10 (Germany) to 349 per million (New Jersey) and it was 5 per million in India and 96 per million in Mexico. The absolute risk of COVID-19 death for people ≥80 years old ranged from 0.6 (Florida) to 17.5 per thousand (Connecticut). The COVID-19 mortality rate in people <65 years old during the period of fatalities from the epidemic was equivalent to the mortality rate from driving between 4 and 82 miles per day for 13 countries and 5 states, and was higher (equivalent to the mortality rate from driving 106–483 miles per day) for 8 other states and the UK. People <65 years old without underlying predisposing conditions accounted for only 0.7–3.6% of all COVID-19 deaths in France, Italy, Netherlands, Sweden, Georgia, and New York City and 17.7% in Mexico. Conclusions: People <65 years old have very small risks of COVID-19 death even in pandemic epicenters and deaths for people <65 years without underlying predisposing conditions are remarkably uncommon. Strategies focusing specifically on protecting high-risk elderly individuals should be considered in managing the pandemic.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006916719&from=export>

RECORD 6

Impact of the coronavirus disease 2019 pandemic on cancer treatment: the patients' perspective

de [5.1.2a](#) K., Dumoulin D.W., Engelen V., Bloemendal H.J., Verheij M., van Laarhoven H.W.M., Dingemans I.H., Dingemans A.C., van der Veldt A.A.M. *European Journal of Cancer* (2020) 136 (132-139). Date of Publication: 1 Sep 2020

Background: The coronavirus disease 2019 (COVID-19) pandemic, caused by severe acute respiratory syndrome coronavirus 2, has inevitable consequences for medical care of patients without COVID-19. To assess the impact of this pandemic on oncological care, a nationwide survey was conducted among patients with cancer in the Netherlands. Methods: The patients' perspective on oncological care was investigated using an online survey between March 29th 2020 and April 18th 2020. The survey consisted of 20 questions on four topics: patients' characteristics, contact with the hospital, consequences of the COVID-19 pandemic and concerns about COVID-19. Results: Five thousand three hundred two patients with cancer completed this nationwide survey. Overall, 30% of patients reported consequences for their oncological



treatment or follow-up. In the majority of cases, this resulted in conversion from hospital visit to consultation by phone or video. The most frequently adjusted treatments were chemotherapy (30%) and immunotherapy (32%). Among patients with delay and discontinuation of treatment, 55% and 63% of patients, respectively, were (very) concerned about these consequences of the COVID-19 pandemic. Consequences were independent of regional differences in COVID-19 incidence. However, patients in regions with high COVID-19 incidence were significantly more concerned. Conclusion: This is the first study investigating perspectives of patients with cancer during the COVID-19 pandemic. The study demonstrates the significant impact of the COVID-19 crisis on oncological care, indicating the need for psycho-oncological support during this pandemic.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007070272&from=export>

RECORD 7

Reduced emergency department utilization during the early phase of the COVID-19 pandemic: viral fear or lockdown effect?

Barten D.G., Latten G.H.P., van Osch F.H.M.

Disaster medicine and public health preparedness (2020) (1-13). Date of Publication: 12 Aug 2020

OBJECTIVE: Since the beginning of the COVID-19 pandemic, several frontline workers have expressed their concerns about reduced emergency department (ED) utilization. We aimed to examine the changes in ED utilization during the early phase of the COVID-19 pandemic, in a country with a well-developed primary care system. METHODS: Retrospective analysis of ED utilization in three Dutch hospitals during a 60-day period starting on February 15, 2020. The identical period in 2019 was used as a reference. ED visits were labeled as COVID (defined as COVID-19 suspected) or non-COVID related. Admission rates were compared using chi-square tests, and the reduction in ED visits was assessed descriptively. RESULTS: During the study period, daily ED volume was 18% lower compared to 2019. ED utilization further declined (-29%) during lockdown. Combined admission rates were higher in 2020 compared to 2019 ($p < 0.001$), and were higher for COVID versus non-COVID ED visits ($p < 0.001$). CONCLUSIONS: ED utilization was markedly reduced during the local rise of COVID-19 in a region with a well-developed primary care system and relatively low ED self-referral rates. Although it cannot directly be concluded from the findings of our study, this observation likely reflects a complex interaction between pure lockdown effects and viral fear, which warrants further research.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632589453&from=export>

RECORD 8

Testing wastewater to detect severe acute respiratory syndrome coronavirus 2 in communities

Harries A.D., Dar Berger S., Satyanarayana S., Thekkur P., Kumar A.M.V.
Transactions of the Royal Society of Tropical Medicine and Hygiene (2020). Date of Publication: 11 Aug 2020

Research groups around the world are starting to analyse whether wastewater surveillance is a useful tool to monitor the presence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in communities. Reported studies from the Netherlands, USA, Australia and France have demonstrated that SARS-CoV-2 can be detected and quantified in wastewater, allowing the total number of community infections to be estimated as well as monitoring whether the virus has returned to a community after elimination. Further work is required to improve the quantification of virus, to better detect the virus at low levels and to ensure wastewater samples are representative of the community under surveillance.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632589743&from=export>

RECORD 9**Tai Chi for coronavirus disease 2019 in recovery period: A protocol for systematic review and meta analysis**

Shi Y., Wen D., Wang H., Zhang P., Zhong Y., Liu D., Zhou D.
Medicine (2020) 99:32 (e21459). Date of Publication: 7 Aug 2020

BACKGROUND: Assessing the effectiveness and safety of Tai Chi for coronavirus disease 2019 (COVID-19) in recovery period is the main purpose of this systematic review protocol. **METHODS:** The following electronic databases will be searched from inception to April 2020: MEDLINE, Ovid, EMBASE, the Cochrane Library, the Allied and Complementary Medicine Database, Chinese National Knowledge Infrastructure, Chinese Biomedical Literature Database, VIP Database and Wanfang Database. In addition, Clinical trial registries, like the Chinese Clinical Trial Registry, the Netherlands National Trial Register and ClinicalTrials.gov, will be searched for ongoing trials with unpublished data. No language restrictions will be applied. The primary outcome will be the time of disappearance of main symptoms (including fever, asthenia, cough disappearance rate, and temperature recovery time), and serum cytokine levels. The secondary outcome will be the accompanying symptoms (such as myalgia, expectoration, stuffiness, runny nose, pharyngalgia, anhelation, chest distress, dyspnea, crackles, headache, nausea, vomiting, anorexia, diarrhea) disappear rate, negative COVID-19 results rate on 2 consecutive occasions (not on the same day), CT image improvement, average hospitalization time, occurrence rate of common type to severe form, clinical cure rate, and mortality. Two independent reviewers will conduct the study selection, data extraction and assessment. Review manager software V 5.3 will be used for the assessment of risk of bias and data synthesis. **RESULTS:** The results will provide a high-quality synthesis of current evidence for researchers in this subject area.



CONCLUSION: The conclusion of the study will provide an evidence to judge whether Tai Chi is effective and safe for COVID-19 in recovery period. **ETHICS AND DISSEMINATION:** This protocol will not evaluate individual patient information or infringe patient rights and therefore does not require ethical approval. Results from this review will be disseminated through peer-reviewed journals and conference reports. PROSPERO registration number CRD42020181456.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632561025&from=export>

RECORD 10

Loneliness and mental health during the COVID-19 pandemic: A study among Dutch older adults

van Tilburg T.G., Steinmetz S., Stolte E., van der Roest H., de Vries D.H.
The journals of gerontology. Series B, Psychological sciences and social sciences (2020). Date of Publication: 5 Aug 2020

OBJECTIVES: With the spread of COVID-19, the Netherlands implemented a policy to keep citizens physically distanced. We hypothesize that consequent reduction in the frequency of social contacts, personal losses and the experience of general threats in society reduced well-being. **METHODS:** Data were collected from 1,679 Dutch community-dwelling participants aged 65 to 102 years old comprising a longitudinal online panel. Social and emotional loneliness and mental health were measured in May 2020, i.e., two months after the implementation of the measures, and earlier in October and November 2019. **RESULTS:** In this pandemic, not only loneliness of older people increased, but mental health remained roughly stable. The policy measures for physical distancing did not cause much social isolation but personal losses, worries about the pandemic, and a decline in trust in societal institutions were associated with increased mental health problems and especially emotional loneliness. **DISCUSSION:** The consequences of long-term social isolation and well-being must be closely monitored.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632545526&from=export>

RECORD 11

Digital Inequality During a Pandemic: Differences in COVID-19-Related Internet Uses and Outcomes among the General Population

van Deursen A.J.A.M.
Journal of medical Internet research (2020). Date of Publication: 3 Aug 2020

BACKGROUND: The World Health Organization (WHO) considers the Coronavirus disease (COVID-19) as a public emergency threatening global health. In the current investigation, we focus on the public's need for online information and communication during the crisis. From digital inequality research, we know that internet access is not



evenly distributed among the general population. **OBJECTIVE:** To provide a timely understanding of how different people use the internet for information and communication needs, and what outcomes they gain therefrom in relation to the COVID-19 pandemic. To reveal to what extent gender, age, personality, health, literacy, education, economic and social resources, internet attitude, material internet access, and internet skills remain important for obtaining internet outcomes after people are involved in the corresponding uses. **METHODS:** This study uses an online survey and draws upon a sample collected in the Netherlands. We obtained a dataset with 1,733 respondents over the age of 18. **RESULTS:** Men are more likely to be involved in COVID-19 communication uses. Age is positively related to COVID-19 information uses and negatively to both outcomes. Agreeableness is negatively related to both outcomes and to information uses. Neuroticism is positively related to all uses and communication outcomes. Conscientiousness is not related to any of the uses and outcomes. Introversion is negatively related to COVID-19 outcomes. Finally, openness relates positively to all information uses and both outcomes. Physical health has a negative relation to both outcomes. Health perception contributes positively to information uses and both outcomes. Traditional literacy has a positive relation to information uses and both outcomes. Education has a positive relationship with COVID-19 information and communication uses. Economic and social resources did not play a role. Internet attitude is positively related to information uses and outcomes, but negatively to communication uses and outcomes. Material access and internet contributed to all uses and outcomes. Finally, several of the between indicators and outcomes became insignificant after accounting for engaging in internet uses. **CONCLUSIONS:** Digital inequality is a major concern among national and international scholars and policymakers. This contribution aimed to provide a broader understanding in the case of a major health pandemic by using the ongoing COVID-19 crisis as a context for the empirical work. Several groups of people were identified as vulnerable, for example the elderly, lower educated, those with physical health problems, low literacy levels, or low levels of internet skills. The general conclusion is that those who are already relatively better off are more likely to use the internet's information and communication opportunities to their benefit in a health pandemic, while the more disadvantaged individuals are less likely to take advantage. This makes the COVID-19 crisis also an enforcer of existing inequalities.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632536585&from=export>

RECORD 12

Emotional eating in pregnant women during the covid-19 pandemic and its association with dietary intake and gestational weight gain

Zhang J., Zhang Y., Huo S., Ma Y., Ke Y., Wang P., Zhao A.

Nutrients (2020) 12:8 (1-12) Article Number: 2250. Date of Publication: 1 Aug 2020

Reproductive health is a significant public health issue during pandemics; however, the impacts of the novel 2019 coronavirus disease (COVID-19) on noninfected pregnant



women are still unknown. This study intends (1) to examine whether emotional eating (EE) occurred during the pandemic triggered by disease concerns and (2) to explore the associations among EE, dietary changes, and gestational weight gain (GWG). Based on an online survey, 640 new mothers who experienced the lockdown in their third trimester were recruited from seven provinces in China. EE was evaluated with the Chinese version of the Dutch Eating Behavior Questionnaire, EE domain. A self-designed e-questionnaire was used to collect the data of participants on the sociodemographic characteristics, concerns about the COVID-19 pandemic, maternity information, physical activities, and dietary changes during lockdown. The results show that the average EE score was 26.5 ± 8.3 , and women living in a severely affected area, who are very worried about the pandemic and who had less physical activity had a higher tendency of EE. Although there is a dietary pattern changed during pandemic, the average GWG in the studied group was in the normal range. However, a higher EE score was associated with a significant excess of GWG in women not from Wuhan (EE score 33–65 vs. 13–22: adjusted OR, 95% Confidence Interval (CI) = 1.90, 1.08–3.32). The sensitivity analysis that additionally adjusted for the pregestational body mass index and gestational metabolic disease was consistent with this result. The mediation model was also examined and showed that, after adjusting for living area and exercise, EE was associated with significantly increased consumption of cereals (EE score 33–65 vs. 13–22: adjusted OR, 95% CI = 2.22, 1.29–3.82) and oil (EE score 33–65 vs. 13–22: adjusted OR, 95% CI = 3.03, 1.06–8.69) but decreased consumption of fish and seafood (EE score 33–65 vs. 13–22: adjusted OR, 95% CI = 1.88, 1.14–3.11; 23–32 vs. 13–22: adjusted OR, 95% CI = 1.79, 1.20–2.66). In conclusion, this study indicated that EE occurred in a proportional number of pregnant women during the COVID-19 pandemic and is associated with excess GWG mediated by increased intake of certain foods. The findings suggest the need for psychosocial and nutritional education and interventions during pregnancy checkups. Further studies are needed to determine modifiable psychosocial predictors and potential nutritional concerns in pregnant women during disease outbreaks.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2004806239&from=export>

RECORD 13

Chloroquine Dosing Recommendations for Pediatric COVID-19 Supported by Modeling and Simulation

Verscheijden L.F.M., van der Zanden ^{5.1.26}, ^{5.1.26} Bussel L.P.M., de Hoop-Sommen M., Russel F.G.M., Johnson T.N., de Wildt S.N.

Clinical Pharmacology and Therapeutics (2020) 108:2 (248-252). Date of Publication: 1 Aug 2020

As chloroquine (CHQ) is part of the Dutch Centre for Infectious Disease Control coronavirus disease 2019 (COVID-19) experimental treatment guideline, pediatric dosing guidelines are needed. Recent pediatric data suggest that existing World Health Organization (WHO) dosing guidelines for children with malaria are suboptimal. The aim



of our study was to establish best-evidence to inform pediatric CHQ doses for children infected with COVID-19. A previously developed physiologically-based pharmacokinetic (PBPK) model for CHQ was used to simulate exposure in adults and children and verified against published pharmacokinetic data. The COVID-19 recommended adult dosage regimen of 44 mg/kg total was tested in adults and children to evaluate the extent of variation in exposure. Based on differences in area under the concentration-time curve from zero to 70 hours (AUC_{0-70h}) the optimal CHQ dose was determined in children of different ages compared with adults. Revised doses were re-introduced into the model to verify that overall CHQ exposure in each age band was within 5% of the predicted adult value. Simulations showed differences in drug exposure in children of different ages and adults when the same body-weight based dose is given. As such, we propose the following total cumulative doses: 35 mg/kg (CHQ base) for children 0–1 month, 47 mg/kg for 1–6 months, 55 mg/kg for 6 months–12 years, and 44 mg/kg for adolescents and adults, not to exceed 3,300 mg in any patient. Our study supports age-adjusted CHQ dosing in children with COVID-19 in order to avoid suboptimal or toxic doses. The knowledge-driven, model-informed dose selection paradigm can serve as a science-based alternative to recommend pediatric dosing when pediatric clinical trial data is absent.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2004839872&from=export>

RECORD 14

SARS-CoV-2 viral spike G614 mutation exhibits higher case fatality rate

Becerra-Flores M., ^{5,1,2e} T.

International Journal of Clinical Practice (2020) 74:8 Article Number: e13525. Date of Publication: 1 Aug 2020

Aim: The COVID-19 pandemic is caused by infection with the SARS-CoV-2 virus. The major mutation detected to date in the SARS-CoV-2 viral envelope spike protein, which is responsible for virus attachment to the host and is also the main target for host antibodies, is a mutation of an aspartate (D) at position 614 found frequently in Chinese strains to a glycine (G). We sought to infer health impact of this mutation. **Result:** Increased case fatality rate correlated strongly with the proportion of viruses bearing G614 on a country by country basis. The amino acid at position 614 occurs at an internal protein interface of the viral spike, and the presence of G at this position was calculated to destabilise a specific conformation of the viral spike, within which the key host receptor binding site is more accessible. **Conclusion:** These results imply that G614 is a more pathogenic strain of SARS-CoV-2, which may influence vaccine design. The prevalence of this form of the virus should also be included in epidemiologic models predicting the COVID-19 health burden and fatality over time in specific regions. Physicians should be aware of this characteristic of the virus to anticipate the clinical course of infection.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005143599&from=>

[export](#)**RECORD 15****Regional BCG vaccination policy in former East- and West Germany may impact on both severity of SARS-CoV-2 and incidence of childhood leukemia**Hauer J., Fischer U., ^{5.1.2e} F., Borkhardt A.*Leukemia* (2020) 34:8 (2217-2219). Date of Publication: 1 Aug 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005253053&from=export>**RECORD 16****"I don't know what lockdown means": Difficulty reading and writing in times of corona****"Ik weet niet wat lock-down betekent": Moeite met lezen en schrijven in tijden van corona**

van den Muijsenbergh M., Gingnagel D., Duijnhoven T., Dees M.

Huisarts en Wetenschap (2020) 63:8 (46-48). Date of Publication: 1 Aug 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005480665&from=export>**RECORD 17****Oseltamivir in human coronavirus infection: Post-hoc analysis of 2016-2018 data
Oseltamivir bij infectie door een humaan coronavirus: Post-hocanalyse van gegevens uit 2016-2018**van der Velden A., ^{5.1.2e} ^{1.2}, Cianci D., Bongard E., Saville B., Ieven M., ^{5.1.2e}^{5.1.2e}, Butler C.C., Coenen S.*Huisarts en Wetenschap* (2020) 63:8 (24-26). Date of Publication: 1 Aug 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005493753&from=export>**RECORD 18****Immediate impact of COVID-19 on transplant activity in the Netherlands**

de Vries A.P.J., Alwayn I.P.J., Hoek R.A.S., van den Berg A.P., Ultee F.C.W., Vogelaar

S.M., Haase-Kromwijk B.J.J.M., Heemskerk M.B.A., Hemke A.C., Nijboer W.N.,

Schaefer B.S., Kuiper M.A., de Jonge J., van der Kaaij N.P., Reinders M.E.J.

Transplant Immunology (2020) 61 Article Number: 101304. Date of Publication: 1 Aug 2020

The rapid emergence of the COVID-19 pandemic is unprecedented and poses an



unparalleled obstacle in the sixty-five year history of organ transplantation. Worldwide, the delivery of transplant care is severely challenged by matters concerning - but not limited to - organ procurement, risk of SARS-CoV-2 transmission, screening strategies of donors and recipients, decisions to postpone or proceed with transplantation, the attributable risk of immunosuppression for COVID-19 and entrenched health care resources and capacity. The transplant community is faced with choosing a lesser of two evils: initiating immunosuppression and potentially accepting detrimental outcome when transplant recipients develop COVID-19 versus postponing transplantation and accepting associated waitlist mortality. Notably, prioritization of health care services for COVID-19 care raises concerns about allocation of resources to deliver care for transplant patients who might otherwise have excellent 1-year and 10-year survival rates. Children and young adults with end-stage organ disease in particular seem more disadvantaged by withholding transplantation because of capacity issues than from medical consequences of SARS-CoV-2. This report details the nationwide response of the Dutch transplant community to these issues and the immediate consequences for transplant activity. Worryingly, there was a significant decrease in organ donation numbers affecting all organ transplant services. In addition, there was a detrimental effect on transplantation numbers in children with end-organ failure. Ongoing efforts focus on mitigation of not only primary but also secondary harm of the pandemic and to find right definitions and momentum to restore the transplant programs.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005767804&from=export>

RECORD 19

Thromboembolic events in patients with SARS-CoV-2

Ng J.J., Choong A.M.T.L.

Journal of Vascular Surgery (2020) 72:2 (760-761). Date of Publication: 1 Aug 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005961287&from=export>

RECORD 20

Comparison of diagnostic accuracies of rapid serological tests and ELISA to molecular diagnostics in patients with suspected coronavirus disease 2019 presenting to the hospital

Ong D.S.Y., de Man S.J., 5.12e F.A., Koeleman J.G.M.

Clinical Microbiology and Infection (2020) 26:8 (1094.e7-1094.e10). Date of Publication: 1 Aug 2020

Objectives: To assess the diagnostic performance of rapid lateral flow immunochromatographic assays (LFAs) compared with an ELISA and nucleic acid amplification tests (NATs) in individuals with suspected coronavirus disease 2019 (COVID-19). Methods: Patients presenting to a Dutch teaching hospital were eligible



between 17 March and 10 April 2020, when they had respiratory symptoms that were suspected for COVID-19. The performances of six different LFAs were evaluated in plasma samples obtained on corresponding respiratory sample dates of NATs testing. Subsequently, the best performing LFA was evaluated in 228 patients and in 50 sera of a historical patient control group. Results: In the pilot analysis, sensitivity characteristics of LFA were heterogeneous, ranging from 2/20 (10%; 95% CI 0%–23%) to 11/20 (55%; 95% CI 33%–77%). In the total cohort, Orient Gene Biotech COVID-19 IgG/IgM Rapid Test LFA had a sensitivity of 43/99 (43%; 95% CI 34%–53%) and specificity of 126/129 (98%; 95% CI 95%–100%). Sensitivity increased to 31/52 (60%; 95% CI 46%–73%) in patients with at least 7 days of symptoms, and to 21/33 (64%; 95% CI 47%–80%) in patients with C-reactive protein (CRP) \geq 100 mg/L. Sensitivity and specificity of Wantai SARS-CoV-2 Ab ELISA was 59/95 (62%; 95% CI 52%–72%) and 125/128 (98%; 95% CI 95%–100%) in all patients, respectively, but sensitivity increased to 38/48 (79%; 95% CI 68%–91%) in patients with at least 7 days of symptoms. Conclusions: There is large variability in diagnostic test performance between rapid LFAs, but overall limited sensitivity and high specificity in acutely admitted patients. Sensitivity improved in patients with longer existing symptoms or high CRP. LFAs should only be considered as additional triage tools when these may lead to the improvement of hospital logistics.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006150279&from=export>

RECORD 21

International COVID-19 Palliative Care Guidance for Nursing Homes Leaves Key Themes Unaddressed

Gilissen J., Pivodic L., Unroe K.T., Block L.V.D.

Journal of Pain and Symptom Management (2020) 60:2 (e56-e69). Date of Publication: 1 Aug 2020

COVID-19 mortality disproportionately affects nursing homes, creating enormous pressures to deliver high-quality end-of-life care. Comprehensive palliative care should be an explicit part of both national and global COVID-19 response plans. Therefore, we aimed to identify, review, and compare national and international COVID-19 guidance for nursing homes concerning palliative care, issued by government bodies and professional associations. We performed a directed documentary and content analysis of newly developed or adapted COVID-19 guidance documents from across the world. Documents were collected via expert consultation and independently screened against prespecified eligibility criteria. We applied thematic analysis and narrative synthesis techniques. We identified 21 eligible documents covering both nursing homes and palliative care, from the World Health Organization (n = 3), and eight individual countries: U.S. (n = 7), The Netherlands (n = 2), Ireland (n = 1), U.K. (n = 3), Switzerland (n = 3), New Zealand (n = 1), and Belgium (n = 1). International documents focused primarily on infection prevention and control, including only a few sentences on palliative care-related topics. Palliative care themes most frequently mentioned across documents were end-of-life visits, advance care planning documentation, and clinical



decision making toward the end of life (focusing on hospital transfers). There is a dearth of comprehensive international COVID-19 guidance on palliative care for nursing homes. Most have a limited focus both regarding breadth of topics and recommendations made. Key aspects of palliative care, that is, symptom management, staff education and support, referral to specialist services or hospice, and family support, need greater attention in future guidelines.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006150671&from=export>

RECORD 22

COVID-19: Clinical Challenges in Dutch Geriatric Psychiatry

Naarding P., Oude Voshaar R.C., Marijnissen R.M.

American Journal of Geriatric Psychiatry (2020) 28:8 (839-843). Date of Publication: 1 Aug 2020

The COVID-19 pandemic has changed everyday life tremendously in a short period of time. After a brief timeline of the Dutch situation and our management strategy to adapt geriatric mental health care, we present a case-series to illustrate the specific challenges for geriatric psychiatrists.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006788890&from=export>

RECORD 23

The Post-Acute and Long-Term Care Crisis in the Aftermath of COVID-19: A Dutch Perspective

Spaetgens B., Brouns S.H., Schols J.M.G.A.

Journal of the American Medical Directors Association (2020) 21:8 (1171-1172). Date of Publication: 1 Aug 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007238142&from=export>

RECORD 24

CO-RADS: A Categorical CT Assessment Scheme for Patients Suspected of Having COVID-19-Definition and Evaluation

Prokop M., van Everdingen W., van Rees Vellinga T., Quarles van Ufford H., Stöger L., Beenen L., Geurts B., Gietema H., Krdzalic J., Schaefer-Prokop C., van Ginneken B., Brink M.

Radiology (2020) 296:2 (E97-E104). Date of Publication: 1 Aug 2020

Background A categorical CT assessment scheme for suspicion of pulmonary



involvement of coronavirus disease 2019 (COVID-19) provides a basis for gathering scientific evidence and improved communication with referring physicians. Purpose To introduce the COVID-19 Reporting and Data System (CO-RADS) for use in the standardized assessment of pulmonary involvement of COVID-19 on unenhanced chest CT images and to report its initial interobserver agreement and performance. Materials and Methods The Dutch Radiological Society developed CO-RADS based on other efforts for standardization, such as the Lung Imaging Reporting and Data System or Breast Imaging Reporting and Data System. CO-RADS assesses the suspicion for pulmonary involvement of COVID-19 on a scale from 1 (very low) to 5 (very high). The system is meant to be used in patients with moderate to severe symptoms of COVID-19. The system was evaluated by using 105 chest CT scans of patients admitted to the hospital with clinical suspicion of COVID-19 and in whom reverse transcription-polymerase chain reaction (RT-PCR) was performed (mean, 62 years \pm 16 [standard deviation]; 61 men, 53 with positive RT-PCR results). Eight observers used CO-RADS to assess the scans. Fleiss κ value was calculated, and scores of individual observers were compared with the median of the remaining seven observers. The resulting area under the receiver operating characteristics curve (AUC) was compared with results from RT-PCR and clinical diagnosis of COVID-19. Results There was absolute agreement among observers in 573 (68.2%) of 840 observations. Fleiss κ value was 0.47 (95% confidence interval [CI]: 0.45, 0.47), with the highest κ value for CO-RADS categories 1 (0.58, 95% CI: 0.54, 0.62) and 5 (0.68, 95% CI: 0.65, 0.72). The average AUC was 0.91 (95% CI: 0.85, 0.97) for predicting RT-PCR outcome and 0.95 (95% CI: 0.91, 0.99) for clinical diagnosis. The false-negative rate for CO-RADS 1 was nine of 161 cases (5.6%; 95% CI: 1.0%, 10%), and the false-positive rate for CO-RADS category 5 was one of 286 (0.3%; 95% CI: 0%, 1.0%). Conclusion The coronavirus disease 2019 (COVID-19) Reporting and Data System (CO-RADS) is a categorical assessment scheme for pulmonary involvement of COVID-19 at unenhanced chest CT that performs very well in predicting COVID-19 in patients with moderate to severe symptoms and has substantial interobserver agreement, especially for categories 1 and 5. © RSNA, 2020 Online supplemental material is available for this article.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632412224&from=export>

RECORD 25

Association between the spread of COVID-19 and weather-climatic parameters

Carta M.G., Scano A., Lindert J., Bonanno S., Rinaldi L., Fais S., Orrù G.

European review for medical and pharmacological sciences (2020) 24:15 (8226-8231).

Date of Publication: 1 Aug 2020

OBJECTIVE: To explore whether the climate has played a role in the COVID-19 outbreak, we compared virus lethality in countries closer to the Equator with others. Lethality in European territories and in territories of some nations with a non-temperate climate was also compared. MATERIALS AND METHODS: Lethality was calculated as the rate of deaths in a determinate moment from the outbreak of the pandemic out of



the total of identified positives for COVID-19 in a given area/nation, based on the COVID-John Hopkins University website. Lethality of countries located within the 5th parallels North/South on 6 April and 6 May 2020, was compared with that of all the other countries. Lethality in the European areas of The Netherlands, France and the United Kingdom was also compared to the territories of the same nations in areas with a non-temperate climate. RESULTS: A lower lethality rate of COVID-19 was found in Equatorial countries both on April 6 (OR=0.72 CI 95% 0.66-0.80) and on May 6 (OR=0.48, CI 95% 0.47-0.51), with a strengthening over time of the protective effect. A trend of higher risk in European vs. non-temperate areas was found on April 6, but a clear difference was evident one month later: France (OR=0.13, CI 95% 0.10-0.18), The Netherlands (OR=0.5, CI 95% 0.3-0.9) and the UK (OR=0.2, CI 95% 0.01-0.51). This result does not seem to be totally related to the differences in age distribution of different sites. CONCLUSIONS: The study does not seem to exclude that the lethality of COVID-19 may be climate sensitive. Future studies will have to confirm these clues, due to potential confounding factors, such as pollution, population age, and exposure to malaria.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632564869&from=export>

RECORD 26

The vascular nature of COVID-19

Oudkerk M., Kuijpers D., Oudkerk S.F., van Beek E.J.

The British journal of radiology (2020) (20200718). Date of Publication: 31 Jul 2020

A potential link between mortality, D-dimer values and a prothrombotic syndrome has been reported in COVID-19 patients. The National Institute for Public Health of the Netherlands published a report for guidance on diagnosis, prevention and treatment of thromboembolic complications in COVID-19 with a new vascular disease concept. The analysis of all available current medical, laboratory and imaging data on COVID-19 confirms that symptoms and diagnostic tests can not be explained by impaired pulmonary ventilation. Further imaging and pathological investigations confirm that the COVID-19 syndrome is explained by perfusion disturbances first in the lung, but consecutively in all organs of the body. Damage of the microvasculature by SARS 1 and SARS 2 (COVID-19) viruses causes microthrombotic changes in the pulmonary capillaries and organs leading to macrothrombosis and emboli. Therefore anticoagulant prophylaxis, close lab and CT imaging monitoring and early anticoagulant therapy are indicated.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632496506&from=export>

RECORD 27

Validation of the Impact of Event Scale With Modifications for COVID-19 (IES-

COVID19)

Vanaken L., Scheveneels S., Belmans E., Hermans D.

Frontiers in Psychiatry (2020) 11 Article Number: 738. Date of Publication: 28 Jul 2020

Viral outbreaks can be experienced as disruptive and can be associated with trauma-related stress symptoms. In the current study, we adjusted the Dutch version of the Impact of Event Scale (IES) to assess traumatic stress symptoms related to the impact of the COVID-19 outbreak. The psychometric properties of this Impact of Event Scale with modifications for COVID-19 (IES-COVID19) were investigated by administering the IES-COVID19 to 380 university students who participated during the early stage of the COVID-19 outbreak, upon invitation via e-mail. Using confirmatory factor analysis, the factor structure of the IES-COVID19 was found to be similar to the original IES, indicating two latent factors: intrusion and avoidance, $\chi^2(85) = 147.51$, CFI = .92, TLI = .90, RMSEA = .044, SRMR = .049. Cronbach's alpha showed acceptable internal consistency of the total IES-COVID19, $\alpha = .75$. Pearson's correlations of the IES-COVID19 over time were also sufficient, demonstrating adequate test-retest reliability, $r = .62$. Significant correlations (ranging between .15 and .50) between the IES-COVID19 and symptoms of depression, anxiety, stress, stress-related rumination, as well as negative social interactions, demonstrate adequate convergent validity. Overall, the IES-COVID19 shows to be a valid and reliable measure that can be utilized to investigate trauma-related stress symptoms of intrusion and avoidance related to the short- and long-term impact of the COVID-19 outbreak.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632540530&from=export>

RECORD 28**Presence of Genetic Variants Among Young Men With Severe COVID-19**

van der Made C.I., Simons A., Schuurs-Hoeijmakers J., van den Heuvel G., Mantere T., Kersten S., van Deuren R.C., Steehouwer M., van Reijmersdal S.V., Jaeger M., Hofste T., Astuti G., Corominas Galbany J., van der Schoot V., van der Hoeven H., Hagmolen Of Ten Have W., Klijn E., van den Meer C., Fiddelaers J., de Mast Q., Bleeker-Rovers C.P., Joosten L.A.B., Yntema H.G., Gilissen C., Nelen M., van der Meer J.W.M., Brunner H.G., Netea M.G., van de Veerdonk F.L., Hoischen A.

JAMA (2020). Date of Publication: 24 Jul 2020

Importance: Severe coronavirus disease 2019 (COVID-19) can occur in younger, predominantly male, patients without preexisting medical conditions. Some individuals may have primary immunodeficiencies that predispose to severe infections caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Objective: To explore the presence of genetic variants associated with primary immunodeficiencies among young patients with COVID-19. Design, Setting, and Participants: Case series of pairs of brothers without medical history meeting the selection criteria of young (age <35 years) brother pairs admitted to the intensive care unit (ICU) due to severe COVID-19. Four men from 2 unrelated families were admitted to the ICUs of 4 hospitals in the



Netherlands between March 23 and April 12, 2020. The final date of follow-up was May 16, 2020. Available family members were included for genetic variant segregation analysis and as controls for functional experiments. Exposure: Severe COVID-19. Main Outcome and Measures: Results of rapid clinical whole-exome sequencing, performed to identify a potential monogenic cause. Subsequently, basic genetic and immunological tests were performed in primary immune cells isolated from the patients and family members to characterize any immune defects. Results: The 4 male patients had a mean age of 26 years (range, 21-32), with no history of major chronic disease. They were previously well before developing respiratory insufficiency due to severe COVID-19, requiring mechanical ventilation in the ICU. The mean duration of ventilatory support was 10 days (range, 9-11); the mean duration of ICU stay was 13 days (range, 10-16). One patient died. Rapid clinical whole-exome sequencing of the patients and segregation in available family members identified loss-of-function variants of the X-chromosomal TLR7. In members of family 1, a maternally inherited 4-nucleotide deletion was identified (c.2129_2132del; p.[Gln710Argfs*18]); the affected members of family 2 carried a missense variant (c.2383G>T; p.[Val795Phe]). In primary peripheral blood mononuclear cells from the patients, downstream type I interferon (IFN) signaling was transcriptionally downregulated, as measured by significantly decreased mRNA expression of IRF7, IFNB1, and ISG15 on stimulation with the TLR7 agonist imiquimod as compared with family members and controls. The production of IFN- γ , a type II IFN, was decreased in patients in response to stimulation with imiquimod. Conclusions and Relevance: In this case series of 4 young male patients with severe COVID-19, rare putative loss-of-function variants of X-chromosomal TLR7 were identified that were associated with impaired type I and II IFN responses. These preliminary findings provide insights into the pathogenesis of COVID-19.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632440224&from=export>

RECORD 29

The Contribution of the Age Distribution of Cases to COVID-19 Case Fatality Across Countries: A 9-Country Demographic Study

Sudharsanan N., Didzun O., Bärnighausen T., Geldsetzer P.

Annals of internal medicine (2020). Date of Publication: 22 Jul 2020

BACKGROUND: There is wide variation in coronavirus disease 2019 (COVID-19) case-fatality rates (CFRs) across countries, leading to uncertainty about the true lethality of the disease. A large part of this variation may be due to the ages of individuals who are tested and identified. **OBJECTIVE:** To measure the contribution of distortions from the age distributions of confirmed cases to CFRs within and across populations. **DESIGN:** Cross-sectional demographic study using aggregate data on COVID-19 cases and deaths by age. **SETTING:** Population-based data from China, France, Germany, Italy, the Netherlands, South Korea, Spain, Switzerland, and the United States. **PARTICIPANTS:** All individuals with confirmed COVID-19, as reported by each country as of 19 April 2020 (N = 1 223 261). **MEASUREMENTS:** Age-specific COVID-19 CFRs



and age-specific population shares by country. RESULTS: The overall observed CFR varies widely, with the highest rates in Italy (9.3%) and the Netherlands (7.4%) and the lowest rates in South Korea (1.6%) and Germany (0.7%). Adjustment for the age distribution of cases explains 66% of the variation of across countries, with a resulting age-standardized median CFR of 1.9%. Among a larger sample of 95 countries, the observed variation in COVID-19 CFRs is 13 times larger than what would be expected on the basis of just differences in the age-composition of countries. LIMITATION: The age-adjusted rates assume that, conditional on age, COVID-19 mortality among diagnosed cases is the same as that among undiagnosed cases and that individuals of all ages are equally susceptible to severe acute respiratory syndrome coronavirus 2 infection. CONCLUSION: Selective testing and identifying of older cases considerably warps estimates of the lethality of COVID-19 within populations and comparisons across countries. Removing age distortions and focusing on differences in age-adjusted case fatality will be essential for accurately comparing countries' performance in caring for patients with COVID-19 and for monitoring the epidemic over time. PRIMARY FUNDING SOURCE: Alexander von Humboldt Foundation.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632424921&from=export>

RECORD 30

Therapy needs and possibilities in pediatric rehabilitation during the Covid-19 lockdown in the Netherlands

Alsem M., Berkhout J., Buizer A.

Child: care, health and development (2020). Date of Publication: 21 Jul 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632415514&from=export>

RECORD 31

COVID-19 in nursing homes A study of diagnosis, symptomatology and disease course

Covid-19 in verpleeghuizen

Rutten J.J.S., van Loon A.M., Joling K.J., 5.12e, van Buul L.W., Hertogh C.M.P.M.

Nederlands tijdschrift voor geneeskunde (2020) 164. Date of Publication: 20 Jul 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632584562&from=export>

RECORD 32

Sex Differences in Mortality From COVID-19 Pandemic: Are Men Vulnerable and Women Protected?

Sharma G., Volgman A.S., Michos E.D.

JACC: Case Reports (2020) 2:9 (1407-1410). Date of Publication: 15 Jul 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006789239&from=export>

RECORD 33

Association of a Public Health Campaign about Coronavirus Disease 2019 Promoted by News Media and a Social Influencer with Self-reported Personal Hygiene and Physical Distancing in the Netherlands

Yousuf H., Corbin J., Sweep G., Hofstra M., Scherder E., Van Gorp E., Zwetsloot P.P., Zhao J., Van Rossum B., Jiang T., Lindemans J.-W., Narula J., Hofstra L.
JAMA Network Open (2020) 3:7 Article Number: e2014323. Date of Publication: 8 Jul 2020

Importance: In the absence of a vaccine and therapeutic agent, personal hygiene and physical distancing are essential measures to contain the coronavirus disease 2019 pandemic. Objective: To determine whether a social media campaign, targeted at the gaps in behavior on personal hygiene and physical distancing and distributed nationwide via digital news media, may be an effective method to improve behavior and help to inhibit person-to-person transmission of severe acute respiratory syndrome coronavirus 2. Design, Setting, and Participants: This survey study was designed to uncover self-reported gaps in behavior regarding personal hygiene and physical distancing in the Netherlands. A diagnostic survey was distributed by a large national newspaper (De Telegraaf) and a popular social influencer (Govert Sweep) on March 17, 2020, and was completed by 16072 participants. Analysis of these outcomes showed that coughing and sneezing in the elbow was done well, but that handwashing, face touching, and physical distancing showed serious gaps compared with advised behavior. This diagnostic information was used to design infographics and a video targeted at repairing these gaps in behavior. The video and infographics were distributed on a national level on March 21, 2020, followed by a postcampaign survey to measure the results on March 24, 2020. Data analysis was performed from March to April 2020. Exposure: Exposed participants were those who viewed the infographics and/or video. Main Outcomes and Measures: Improvement on the extent of handwashing in all areas, handwashing duration of 20 seconds or longer, awareness on face touching, and physical distancing were measured according to responses on the postcampaign survey. Results: A total of 17189 participants (mean [SD] age, 47.61 [13.57] years; 9100 women [52.9%]) responded to the postcampaign survey. The news article in De Telegraaf was read more than 2 million times, and the influencer video was watched more than 80000 times. Cross-sectional analysis of the postcampaign survey using logistic regression correcting for age, gender, and educational level showed that exposure to the video plus infographics (827 participants) (adjusted odds ratio [OR], 2.14; 95% CI, 1.83-2.50; $P < .001$) and to the infographics alone (11348 participants) (adjusted OR, 1.31; 95% CI, 1.22-1.40; $P < .001$) were positively associated with washing hands in all areas compared with the unexposed group (4751 participants). In



addition, exposure to the video plus infographics (adjusted OR, 1.86; 95% CI, 1.59-2.16; $P < .001$) and to the infographics alone (adjusted OR, 1.27; 95% CI, 1.19-1.36; $P < .001$) were positively associated with washing hands long enough compared with the unexposed group. Exposure to the video alone was not associated with improved handwashing. Compared with the unexposed group, exposure to the infographics alone and video plus infographics were associated with improvements in physical distancing when the participant had COVID-19 symptoms (infographics alone, adjusted OR, 1.10; 95% CI, 1.03-1.17; $P = .006$; video plus infographics, adjusted OR, 0.79; 95% CI, 0.69-0.91; $P = .001$) and face touching (infographics alone, adjusted OR, 1.29; 95% CI, 1.22-1.38; $P < .001$; infographics and video, adjusted OR, 1.49, 95% CI, 1.30-1.71; $P < .001$).
Conclusions and Relevance: These findings suggest that a targeted behavioral change campaign, promoted by a news platform and social media, was associated with self-reported improvement in personal hygiene with the aim to prevent person-to-person transmission of severe acute respiratory syndrome coronavirus 2. This method of evidence-based campaigning may be an effective way to improve critical public health issues, such as the coronavirus disease 2019 pandemic..

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632296233&from=export>

RECORD 34

COVID-19: patient zero in the Netherlands

COVID-19: patiënt nul in Nederland

Alderweireld C.E.A., Buiting A.G.M., Murk J.-L.A.N., Verweij J.J., Berrevoets M.A.H., van Kasteren M.E.E.

Nederlands tijdschrift voor geneeskunde (2020) 164. Date of Publication: 2 Jul 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632267754&from=export>

RECORD 35

Progression of dyspnea in COVID-19 patients: now what?

Toename van dyspneu bij covid-19-patiënten

Deenstra D.D., Nijziel M.R., Aldenkamp A.F., van Balkom R.H.H., Smeenk F.W.J.M.

Nederlands tijdschrift voor geneeskunde (2020) 164. Date of Publication: 2 Jul 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632585132&from=export>

RECORD 36

Use of Google Trends to investigate loss-of-smell-related searches during the COVID-19 outbreak

Walker A., Hopkins C., Surda P.

International Forum of Allergy and Rhinology (2020) 10:7 (839-847). Date of Publication: 1 Jul 2020

Background: Initial reports describing coronavirus 2019 (COVID-19) were dominated by the presence of cough, breathlessness, and fever; anecdotal reports suggested anosmia may also be a manifestation. We used Google Trends (GT) to investigate whether there was a surge in individuals searching for information related to smell loss during the COVID-19 epidemic in Italy, Spain, the United Kingdom, the United States, Germany, France, Iran, and The Netherlands. Methods: GT was used to explore internet activity related to loss of smell in the 8 aforementioned countries. Spearman rank analysis was performed to correlate loss-of-smell–relative search volumes (RSVs), with the increases of daily confirmed cases of COVID-19 and deaths attributed to disease. As a control event, we also performed analysis of smell-related searches during the last UK influenza epidemic of 2009. Results: In all 8 countries, we observed strong correlations between daily RSVs related to loss of smell, increases of daily COVID-19* cases and deaths ranging from 0.633 to 0.952. All correlations were statistically significant ($p < 0.05$). Conclusion: There is a strong correlation between the frequency of searches for smell-related information and the onset of COVID-19 infection in Italy, Spain, UK, USA, Germany, France, Iran, and The Netherlands. We hypothesize this may relate to a previously underrecognized symptom.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2004789520&from=export>

RECORD 37

The role of vitamin D in the prevention of coronavirus disease 2019 infection and mortality

Ilie P.C., Stefanescu S., Smith L.

Aging Clinical and Experimental Research (2020) 32:7 (1195-1198). Date of Publication: 1 Jul 2020

WHO declared SARS-CoV-2 a global pandemic. The present aim was to propose an hypothesis that there is a potential association between mean levels of vitamin D in various countries with cases and mortality caused by COVID-19. The mean levels of vitamin D for 20 European countries and morbidity and mortality caused by COVID-19 were acquired. Negative correlations between mean levels of vitamin D (average 56 mmol/L, STDEV 10.61) in each country and the number of COVID-19 cases/1 M (mean 295.95, STDEV 298.7, and mortality/1 M (mean 5.96, STDEV 15.13) were observed. Vitamin D levels are severely low in the aging population especially in Spain, Italy and Switzerland. This is also the most vulnerable group of the population in relation to COVID-19. It should be advisable to perform dedicated studies about vitamin D levels in COVID-19 patients with different degrees of disease severity.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2004869027&from=export>

RECORD 38**Mortality of people with intellectual disabilities during the 2017/2018 influenza epidemic in the Netherlands: potential implications for the COVID-19 pandemic**

Cuypers M., Schalk B.W.M., Koks-Leensen M.C.J., Nägele M.E., Bakker-van Gijssel E.J., Naaldenberg J., Leusink G.L.

Journal of Intellectual Disability Research (2020) 64:7 (482-488). Date of Publication: 1 Jul 2020

Background: Data on the development of Covid-19 among people with intellectual disabilities (IDs) are scarce and it is uncertain to what extent general population data applies to people with ID. To give an indication of possible implications, this study investigated excess mortality patterns during a previous influenza epidemic. Methods: Using Dutch population and mortality registers, a historical cohort study was designed to compare mortality during the 2017–2018 influenza epidemic with mortality in the same period in the three previous years. People with ID were identified by entitlements to residential ID-care services as retrieved from a national database. Results: Data covered the entire adult Dutch population (12.6 million; GenPop), of which 91 064 individuals were identified with an ID. During the influenza epidemic, mortality among people with ID increased almost three times as much than in the GenPop (15.2% vs. 5.4%), and more among male individuals with ID (+19.5%) than among female individuals with ID (+10.6%), as compared with baseline. In both cohorts, comparable increases in mortality within older age groups and due to respiratory causes were seen. Particularly in the ID-cohort, excess deaths also occurred in younger age groups, due to endocrine diseases and ID-specific causes. Conclusions: During the 2017–2018 influenza epidemic, excess mortality among people with ID was three times higher than in the general Dutch population, appeared more often at young age and with a broader range of underlying causes. These findings suggest that a pandemic may disproportionately affect people with ID while population data may not immediately raise warnings. Early detection of diverging patterns and faster implementation of tailored strategies therefore require collection of good quality data.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005094426&from=export>

RECORD 39**Thromboinflammation and the hypercoagulability of COVID-19**

Connors J.M., Levy J.H.

Journal of Thrombosis and Haemostasis (2020) 18:7 (1559-1561). Date of Publication: 1 Jul 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005096833&from=export>

RECORD 40

Personalized recovery of severe COVID19: Rehabilitation from the perspective of patient needs

bij de Vaate E., Gerrits K.H.L., Goossens P.H.

European Journal of Clinical Investigation (2020) 50:7 Article Number: e13325. Date of

Publication: 1 Jul 2020

EMBASE LINK<http://www.embase.com/search/results?subaction=viewrecord&id=L2005484222&from=export>**RECORD 41****BCG vaccination policy and preventive chloroquine usage: do they have an impact on COVID-19 pandemic?**

Sharma A., Kumar Sharma S., Shi Y., Bucci E., Carafoli E., Melino G., Bhattacharjee A., Das G.

Cell Death and Disease (2020) 11:7 Article Number: 516. Date of Publication: 1 Jul 2020

Coronavirus disease 2019 (COVID-19) is a severe acute respiratory syndrome caused by Coronavirus 2 (SARS-CoV-2). In the light of its rapid global spreading, on 11 March 2020, the World Health Organization has declared it a pandemic. Interestingly, the global spreading of the disease is not uniform, but has so far left some countries relatively less affected. The reason(s) for this anomalous behavior are not fully understood, but distinct hypotheses have been proposed. Here we discuss the plausibility of two of them: the universal vaccination with *Bacillus Calmette–Guerin* (BCG) and the widespread use of the antimalarial drug chloroquine (CQ). Both have been amply discussed in the recent literature with positive and negative conclusions: we felt that a comprehensive presentation of the data available on them would be useful. The analysis of data for countries with over 1000 reported COVID-19 cases has shown that the incidence and mortality were higher in countries in which BCG vaccination is either absent or has been discontinued, as compared with the countries with universal vaccination. We have performed a similar analysis of the data available for CQ, a widely used drug in the African continent and in other countries in which malaria is endemic; we discuss it here because CQ has been used as the drug to treat COVID-19 patients. Several African countries no longer recommend it officially for the fight against malaria, due to the development of resistance to *Plasmodium*, but its use across the continent is still diffuse. Taken together, the data in the literature have led to the suggestion of a possible inverse correlation between BCG immunization and COVID-19 disease incidence and severity.

EMBASE LINK<http://www.embase.com/search/results?subaction=viewrecord&id=L2005528939&from=export>**RECORD 42****Return to sports after COVID-19: a position paper from the Dutch Sports**



Cardiology Section of the Netherlands Society of Cardiology

Verwoert G.C., de Vries S.T., Bijsterveld N., Willems A.R., vd Borgh R., Jongman J.K., Kemps H.M.C., Snoek J.A., Rienks R., Jorstad H.T.
Netherlands Heart Journal (2020) 28:7-8 (391-395). Date of Publication: 1 Jul 2020

The coronavirus disease 2019 (COVID-19) pandemic has led to preventive measures worldwide. With the decline of infection rates, less stringent restrictions for sports and exercise are being implemented. COVID-19 is associated with significant cardiovascular complications; however there are limited data on cardiovascular complications and long-term outcomes in both competitive (elite) athletes and highly active individuals. Based on different categories of disease severity (asymptomatic, regional/systemic symptoms, hospitalisation, myocardial damage, and/or myocarditis), in this point-of-view article we offer the (sports) cardiologist or sports physician in the Netherlands a practical guide to pre-participation screening, and diagnostic and management strategies in all athletes >16 years of age after COVID-19 infection.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005563149&from=export>

RECORD 43

The Netherlands Heart Journal: special issue on COVID-19

Vendrik J., Piek J.J.
Netherlands Heart Journal (2020) 28:7-8 (361-362). Date of Publication: 1 Jul 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005596989&from=export>

RECORD 44

Recommendations on how to provide cardiac rehabilitation services during the COVID-19 pandemic

Kemps H.M.C., Brouwers R.W.M., 5.1.2e, Jorstad H.T., de Kluijver E.P., Kraaijenhagen R.A., Kuijpers P.M.J.C., van der Linde M.R., de Melker E., Rodrigo S.F., Spee R.F., Sunamura M., Vromen T., Wittekoek M.E.
Netherlands Heart Journal (2020) 28:7-8 (387-390). Date of Publication: 1 Jul 2020

The ongoing coronavirus disease 2019 (COVID-19) crisis is having a large impact on acute and chronic cardiac care. Due to public health measures and the reorganisation of outpatient cardiac care, traditional centre-based cardiac rehabilitation is currently almost impossible. In addition, public health measures are having a potentially negative impact on lifestyle behaviour and general well-being. Therefore, the Working Group of Cardiovascular Prevention and Rehabilitation of the Dutch Society of Cardiology has formulated practical recommendations for the provision of cardiac rehabilitation during the COVID-19 pandemic, by using telerehabilitation programmes without face-to-face contact based on current guidelines supplemented with new insights and experiences.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005596990&from=export>

RECORD 45**Confirmation of the high cumulative incidence of thrombotic complications in critically ill ICU patients with COVID-19: An updated analysis**

Klok F.A., Kruijff M.J.H.A., van der Meer N.J.M., Arbous M.S., Gommers D., Kant K.M., Kaptein F.H.J., van Paassen J., Stals M.A.M., Huisman M.V., Endeman H.
Thrombosis Research (2020) 191 (148-150). Date of Publication: 1 Jul 2020

Introduction: We recently reported a high cumulative incidence of thrombotic complications in critically ill patients with COVID-19 admitted to the intensive care units (ICUs) of three Dutch hospitals. In answering questions raised regarding our study, we updated our database and repeated all analyses. **Methods:** We re-evaluated the incidence of the composite outcome of symptomatic acute pulmonary embolism (PE), deep-vein thrombosis, ischemic stroke, myocardial infarction and/or systemic arterial embolism in all COVID-19 patients admitted to the ICUs of 2 Dutch university hospitals and 1 Dutch teaching hospital from ICU admission to death, ICU discharge or April 22nd 2020, whichever came first. **Results:** We studied the same 184 ICU patients as reported on previously, of whom a total of 41 died (22%) and 78 were discharged alive (43%). The median follow-up duration increased from 7 to 14 days. All patients received pharmacological thromboprophylaxis. The cumulative incidence of the composite outcome, adjusted for competing risk of death, was 49% (95% confidence interval [CI] 41–57%). The majority of thrombotic events were PE (65/75; 87%). In the competing risk model, chronic anticoagulation therapy at admission was associated with a lower risk of the composite outcome (Hazard Ratio [HR] 0.29, 95%CI 0.091–0.92). Patients diagnosed with thrombotic complications were at higher risk of all-cause death (HR 5.4; 95%CI 2.4–12). Use of therapeutic anticoagulation was not associated with all-cause death (HR 0.79, 95%CI 0.35–1.8). **Conclusion:** In this updated analysis, we confirm the very high cumulative incidence of thrombotic complications in critically ill patients with COVID-19 pneumonia.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005770816&from=export>

RECORD 46**Case fatality rate in patients with COVID-19 infection and its relationship with length of follow up**

Giorgi Rossi P., Broccoli S., Angelini P.
Journal of Clinical Virology (2020) 128 Article Number: 104415. Date of Publication: 1 Jul 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005795806&from=export>

[export](#)**RECORD 47****Multi-center evaluation of cepheid xpert® xpress SARS-CoV-2 point-of-care test during the SARS-CoV-2 pandemic**

Wolters F., van de Bovenkamp J., van den Bosch B., van den Brink S., Broeders M., Chung N.H., Favié B., Goderski G., Kuijpers J., Overdeest I., Rahamat-Langedoen J., Wijsman L., Melchers W.J., 5.1.2e
Journal of Clinical Virology (2020) 128 Article Number: 104426. Date of Publication: 1 Jul 2020

Background: With the outbreak of SARS-CoV-2, rapid diagnostics are paramount to contain the current pandemic. The routinely used realtime RT-PCR is sensitive, specific and able to process large batches of samples. However, turnaround time is long and in cases where fast obtained results are critical, molecular point of care tests (POCT) can be an alternative. Here we report on a multicenter evaluation of the Cepheid Xpert Xpress SARS-CoV-2 point-of-care test. Study design: The Xpert Xpress SARS-CoV-2 assay was evaluated against the routine in-house real-time RT-PCR assays in three medical microbiology laboratories in The Netherlands. A sensitivity and specificity panel was tested consisting of a dilution series of SARS-CoV-2 and ten samples containing SARS-CoV-2 and a range of other seasonal respiratory viruses. Additionally, 58 samples of patients positive for SARS-CoV-2 with different viral loads and 30 tested negative samples in all three Dutch laboratories using an in-house RT-PCR, were evaluated using Cepheids Xpert Xpress SARS-CoV-2 cartridges. Results: Xpert Xpress SARS-CoV-2 point of care test showed equal performance compared to routine in-house testing with a limit of detection (LOD) of 8.26 copies/mL. Other seasonal respiratory viruses were not detected. In clinical samples Xpert Xpress SARS-CoV-2 reaches an agreement of 100 % compared to all in-house RT-PCRs Conclusion: Cepheids GeneXpert Xpert Xpress SARS-CoV-2 is a valuable addition for laboratories in situations where rapid and accurate diagnostics are of the essence.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005856607&from=export>

RECORD 48**Preparedness of European diagnostic microbiology labs for detection of SARS-CoV-2, March 2020**

Matheussen V., Loens K., Lammens C., Vilken T., Koopmans M., 5.1.2e 12, Ieven M.
Journal of Clinical Virology (2020) 128 Article Number: 104432. Date of Publication: 1 Jul 2020

Background: To track the European spread of SARS-CoV-2, decentralized testing became necessary and test capacity needed to be expanded outside reference



laboratories rapidly. Methods: We assessed via an online questionnaire the preparedness of European hospital laboratories for detection of SARS-CoV-2 and listed the main drawbacks for implementation. Results: Forty-five percent of the surveyed labs had a test in place by March 26th which is well into the first wave of the pandemic in most countries. Conclusions: The main implementation barriers for introduction of a SARSCoV-2 molecular assay in European diagnostic laboratories were availability of positive controls and a specificity panel.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005871533&from=export>

RECORD 49**Point of View of the Dutch Society for Gynaecological Endoscopy on Surgery during the Coronavirus 2019 Crisis**

Radder C., de Leeuw R., Coppus S.

Journal of Minimally Invasive Gynecology (2020) 27:5 (1217-1218). Date of Publication: 1 Jul 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006090694&from=export>

RECORD 50**In-hospital verification of non-CE-marked respiratory protective devices to ensure safety of healthcare staff during the COVID-19 outbreak**

van Wezel R.A.C., Vrancken A.C.T., Ernest M., Laurensse J., van Doornmalen Gomez Hoyos J.P.C.M.

Journal of Hospital Infection (2020) 105:3 (447-453). Date of Publication: 1 Jul 2020

Background: Due to the coronavirus disease 2019 (COVID-19) pandemic, a shortage of respirators is occurring worldwide; more specifically, Conformité Européene (CE)-certified Filtering Face-Piece (FFP2) respirators. This has resulted in an increased supply to hospitals of alternative respirators of uncertain quality. Nevertheless, the quality of the respirators used by our healthcare workers must be ensured. Aim: To develop a protocol to ensure the quality of respiratory protective devices for healthcare workers nursing and treating patients with possible or confirmed COVID-19 in the Catharina Hospital. Methods: A protocol and criteria based on applicable standards were developed to ensure the quality of respirators. The protocol has been implemented at the Catharina Hospital and includes verification of the documents accompanying the respirator, visual inspection of the respirator, and a test for total inward leak of particles into respirators. Findings: Sixty-seven percent of the respirator brands and types received in the Catharina Hospital did not meet quality criteria. Conclusion: With a simple verification protocol the quality of the respirators can be checked and guaranteed while there is a shortage of the CE-approved respirators that are normally used. With this in-hospital protocol, healthcare workers can be equipped with safe-to-use

respirators.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006732621&from=export>

RECORD 51

Pre-outbreak determinants of perceived risks of corona infection and preventive measures taken : A prospective population-based study

van der Velden P.G., Marchand M., Cuelenaere B., Das M.

PLoS ONE (2020) 15:7 July Article Number: e0234600. Date of Publication: 1 Jul 2020

Objectives Assess how people perceive the risks of coronavirus infection, whether people take preventive measures, and which pre-outbreak factors contribute to the perceived risks and measures taken, such as pre-outbreak respiratory problems, heart problems, diabetes, anxiety and depression symptoms, loneliness, age, gender, marital and employment status and education level. **Methods** Data were collected in the longitudinal LISS panel, based on a random sample of the Dutch population. The coronavirus survey started on March 2, and the data collection ended on March 17 2020. Data were linked with surveys on health and social integration conducted at the end of 2019 (Nstudy sample = 3,540). **Results** About 15% perceived the risk of infection as high, and 11% the risk becoming ill when infected. Multivariable logistic regression analyses showed the following. Older age-groups perceived the risk for coronavirus infection as lower (all adjusted Odd Ratio's [aOR] .070). In total, 43.8% had taken preventive measures, especially females (aOR = 1.46, 95% CI = 1.26–1.70). Those with lower education levels less often used preventive measures (aOR = 0.55, 95% CI = 0.45–0.67). Those with pre-outbreak respiratory problems (aOR = 2.75, 95% CI = 2.11–3.57), heart problems (aOR = 1.97, 95% CI = 1.34–2.92) and diabetes (aOR = 3.12, 95% CI = 2.02–4.82) perceived the risk becoming ill when infected as higher than others. However, respondents with pre-outbreak respiratory problems and diabetes did not more often take preventive measures. **Conclusions** Vulnerable patients more often recognize that they are at risk becoming ill when infected by the coronavirus, but many do not take preventive measures. Interventions to stimulate the use of preventive measures should pay additional attention to physically vulnerable patients, males and those with lower education levels.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006955928&from=export>

RECORD 52

Allowing Visitors Back in the Nursing Home During the COVID-19 Crisis: A Dutch National Study Into First Experiences and Impact on Well-Being

Verbeek H., Gerritsen D.L., Backhaus R., de Boer B.S., Koopmans R.T.C.M., Hamers J.P.H.

Journal of the American Medical Directors Association (2020) 21:7 (900-904). Date of

Publication: 1 Jul 2020

Objectives: To prevent and control COVID-19 infections, nursing homes across the world have taken very restrictive measures, including a ban for visitors. These restrictive measures have an enormous impact on residents' well-being and pose dilemmas for staff, although primary data are lacking. A Dutch guideline was developed to cautiously open nursing homes for visitors during the COVID-19 pandemic. This study reports the first findings on how the guideline was applied in the local context; the compliance to local protocols; and the impact on well-being of residents, their family caregivers, and staff. **Design:** A mixed-methods cross-sectional study was conducted. **Setting and Participants:** In total, 26 nursing homes were permitted to enlarge their possibilities for allowing visitors in their facility. These nursing homes were proportionally representative of the Netherlands as they were selected by their local Area Health Authority for participation. At each nursing home, a contact person was selected for participation in the current study. **Methods:** A mixed-methods cross-sectional study was conducted, consisting of questionnaire, telephone interviews, analyses of documentation (ie, local visiting protocols), and a WhatsApp group. **Results:** Variation in local protocols was observed, for example, related to the use of personal protective equipment, location, and supervision of visits. In general, experiences were very positive. All nursing homes recognized the added value of real and personal contact between residents and their loved ones and indicated a positive impact on well-being. Compliance with local guidelines was sufficient to good. No new COVID-19 infections were reported during this time. **Conclusions and Implications:** These results indicate the value of family visitation in nursing homes and positive impact of visits. Based on these results, the Dutch government has decided to allow all nursing homes in the Netherlands to cautiously open their homes using the guidelines. More research is needed on impact and long-term compliance.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007035315&from=export>

RECORD 53

CT in relation to rt-PCR in diagnosing covid-19 in the netherlands: A prospective study

Gietema H.A., Zelis N., Nobel J.M., Lambriksi L.J.G., Alphen L.B.V., Lashof A.M.L.O., Wildberger J.E., Nelissen I.C., Stassen P.M.

PLoS ONE (2020) 15:7 July Article Number: e0235844. Date of Publication: 1 Jul 2020

Early differentiation between emergency department (ED) patients with and without corona virus disease (COVID-19) is very important. Chest CT scan may be helpful in early diagnosing of COVID-19. We investigated the diagnostic accuracy of CT using RT-PCR for SARSCoV-2 as reference standard and investigated reasons for discordant results between the two tests. **Methods** In this prospective single centre study in the Netherlands, all adult symptomatic ED patients had both a CT scan and a RT-PCR upon arrival at the ED. CT results were compared with PCR test(s). Diagnostic accuracy



was calculated. Discordant results were investigated using discharge diagnoses. Results Between March 13th and March 24th 2020, 193 symptomatic ED patients were included. In total, 43.0% of patients had a positive PCR and 56.5% a positive CT, resulting in a sensitivity of 89.2%, specificity 68.2%, likelihood ratio (LR)+ 2.81 and LR- 0.16. Sensitivity was higher in patients with high risk pneumonia (CURB-65 score \geq 3; n = 17, 100%) and with sepsis (SOFA score \geq 2; n = 137, 95.5%). Of the 35 patients (31.8%) with a suspicious CT and a negative RT-PCR, 9 had another respiratory viral pathogen, and in 7 patients, COVID-19 was considered likely. One of nine patients with a non-suspicious CT and a positive PCR had developed symptoms within 48 hours before scanning. Discussion The accuracy of chest CT in symptomatic ED patients is high, but used as a single diagnostic test, CT can not safely diagnose or exclude COVID-19. However, CT can be used as a quick tool to categorize patients into "probably positive" and "probably negative" cohorts.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007049901&from=export>

RECORD 54

At the heart of the Dutch COVID-19 epidemic: experiences of a municipal health service and a look at the future

In het hart van de Nederlandse covid-19-epidemie

Westra K., Beulens C.A., Sijbers-Hanegraaf M.M.A.

Nederlands tijdschrift voor geneeskunde (2020) 164. Date of Publication: 25 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632528722&from=export>

RECORD 55

Using eHealth to Support COVID-19 Education, Self-Assessment, and Symptom Monitoring in the Netherlands: Observational Study

Timmers T., Janssen L., Stohr J., Murk J.L., Berrevoets M.A.H.

JMIR mHealth and uHealth (2020) 8:6 (e19822). Date of Publication: 23 Jun 2020

BACKGROUND: The coronavirus disease (COVID-19) situation demands a lot from citizens, health care providers, and governmental institutions. Citizens need to cope with guidelines on social interaction, work, home isolation, and symptom recognition. Additionally, health care providers and policy makers have to cope with unprecedented and unpredictable pressure on the health care system they need to manage. By providing citizens with an app, they always have access to the latest information and can assess their own health. This data could be used to support policy makers and health care providers to get valuable insights in the regional distribution of infection load and health care consumption. **OBJECTIVE:** The aim of this observational study is to assess people's use of an app to support them with COVID-19 education, self-assessment, and monitoring of their own health for a 7-day period. In addition, we aim



to assess the usability of this data for health care providers and policy makers by applying it to an interactive map and combining it with hospital data. The secondary outcomes of the study were user's satisfaction with the information provided in the app, perceived usefulness of the app, health care providers they contacted, and the follow-up actions from this contact. **METHODS:** This observational cohort study was carried out at the nonacademic teaching hospital "Elisabeth Twee Steden" (ETZ) in Tilburg, Netherlands. From April 1, 2020, onwards ETZ offered the COVID-19 education, self-assessment, and symptom tracking diary to their already existing app for patient education and monitoring. **RESULTS:** Between April 1 and April 20, 2020, a total of 6194 people downloaded the app. The self-assessment functionality was used abundantly to check one's health status. In total, 5104 people responded to the question about severe symptoms, from which 242 indicated to suffer from severe symptoms. A total of 4929 people responded to the question about mild symptoms, from which 3248 indicated to suffer from these. The data was successfully applied to an interactive map, displaying user demographics and health status. Furthermore, the data was linked to clinical data. App users were satisfied with the information in the app and appreciated the symptom diary functionality. In total, 102 users reached out to a health care provider, leading to 91 contacts. **CONCLUSIONS:** Our study demonstrated the successful implementation and use of an app with COVID-19 education, self-assessment, and a 7-day symptom diary. Data collected with the app were successfully applied to an interactive map. In addition, we were able to link the data to COVID-19 screening results from the hospital's microbiology laboratory. This data could be used to support policy makers and health care providers to get valuable insights in the regional distribution of infection load and health care consumption. **TRIAL REGISTRATION:** Netherlands Trial Register NL8501; <https://www.trialregister.nl/trial/8501>.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632051627&from=export>

RECORD 56

Global governance for COVID-19 vaccines

The Lancet

The Lancet (2020) 395:10241 (1883). Date of Publication: 20 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006762068&from=export>

RECORD 57

Have deaths from COVID-19 in Europe plateaued due to herd immunity?

Okell L.C., Verity R., Watson O.J., Mishra S., Walker P., Whittaker C., Katzourakis A., Donnelly C.A., Riley S., Ghani A.C., Gandy A., Flaxman S., Ferguson N.M., Bhatt S.

The Lancet (2020) 395:10241 (e110-e111). Date of Publication: 20 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006762081&from=>

[export](#)**RECORD 58****Recommendations for Hospital-Based Physical Therapists Managing Patients With COVID-19**

Felten-Barentsz K.M., van Oorsouw R., Klooster E., Koenders N., Driehuis F., Hulzebos E.H.J., van der Schaaf M., Hoozeboom T.J., van der Wees P.J.
Physical therapy (2020). Date of Publication: 18 Jun 2020

OBJECTIVE: The COVID-19 pandemic is rapidly evolving and has led to increased numbers of hospitalizations worldwide. Hospitalized patients with COVID-19 experience a variety of symptoms, including fever, muscle pain, tiredness, cough, and difficulty breathing. Elderly people and those with underlying health conditions are considered to be more at risk of developing severe symptoms and have a higher risk of physical deconditioning during their hospital stay. Physical therapists have an important role in supporting hospitalized patients with COVID-19 but also need to be aware of challenges when treating these patients. In line with international initiatives, this article aims to provide guidance and detailed recommendations for hospital-based physical therapists managing patients hospitalized with COVID-19 through a national approach in the Netherlands. **METHODS:** A pragmatic approach was used. A working group conducted a purposive scan of the literature and drafted initial recommendations based on the knowledge of symptoms in patients with COVID-19, and current practice for physical therapist management for patients hospitalized with lung disease and patients admitted to the intensive care unit (ICU). An expert group of hospital-based physical therapists in the Netherlands provided feedback on the recommendations, which were finalized when consensus was reached among the members of the working group. **RESULTS:** The recommendations include safety recommendations, treatment recommendations, discharge recommendations, and staffing recommendations. Treatment recommendations address 2 phases of hospitalization: when patients are critically ill and admitted to the ICU, and when patients are severely ill and admitted to the COVID ward. Physical therapist management for patients hospitalized with COVID-19 comprises elements of respiratory support and active mobilization. Respiratory support includes breathing control, thoracic expansion exercises, airway clearance techniques, and respiratory muscle strength training. Recommendations toward active mobilization include bed mobility activities, active range-of-motion exercises, active (-assisted) limb exercises, activities-of-daily-living training, transfer training, cycle ergometer, pre-gait exercises, and ambulation.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632130017&from=export>

RECORD 59**Paediatric and adult critical care medicine: joining forces against Covid-19**

Kneyber M.C.J., Engels B., Van Der Voort P.H.J.

Critical Care (2020) 24:1 Article Number: 350. Date of Publication: 16 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632076155&from=export>

RECORD 60**Coronavirus rips through Dutch mink farms, triggering culls**

Enserink M.

Science (2020) 368:6496 (1169). Date of Publication: 12 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006910153&from=export>

RECORD 61**Collateral damage of the covid-19 pandemic: A Dutch perinatal perspective**

Verweij E.J., M'Hamdi H.I., Steegers E.A.P., Reiss I.K.M., Schoenmakers S.

The BMJ (2020) 369 Article Number: m2326. Date of Publication: 12 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632030377&from=export>

RECORD 62**SARS-CoV-2 infection in farmed minks, the Netherlands, April and May 2020**

Oreshkova N., ^{5.1.2e} R.J., Vreman S., Harders F., Oude Munnink B.B., Van Der Honing R.W.H., Gerhards N., Tolsma P., Bouwstra ^{5.1.2e} R.S., Tacken M.G.J., De Rooij M.M.T., Weesendorp E., Engelsma M.Y., Brusckke C.J.M., Smit L.A.M., Koopmans M., Van Der Poel W.H.M., Stegeman A.

Eurosurveillance (2020) 25:23 Article Number: 2001005. Date of Publication: 11 Jun 2020

Respiratory disease and increased mortality occurred in minks on two farms in the Netherlands, with interstitial pneumonia and SARS-CoV-2 RNA in organ and swab samples. On both farms, at least one worker had coronavirus disease-associated symptoms before the outbreak. Variations in mink-derived viral genomes showed between-mink transmission and no infection link between the farms. Inhalable dust contained viral RNA, indicating possible exposure of workers. One worker is assumed to have attracted the virus from mink.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007180571&from=export>

RECORD 63

Kawasaki-like disease: emerging complication during the COVID-19 pandemic

Viner R.M., Whittaker E.

The Lancet (2020) 395:10239 (1741-1743). Date of Publication: 6 Jun 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2006015493&from=export>**RECORD 64****Two Randomized Controlled Trials of Bacillus Calmette-Guérin Vaccination to reduce absenteeism among health care workers and hospital admission by elderly persons during the COVID-19 pandemic: A structured summary of the study protocols for two randomised controlled trials**Ten Doesschate T., Moorlag S.J.C.F.M., Van Der Vaart T.W., Taks E., Debisarun P., Ten Oever J., Bleeker-Rovers C.P., Verhagen P.B., Lalmohamed A., Ter Heine R., Van Crevel R., Van De Wijgert J., Janssen A.B., [5.1.2e](#) M.J., Van Werkhoven C.H., Netea M.G.*Trials* (2020) 21:1 Article Number: 481. Date of Publication: 5 Jun 2020

Objectives: The objectives of these two separate trials are: (1) to reduce health care workers (HCWs) absenteeism; and (2) to reduce hospital admission among the elderly during the COVID-19 pandemic through BCG vaccination. Trial design: Two separate multi-centre placebo-controlled parallel group randomized trials Participants: (1) Health care personnel working in the hospital or ambulance service where they will take care of patients with the COVID-19 infection and (2) elderly ≥ 60 years. The HCW trial is being undertaken in 9 hospitals. The elderly trial is being undertaken in locations in the community in Nijmegen, Utrecht, and Veghel, in the Netherlands, using senior citizen organisations to facilitate recruitment. Intervention and comparator: For both trials the intervention group will be randomized to vaccination with 0.1 ml of the licensed BCG vaccine (Danish strain 1331, SSI, Denmark, equivalent to 0.075 mg attenuated *M. bovis*). The placebo group consists of 0.1 ml 0.9% NaCl, which is the same amount, and has the same colour and appearance as the suspended BCG vaccine. Main outcomes: (1) Number of days of unplanned work absenteeism in HCWs for any reason which can be continuously measured on a bi-weekly basis, and (2) the cumulative incidence of hospital admission due to documented COVID-19. Randomisation: Participants will be randomized to BCG vaccine or placebo (1;1) centrally using a computer-based system, stratified by study centre. Blinding (masking): Subjects, investigators, physicians and outcome assessors are blinded for the intervention. Only the pharmacist assistant that prepares- And research personnel that administers-study medicines are unblinded. Numbers to be randomised (sample size): (1) The sample size for the first trial is N=1500 HCWs randomised 1:1 to either BCG vaccine (n=750) and placebo (n=750) and (2) The sample size for the second trial is N=1600 elderly persons randomised to BCG vaccine (n=800) and the placebo group (n=800). Trial Status: HCW: Version 4.0, 24-04-2020. Recruitment began 25-03-2020 and was completed on the 23-04-2020. Elderly: Version 3.0, 04-04-2020. Recruitment began 16-04-2020 and is ongoing. Trial registration: The HCWs trial was registered 31-03-2020 at clinicaltrials.gov (identifier:



NCT04328441) and registered 20-03-2020 at the Dutch Trial Registry (trialregister.nl, identifier Trial NL8477). The elderly trial was registered 22-04-2020 at the Dutch trial registry with number NL8547. Full protocol: The full protocols will be attached as additional files, accessible from the Trials website (Additional file 1). In the interest in expediting dissemination of this material, the familiar formatting has been eliminated; this Letter serves as a summary of the key elements of the full protocol.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632000953&from=export>

RECORD 65**COVID-19 in rheumatology outpatient clinics: Dutch mirror image to Lombardy, Italy**

Benoy S., Traksel R., Verhaegh P., Broen J.

Annals of the rheumatic diseases (2020). Date of Publication: 3 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631995760&from=export>

RECORD 66**Hydroxychloroquine and chloroquine for COVID-19: no evidence of effectiveness
Hydroxychloroquine en chloroquine bij COVID-19**

Vollaard A., 5.1.2e, van der Linden P.D., Sinha B., de Boer M.G.J.

Nederlands tijdschrift voor geneeskunde (2020) 164. Date of Publication: 2 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632528997&from=export>

RECORD 67**Scientific Editing in the COVID-19 Era—Personal Vignettes from the JBMR Editors**

Hofbauer L.C., Rivadeneira F., Westendorf J.J., Civitelli R.

Journal of Bone and Mineral Research (2020) 35:6 (1005-1008). Date of Publication: 1 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005095545&from=export>

RECORD 68**Europe's response to COVID-19 in March and April 2020 - A letter to the editor on "World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19)" (Int J Surg 2020;76:71-6)**

Cheng S.O., Khan S.

International Journal of Surgery (2020) 78 (3-4). Date of Publication: 1 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005575816&from=export>

RECORD 69

Sterilization of disposable face masks by means of standardized dry and steam sterilization processes; an alternative in the fight against mask shortages due to COVID-19

de Man P., van Straten B., van den Dobbelsesteen J., van der Eijk A., Horeman T., Koeleman H.

Journal of Hospital Infection (2020) 105:2 (356-357). Date of Publication: 1 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005761183&from=export>

RECORD 70

Fewer cancer diagnoses during the COVID-19 epidemic in the Netherlands

Dinmohamed A.G., Visser O., Verhoeven R.H.A., Louwman M.W.J., van Nederveen F.H., Willems S.M., Merckx M.A.W., Lemmens V.E.P.P., Nagtegaal I.D., Siesling S.

The Lancet Oncology (2020) 21:6 (750-751). Date of Publication: 1 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005835592&from=export>

RECORD 71

Correction to Screening of faecal microbiota transplant donors during the COVID-19 outbreak: suggestions for urgent updates from an international expert panel (The Lancet Gastroenterology & Hepatology (2020) 5(5) (430–432), (S2468125320300820), (10.1016/S2468-1253(20)30082-0))

The Lancet Gastroenterology and Hepatology (2020) 5:6 (e5). Date of Publication: 1 Jun 2020

Ianiro G, Mullish BH, Kelley CR, et al. Screening of faecal microbiota transplant donors during the COVID-19 outbreak: suggestions for urgent updates from an international expert panel. *Lancet Gastroenterol Hepatol* 2020; 5: 430–31—In this Comment, the declaration of interests statement should read: "CRK has served as a clinical advisor, with no financial compensation, for OpenBiome since 2013; she is a local principal investigator for the PRISM-3 clinical trial, for which her institution receives some salary support for a research coordinator and compensation from Finch Therapeutics Group for each patient enrolled. HS reports personal fees from Danone, Enterome, Takeda, AbbVie, Roche, Amgen, Danone, BiomX, Ferring, BMS, Astellas, MSD, Novartis, Tillotts Pharma, and Biocodex, and grants from Biocodex, Danone, and BiomX, and is a co-



founder of Exeliom Biosciences. ZK is an employee and shareholder of Finch Therapeutics and is an unpaid special advisor for OpenBiome. SCN reports grants from Ferring and personal fees from Takeda, AbbVie, Janssen, and Tillotts. MF reports personal fees from Finch Therapeutics Group, Rebiotix, Takeda, AbbVie, and Janssen. JRA reports personal fees from Finch Therapeutics and a non-financial relationship with OpenBiome as a scientific advisor. FZ reports grants from the non-profit China Microbiota Transplantation System (fmtBank) and a patent for GenFMTer for separating microbiota issued to FMT Medical. JK reports grants from Vedanta Biosciences and is an unpaid board member of the non-profit Netherlands Donor Feces Bank. SPC reports non-financial support from Janssen and personal fees from Shire, Ferring, Microbiotica, and Pfizer. AG reports personal fees for consultancy for Eisai S.r.l., 3PSolutions, Real Time Meeting, Fondazione Istituto Danone, Sinergie S.r.l. Board MRGE, and Sanofi S.p.A, personal fees for acting as a speaker for Takeda S.p.A, AbbVie, and Sandoz S.p.A, and personal fees for acting on advisory boards for VSL3 and Eisai. GI, BHM, LM, MS, HT, and GC declare no competing interests." The sixth author should read "Siew C Ng". These corrections have been made to the online version as of May 14, 2020.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005856635&from=export>

RECORD 72

The flash mob in time of COVID-19

De flashmob in COVID-19-tijd OPEN REDACTIONEEL 04-06-2020

van der Graaf Y.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:23. Date of Publication: 1 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006131641&from=export>

RECORD 73

Preoperative screening for COVID-19: Do not underestimate transmission by subclinical patients

Preoperatieve screening op COVID-19 Transmissie door subklinische patiënten niet onderschatten

Bakx R., Boormeester M.A., ^{5.1.2e} ^{5.1.2e}, Murk J.-L.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:23 Article Number: A38. Date of Publication: 1 Jun 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006131648&from=export>

RECORD 74**COVID-19: Complexity and the Black Swan**

Valeras A.S.


Families, systems & health : the journal of collaborative family healthcare (2020) 38:2 (221-223). Date of Publication: 1 Jun 2020

In previous President's Columns (Valeras, 2019a, 2019b), the properties of complexity and complex adaptive systems have been discussed, in terms of the value of continual and iterative change, in order to nudge a system to emerge differently, rather than maintain the status quo. COVID-19 is not a nudge; it is a tidal wave. Engaging with and understanding complexity science allows us to examine the internal rules of our health care system and recognize our own role as agents that can systematically and deliberately disrupt the status quo. The intertwined and interdependent complex relationships that exist in health care between persons, business, academia, and government buffer the system from rapid and drastic change. COVID-19, however, swiftly disrupted many of the rules keeping the system in its previous state. Some would describe this sudden and dramatic systems change as a Black Swan. This column will examine the role of the Black Swan, as it relates to this pandemic. The Black Swan is a term coined in the 2nd century by Roman poet Juvenal's description of something being *rara avis in terris nigroque simillima cygno*, Latin for "a bird as rare as the black swan" (Taleb, 2007, p. xxxi). At this time, reference to a black swan was meant as a statement of impossibility, because all historical records of swans had been white. In 1697, Dutch explorers discovered black swans living in the wild in Western Australia (Taleb, 2007, p. xxi), and the black swan became a metaphor for events that come as a surprise, have major implications, and can often be understood only with the benefit of hindsight. This theory of the black swan was further articulated by Nassim Nicholas Taleb in his books *Foolled by Randomness* (Taleb, 2001) and *The Black Swan* (Taleb, 2007). (PsycInfo Database Record (c) 2020 APA, all rights reserved).

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632050041&from=export>

RECORD 75**The role of children in transmission of SARS-CoV-2: A rapid review**

 Xu W., Dozier M., He Y., Kirolos A., Theodoratou E.

Journal of global health (2020) 10:1 (011101). Date of Publication: 1 Jun 2020

Background: Understanding the role of children in the transmission of SARS-CoV-2 is urgently required given its policy implications in relation to the reopening of schools and intergenerational contacts. Methods: We conducted a rapid review of studies that investigated the role of children in the transmission of SARS-CoV-2. We synthesized evidence for four categories: 1) studies reporting documented cases of SARS-CoV-2 transmission by infected children; 2) studies presenting indirect evidence on the potential of SARS-CoV-2 transmission by (both symptomatic and asymptomatic) children; 3) studies reporting cluster outbreaks of COVID-19 in schools; 4) studies



estimating the proportions of children infected by SARS-CoV-2, and reported results narratively. Results: A total of 16 unique studies were included for narrative synthesis. There is limited evidence detailing transmission of SARS-CoV-2 from infected children. We found two studies that reported a 3-month-old whose parents developed symptomatic COVID-19 seven days after caring for the infant and two children who may have contracted COVID-19 from the initial cases at a school in New South Wales. In addition, we identified six studies presenting indirect evidence on the potential for SARS-CoV-2 transmission by children, three of which found prolonged virus shedding in stools. There is little data on the transmission of SARS-CoV-2 in schools. We identified only two studies reporting outbreaks of COVID-19 in school settings and one case report of a child attending classes but not infecting any other pupils or staff. Lastly, we identified six studies estimating the proportion of children infected; data from population-based studies in Iceland, Italy, South Korea, Netherlands, California and a hospital-based study in the UK suggest children may be less likely to be infected. Conclusions: Preliminary results from population-based and school-based studies suggest that children may be less frequently infected or infect others, however current evidence is limited. Prolonged faecal shedding observed in studies highlights the potentially increased risk of faeco-oral transmission in children. Further seroprevalence studies (powered adequately for the paediatric population) are urgently required to establish whether children are in fact less likely to be infected compared to adults. Note: We plan to update this rapid review as new data becomes available. These updates are available at <https://www.ed.ac.uk/usher/uncover/completed-uncover-reviews>.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632252436&from=export>

RECORD 76

The status and trends of coronavirus research: A global bibliometric and visualized analysis

Mao X., Guo L., Fu P., Xiang C.

Medicine (2020) 99:22 (e20137). Date of Publication: 29 May 2020

OBJECTIVES: The infectious pneumonia caused by the Coronavirus Disease 2019 (COVID-19) occurred in Wuhan, Hubei Province, China, from December 2019 and spread the whole country and even other 24 countries. Coronavirus research is of significance to overcome the epidemic. Our study aims to investigate the global status and trends of coronavirus research. **METHOD:** Publications related to the studies of coronavirus research from January 1, 2003 to February 6, 2020 were retrieved from the Science Citation Index-Expanded (SCI-E) of the Web of Science database. A total of 9294 publications were included. The data source was studied and indexed by bibliometric methodology. For visualized study, bibliographic coupling analysis, co-authorship analysis, co-citation analysis, co-occurrence analysis and the analysis of publication trends in coronavirus research were conducted by VOS (visualization of similarities) viewer and GraphPadPrism 6 software. **RESULTS:** The number of publications about coronavirus research increased sharply in 2020 for SARS outbreak



and increased again in 2012 for MERS outbreak. The USA made the highest contributions to the global research with the most total number of publications, total citation frequency, and the highest H-index, while Netherlands had the highest average citation per item. Journal of Virology had the largest publication numbers. The University of Hong Kong is the most contributive institution with the most publications. The main research orientation and funding agency were virology and United States Department of Health Human Services. Keywords of all related studies could be divided into 4 clusters: "Pathological research," "Epidemiology research," "Clinical research," and "Mechanism research." CONCLUSIONS: The outbreak of the epidemic could promote coronavirus research, meanwhile, coronavirus research contributes to overcoming the epidemic. Attention should be drawn to the latest popular research, including "Spike protein," "Receptor binding domain," and "Vaccine." Therefore, more and more efforts will be put into mechanism research and vaccine research and development, which can be helpful to deal with the epidemic.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631946101&from=export>

RECORD 77

Air pollution: a determinant for COVID-19?

Luchtverontreiniging: een determinant voor COVID-19?

In 't Veen J.C.C.M., Kappen J.H., van Schayck O.C.P.

Nederlands tijdschrift voor geneeskunde (2020) 164. Date of Publication: 28 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632528941&from=export>

RECORD 78

COVID-19 patients exhibit less pronounced immune suppression compared with bacterial septic shock patients

Kox M., Frenzel T., Schouten J., Van De Veerdonk F.L., Koenen H.J.P.M., Pickkers P., Hemelaar P., Beunders R., Van Der Hoeven J., Van Der Velde S., Van Der Eng H., Rovers N., Klop-Riehl M., Gerretsen J., Kooistra E., Waalders N., Claassen W., Heesakkers H., Van Schaik T., Netea M., Joosten L., Janssen N., Grondman I., De Nooijer A., De Mast Q., Jaeger M., Kouijzer I., Dijkstra H., Lemmers H., Van Crevel R., Van De Maat J., Nijman G., Moorlag S., Taks E., Debisarun P., Wertheim H., Hopman J., Rahamat-Langendoen J., Bleeker-Rovers C., Fasse E., Van Rijssen E., Kolkman M., Van Cranenbroek B., Smeets R., Joosten I.

Critical Care (2020) 24:1 Article Number: 263. Date of Publication: 26 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631857551&from=export>

RECORD 79**Prevalence and Clinical Presentation of Health Care Workers with Symptoms of Coronavirus Disease 2019 in 2 Dutch Hospitals during an Early Phase of the Pandemic**

Kluytmans-Van Den Bergh M.F.Q., Buiting A.G.M., Pas S.D., Bentvelsen R.G., Van Den
 5.1.2a
 , Van Oudheusden A.J.G., Van Rijen M.M.L., Verweij J.J., Koopmans
 M.P.G., Kluytmans J.A.J.W.

JAMA Network Open (2020) 3:5 Article Number: e209673. Date of Publication: 21 May 2020

Importance: On February 27, 2020, the first patient with coronavirus disease 2019 (COVID-19) was reported in the Netherlands. During the following weeks, at 2 Dutch teaching hospitals, 9 health care workers (HCWs) received a diagnosis of COVID-19, 8 of whom had no history of travel to China or northern Italy, raising the question of whether undetected community circulation was occurring. **Objective:** To determine the prevalence and clinical presentation of COVID-19 among HCWs with self-reported fever or respiratory symptoms. **Design, Setting, and Participants:** This cross-sectional study was performed in 2 teaching hospitals in the southern part of the Netherlands in March 2020, during the early phase of the COVID-19 pandemic. Health care workers employed in the participating hospitals who experienced fever or respiratory symptoms were asked to voluntarily participate in a screening for infection with the severe acute respiratory syndrome coronavirus 2. **Data analysis** was performed in March 2020. **Main Outcomes and Measures:** The prevalence of severe acute respiratory syndrome coronavirus 2 infection was determined by semiquantitative real-time reverse transcriptase-polymerase chain reaction on oropharyngeal samples. Structured interviews were conducted to document symptoms for all HCWs with confirmed COVID-19. **Results:** Of 9705 HCWs employed (1722 male [18%]), 1353 (14%) reported fever or respiratory symptoms and were tested. Of those, 86 HCWs (6%) were infected with severe acute respiratory syndrome coronavirus 2 (median age, 49 years [range, 22-66 years]; 15 [17%] male), representing 1% of all HCWs employed. Most HCWs experienced mild disease, and only 46 (53%) reported fever. Eighty HCWs (93%) met a case definition of fever and/or coughing and/or shortness of breath. Only 3 (3%) of the HCWs identified through the screening had a history of travel to China or northern Italy, and 3 (3%) reported having been exposed to an inpatient with a known diagnosis of COVID-19 before the onset of symptoms. **Conclusions and Relevance:** Within 2 weeks after the first Dutch case was detected, a substantial proportion of HCWs with self-reported fever or respiratory symptoms were infected with severe acute respiratory syndrome coronavirus 2, likely as a result of acquisition of the virus in the community during the early phase of local spread. The high prevalence of mild clinical presentations, frequently not including fever, suggests that the currently recommended case definition for suspected COVID-19 should be used less stringently.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631825225&from=export>

RECORD 80**Diagnostic algorithm for COVID-19 at the ER****Diagnostisch algoritme voor COVID-19 op de SEH**

Dofferhoff A.S.M., Swinkels A., Sprong T., Berk Y., Spanbroek M., Nabuurs-Franssen M.H., Vermaat M., van de Kerkhof B., Willekens M.H.C., Voss A.

Nederlands tijdschrift voor geneeskunde (2020) 164. Date of Publication: 14 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631763447&from=export>

RECORD 81**COVID-19: care at home or in hospital? Considerations in primary care****COVID-19: thuis behandelen of naar het ziekenhuis?**

Harskamp R.E., de Meij M.A., Cals J.W.L., Reesink H.J., 5.1.2e.

Nederlands tijdschrift voor geneeskunde (2020) 164. Date of Publication: 14 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631791167&from=export>

RECORD 82**Clinical Characteristics of Coronavirus Disease 2019 in the Netherlands****SARS-CoV-2 in Nederland: de kliniek van een nieuw virus**

5.1.2e.

Nederlands tijdschrift voor geneeskunde (2020) 164. Date of Publication: 13 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631763169&from=export>

RECORD 83**Letter to the Editor: Wastewater-Based Epidemiology Can Overcome****Representativeness and Stigma Issues Related to COVID-19**

Murakami M., Hata A., Honda R., Watanabe T.

Environmental Science and Technology (2020) 54:9 (5311). Date of Publication: 5 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005752499&from=export>

RECORD 84**Emergence of drift variants that may affect covid-19 vaccine development and antibody treatment**

Koyama T., Weeraratne D., Snowdon J.L., Parida L.

Pathogens (2020) 9:5 Article Number: 324. Date of Publication: 1 May 2020

New coronavirus (SARS-CoV-2) treatments and vaccines are under development to combat COVID-19. Several approaches are being used by scientists for investigation, including (1) various small molecule approaches targeting RNA polymerase, 3C-like protease, and RNA endonuclease, and (2) exploration of antibodies obtained from convalescent plasma from patients who have recovered from COVID-19. The coronavirus genome is highly prone to mutations that lead to genetic drift and escape from immune recognition, thus, it is imperative that sub-strains with different mutations are also accounted for during vaccine development. As the disease has grown to become a pandemic, B-cell and T-cell epitopes predicted from SARS coronavirus have been reported. Using the epitope information along with variants of the virus, we have found several variants which might cause drifts. Among such variants, 23403A>G variant (p.D614G) in spike protein B-cell epitope is observed frequently in European countries, such as the Netherlands, Switzerland, and France, but seldom observed in China.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2004258714&from=export>

RECORD 85

Coping with COVID-19: scaling up virtual care to standard practice

Barsom E.Z., Feenstra T.M., Bemelman W.A., Bonjer J.H., Schijven M.P.
Nature Medicine (2020) 26:5 (632-634). Date of Publication: 1 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2004660185&from=export>

RECORD 86

Origin and transmission of Feline coronavirus type I in domestic cats from Northern Italy: a phylogeographic approach

Lauzi S., Stranieri A., Giordano A., Luzzago C., Zehender G., Paltrinieri S., Ebranati E.
Veterinary Microbiology (2020) 244 Article Number: 108667. Date of Publication: 1 May 2020

Feline coronavirus (FCoV) is responsible, along with an inadequate immune response of the host, for Feline infectious peritonitis (FIP), one of the most frequent and deadly infectious feline disease worldwide. This study analyzed the genetic characteristics of the spike (S) gene of 33 FCoV circulating in Northern Italy between 2011 and 2015 in cats with or without FIP. In order to reconstruct the most probable places of origin and dispersion of FCoV among Italian cats, a phylogeographic approach was performed based on 106 FCoV S gene partial sequences from cats, including the 33 novel Italian sequences and 73 retrieved from public databases. Only FCoV type I was found in the Italian cats. The estimated mean evolutionary rate of FCoV was 2.4×10^{-2} subs/site/year

(95% HPD: 1.3-3.7 × 10⁻²), confirming the high genetic variability in the circulating strains. All the isolates clustered in a unique highly significant clade that likely originated from USA between the 1950s and the 1970s, confirming the first descriptions of the disease in American cats. Our results suggest that from USA the virus likely entered Germany and thereafter spread to other European countries. Phylogeography showed that sequences segregated mainly by geographical origin. In the 2010s Italian sequences clustered in different subclades, confirming that different strains cocirculate in Italy. Further studies on archival samples and other genetic regions of FCoV are suggested in order to confirm the present results and to reconstruct a more in-depth detailed virus dispersion pattern for the definition of possible control measures.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005567740&from=export>

RECORD 87

Not to the intensive care: Is that an autonomous choice?

Niet naar de IC: Is dat een autonome keuze?

Smulders Y.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:18. Date of Publication: 1 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005748162&from=export>

RECORD 88

Ethical principles compromised during the COVID-19 pandemic?

Ethische principes in het gedrang door COVID-19?

5.1.2e, van de Vathorst S.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:18 Article Number: D5049. Date of Publication: 1 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005748173&from=export>

RECORD 89

Do's and don'ts in COVID-19-associated coagulopathy

Do's-and-don'ts bij COVID-19-coagulopathie

Klok F.A., den Exter P.L., Huisman M.V., Eikenboom J.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:18 Article Number: D5031. Date of Publication: 1 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005748174&from=export>

RECORD 90**A multinational report to characterise SARS-CoV-2 infection in people with cystic fibrosis**

Cosgriff R., Ahern S., Bell S.C., Brownlee K., Burgel P.-R., Byrnes C., Corvol H., Cheng S.Y., Elbert A., Faro A., Goss C.H., Gulmans V., Marshall B.C., McKone E., Middleton P.G., Ruseckaite R., Stephenson A.L., Carr S.B.

Journal of Cystic Fibrosis (2020) 19:3 (355-358). Date of Publication: 1 May 2020

Information is lacking on the clinical impact of the novel coronavirus, SARS-CoV-2, on people with cystic fibrosis (CF). Our aim was to characterise SARS-CoV-2 infection in people with cystic fibrosis. Methods: Anonymised data submitted by each participating country to their National CF Registry was reported using a standardised template, then collated and summarised. Results: 40 cases have been reported across 8 countries. Of the 40 cases, 31 (78%) were symptomatic for SARS-CoV-2 at presentation, with 24 (60%) having a fever. 70% have recovered, 30% remain unresolved at time of reporting, and no deaths have been submitted. Conclusions: This early report shows good recovery from SARS-CoV-2 in this heterogeneous CF cohort. The disease course does not seem to differ from the general population, but the current numbers are too small to draw firm conclusions and people with CF should continue to strictly follow public health advice to protect themselves from infection.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005761396&from=export>

RECORD 91**COVID-19 pandemic and the Olympic Games**

Vaishya R.

Journal of Clinical Orthopaedics and Trauma (2020) 11 Supplement 3 (S281-S282).

Date of Publication: 1 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005935005&from=export>

RECORD 92**A man with dyspnea after COVID-19 pneumonia****Een man met dyspneu na een COVID-19-pneumonie**

Bloemen H., Hagmolen W., Clappers-Gielen G.A.L.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:20. Date of Publication: 1 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006122017&from=export>

RECORD 93**Diagnostic algorithm for COVID-19 at the ER****Diagnostisch algoritme voor COVID-19 op de SEH**

Dofferhoff A.S.M., Swinkels A., Sprong T., Berk Y., Spanbroek M., Nabuurs-Franssen M.H., Vermaat M., van de Kerkhof B., Willekens M.H.C., Voss A.
Nederlands Tijdschrift voor Geneeskunde (2020) 164:21. Date of Publication: 1 May 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006131618&from=export>

RECORD 94**COVID-19 virulence in aged patients might be impacted by the host cellular MicroRNAs abundance/profile**

Fulzele S., Sahay B., Yusufu I., Lee T.J., Sharma A., Kolhe R., Isales C.M.
Ageing and Disease (2020) 11:3 (509-522). Date of Publication: 1 May 2020

The World health organization (WHO) declared Coronavirus disease 2019 (COVID-19) a global pandemic and a severe public health crisis. Drastic measures to combat COVID-19 are warranted due to its contagiousness and higher mortality rates, specifically in the aged patient population. At the current stage, due to the lack of effective treatment strategies for COVID-19 innovative approaches need to be considered. It is well known that host cellular miRNAs can directly target both viral 3'UTR and coding region of the viral genome to induce the antiviral effect. In this study, we did in silico analysis of human miRNAs targeting SARS (4 isolates) and COVID-19 (29 recent isolates from different regions) genome and correlated our findings with aging and underlying conditions. We found 848 common miRNAs targeting the SARS genome and 873 common miRNAs targeting the COVID-19 genome. Out of a total of 848 miRNAs from SARS, only 558 commonly present in all COVID-19 isolates. Interestingly, 315 miRNAs are unique for COVID-19 isolates and 290 miRNAs unique to SARS. We also noted that out of 29 COVID-19 isolates, 19 isolates have identical miRNA targets. The COVID-19 isolates, Netherland (EPI_ISL_422601), Australia (EPI_ISL_413214), and Wuhan (EPI_ISL_403931) showed six, four, and four unique miRNAs targets, respectively. Furthermore, GO, and KEGG pathway analysis showed that COVID-19 targeting human miRNAs involved in various age-related signaling and diseases. Recent studies also suggested that some of the human miRNAs targeting COVID-19 decreased with aging and underlying conditions. GO and KEGG identified impaired signaling pathway may be due to low abundance miRNA which might be one of the contributing factors for the increasing severity and mortality in aged individuals and with other underlying conditions. Further, in vitro and in vivo studies are needed to validate some of these targets and identify potential therapeutic targets.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631993181&from=export>

RECORD 95**An overview of mobile applications (apps) to support the coronavirus disease 2019 response in India**

Bassi A., Arfin S., John O., Jha V.

Indian Journal of Medical Research (2020) 151:5 (468-473). Date of Publication: 1 May 2020

Background & objectives: The potential benefits of mobile health (mHealth) initiatives to manage the coronavirus disease 2019 (COVID-19) pandemic have been explored. The Government of India, State governments, and healthcare organizations have developed various mobile apps for the containment of COVID-19. This study was aimed to systematically review COVID-19 related mobile apps and highlight gaps to inform the development of future mHealth initiatives. **Methods:** Google Play and the Apple app stores were searched using the terms 'COVID-19', 'coronavirus', 'pandemic', and 'epidemic' in the first week of April 2020. A list of COVID-19-specific functions was compiled based on the review of the selected apps, the literature on epidemic surveillance, and national and international media reports. The World Health Organization guideline on Digital Health Interventions was used to classify the app functions under the categories of the general public, health workers, health system managers, and data services. **Results:** The search yielded 346 potential COVID-19 apps, of which 50 met the inclusion criteria. Dissemination of untargeted COVID-19-related information on preventative strategies and monitoring the movements of quarantined individuals was the function of 27 (54%) and 19 (32%) apps, respectively. Eight (16%) apps had a contact tracing and hotspot identification function. **Interpretation & conclusions:** Our study highlights the current emphasis on the development of self-testing, quarantine monitoring, and contact tracing apps. India's response to COVID-19 can be strengthened by developing comprehensive mHealth solutions for frontline healthcare workers, rapid response teams and public health authorities. Among this unprecedented global health emergency, the Governments must ensure the necessary but least intrusive measures for disease surveillance. Bassi Abhinav 1 The George Institute for Global Health, New Delhi Arfin Sumaiya 2 The George Institute for Global Health, New Delhi John Oommen 3 The George Institute for Global Health, New Delhi Jha Vivekanand 4 The George Institute for Global Health, New Delhi World Health Organization. Coronavirus disease 2019 (COVID-19): Situation report-78. Geneva: WHO; 2020. World Health Organization. Coronavirus disease 2019 (COVID-19): Situation Report-106. Geneva: WHO; 2020. Zarocostas J. How to fight an infodemic. *Lancet* 2020; 395 : 676. Wood CS, Thomas MR, Budd J, Mashamba-Thompson TP, Herbst K, Pillay D, et al. Taking connected mobile-health diagnostics of infectious diseases to the field. *Nature* 2019; 566 : 467-74. World Health Organization. Digital technology for COVID-19 response. Geneva: WHO; 2020. Reeves JJ, Hollandsworth HM, Torriani FJ, Taplitz R, Abeles S, Tai-Seale M, et al. Rapid response to COVID-19: Health informatics support for outbreak management in an academic health system. *J Am Med Inform Assoc* 2020. pii: ocaa037. Danquah LO, Hasham N, MacFarlane M, Conteh FE, Momoh F, Tedesco AA, et al. Use of a mobile application for Ebola contact tracing and monitoring in Northern 5.1.2e: A proof-of-concept study. *BMC Infect Dis* 2019; 19. doi:10.1186/s12879-019-4354-z. Ahmadi S, Bempong NE, De Santis O,

Sheath D, Flahault A. The role of digital technologies in tackling the Zika outbreak: A scoping review. *J Public Health Emerg* 2018; 2 : 1-20. Schwind JS, Wolking DJ, Brownstein JS, Mazet JA, Smith WA, Smith WA. Evaluation of local media surveillance for improved disease recognition and monitoring in global hotspot regions. *PLoS One* 2014; 9 : e110236. Zhou X, Snoswell CL, Harding LE, Bambling M, Edirippulige S, Bai X, et al. The role of telehealth in reducing the mental health burden from COVID-19. *Telemed e Health* 2020; 26 : 377-9. Smith AC, Thomas E, Snoswell CL, Haydon H, Mehrotra A, Clemensen J, et al. Telehealth for global emergencies: Implications for coronavirus disease 2019 (COVID-19). *J Telemed Telecare* 2020. pii: 1357633X20916567. Dujmovic J. Wildly popular coronavirus-tracker app helps South Koreans steer clear of outbreak areas. *MarketWatch*; 2020. Available from: <https://www.marketwatch.com/story/wildly-popular-coronavirus-tracker-app-helps-south-koreans-steer-clear-of-outbreak-areas-2020-03-18>><https://www.marketwatch.com/story/wildly-popular-coronavirus-tracker-app-helps-south-koreans-steer-clear-of-outbreak-areas-2020-03-18>, accessed on April 11, 2020. Wakefield J. Coronavirus: Tracking app aims for one million downloads. Available from: <https://www.bbc.com/news/technology-52033210>><https://www.bbc.com/news/technology-52033210>, accessed on April 8, 2020. Holmes A. Singapore is using a high-tech surveillance app to track the coronavirus, keeping schools and businesses open. Here's how it works. *Business Insider India*; 2020. Available from: <https://www.businessinsider.in/tech/news/singapore-is-using-a-high-tech-surveillance-app-to-track-the-coronavirus-keeping-schools-and-businesses-open-heres-how-it-works-/articleshow/74797714.cms>><https://www.businessinsider.in/tech/news/singapore-is-using-a-high-tech-surveillance-app-to-track-the-coronavirus-keeping-schools-and-businesses-open-heres-how-it-works-/articleshow/74797714.cms>, accessed on April 11, 2020. Ananth V. Beyond contact-tracing, Aarogya Setu may find use in policy inputs. *The Economic Times*; 2020. Available from: <https://economictimes.indiatimes.com/news/economy/policy/beyond-contact-tracing-aarogya-setu-may-find-use-in-policy-inputs/articleshow/75078678.cms>><https://economictimes.indiatimes.com/news/economy/policy/beyond-contact-tracing-aarogya-setu-may-find-use-in-policy-inputs/articleshow/75078678.cms>, accessed on April 11, 2020. Maharashtra govt launches online self-assessment tool to better identify, assist Covid-19 patients. *India Today*; 2020. Available from: <https://www.indiatoday.in/india/story/maharashtra-govt-launches-online-self-assessment-tool-to-better-identify-assist-covid-19-patients-1662766-2020-04-03>><https://www.indiatoday.in/india/story/maharashtra-govt-launches-online-self-assessment-tool-to-better-identify-assist-covid-19-patients-1662766-2020-04-03>, accessed on April 11, 2020. 17. World Health Organization. WHO guideline: Recommendations on digital interventions for health system strengthening. Geneva: WHO; 2019. Mohanty B, Chughtai A, Rabhi F. Use of Mobile Apps for epidemic surveillance and response-A vailability and gaps. *Glob Biosecurity* 2019; 1 : 37. Available from: <https://jglobalbiosecurity.com/article/10.31646/gbio.39/>><https://jglobalbiosecurity.com/article/10.31646/gbio.39/>, accessed on April 8, 2020. Greenhalgh T, Koh GCH, Car J. Covid-19: A remote assessment in primary care. *BMJ* 2020; 368 : m1182. Roundup:



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EMBASE LINK
<http://www.embase.com/search/results?subaction=viewrecord&id=L632304580&from=export>

RECORD 96

Point of view of the Dutch Society for Gynaecological Endoscopy (WGE) on surgery during the COVID-19 crisis

Radder C., de Leeuw R., Coppus S.

Journal of minimally invasive gynecology (2020). Date of Publication: 25 Apr 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631651004&from=export>

RECORD 97**Diagnosis, Prevention, and Treatment of Thromboembolic Complications in COVID-19: Report of the National Institute for Public Health of the Netherlands**

Oudkerk M., Büller H.R., Kuijpers D., van Es N., Oudkerk S.F., McLoud T.C., Gommers D., van Dissel J., Ten Cate H., van Beek E.J.
Radiology (2020) (201629). Date of Publication: 23 Apr 2020

A potential link between mortality, D-dimer values and a prothrombotic syndrome has been reported in patients with COVID-19 infection. The National Institute for Public Health of the Netherlands asked a group of Radiology and Vascular Medicine experts to provide guidance for the imaging workup and treatment of these important complications. This report summarizes evidence for thromboembolic disease, potential diagnostic and preventive actions as well as recommendations for patients with COVID-19 infection.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631968583&from=export>

RECORD 98**Chloroquine dosing recommendations for pediatric COVID-19 supported by modeling and simulation**

Verscheijden L.F.M., van der Zanden ^{5.1.26}, ^{5.1.26} Bussel L.P.M., de Hoop-Sommen M., Russel F.G.M., Johnson T.N., de Wildt S.N.
Clinical pharmacology and therapeutics (2020). Date of Publication: 22 Apr 2020

As chloroquine (CHQ) is part of the Dutch Centre for Infectious Disease Control COVID-19 experimental treatment guideline, pediatric dosing guidelines are needed. Recent pediatric data suggest that existing WHO dosing guidelines for children with malaria are suboptimal. The aim of our study was to establish best-evidence to inform pediatric CHQ doses for children infected with COVID-19. A previously developed physiologically-based pharmacokinetic (PBPK) model for CHQ was used to simulate exposure in adults and children and verified against published pharmacokinetic data. The COVID-19 recommended adult dosage regimen of 44mg/kg total was tested in adults and children to evaluate the extent of variation in exposure. Based on differences in AUC_{0-70h} the optimal CHQ dose was determined in children of different ages compared to adults. Revised doses were re-introduced into the model to verify that overall CHQ exposure in each age band was within 5% of the predicted adult value. Simulations showed differences in drug exposure in children of different ages and adults when the same body-weight based dose is given. As such, we propose the following total cumulative doses: 35 mg/kg (CHQ base) for children 0-1 month, 47 mg/kg for 1-6 months, 55 mg/kg



for 6 months-12 years and 44 mg/kg for adolescents and adults, not to exceed 3300 mg in any patient. Our study supports age-adjusted CHQ dosing in children with COVID-19 in order to avoid suboptimal or toxic doses. The knowledge-driven, model-informed dose selection paradigm can serve as a science-based alternative to recommend pediatric dosing when pediatric clinical trial data is absent.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631614099&from=export>

RECORD 99

COVID-19 in Europe: the Italian lesson

Saglietto A., D'Ascenzo F., Zoccai G.B., De Ferrari G.M.

The Lancet (2020) 395:10230 (1110-1111). Date of Publication: 4 Apr 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005647520&from=export>

RECORD 100

Regional coordination and bottom-up response of general practitioners in Belgium and the Netherlands

Van Olmen J., Remmen R., Van Royen P., Philips H., Verhoeven V., Anthierens S.

The BMJ (2020) 369 Article Number: m1377. Date of Publication: 3 Apr 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631420893&from=export>

RECORD 101

Indications for healthcare surge capacity in European countries facing an exponential increase in coronavirus disease (COVID-19) cases, March 2020

Verelst F., Kuylen E., Beutels P.

Eurosurveillance (2020) 25:13. Date of Publication: 2 Apr 2020

European healthcare systems face extreme pressure from coronavirus disease (COVID-19). We relate country-specific accumulated COVID-19 deaths (intensity approach) and active COVID-19 cases (magnitude approach) to measures of healthcare system capacity: hospital beds, healthcare workers and healthcare expenditure. Modelled by the intensity approach with a composite measure for healthcare capacity, the countries experiencing the highest pressure on 25 March 2020 - relative to Italy on 11 March - were Italy, Spain, the Netherlands and France (www.covid-hcpressure.org).

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005554684&from=export>

RECORD 102**You'll never walk alone**

Smeele I.

Huisarts en Wetenschap (2020) 63:4 (3). Date of Publication: 1 Apr 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2004721016&from=export>**RECORD 103****You're gonna have to have something else****Je zal maar iets anders hebben**

Smulders Y.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:14. Date of Publication: 1 Apr 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627813&from=export>**RECORD 104****In-hospital treatment of COVID-19 patients****COVID-19 in het ziekenhuis**

De Wee E.M., Van Der Sar-Van Der Brugge S., Grootenboers M., Bentvelsen R.G., Kant K.M.M., Van Der Leest C.H.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:14 Article Number: D4965. Date of Publication: 1 Apr 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627822&from=export>**RECORD 105****Medication and comedication in COVID-19 patients****Geneesmiddelen bij covid-19**

Lenkens M., de Wit H., Danser A.H., Esselink A.C., Horikx A., ten Oever J., van de Veerdonk F., Kramers K.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:14 Article Number: D4995. Date of Publication: 1 Apr 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627824&from=export>**RECORD 106****Addicted to the screen**

**Verslaafd aan het beeldscherm**

van der Graaf Y.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:15 Article Number: A29. Date of Publication: 1 Apr 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627827&from=export>**RECORD 107****'We are always lagging behind the facts': Experiences from the general practice at the time of COVID-19****'We lopen steeds achter de feiten aan' ervaringen uit de huisartsenpraktijk ten tijde van covid-19**

5.1.2e, de Jong D.M.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:15. Date of Publication: 1 Apr 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627833&from=export>**RECORD 108****Respiratory complaints in the time of COVID-19: Assessment and approach in general practice****Luchtwegklachten in tijden van corona: Beoordeling en beleid in de huisartsenpraktijk**

Loogman M.C.M., de Jong N., Platteel T.N., Bouma M., 5.1.2e, 5.1.2e

Nederlands Tijdschrift voor Geneeskunde (2020) 164:15 Article Number: D4999. Date of Publication: 1 Apr 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627838&from=export>**RECORD 109****Contrasts****Contrasten**

5.1.2e

Nederlands Tijdschrift voor Geneeskunde (2020) 164:16. Date of Publication: 1 Apr 2020**EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627842&from=export>

RECORD 110**Clinical characteristics of coronavirus disease 2019 in the Netherlands****SARS-CoV-2 in Nederland: De kliniek van een nieuw virus**

Joost Wiersinga W.

*Nederlands Tijdschrift voor Geneeskunde (2020) 164:16 Article Number: D5021. Date of Publication: 1 Apr 2020***EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627847&from=export>**RECORD 111****The first 100 COVID-19 patients admitted to the Elisabeth-Tweesteden Hospital: A retrospective cohort study****De eerste honderd opgenomen COVID-19-patiënten in het Elisabeth-Tweesteden Ziekenhuis: Een retrospectieve cohortstudie**

Murk J.-L., van de Biggelaar R., Stohr J., Verweij J., Buiting A., Wittens S., van Hooft M., Diederens B., Kluiters-De Hingh Y., Ranschaert E., Brouwer A., Retera J., Verheijen M., Ramnarain D., van Ek I., van Oers J.

*Nederlands Tijdschrift voor Geneeskunde (2020) 164:16 Article Number: D5002. Date of Publication: 1 Apr 2020***EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627848&from=export>**RECORD 112****COVID-19 in the Emergency Department of Bernhoven Hospital****Covid-19 op de spoedeisende hulp in Bernhoven**

Buenen A.G., Wever P.C., Borst D.P., Sliker K.A.

*Nederlands Tijdschrift voor Geneeskunde (2020) 164:16 Article Number: D5001. Date of Publication: 1 Apr 2020***EMBASE LINK**<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627849&from=export>**RECORD 113****The first 29 COVID-19 patients in a clinic: Early experiences from a hospital in North Brabant****De eerste 29 COVID-19-patiënten in de kliniek: Vroege bevindingen uit een ziekenhuis in Noord-Brabant**van der Moeren N., Talman S., van den 5.1.2a, Kant M., Heukels P., Bentvelsen R.G., Loth D.W.*Nederlands Tijdschrift voor Geneeskunde (2020) 164:16 Article Number: D4981. Date of Publication: 1 Apr 2020*

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627852&from=export>

RECORD 114**Interview with Anke Biemans
Anke Biemans**

Klemann S., Biemans A., Iyer V.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:16. Date of Publication: 1 Apr 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627854&from=export>

RECORD 115**Atypical clinical picture of COVID-19 in older patients
Atypisch beeld van COVID-19 bij oudere patiënten**

Olde Rikkert M.G.M., Vingerhoets R.W., van Geldorp N., de Jong E., Maas H.A.A.M.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:17 Article Number: D5004. Date of Publication: 1 Apr 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005748157&from=export>

RECORD 116**Rational use of respiratory protective equipment: Advice for health care professionals in time of COVID-19****Rationeel gebruik van ademhalingsbeschermingsmaskers: Adviezen voor zorgverleners in tijden van COVID-19**

Voss A., Martens L., van Mansfeld R., Hopman J., Veldkamp K.E., Wertheim H., Kluytmans J.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:17 Article Number: D5040. Date of Publication: 1 Apr 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005748159&from=export>

RECORD 117**Cross-country comparison of case fatality rates of Covid-19/SARS-CoV-2**

Khafaie M.A., Rahim F.

Osong Public Health and Research Perspectives (2020) 11:2 (74-80). Date of Publication: 1 Apr 2020

Objectives: Case fatality rates (CFR) and recovery rates are important readouts during epidemics and pandemics. In this article, an international analysis was performed on the ongoing coronavirus disease 2019 (COVID-19) pandemic. **Methods:** Data were retrieved from accurate databases according to the user's guide of data sources for patient registries, CFR and recovery rates were calculated for each country. A comparison of CFR between countries with total cases $\geq 1,000$ was observed for 12th and 23rd March. **Results:** Italy's CFR was the highest of all countries studied for both time points (12th March, 6.22% versus 23rd March, 9.26%). The data showed that even though Italy was the only European country reported on 12th March, Spain and France had the highest CFR of 6.16 and 4.21%, respectively, on 23rd March, which was strikingly higher than the overall CFR of 3.61%. **Conclusion:** Obtaining detailed and accurate medical history from COVID-19 patients, and analyzing CFR alongside the recovery rate, may enable the identification of the highest risk areas so that efficient medical care may be provided. This may lead to the development of point-of-care tools to help clinicians in stratifying patients based on possible requirements in the level of care, to increase the probabilities of survival from COVID-19 disease.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631487796&from=export>

RECORD 118**Strong associations and moderate predictive value of early symptoms for SARS-CoV-2 test positivity among healthcare workers, the Netherlands, March 2020**

Tostmann A., Bradley J., Bousema T., Yiek W.-K., Holwerda 5.1.2e C., Ten Oever J., Meijer C., Rahamat-Langendoen J., Hopman J., van der Geest-Blankert N., Wertheim H.

Euro surveillance : bulletin Europeen sur les maladies transmissibles = European communicable disease bulletin (2020) 25:16. Date of Publication: 1 Apr 2020

Healthcare workers (n = 803) with mild symptoms were tested for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (n = 90 positive) and asked to complete a symptom questionnaire. Anosmia, muscle ache, ocular pain, general malaise, headache, extreme tiredness and fever were associated with positivity. A predictive model based on these symptoms showed moderate discriminative value (sensitivity: 91.2%; specificity: 55.6%). While our models would not justify presumptive SARS-CoV-2 diagnosis without molecular confirmation, it can contribute to targeted screening strategies.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631664870&from=export>

RECORD 119**How sewage could reveal true scale of coronavirus outbreak**



Mallapaty S.
Nature (2020) 580:7802 (176-177). Date of Publication: 1 Apr 2020
EMBASE LINK
<http://www.embase.com/search/results?subaction=viewrecord&id=L631983818&from=export>

RECORD 120

With COVID-19, modeling takes on life and death importance

Enserink M., Kupferschmidt K.
Science (2020) 367:6485 (1414-1415). Date of Publication: 27 Mar 2020
EMBASE LINK
<http://www.embase.com/search/results?subaction=viewrecord&id=L2005424140&from=export>

RECORD 121

Rapid assessment of regional SARS-CoV-2 community transmission through a convenience sample of healthcare workers, the Netherlands, March 2020

Reusken C.B., Buiting A., Bleeker-Rovers C., Diederens B., Hooiveld M., Friesema I., Koopmans M., Kortbeek T., Lutgens S.P.M., ^{5.1.2e}, Murk J.-L., Overdeest I., Trienekens T., ^{5.1.2e}, Van Den ^{5.1.2e}, Van Dissel J., Van Gageldonk-Lafeber A., Van Der Vegt D., Wever P.C., Van Der Hoek W., Kluytmans J.
Eurosurveillance (2020) 25:12 Article Number: 2000334. Date of Publication: 26 Mar 2020

To rapidly assess possible community transmission in Noord-Brabant, the Netherlands, healthcare workers (HCW) with mild respiratory complaints and without epidemiological link (contact with confirmed case or visited areas with active circulation) were tested for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Within 2 days, 1,097 HCW in nine hospitals were tested; 45 (4.1%) were positive. Of six hospitals with positive HCW, two accounted for 38 positive HCW. The results informed local and national risk management.

EMBASE LINK
<http://www.embase.com/search/results?subaction=viewrecord&id=L2005434496&from=export>

RECORD 122

Rapidly increasing cumulative incidence of coronavirus disease (COVID-19) in the European Union/European Economic Area and the United Kingdom, 1 January to 15 March 2020

Kinross P., Suetens C., Dias J.G., Alexakis L., Wijermans A., Colzani E., Monnet D.L.
Eurosurveillance (2020) 25:11 Article Number: 2000285. Date of Publication: 19 Mar 2020



The cumulative incidence of coronavirus disease (COVID-19) cases is showing similar trends in European Union/European Economic Area countries and the United Kingdom confirming that, while at a different stage depending on the country, the COVID-19 pandemic is progressing rapidly in all countries. Based on the experience from Italy, countries, hospitals and intensive care units should increase their preparedness for a surge of patients with COVID-19 who will require healthcare, and in particular intensive care.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005434489&from=export>

RECORD 123

Adaptive nutrients in strengthening the immune and respiratory system concerning COVID 19

Venipriyadharshini L.

International Journal of Research in Pharmaceutical Sciences (2020) 11:Special Issue 1 (198-200). Date of Publication: 11 Mar 2020

SARS – CoV – 2 is a deadly infectious virus which targets the respiratory system and leads to a disorder known as COVID 19. It is easily communicable between human beings. MERS –Corona Virus, SARS-Corona Virus, and SARS-Corona Virus-2 can lead to severe illness, whereas; novel coronavirus which related with several species which includes HKU1 (HCoV-HKU1) originated from infected mice. NL63, HCoV-NL63 is a species of Coronavirus that was recognized in 2004 in a child with bronchiolitis from the city of Netherlands. HCoV-OC43 is a virus which leads to infection generally occurs at respiratory tract around upside, and Human coronavirus 229E (HCoV-229E) is connected with a common cold and also symptoms in healthy individuals. Hosts with higher antioxidants and immune capacity can be easily tackled and fight against an antigen. Started from china there so many countries like the USA, Spain, Italy, France, Iran, India, England, Belgium and Pakistan which are profoundly affected by Coronavirus as on April 2020. This present review, papers focused on structure, platforms and ill effects of Coronavirus, and also dis-closes about the nutrients which include vitamins, minerals, polyphenols and antioxidants; the nutrients under discussion can support the healthy function-ing and also strengthen the respiratory system were reviewed.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2004867682&from=export>

RECORD 124

The NTvG in corona time

Het NTvG in coronatijd

Nederlands Tijdschrift voor Geneeskunde (2020) 164:13. Date of Publication: 1 Mar 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627799&from=export>

RECORD 125**Chloroquine as a possible treatment for COVID-19**
Chloroquine als mogelijke behandeling van COVID-19

Coumou J., De Vries P.J.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:13 Article Number: D4936. Date of Publication: 1 Mar 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005627805&from=export>

RECORD 126**Visualization analysis on treatment of coronavirus based on knowledge graph**

Wei Y., Yu W., Jianqiao T., Xiaoli X., Yuesheng Z., Suqi Y.

Zhonghua Wei Zhong Bing Ji Jiu Yi Xue (2020) 32:3 (279-286). Date of Publication: 1 Mar 2020

Objective To discuss the research progress in the field of coronavirus (CoVs) treatment based on the visualization analysis of knowledge graph. **Methods** The related literatures in the field of CoVs treatment were retrieved from the establishment of Web of Science core collection database to February 15th, 2020, and the literature analysis tool of Web of Science database was used to count the annual trend of published literatures. The VOSviewer software was used to analyze the relationship among countries, institutions, authors, clustering and density of subject words. The HistCite software was used to screen important documents and to draw the evolution process of hot spots. The CiteSpace software was used to analyze the breakout points of subject words, so as to find the front and hot spots in this field. **Results** A total of 1 747 data were retrieved, with the exception of 17 duplicate data, and 1 730 data were retained for visualization analysis. In terms of literature volume, the literatures on CoVs therapy rose after 2003 and 2012, and the number of published literatures had remained high since 2014. In terms of countries, the main countries that carried out the research on the treatment of CoVs were the United States (n = 613), China (n = 582), Germany (n = 122), Canada (n = 99), etc., and the cooperation among countries was close. In terms of institutions, the number of papers issued by Chinese Academy of Sciences in the field of CoVs treatment ranked first (n = 82), followed by University of Hong Kong of China (n = 74) and Chinese University of Hong Kong of China (n = 58), followed by National Institute of Allergy and Infectious Diseases (n = 37), and the cooperation among various institutions was close. In terms of literature authors, there were two high-yielding authors in the United States [Ralph S. Baric (n = 21) and Kuo Chen Chou (n = 17)], two Chinese authors [Yuen Kwok-yung (n = 17) and Jiang Shibo (n = 16)] and one Dutch author [Eric J. Snijder (n = 17)]. In terms of the cluster analysis of authors, the authors were closely



related in reverse genetics, respiratory infection, receptor binding domain, etc., and the 15 top-cited papers came mainly from China, the United States, Netherlands and other countries, and the literature content represented the frontiers and hot spots in different periods. The treatment hot spots focused on preventing virus adsorption, inhibiting the virus gene nucleic acid replication, transcription and translation. The main subject words were divided into three main categories, namely, CoVs epidemiology, basic research and drug development, in which basic research and drug development were strongly correlated. In the subject words breakthrough analysis, there were time-related breakthrough points in 1991, 1996 and 2002, and the "diagnosis" and "sequence" were continuous hot spots. Conclusions Through the visualization analysis of knowledge graph, the development trend and hot spots of CoVs therapy research could be well observed. In this study, the degree of attention in the field of CoVs treatment showed periodic changes, related to the outbreak of new CoVs, and the country, institutions and the author were closely related. The treatment hot spots focused on preventing virus adsorption, inhibiting the virus gene nucleic acid replication, transcription and translation in order to develop new targets of drug.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005891334&from=export>

RECORD 127**The arrival of COVID-19 in the Netherlands**

Falières I.

Anaesthesia, Pain and Intensive Care (2020) 21:1 (13-17). Date of Publication: 1 Feb 2020

The last three months have been the most memorable and the most tense period in the lives of the most of us. After Taking Wuhan (China) by storm, the coronavirus crossed all of the frontiers and reached to 202 countries, including the East Asian countries, Middle East, the Americas and then the European countries. The Netherlands was effected less, with about 1000 deaths and more than 12000 confirmed patients, than its neighbors – Italy and Spain, but had its share. This manuscript presents an outline of the public perceptions, and the guidelines to manage these patients at different stages of the disease, including ventilation and intubation protocols, based upon our experience of over two months. It does not claim to be complete and exhaustive, and the readers are directed to consult their National guidelines (if any).

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005907251&from=export>

RECORD 128**Hiding in plain sight: An approach to treating patients with severe covid-19 infection**

Fedson D.S., Opal S.M., Rordam O.M.

mBio (2020) 11:2 Article Number: e00398-20. Date of Publication: 2020

Patients with COVID-19 infection are at risk of acute respiratory disease syndrome (ARDS) and death. The tissue receptor for COVID-19 is ACE2, and higher levels of ACE2 can protect against ARDS. Angiotensin receptor blockers and statins upregulate ACE2. Clinical trials are needed to determine whether this drug combination might be used to treat patients with severe COVID-19 infection.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2004063290&from=export>

RECORD 129

Modeling and short-term forecasts of indicators for COVID-19 outbreak in 25 countries at the end of march

Ankarali H., Erarslan N., Pasin Ö., Al-Mahmood A.K.

Bangladesh Journal of Medical Science (2020) 19:Special issue (6-20). Date of Publication: 2020

Objective: The coronavirus, which originated in Wuhan, causing the disease called COVID-19, spread more than 200 countries and continents end of the March. In this study, it was aimed to model the outbreak with different time series models and also predict the indicators. Materials and Methods: The data was collected from 25 countries which have different process at least 20 days. ARIMA(p,d,q), Simple Exponential Smoothing, Holt's Two Parameter, Brown's Double Exponential Smoothing Models were used. The prediction and forecasting values were obtained for the countries. Trends and seasonal effects were also evaluated. Results and Discussion: China has almost under control according to forecasting. The cumulative death prevalence in Italy and Spain will be the highest, followed by the Netherlands, France, England, China, Denmark, Belgium, Brazil and Sweden respectively as of the first week of April. The highest daily case prevalence was observed in Belgium, America, Canada, Poland, Ireland, Netherlands, France and Israel between 10% and 12%.The lowest rate was observed in China and South Korea. Turkey was one of the leading countries in terms of ranking these criteria. The prevalence of the new case and the recovered were higher in Spain than Italy. Conclusion: More accurate predictions for the future can be obtained using time series models with a wide range of data from different countries by modelling real time and retrospective data.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2004710898&from=export>

RECORD 130

New on the market? Corona virus outbreak in Wuhan

Nieuw van de markt? Coronavirusuitbraak in Wuhan

Haagmans B.L., ^{5.1.2e}, Koopmans M.P.G.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:7 Article Number: D4847. Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005093119&from=export>

RECORD 131

Ibuprofen and thromboembolism in SARS-COV2

Arjomandi Rad A., Vardanyan R., Tas N.R.

Journal of Thrombosis and Haemostasis (2020). Date of Publication: 2020

Recent and developing literature has begun reporting on the incidence of thromboembolic events associated with COVID-19. Klok et al. analysed 184 SARS-CoV2-positive ICU patients in two Dutch University Hospitals, reporting an incidence of thrombotic complications to be 31%, with Pulmonary Embolism (PE) comprising 81% of these complications. [1] Moreover, Cui et al. reports on a population of 81 ICU patients at the Union Hospital, Wuhan, an incidence of 25% in VTE, also possibly related to worse prognosis. [2] Wang et al. collected data from 1026 COVID-19 positive patients in 31 provincial administrative regions in China and found 40% of the patients as high risk for VTE according to the Padua Prediction Score, with 11% being predicted to go on developing VTE. [3] Other reports and studies have also discussed the role of acute PE in COVID-19. Recent studies have also reported and advised on the use of prophylactic Low Molecular Weight Heparin (LMWH) in COVID-19 patients, to prevent the severe outcomes associated with thromboembolic complications.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005126492&from=export>

RECORD 132

Increase in COVID-19 cases and case-fatality and case-recovery rates in Europe: A cross-temporal meta-analysis

Karadag E.

Journal of Medical Virology (2020). Date of Publication: 2020

The new coronavirus (COVID-19) infection reported in China in December 2019 has become a pandemic in a few weeks, affecting the entire world. In this respect, it is crucial to determine the case-increase, case-fatality, and case-recovery rates to control COVID-19. In this study, the case-increase, case-fatality, and case-recovery rates of COVID-19 in 36 European countries were analyzed with the meta-analysis method using data released by the health organizations and WHO. The data were obtained from the website of health organizations of 36 European countries and the website of WHO until 11 May 2020. The analyses were carried out on 1 744 704 COVID-19-diagnosed cases in 36 European countries. The case-increase, case-fatality and case-recovery rates of COVID-19 were calculated using 95% confidence intervals (95% CI), single-arm



meta-analysis, cross-temporal meta-analysis, and meta-regression random-effects model. The standardized case-increase rate of COVID-19 is 5% (95% CI [0.040, 0.063]) and the average case-increase rate in European countries has started to decline by around 3% (95% CI [0.047, 0.083]) weekly. The countries with the highest rate of case increase are Belgium, Sweden, Russia, the Netherlands and the United Kingdom. Although the case-fatality rate of COVID-19 patients was 4.5% as of May 11 (95% CI [0.037-0.055]), this rate is 6.3% (95% CI [0.047, 0.083]) in standardized time (6th week). The case-recovery rates of patients are 46% (95% CI [0.376-0.547]). This study presents important results regarding the COVID-19 pandemic in Europe. Although the rate of increase in new COVID-19 cases has dropped, there is not much decline in the case-fatality rates and no increase in case-recovery rates. The case-fatality rate of COVID-19 in Europe was estimated to be in the range of 4% to 4.5% and a minimum of 4 weeks (as of 11 May) is expected to have the figure below 1% in a country with an average case-increase rate. Monitoring case fatalities in Belgium, the Netherlands and Sweden, and treatment successes in Germany and Austria play a role of utmost importance.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005132572&from=export>

RECORD 133

Correction: The challenge of COVID-19 and hematopoietic cell transplantation: EBMT recommendations for management of hematopoietic cell transplant recipients, their donors, and patients undergoing CAR T-cell therapy (Bone Marrow Transplantation, (2020), 10.1038/s41409-020-0919-0)

Ljungman P., Mikulska M., de la Camara R., Basak G.W., Chabannon C., Corbacioglu S., Duarte R., Dolstra H., Lankester A.C., Mohty M., Montoto S., Murray J., de Latour R.P., Snowden J.A., Yakoub-Agha I., Verhoeven B., Kröger N., Styczynski J. *Bone Marrow Transplantation* (2020). Date of Publication: 2020

The original HTML and PDF versions of this article were updated shortly after publication to correct author Bregje Verhoeven's name and affiliation. Bregje Verhoeven was incorrectly associated with Willem-Alexander Children's Hospital, Department of Pediatrics, Leiden University Medical Center, Leiden, The Netherlands. The correct affiliation is Foundation Hematon, Utrecht, The Netherlands. This has now been corrected in both the PDF and HTML versions of the article.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005168794&from=export>

RECORD 134

Blood donation and the global COVID-19 pandemic: areas for social science research

Haw J., Holloway K., Masser B.M., Merz E.-M., Thorpe R.

Vox Sanguinis (2020). Date of Publication: 2020

In the context of the global COVID-19 pandemic, blood collection agencies (BCAs) around the world are operating under unprecedented conditions. As social scientists in donor research in Canada, Australia, and the Netherlands, we provide some early observations on donor and public responses to the pandemic and identify areas for donor research moving forward. Given the significant variation among countries and BCAs, we cannot claim to present an exhaustive list that will apply to all countries and BCAs; however, we consider the following topic areas to be important based on our observations and knowledge of donation scholarship.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005418839&from=export>

RECORD 135

No SARS-CoV-2 detection in the German CAPNETZ cohort of community acquired pneumonia before COVID-19 peak in March 2020

Panning M., Wiener J., Rothe K., Schneider J., Pletz M.W., Rohde G., Rupp J., Witznath M., Spinner C.D., Dreher M., Cornelissen C., Knüppel W., Stolz D., Suttrop N., Bauer W., Mikolajewska A., Witznath M., Pankow W., Gläser S., Thiemi G., Prediger M., Schmager S., Kolditz M., Schulte-Hubbert B., Langner S., Rohde G., Bellinghausen C., Panning M., Hoffmann C., Welte T., Freise J., Barten G., Kröner W., Nawrocki M., Naim J., Illig T., Klopp N., Pletz M., Kroegel C., Schleenvoigt B., Forstner C., Moeser A., Drömann D., Parschke P., Franzen K., Rupp J., Käding N., Wouters M., Walraven K., Braeken D., Spinner C., Zaruchas A., Schaberg, Heigener D., Hering I., Albrich W., Waldeck F., Rassouli F., Baldesberger S., Stenger S., Wallner M., Burgmann H., Traby L.

Infection (2020). Date of Publication: 2020

Purpose: The first SARS-CoV-2 cases in Europe were reported in January 2020. Recently, concern arose on unrecognized infections before this date. For a better understanding of the pandemic, we retrospectively analyzed patient samples for SARS-CoV-2 from the prospective CAPNETZ study cohort. **Methods:** We used nasopharyngeal swab samples from a cohort of well characterized patients with community acquired pneumonia of the CAPNETZ study group, recruited from different geographic regions across Germany, Austria, the Netherlands, and Switzerland between 02nd December 2019 and 28th April 2020. Multiplex real-time RT-PCR for a broad range of respiratory pathogens and SARS-CoV-2 real-time RT-PCR were performed on all samples. **Results:** In our cohort, respiratory pathogens other than SARS-CoV-2 were detected in 21.5% (42/195) of patients with rhinovirus as the most frequently detected pathogen. The detection rate increased to 29.7% (58/195) when SARS-CoV-2 was included. No SARS-CoV-2 positive sample was detected before end of March 2020. **Conclusions:** Respiratory viral pathogens accounted for a considerable number of positive results but no SARS-CoV-2 case was identified before the end of March 2020.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005471062&from=export>

RECORD 136**Prevalence of COVID-19 diagnosis in Dutch CML patients during the 2020 SARS-CoV2 pandemic. A prospective cohort study**

Ector G.I.C.G., Huijskens E.G.W., Blijlevens N.M.A., Westerweel P.E.
Leukemia (2020). Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005521445&from=export>

RECORD 137**Clinical characteristics and outcome of SARS-CoV-2-infected patients with haematological diseases: a retrospective case study in four hospitals in Italy, Spain and the Netherlands**

van Doesum J., China A., Pagliaro M., Pasquini M.C., van Meerten T., 5 1,2e, Ammatuna E.

Leukemia (2020). Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005524078&from=export>

RECORD 138**COVID-19 in multiple sclerosis: The Dutch experience**

Loonstra F.C., Hoitsma E., van Kempen Z.L.E., Killestein J., Mostert J.P.
Multiple Sclerosis Journal (2020). Date of Publication: 2020

Here, we provide an extensive overview of all reported COVID-19 cases in multiple sclerosis (MS) patients in the Netherlands between 27 February and 9 June 2020, gathered by the Dutch MS Taskforce of the Netherlands Society of Neurology. A total of 86 MS patients were reported, 43 of whom tested positive for COVID-19. Of 43 patients who tested positive, 22 patients were hospitalized. Three intensive care unit (ICU) admissions and four deaths were reported. Our findings show no apparent difference in disease-modifying treatment (DMT) use and COVID-19 disease course in Dutch MS patients. In addition, a clear link between low lymphocyte count and severe disease was not observed.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005572559&from=export>

RECORD 139**Clinical and Pathological Findings in SARS-CoV-2 Disease Outbreaks in Farmed Mink (Neovison vison)**

5.1.2e R.J., Vreman S., Hakze-van der Honing R.W., Zwart R., de Rond J., Weesendorp E., Smit L.A.M., Koopmans M., Bouwstra R., Stegeman 5.1.2e, 5.1.2e, 5.1.2e W.H.M.

Veterinary Pathology (2020). Date of Publication: 2020

SARS-CoV-2, the causative agent of COVID-19, caused respiratory disease outbreaks with increased mortality in 4 mink farms in the Netherlands. The most striking postmortem finding was an acute interstitial pneumonia, which was found in nearly all examined mink that died at the peak of the outbreaks. Acute alveolar damage was a consistent histopathological finding in mink that died with pneumonia. SARS-CoV-2 infections were confirmed by detection of viral RNA in throat swabs and by immunohistochemical detection of viral antigen in nasal conchae, trachea, and lung. Clinically, the outbreaks lasted for about 4 weeks but some animals were still polymerase chain reaction-positive for SARS-CoV-2 in throat swabs after clinical signs had disappeared. This is the first report of the clinical and pathological characteristics of SARS-CoV-2 outbreaks in mink farms.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005572574&from=export>

RECORD 140**Rapid SARS-CoV-2 whole-genome sequencing and analysis for informed public health decision-making in the Netherlands**

Oude Munnink B.B., Nieuwenhuijse D.F., Stein M., O'Toole Á., Haverkate M., Mollers M., Kamga S.K., Schapendonk C., Pronk M., Lexmond P., van der Linden A., Bestebroer T., Chestakova I., Overmars R.J., van Nieuwkoop S., Molenkamp R., van der Eijk A.A., GeurtsvanKessel C., Vennema H., 5.1.2e, Rambaut A., van Dissel J., Sikkema R.S., 5.1.2e, Koopmans M., Oudehuis G.J.A.P.M., Schinkel J., Kluytmans J., Kluytmans-van den Bergh M., van den 5.1.2e, Berntvelsen R.G., van Rijen M.M.L., Schneeberger P., Pas S., Diederens B.M., Bergmans A.M.C., van der Eijk P.A.V., Verweij J., Buiting A.G.N., Streefkerk R., Aldenkamp A.P., de Man P., Koelemal J.G.M., Ong D., Paltansing S., Veassen N., Slevin J., Bakker L., Brockhoff H., Rietveld A., Slijkerman Megelink F., Cohen Stuart J., de Vries A., van der Reijden W., Ros A., Lodder E., Verspui-van der Eijk E., Huijskens I., Kraan E.M., van der Linden M.P.M., Debast S.B., Naiemi N.A., Kroes A.C.M., Damen M., Dinant S., Lekkerkerk S., Pontesilli O., Smit P., van Tienen C., 5.1.2e, 5.1.2e, van Pelt J., Ott A., van der Weijden C., Wertheim H., Rahamat-Langendoen J., Reimerink J., Bodewes R., Duizer E., van der Veer B., Reusken C., Lutgens S., Schneeberger P., Hermans M., Wever P., Leenders A., ter Waarbeek H., 5.1.2e

Nature Medicine (2020). Date of Publication: 2020

In late December 2019, a cluster of cases of pneumonia of unknown etiology were

reported linked to a market in Wuhan, China¹. The causative agent was identified as the species Severe acute respiratory syndrome-related coronavirus and was named SARS-CoV-2 (ref. ²). By 16 April the virus had spread to 185 different countries, infected over 2,000,000 people and resulted in over 130,000 deaths³. In the Netherlands, the first case of SARS-CoV-2 was notified on 27 February. The outbreak started with several different introductory events from Italy, Austria, Germany and France followed by local amplification in, and later also outside, the south of the Netherlands. The combination of near to real-time whole-genome sequence analysis and epidemiology resulted in reliable assessments of the extent of SARS-CoV-2 transmission in the community, facilitating early decision-making to control local transmission of SARS-CoV-2 in the Netherlands. We demonstrate how these data were generated and analyzed, and how SARS-CoV-2 whole-genome sequencing, in combination with epidemiological data, was used to inform public health decision-making in the Netherlands.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005593887&from=export>

RECORD 141

Impact of the COVID-19 outbreak on acute stroke care

Rinkel L.A., Prick J.C.M., Slot R.E.R., Sombroek N.M.A., Burggraaff J., Groot A.E., Emmer B.J., ^{5.1.2e} ^{5.1.2e}, Brouwer M.C., van den Berg-Vos R.M., Majoie C.B.L.M., Beenen L.F.M., van de Beek D., Visser M.C., van Schaik S.M., Coutinho J.M. *Journal of Neurology* (2020). Date of Publication: 2020

Background and purpose: There are concerns that the coronavirus disease 2019 (COVID-19) outbreak negatively affects the quality of care for acute cardiovascular conditions. We assessed the impact of the COVID-19 outbreak on trends in hospital admissions and workflow parameters of acute stroke care in Amsterdam, The Netherlands. **Methods:** We used data from the three hospitals that provide acute stroke care for the Amsterdam region. We compared two 7-week periods: one during the peak of the COVID-19 outbreak (March 16th–May 3th 2020) and one prior to the outbreak (October 21st–December 8th 2019). We included consecutive patients who presented to the emergency departments with a suspected stroke and assessed the change in number of patients as an incidence-rate ratio (IRR) using a Poisson regression analysis. Other outcomes were the IRR for stroke subtypes, change in use of reperfusion therapy, treatment times, and in-hospital complications. **Results:** During the COVID-19 period, 309 patients presented with a suspected stroke compared to 407 patients in the pre-COVID-19 period (IRR 0.76 95%CI 0.65–0.88). The proportion of men was higher during the COVID-19 period (59% vs. 47%, $p < 0.001$). There was no change in the proportion of stroke patients treated with intravenous thrombolysis (28% vs. 30%, $p = 0.58$) or endovascular thrombectomy (11% vs 12%, $p = 0.82$) or associated treatment times. Seven patients (all ischemic strokes) were diagnosed with COVID-19. **Conclusion:** We observed a 24% decrease in suspected stroke presentations during the COVID-19 outbreak, but no evidence for a decrease in quality of acute stroke care.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005622105&from=export>

RECORD 142**Mortality and the Use of Antithrombotic Therapies Among Nursing Home Residents with COVID-19**

Brouns S.H., Brüggemann R., Linkens A.E.M.J.H., Magdelijns F.J., Joosten H., Heijnen R., ten Cate-Hoek A.J., Schols J.M.G.A., ten Cate H., Spaetgens B.
Journal of the American Geriatrics Society (2020). Date of Publication: 2020

BACKGROUND/OBJECTIVES: Nursing home (NH) residents are a vulnerable population, susceptible to respiratory disease outbreaks such as coronavirus disease 2019 (COVID-19). Poor outcome in COVID-19 is at least partly attributed to hypercoagulability, resulting in a high incidence of thromboembolic complications. It is unknown whether commonly used antithrombotic therapies may protect the vulnerable NH population with COVID-19 against mortality. This study aimed to investigate whether the use of oral antithrombotic therapy (OAT) was associated with a lower mortality in NH residents with COVID-19. **DESIGN:** A retrospective case series. **SETTING:** Fourteen NH facilities from the NH organization Envida, Maastricht, the Netherlands. **PARTICIPANTS:** A total of 101 NH residents with COVID-19 were enrolled. **MEASUREMENTS:** The primary outcome was all-cause mortality. The association between age, sex, comorbidity, OAT, and mortality was assessed using logistic regression analysis. **RESULTS:** Overall mortality was 47.5% in NH residents from 14 NH facilities. Age, comorbidity, and medication use were comparable among NH residents who survived and who died. OAT was associated with a lower mortality in NH residents with COVID-19 in the univariable analysis (odds ratio (OR) = 0.89; 95% confidence interval (CI) = 0.41–1.95). However, additional adjustments for sex, age, and comorbidity attenuated this difference. Mortality in males was higher compared with female residents (OR = 3.96; 95% CI = 1.62–9.65). Male residents who died were younger compared with female residents (82.2 (standard deviation (SD) = 6.3) vs 89.1 (SD = 6.8) years; $P < .001$). **CONCLUSION:** NH residents in the 14 facilities we studied were severely affected by the COVID-19 pandemic, with a mortality of 47.5%. Male NH residents with COVID-19 had worse outcomes than females. We did not find evidence for any protection against mortality by OAT, necessitating further research into strategies to mitigate poor outcome of COVID-19 in vulnerable NH populations.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005630502&from=export>

RECORD 143**Early impact of COVID-19 on individuals with self-reported eating disorders: A survey of ~1,000 individuals in the United States and the Netherlands**

Termorshuizen J.D., Watson H.J., Thornton L.M., Borg S., Flatt R.E., MacDermod C.M., Harper L.E., van Furth E.F., Peat C.M., Bulik C.M.

International Journal of Eating Disorders (2020). Date of Publication: 2020

Objective: We evaluated the early impact of COVID-19 on people with self-reported eating disorders. **Method:** Participants in the United States (US, N = 511) and the Netherlands (NL, N = 510), recruited through ongoing studies and social media, completed an online survey that included both quantitative measures and free-text responses assessing the impact of COVID-19 on situational circumstances, eating disorder symptoms, eating disorder treatment, and general well-being. **Results:** Results revealed strong and wide-ranging effects on eating disorder concerns and illness behaviors that were consistent with eating disorder type. Participants with anorexia nervosa (US 62% of sample; NL 69%) reported increased restriction and fears about being able to find foods consistent with their meal plan. Individuals with bulimia nervosa and binge-eating disorder (US 30% of sample; NL 15%) reported increases in their binge-eating episodes and urges to binge. Respondents noted marked increases in anxiety since 2019 and reported greater concerns about the impact of COVID-19 on their mental health than physical health. Although many participants acknowledged and appreciated the transition to telehealth, limitations of this treatment modality for this population were raised. Individuals with past histories of eating disorders noted concerns about relapse related to COVID-19 circumstances. Encouragingly, respondents also noted positive effects including greater connection with family, more time for self-care, and motivation to recover. **Discussions:** COVID-19 is associated with increased anxiety and poses specific disorder-related challenges for individuals with eating disorders that require attention by healthcare professionals and carers.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005689097&from=export>

RECORD 144

Strong associations and moderate predictive value of early symptoms for SARS-CoV-2 test positivity among healthcare workers, the Netherlands, March 2020

Tostmann A., Bradley J., Bousema T., Yiek W.-K., Holwerda 5.1.2e C., ten Oever J., Meijer C., Rahamat-Langendoen J., Hopman J., van der Geest-Blankert N., Wertheim H.

Eurosurveillance (2020) 25:16. Date of Publication: 2020

Healthcare workers (n=803) with mild symptoms were tested for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (n=90 positive) and asked to complete a symptom questionnaire. Anosmia, muscle ache, ocular pain, general malaise, headache, extreme tiredness and fever were associated with positivity. A predictive model based on these symptoms showed moderate discriminative value (sensitivity: 91.2%; specificity: 55.6%). While our models would not justify presumptive SARS-CoV-2 diagnosis without molecular confirmation, it can contribute to targeted screening strategies.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2005687509&from=>

[export](#)**RECORD 145****Favorable Anakinra Responses in Severe Covid-19 Patients with Secondary Hemophagocytic Lymphohistiocytosis**

Dimopoulos G., de Mast Q., Markou N., Theodorakopoulou M., Komnos A., Mouktaroudi M., Netea M.G., Spyridopoulos T., Verheggen R.J., Hoogerwerf J., Lachana A., van de Veerdonk F.L., Giamarellos-Bourboulis E.J.
Cell Host and Microbe (2020). Date of Publication: 2020

Dysregulation of inflammation is hypothesized to play a crucial role in the severe complications of COVID-19, with the IL-1/IL-6 pathway being central. Here, we report on the treatment of eight severe COVID-19 pneumonia patients—seven hospitalized in intensive care units (ICUs) in Greece and one non-ICU patient in the Netherlands—with the interleukin-1 receptor antagonist Anakinra. All patients scored positive for the hemophagocytosis score (HScore) and were diagnosed with secondary hemophagocytic lymphohistiocytosis (sHLH) characterized by pancytopenia, hypercoagulation, acute kidney injury, and hepatobiliary dysfunction. At the end of treatment, ICU patients had less need for vasopressors, significantly improved respiratory function, and lower HScore. Although three patients died, the mortality was lower than historical series of patients with sHLH in sepsis. These data suggest that administration of Anakinra may be beneficial for treating severe COVID-19 patients with sHLH as determined by the HScore, and they support the need for larger clinical studies to validate this concept.

Complex immune dysregulation in severe COVID-19 suggests the use of immunomodulation therapies. Dimopoulos et al. describe eight cases of COVID-19 patients who all had secondary hemophagocytic lymphohistiocytosis and showed favorable responses in respiratory function upon treatment with the interleukin-1 receptor antagonist Anakinra.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006025203&from=export>

RECORD 146**Forecasting the Future of Urology Practice: A Comprehensive Review of the Recommendations by International and European Associations on Priority Procedures During the COVID-19 Pandemic**

Amparore D., Campi R., Checucci E., Sessa F., Pecoraro A., Minervini A., Fiori C., Ficarra V., Novara G., Serni S., Porpiglia F.
European Urology Focus (2020). Date of Publication: 2020

There was a large consensus among the different urological associations/societies regarding the prioritization of most urological procedures. However, some differences



were found regarding specific cancer surgeries (ie, radical cystectomy for higher-risk bladder cancer and nephrectomy for larger organ-confined renal masses). In the future, the procedures that are likely to impact the burden of urologists' workload most are prostate biopsies, elective procedures for benign conditions, elective surgeries for lower-risk prostate and renal cancers, nonobstructing stone disease, and benign prostatic hyperplasia.

Context: The unprecedented health care scenario caused by the coronavirus disease 2019 (COVID-19) pandemic has revolutionized urology practice worldwide. **Objective:** To review the recommendations by the international and European national urological associations/societies (UASs) on prioritization strategies for both oncological and nononcological procedures released during the current emergency scenario. **Evidence acquisition:** Each UAS official website was searched between April 8 and 18, 2020, to retrieve any document, publication, or position paper on prioritization strategies regarding both diagnostic and therapeutic urological procedures, and any recommendations on the use of telemedicine and minimally invasive surgery. We collected detailed information on all urological procedures, stratified by disease, priority (higher vs lower), and patient setting (outpatient vs inpatient). Then, we critically discussed the implications of such recommendations for urology practice in both the forthcoming "adaptive" and the future "chronic" phase of the COVID-19 pandemic. **Evidence synthesis:** Overall, we analyzed the recommendations from 13 UASs, of which four were international (American Urological Association, Confederation Americana de Urologia, European Association of Urology, and Urological Society of Australia and New Zealand) and nine national (from Belgium, France, Germany, Italy, Poland, Portugal, The Netherlands, and the UK). In the outpatient setting, the procedures that are likely to impact the future burden of urologists' workload most are prostate biopsies and elective procedures for benign conditions. In the inpatient setting, the most relevant contributors to this burden are represented by elective surgeries for lower-risk prostate and renal cancers, nonobstructing stone disease, and benign prostatic hyperplasia. Finally, some UASs recommended special precautions to perform minimally invasive surgery, while others outlined the potential role of telemedicine to optimize resources in the current and future scenarios. **Conclusions:** The expected changes will put significant strain on urological units worldwide regarding the overall workload of urologists, internal logistics, inflow of surgical patients, and waiting lists. In light of these predictions, urologists should strive to leverage this emergency period to reshape their role in the future. **Patient summary:** Overall, there was a large consensus among different urological associations/societies regarding the prioritization of most urological procedures, including those in the outpatient setting, urological emergencies, and many inpatient surgeries for both oncological and nononcological conditions. On the contrary, some differences were found regarding specific cancer surgeries (ie, radical cystectomy for higher-risk bladder cancer and nephrectomy for larger organ-confined renal masses), potentially due to different prioritization criteria and/or health care contexts. In the future, the outpatient procedures that are likely to impact the burden of urologists' workload most are prostate biopsies and elective procedures for benign conditions. In the inpatient setting, the most relevant contributors to this burden are represented by elective surgeries for lower-risk prostate and renal cancers, nonobstructing stone



disease, and benign prostatic hyperplasia.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006742067&from=export>

RECORD 147

Negatieve invloed geneesmiddelen op COVID-19

Borgsteede S.D., Diesveld M., De Klerk S., Pham K.L., Schoenmakers S., Versmissen J., Lafeber M.

Geneesmiddelenbulletin (2020) 54:4 (29-32). Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006767075&from=export>

RECORD 148

Echo's chamber and Narcissus' pool

De kamer van Echo en de vijver van Narcissus

Van Eijsden P.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:25. Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006908564&from=export>

RECORD 149

Air pollution: A determinant for COVID-19?

Luchtverontreiniging: Een determinant voor COVID-19?

In't Veen J.C.C.M., Kappen J.H., Van Schayck O.C.P.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:25 Article Number: D5153. Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006908568&from=export>

RECORD 150

The role of children in the transmission of SARS-CoV-2

De rol van kinderen in de transmissie van SARS-CoV-2

Van Der Hoek W., Backer J.A., Bodewes R., Friesema I., ^{5.1.2e}, Pijnacker R., Reukers D.F.M., Reusken C., Roof I., Rots N., Te Wierik ^{5.1.2e}, Van Gageldonk-Lafeber A.B., Waegemaekers C.H.F.M., Van Den Hof S.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:25 Article Number: D5140. Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006908570&from=export>

RECORD 151**Clinical meaning of laboratory tests for SARS-CoV-2****Klinische betekenis van laboratoriumtesten SARSCoV-2**

Goudsmit J., Van Der Waals F.W., 5.1.2e, De Wolf F.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:25. Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006908573&from=export>

RECORD 152**Interview with Esther Kuiper****Esther Kuiper**

Van Der Zeeuw F.

Nederlands Tijdschrift voor Geneeskunde (2020) 164:25. Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006908576&from=export>

RECORD 153**COVID-19: Preventive measures are effective to a certain extent****COVID-19: Preventieve maatregelen effectief**

5.1.2e

Nederlands Tijdschrift voor Geneeskunde (2020) 164:26. Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006908578&from=export>

RECORD 154**(Vi)-rushed Into Online Group Schema Therapy Based Day-Treatment for Older Adults by the COVID-19 Outbreak in the Netherlands**

van Dijk S.D.M., Bouman R., Folmer E.H., den Held R.C., Warringa J.E., Marijnissen R.M., Voshaar R.C.O.

American Journal of Geriatric Psychiatry (2020). Date of Publication: 2020

Background: Societal measures in context of the COVID-19 outbreak forced us to transform our schema therapy based day-treatment for older adults with chronic affective disorders and personality problems into an online program. The objective of this paper is to present first impressions of this transformation. Methods: Using over-the-phone instructions initially, all patients were able to participate with the online therapy



program. To reduce screen-time for patients, the nonverbal therapies were shortened. Four patients, aged 64–70 years, started our online program. Results: Therapists were positive about the online capabilities and resilience of patients to adapt to the new situation. Prejudices on limited effectiveness of online psychotherapy were counteracted. Sending homework by email and mail seems to facilitate therapy adherence. Nonverbal therapy could be important to stimulate the online group process. Conclusion: We were positively surprised by the online capabilities of our geriatric mental healthcare patients and encourage further formal effectiveness studies.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2006926560&from=export>

RECORD 155

BCG as a game-changer to prevent the infection and severity of COVID-19 pandemic?

Sharma A.R., Batra G., Kumar M., Mishra A., Singla R., Singh A., Singh R.S., Medhi B. *Allergologia et Immunopathologia* (2020). Date of Publication: 2020

The impact of COVID-19 is changing with country wise and depend on universal immunization policies. COVID-19 badly affects countries that did not have universal immunization policies or having them only for the selective population of countries (highly prominent population) like Italy, USA, UK, Netherland, etc. Universal immunization of BCG can provide great protection against the COVID-19 infection because the BCG vaccine gives broad protection against respiratory infections. BCG vaccine induces expressions of the gene that are involved in the antiviral innate immune response against viral infections with long-term maintenance of BCG vaccine-induced cellular immunity. COVID-19 cases are reported very much less in the countries with universal BCG vaccination policies such as India, Afghanistan, Nepal, Bhutan, Bangladesh, Israel, Japan, etc. as compared to without BCG implemented countries such as the USA, Italy, Spain, Canada, UK, etc. BCG vaccine provides protection for 50–60 years of immunization, so the elderly population needs to be revaccinated with BCG. Several countries started clinical trials of the BCG vaccine for health care workers and elderly people. BCG can be uses as a prophylactic treatment until the availability of the COVID-19 vaccine.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007000834&from=export>

RECORD 156

COVID-19 in health-care workers in three hospitals in the south of the Netherlands: a cross-sectional study

Sikkema R.S., Pas S.D., Nieuwenhuijse D.F., O'Toole Á., Verweij J., van der Linden A., Chestakova I., Schapendonk C., Pronk M., Lexmond P., Bestebroer T., Overmars R.J., van Nieuwkoop S., van den 5.1.2e, Bentvelsen R.G., van Rijen M.M.L., Buiting



A.G.M., van Oudheusden A.J.G., Diederer B.M., Bergmans A.M.C., van der Eijk A., Molenkamp R., Rambaut [1](#), [5.1.2e](#), Kluytmans J.A.J.W., Oude Munnink B.B., Kluytmans van den Bergh M.F.Q., Koopmans M.P.G.
The Lancet Infectious Diseases (2020). Date of Publication: 2020

Background: 10 days after the first reported case of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in the Netherlands (on Feb 27, 2020), 55 (4%) of 1497 health-care workers in nine hospitals located in the south of the Netherlands had tested positive for SARS-CoV-2 RNA. We aimed to gain insight in possible sources of infection in health-care workers. **Methods:** We did a cross-sectional study at three of the nine hospitals located in the south of the Netherlands. We screened health-care workers at the participating hospitals for SARS-CoV-2 infection, based on clinical symptoms (fever or mild respiratory symptoms) in the 10 days before screening. We obtained epidemiological data through structured interviews with health-care workers and combined this information with data from whole-genome sequencing of SARS-CoV-2 in clinical samples taken from health-care workers and patients. We did an in-depth analysis of sources and modes of transmission of SARS-CoV-2 in health-care workers and patients. **Findings:** Between March 2 and March 12, 2020, 1796 (15%) of 12 022 health-care workers were screened, of whom 96 (5%) tested positive for SARS-CoV-2. We obtained complete and near-complete genome sequences from 50 health-care workers and ten patients. Most sequences were grouped in three clusters, with two clusters showing local circulation within the region. The noted patterns were consistent with multiple introductions into the hospitals through community-acquired infections and local amplification in the community. **Interpretation:** Although direct transmission in the hospitals cannot be ruled out, our data do not support widespread nosocomial transmission as the source of infection in patients or health-care workers. **Funding:** EU Horizon 2020 (RECoVer, VEO, and the European Joint Programme One Health METASTAVA), and the National Institute of Allergy and Infectious Diseases, National Institutes of Health.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007030292&from=export>

RECORD 157

Outpatient mental health care during the COVID-19 crisis in Flanders: It could have been much better

De ambulante ggz tijdens de COVID-19-crisis in Vlaanderen: Het kon veel beter

Goethals K.

Tijdschrift voor Psychiatrie (2020) 62:7 (523-527). Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007176949&from=export>

RECORD 158



Real-time naive case fatality rates can reflect timeliness of case confirmation during pandemics

Qi R., Chen C., Hu X.-B., Yu X.-J.

Journal of Infection and Public Health (2020). Date of Publication: 2020

An objective law was observed that naive case fatality rates (CFRs) of a disease will decrease early and then gradually increase infinitely near the true CFR as time went on during an outbreak. The normal growth of naive CFR was an inherent character rather than indicating the disease was becoming more severe. According to the law, by monitoring real-time naive CFRs, it can help outbreak-controllers know if there were many cases left unconfirmed or undiscovered in the outbreak. We reflected on the use of the naive CFR in the context of COVID-19 outbreaks. The results showed that Hubei Province of China, France and South Korea had cases that were not confirmed in a timely manner during the initial stages of the outbreak. Delayed case confirmations existed for long periods of time in France, Italy, the United Kingdom, the Netherlands and Spain. Monitoring of real-time naive CFRs could be helpful for decision-makers to identify under-reporting of cases during pandemics.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L2007443857&from=export>

RECORD 159

Thrombosis management in times of COVID-19 epidemy; a Dutch perspective

Ten Cate H.

Thrombosis Journal (2020) 18:1. Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631570167&from=export>

RECORD 160

Psychiatry and the covid-19 crisis

Psychiatrie en de COVID-19-crisis

Van H.L., Dom G.

Tijdschrift voor psychiatrie (2020) 62:4 (240-243). Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631716650&from=export>

RECORD 161

'Scientific Strabismus' or Two Related Pandemics: COVID-19 & Vitamin D Deficiency

Kara M., Ekiz T., Ricci V., Kara Ö., Chang K.-V., Özçakar L.

British Journal of Nutrition (2020). Date of Publication: 2020

World Health Organization announced the novel coronavirus disease (COVID-19) outbreak to be a global pandemic. The distribution of community outbreaks shows seasonal patterns along certain latitude, temperature, and humidity i.e. similar to the behavior of seasonal viral respiratory tract infections. COVID-19 displays significant spread in northern midlatitude countries with an average temperature of 5-11 °C and low humidity. Vitamin D deficiency has also been described as pandemic, especially in the Europe. Regardless of age, ethnicity, and latitude; recent data showed that 40% of the Europeans are Vitamin D deficient (25(OH)D levels <50 nmol/L), and 13% are severely deficient (25(OH)D <30 nmol/L). A quadratic relationship was found between the prevalences of Vitamin D deficiency in most commonly affected countries by COVID-19 and the latitudes. Vitamin D deficiency is more common in the subtropical and midlatitude countries than the tropical and high latitude countries. The most commonly affected countries with severe Vitamin D deficiency are from the subtropical (Saudi Arabia; 46%, Qatar; 46%, Iran; 33.4%, Chile; 26.4%) and midlatitude (France; 27.3%, Portugal; 21.2% and Austria; 19.3%) regions. Severe Vitamin D deficiency was found to be nearly 0% in some high latitude countries (e.g. Norway, Finland, Sweden, Denmark and Netherlands). Accordingly, we would like to call attention to the possible association between severe Vitamin D deficiency and mortality pertaining to COVID-19. Given its rare side effects and relatively wide safety, prophylactic Vitamin D supplementation and/or food fortification might reasonably serve as a very convenient adjuvant therapy for these two worldwide public health problems alike.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L631797201&from=export>

RECORD 162

Herd immunity or suppression strategy to combat COVID-19

Jung F., Krieger V., Hufert F.T., Küpper J.-H.

Clinical hemorheology and microcirculation (2020) 75:1 (13-17). Date of Publication: 2020

Some months ago, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) broke out in Wuhan, China, and spread rapidly around the world. Some states, such as the Netherlands, Germany, Great Britain, Sweden and the USA initially focused on keeping the restrictions for economy and society as low as possible. The responsible authorities were of the opinion - and still are e.g. in Sweden - that it is sufficient enough to protect particularly vulnerable persons such as the elderly or people with pre-existing conditions. The idea behind this is that as soon as 60 to 70 percent of the population is infected with a pathogen, a so-called "herd immunity" has developed. However, the increasing numbers of deaths and modelling studies showed the expected overload of the hospitals. Therefore, most countries decided for a temporary lockdown with the exception of Sweden. Based on the number of the total population, three times more people died from COVID-19 in Sweden (2679 deaths per 10 million inhabitants) compared to Germany (6848 deaths per 80 million inhabitants). The comparison



Sweden versus Taiwan is even worse because 1072 times more people died in Sweden based on the number of the population (6 deaths per 24 million inhabitants). In the face of the lack of an antiviral treatment and the lack of a protective vaccine one must state Taiwan has made the best out of the pandemic situation whereas Sweden failed completely.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632094725&from=export>

RECORD 163

Mood Homeostasis before and during the Coronavirus Disease 2019 (COVID-19) Lockdown among Students in the Netherlands

Taquet M., Quoidbach J., Fried E.I., Goodwin G.M.
JAMA Psychiatry (2020). Date of Publication: 2020

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632541917&from=export>

RECORD 164

Public perspectives on protective measures during the COVID-19 pandemic in the Netherlands, Germany and Italy: A survey study

Meier K., Glatz T., Guijt M.C., Piccininni M., van der Meulen M., Atmar K., Jolink A.-T.C., Kurth T., Rohmann J.L., Zamanipour Najafabadi A.H.
PloS one (2020) 15:8 (e0236917). Date of Publication: 2020

BACKGROUND: The extent to which people implement government-issued protective measures is critical in preventing further spread of coronavirus disease 2019 (COVID-19) caused by coronavirus SARS-CoV-2. Our study aimed to describe the public belief in the effectiveness of protective measures, the reported implementation of these measures, and to identify communication channels used to acquire information on COVID-19 in European countries during the early stage of the pandemic. **METHODS AND FINDINGS:** An online survey available in multiple languages was disseminated starting on March 19th, 2020. After five days, we computed descriptive statistics for countries with more than 500 respondents. Each day, we assessed enacted community containment measures by stage of stringency (I-IV). In total, 9,796 adults responded, of whom 8,611 resided in the Netherlands (stage III), 604 in Germany (stage III), and 581 in Italy (stage IV). To explore possible dynamics as containment strategies intensified, we also included 1,365 responses submitted during the following week. Participants indicated support for governmental measures related to avoiding social gatherings, selective closure of public places, and hand hygiene and respiratory measures (range for all measures: 95.0%-99.7%). Respondents from the Netherlands less frequently considered a complete social lockdown effective (59.2%), compared to respondents in Germany (76.6%) or Italy (87.2%). Italian residents applied enforced social distancing measures more frequently (range: 90.2%-99.3%, German and Dutch residents: 67.5%-



97.0%) and self-initiated hygienic and social distancing behaviors (range: 36.3%-96.6%, German and Dutch residents: 28.3%-95.7%). Respondents reported being sufficiently informed about the outbreak and behaviors to avoid infection (range: 90.2%-91.1%). Information channels most commonly reported included television newspapers, official health websites, and social media. One week later, we observed no major differences in submitted responses. CONCLUSIONS: During the early stage of the COVID-19 pandemic, belief in the effectiveness of protective measures among survey respondents from three European countries was high and participants reported feeling sufficiently informed. In March 2020, implementation of measures differed between countries and were highest among respondents from Italy, who were subjected to the most stringent lockdown measures and greatest COVID-19 burden in Europe during this period.

EMBASE LINK

<http://www.embase.com/search/results?subaction=viewrecord&id=L632545971&from=export>