

The Daily COVID-19 Literature Surveillance Summary

August 26, 2020



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<https://www.covid19lst.org/podcast/>



COVID-19 Daily Literature Surveillance

COVID19LST



Bringing you real time, distilled information for guiding best practices during the COVID-19 pandemic

LEVEL OF EVIDENCE

Oxford Centre for Evidence-Based Medicine 2011 Levels of Evidence

Question	Step 1 (Level 1*)	Step 2 (Level 2*)	Step 3 (Level 3*)	Step 4 (Level 4*)	Step 5 (Level 5)
How common is the problem?	Local and current random sample surveys (or censuses)	Systematic review of surveys that allow matching to local circumstances**	Local non-random sample**	Case-series**	n/a
Is this diagnostic or monitoring test accurate? (Diagnosis)	Systematic review of cross sectional studies with consistently applied reference standard and blinding	Individual cross sectional studies with consistently applied reference standard and blinding	Non-consecutive studies, or studies without consistently applied reference standards**	Case-control studies, or "poor or non-independent reference standard**	Mechanism-based reasoning
What will happen if we do not add a therapy? (Prognosis)	Systematic review of inception cohort studies	Inception cohort studies	Cohort study or control arm of randomized trial*	Case-series or case-control studies, or poor quality prognostic cohort study**	n/a
Does this intervention help? (Treatment Benefits)	Systematic review of randomized trials or n-of-1 trials	Randomized trial or observational study with dramatic effect	Non-randomized controlled cohort/follow-up study**	Case-series, case-control studies, or historically controlled studies**	Mechanism-based reasoning
What are the COMMON harms? (Treatment Harms)	Systematic review of randomized trials, systematic review of nested case-control studies, n-of-1 trial with the patient you are raising the question about, or observational study with dramatic effect	Individual randomized trial or (exceptionally) observational study with dramatic effect	Non-randomized controlled cohort/follow-up study (post-marketing surveillance) provided there are sufficient numbers to rule out a common harm. (For long-term harms the duration of follow-up must be sufficient.)**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning
What are the RARE harms? (Treatment Harms)	Systematic review of randomized trials or n-of-1 trial	Randomized trial or (exceptionally) observational study with dramatic effect			
Is this (early detection) test worthwhile? (Screening)	Systematic review of randomized trials	Randomized trial	Non-randomized controlled cohort/follow-up study**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning

* Level may be graded down on the basis of study quality, imprecision, indirectness (study PICO does not match questions PICO), because of inconsistency between studies, or because the absolute effect size is very small; Level may be graded up if there is a large or very large effect size.

** As always, a systematic review is generally better than an individual study.

How to cite the Levels of Evidence Table

OCEBM Levels of Evidence Working Group*. "The Oxford 2011 Levels of Evidence".

Oxford Centre for Evidence-Based Medicine. <http://www.cebm.net/index.aspx?o=5653>

* OCEBM Table of Evidence Working Group = Jeremy Howick, Iain Chalmers (James Lind Library), Paul Glasziou, Trish Greenhalgh, Carl Heneghan, Alessandro Liberati, Ivan Moschetti, Bob Phillips, Hazel Thornton, Olive Goddard and Mary Hodgkinson

EXECUTIVE SUMMARY

Epidemiology

- A retrospective study of 242 COVID-19 positive inpatients found that [19% had bacterial co-infection](#) and those with bacterial co-infection had an increased risk of mechanical ventilation (44% vs. 17%) and death (50% vs. 15%) independent of demographics and co-morbidities. The authors suggest concomitant bacterial infection is relatively common in COVID-19 inpatients and may be associated with increased patient mortality.

Transmission & Prevention

- Investigators at Guangzhou Blood Center, China assessed the [presence of anti-SARS-CoV-2 antibodies in the blood](#) of 2,199 volunteer blood donors. They found that of 7 total blood donors with positive serum-SARS-CoV-2 antigen reactivity, only 2 possessed antibodies (IgG and IgA) reliably derived from SARS-CoV-2 exposure. Based on these findings, the authors suggest that COVID-19 infection through blood transfusion is a fairly unlikely mode of transmission, although further investigation is needed.

Management

- A comparative cohort study by a French neuroradiology department found that patients with COVID-19 had more severe cases of [anterior circulation large vessel occlusion](#) (aLVO) based on lower clot burden scores, lower Diffusion-Weighted Imaging-Alberta Stroke Program Early Computed Tomography Scores, and higher infarct core volume. These findings suggest a higher in-hospital mortality risk in aLVO patients with COVID-19, and the authors raise concern that this predicting factor of poor outcome may lead to decreased treatment decisions provided to stroke patients, further worsening the prognosis of aLVO in the setting of COVID-19.
- Gastroenterologists from Madrid, Spain performed a cross-sectional observational study to determine the relationship of incidence, presentation, and severity between patients with [inflammatory bowel disease \(IBD\) and SARS-CoV-2 infection](#). The researchers found that among the 82 of 805 IBD patients with confirmed or suspected COVID-19, there was no correlation between IBD and COVID-19 infection rates, severity of infection, nor any evidence that COVID-19 induces more frequent IBD episodic flare-ups and suggest that management of IBD can be continued without adjustment due to COVID-19.

Mental Health & Resilience Needs

- Researchers from the Philadelphia Care Foundation in the Netherlands conducted a retrospective, descriptive study on the use of the online support service DigiContact by individuals with intellectual disability and their loved ones during COVID-19 social distancing. They found that DigiContact usage was significantly greater during weeks of the COVID-19 outbreak when compared to the first 20 weeks of 2019 and the first 11 weeks of 2020, indicating that [online social services can be important tools in maintaining social support for individuals with intellectual disabilities](#) while adhering to exposure precautions in extenuating circumstances.

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BACTERIAL INFECTIONS AND PATTERNS OF ANTIBIOTIC USE IN PATIENTS WITH COVID-19

Goncalves Mendes Neto A, Lo KB, Wattoo A, Salacup G, Pelayo J, DeJoy R 3rd, Bhargav R, Gul F, Peterson E, Albano J, Patarroyo-Aponte G, Rangaswami J, Azmaiparashvili Z.. J Med Virol. 2020 Aug 18. doi: 10.1002/jmv.26441. Online ahead of print.

Level of Evidence: 3 - Local non-random sample

BLUF

Internists from Albert Einstein Medical Center in Philadelphia, Pennsylvania conducted a retrospective study of 242 COVID-19 positive inpatients (both intensive care and non-intensive care) from March 3rd, 2020 to April 24th, 2020 and found 19% (n = 46) had bacterial co-infection (Figure 2), and those with bacterial co-infection had an increased risk of mechanical ventilation (44% vs. 17%) and death (50% vs. 15%; Figure 3) independent of demographics and co-morbidities. Authors suggest concomitant bacterial infection is relatively common in COVID-19 inpatients and may be associated with increased patient mortality.

ABSTRACT

INTRODUCTION: Bacterial coinfection is associated with poor outcomes in patients with viral pneumonia, but data on its role in the mortality of patients with COVID-19 is limited. **METHODS:** This is a single-center retrospective analysis of 242 patients with confirmed coronavirus disease 2019 (COVID-19) admitted to both intensive care and non-intensive care settings. Bacterial coinfection was determined by the presence of characteristic clinical features and positive culture results. Multivariable logistic regression was used to analyze the association of concomitant bacterial infection with inpatient death after adjusting for demographic factors and comorbidities. Antibiotic use pattern was also determined. **RESULTS:** Bacterial coinfection was detected in 46 (19%) patients. Genitourinary source was the most frequent, representing 57% of all coinfections. The overall mortality rate was 21%. Concomitant bacterial infections were independently associated with increased inpatient mortality (OR: 5.838; 95% CI: 2.647-12.876). Patients with bacterial coinfection were relatively older (71.35±11.20 vs. 64.78±15.23; p 0.006%). 67% of patients received antibiotic therapy, yet 72% did not have an obvious source of bacterial infection. There was a significantly higher rate of inpatient mortality in patients who received antibiotics compared to those who did not (30% vs. 5%; p<0.0001). **CONCLUSION:** Bacterial coinfection in COVID-19 is associated with increased mortality. This article is protected by copyright. All rights reserved.

FIGURES

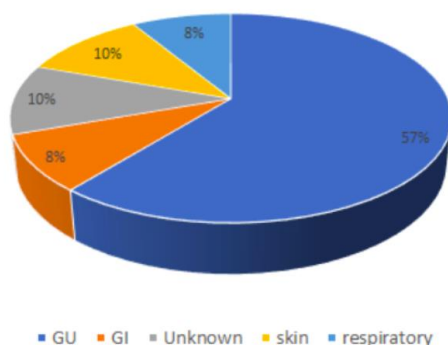


Figure 2. Bacterial infections.

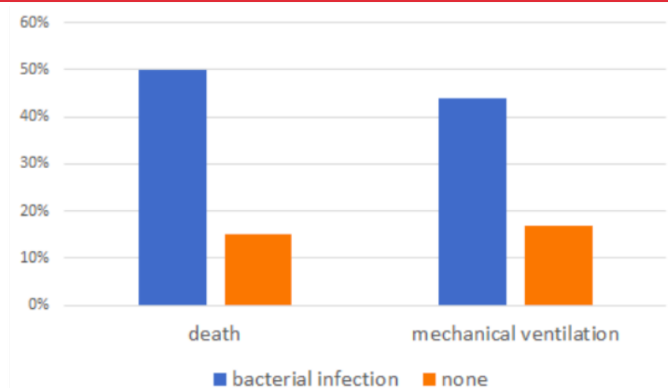


Figure 3. Mortality and mechanical ventilation.

TRANSMISSION & PREVENTION

PREVENTION IN THE HOSPITAL

LOW PREVALENCE OF ANTIBODIES AGAINST SARS-COV-2 AMONG VOLUNTARY BLOOD DONORS IN GUANGZHOU, CHINA

Xu R, Huang J, Duan C, Liao Q, Shan Z, Wang M, Rong X, Li C, Fu Y, Wang H.. J Med Virol. 2020 Aug 19. doi: 10.1002/jmv.26445. Online ahead of print.

Level of Evidence: Other - Mechanism-based reasoning

BLUF

Authors affiliated with The Key Medical Laboratory of Guangzhou, Sun Yat-sen University, and Southern Medical University assessed the presence of anti-SARS-CoV-2 antibodies in the blood of 2,199 volunteer blood donors from March to April, 2020 in Guangzhou, China. The researchers found that of 7 total blood donors with positive serum-SARS-CoV-2 antigen reactivity, only 2 possessed antibodies (IgG and IgA) reliably derived from SARS-CoV-2 exposure (Figure 1, IgG titers 1:16 and 1:4 of two samples, respectively). Based on these findings, the authors suggest that COVID-19 infection through blood transfusion is a fairly unlikely mode of transmission, although further investigation is needed given the limitations in the sensitivity of the ELISA assays.

ABSTRACT

Since the first case of COVID-19 reported in late December of 2019 in Wuhan, China, the SARS-CoV-2 virus has caused approximately 20 million infections and 732 thousand deaths around the world by 11 August, 2020. Although the pathogen generally infects respiratory system, whether it is present in the bloodstream and whether it poses a threat to the blood supply during the period of outbreak is a serious public concern. In this study, we used ELISA to screen total antibodies against SARS-CoV-2 in 2,199 blood donors who had donated blood at the Guangzhou Blood Center during the epidemic. The Ig-reactive samples were further characterized for IgA, IgG and IgM subtypes by ELISA and viral nucleic acid by real-time PCR. Among the 2,199 plasma samples, seven were reactive under total antibodies screening. Further testing revealed that none of them had detectable viral nucleic acid or IgM antibody, but two samples contained IgA and IgG. The IgG antibody titers of both positive samples were 1:16 and 1:4, respectively. Our results indicated a low prevalence of past SARS-CoV-2 infection in our blood donors, as none of the tests were positive for viral nucleic acid and only 2/2,199 (0.09%) of samples were positive for IgG and IgA. There would be limited necessity of implementation of such testing in blood screening in COVID-19 low-risk area. This article is protected by copyright. All rights reserved.

FIGURES

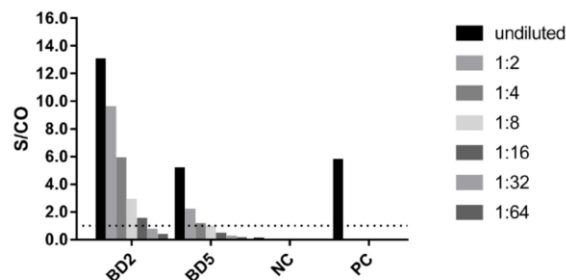


Figure 1. Titration of IgG antibody against SARS-CoV-2. The plasma samples of the two IgG-positive donors (BD2 and BD5) were doubling diluted and then tested by anti-SARS-CoV-2 IgG ELISA assay (WT). NC and PC served as negative control and positive control sera for the assay and were tested without dilution. The dotted line indicates a value of 1.0 for the signal to cut-off (S/CO).

MANAGEMENT

ACUTE CARE

EMERGENCY MEDICINE

EARLY BRAIN IMAGING SHOWS INCREASED SEVERITY OF ACUTE ISCHEMIC STROKES WITH LARGE VESSEL OCCLUSION IN COVID-19 PATIENTS

Escalard S, Chalumeau V, Escalard C, Redjem H, Delvoye F, Hébert S, Smajda S, Ciccio G, Desilles JP, Mazighi M, Blanc R, Maïer B, Piotin M. Stroke. 2020 Aug 19;STROKEAHA120031011. doi: 10.1161/STROKEAHA.120.031011. Online ahead of print.

Level of Evidence: 3 - Cohort study or control arm of randomized trial

BLUF

A comparative cohort study conducted from March to April 2020 by the Interventional Neuroradiology Department at Rothschild Foundation Hospital in Paris, France found that patients with COVID-19 had more severe cases of anterior circulation large vessel occlusion (aLVO) based on lower clot burden scores (median: 6.5 versus 8, $p=0.016$), lower Diffusion-Weighted Imaging-Alberta Stroke Program Early Computed Tomography Scores (DWI-ASPECTS; median: 5 versus 8, $p=0.006$), and higher infarct core volume (Figure 1; median: 56 versus 6 mL, $p=0.004$). These findings (Figure 2) suggest a higher in-hospital mortality risk in aLVO patients with COVID-19, and the authors raise concern that this predicting factor of poor outcome may lead to decreased treatment decisions provided to stroke patients, worsening the prognosis of aLVO in the setting of COVID-19.

SUMMARY

Researchers looked at twelve patients with early diagnosis of anterior circulation large vessel occlusion (aLVO) and confirmed COVID-19 in comparison to 34 patients with aLVO without COVID-19 (Figure 2). The COVID-19 group was younger (mean age 60.1 ± 12.6 years old, $p=0.032$), had higher prevalence of diabetes mellitus ($p=0.039$), significantly lower clot burden score (median: 6.5 versus 8, $p=0.016$), higher rate of multivessel occlusion (50% versus 8.8%, $P=0.005$), lower DWI-ASPECT scores (median: 5 versus 8, $p=0.006$), higher infarct core volume (median: 58 versus 6 mL, $p=0.004$), and higher in-hospital mortality (41.7% versus 11.8%, $p=0.025$).

ABSTRACT

BACKGROUND AND PURPOSE: Reports are emerging regarding the association of acute ischemic strokes with large vessel occlusion and coronavirus disease 2019 (COVID-19). While a higher severity of these patients could be expected from the addition of both respiratory and neurological injury, COVID-19 patients with strokes can present with mild or none respiratory symptoms. We aimed to compare anterior circulation large vessel occlusion strokes severity between patients with and without COVID-19. **METHODS:** We performed a comparative cohort study between patients with COVID-19 who had anterior circulation large vessel occlusion and early brain imaging within 3 hours from onset, in our institution during the 6 first weeks of the COVID-19 outbreak and a control group admitted during the same calendar period in 2019. **RESULTS:** Twelve COVID-19 patients with anterior circulation large vessel occlusion and early brain imaging were included during the study period and compared with 34 control patients with anterior circulation large vessel occlusion and early brain imaging in 2019. Patients in the COVID-19 group were younger ($P=0.032$) and had a history of diabetes mellitus more frequently ($P=0.039$). Patients did not significantly differ on initial National Institutes of Health Stroke Scale nor time from onset to imaging ($P=0.18$ and $P=0.6$, respectively). Patients with COVID-19 had more severe strokes than patients without COVID-19, with a significantly lower clot burden score (median: 6.5 versus 8, $P=0.016$), higher rate of multivessel occlusion (50% versus 8.8%, $P=0.005$), lower DWI-ASPECTS (Diffusion-Weighted Imaging-Alberta Stroke Program Early Computed Tomography Scores; median: 5 versus 8, $P=0.006$), and higher infarct core volume (median: 58 versus 6 mL, $P=0.004$). Successful recanalization rate was similar in both groups ($P=0.767$). In-hospital mortality was higher in the COVID-19 patients' group (41.7% versus 11.8%, $P=0.025$). **CONCLUSIONS:** Early brain imaging showed higher severity large vessel occlusion strokes in patients with COVID-19. Given the massive number of infected patients, concerns should be raised about the coming neurovascular impact of the pandemic worldwide.

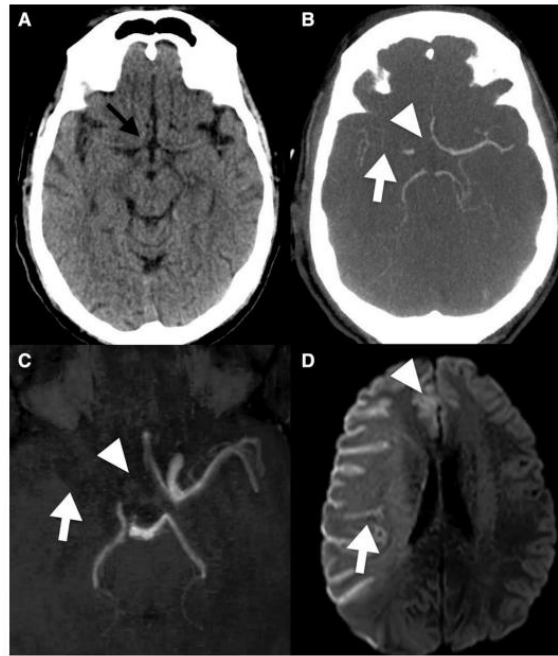


Figure 1: Early brain imaging findings in coronavirus disease 2019 (COVID-19) patients with large vessel occlusion strokes. A 56-year-old man with left hemiplegia (A and B), the computed tomography (CT) was performed 0.5 h after onset. The noncontrast-CT (A) showed no early ischemic changes (black arrow shows the anterior cerebral artery). The CT-angiography (B) shows a proximal middle cerebral artery (MCA) occlusion (arrow) associated with a proximal anterior cerebral artery occlusion (arrow head), the clot burden was 5. A 45-year-old female with left hemiplegia (C and D), the magnetic resonance imaging (MRI) was performed 2.25 h after onset. The 3-dimensional time-of-flight (C) shows a carotid terminus occlusion with proximal MCA occlusion (arrow) associated with an anterior cerebral artery occlusion (arrow head), the clot burden was 5. The DWI sequence (D) shows ischemic lesions in both MCA and anterior cerebral artery territories (arrow and arrow head, respectively), DWI-ASPECTS (Diffusion-Weighted Imaging–Alberta Stroke Program Early Computed Tomography Scores) was 0, infarct core volume was 186.5 mL.

Characteristic	Total (n=46)	COVID-19 (n=12)	Non-COVID-19 (n=34)	P Value
Characteristic				
Mean age (SD), y	67.6±15.2	60.1±12.6	70.3±15.3	0.032*
Male sex, n (%)	30 (65.2)	10 (83.3)	20 (58.8)	0.170
Median baseline mRS (IQR)	0 (0–1)	1 (0–1)	0 (0–1)	0.222
Risk factor, n (%)				
Hypertension	29 (63.0)	5 (41.7)	24 (70.6)	0.093
Diabetes mellitus	9 (19.6)	5 (41.7)	4 (11.8)	0.096*
Hypercholesterolemia	11 (23.9)	3 (25.0)	8 (23.5)	1
Smoking (1 missing in non-COVID-19)	3 (6.7)	0 (0)	3 (9.1)	0.554
Atrial fibrillation	14 (30.4)	1 (8.3)	13 (38.2)	0.073
Stroke characteristic				
Median NIHSS (IQR)	18 (13–23)	19 (17.5–24.25)	17.5 (12.25–21.0)	0.180
Median time from onset to imaging (IQR), min	1075 (75–135)	116 (86–135)	104 (74–133)	0.561
Brain imaging findings				
MRI with angioMR, n (%)	40 (87.0)	10 (83.3)	30 (88.2)	
CT with angioCT, n (%)	6 (13.0)	2 (16.7)	1 (1.8)	
Occlusion site, n (%)				0.731
Carotid terminus	8 (17.4)	3 (25.0)	5 (14.7)	
Middle cerebral artery-M1	27 (58.7)	7 (58.3)	20 (58.8)	
Middle cerebral artery-M2	11 (23.9)	2 (16.7)	9 (26.5)	
Associated ACA or PCA occlusion, n (%)	9 (19.6)	6 (50)	3 (8.8)	0.006*
Median clot burden (IQR)	8 (6–8)	6.5 (5–7.25)	8 (7.25–8.75)	0.016*
MRI only findings				
All patients (with or without associated ACA or PCA occlusion), n (%)	40 (87.0)	10 (83.3)	30 (88.2)	
Median DWI-lesion volume (IQR), mL	12 (4–38)	58 (33–123)	6 (3–24)	0.004*
Median DWI-ASPECT score (IQR)	7 (6–8)	5 (3–7)	8 (7–9)	0.006*
Among patient without associated ACA or PCA occlusion, n (%)	34 (73.9)	6 (50)	28 (82.3)	
Median DWI-lesion volume (IQR), mL	7 (4–34)	36 (12–47)	6 (3–24)	0.060*
Median DWI-ASPECT score (IQR)	8 (7–8.75)	6 (3.5–7.75)	8 (7–9)	0.058*
Treatment				
IV thrombolysis, n (%)	25 (54.3)	8 (66.7)	17 (50)	0.319
Mechanical thrombectomy, n (%)	40 (86.8)	12 (100)	28 (82.3)	0.311
Successful recanalization, n (%)	43 (93.5)	11 (91.7)	32 (94.1)	0.787
In-hospital mortality, n (%)	9 (19.6)	5 (41.7)	4 (11.8)	0.025*

COVID-19 indicates coronavirus disease 2019; CT, computed tomography; DWI, diffusion-weighted imaging; DWI-ASPECT, Diffusion-Weighted Imaging–Alberta Stroke Program Early Computed Tomography Scores; IQR, interquartile range; IV, intravenous; MRI, magnetic resonance imaging; mRS, modified Rankin Scale; and NIHSS, National Institutes of Health Stroke Scale.

*Statistically significant.

GASTROENTEROLOGY

INCIDENCE, CLINICAL CHARACTERISTICS, AND EVOLUTION OF SARS-COV-2 INFECTION IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE: A SINGLE-CENTER STUDY IN MADRID, SPAIN

Guerra I, Algaba A, Jiménez L, Mar Aller M, Garza D, Bonillo D, Molina Esteban LM, Bermejo F.. *Inflamm Bowel Dis*. 2020 Aug 24;izaa221. doi: 10.1093/ibd/izaa221. Online ahead of print.
Level of Evidence: 3 - Local non-random sample

BLUF

Gastroenterologists and microbiologists from Madrid, Spain performed a cross-sectional observational study to determine the relationship of incidence, presentation, and severity between patients with inflammatory bowel disease (IBD) (Table 1) and SARS-CoV-2 infection. The researchers found that of the 82 of 805 IBD patients with confirmed or suspected COVID-19, there was no correlation between IBD and COVID-19 infection rates (Figure 3), severity of infection (Table 2), nor any evidence that COVID-19 induces more frequent IBD episodic flare-ups and suggest that management of IBD can be continued without adjustment due to COVID-19.

ABSTRACT

BACKGROUND: There are scarce data about SARS-CoV-2 infection in patients with inflammatory bowel disease (IBD). Our aim was to analyze the incidence, clinical presentation, and severity of SARS-CoV-2 infection in patients with IBD. **METHODS:** This is a cross-sectional, observational study. We contacted all the patients being treated at our IBD unit to identify those patients with suspected or confirmed SARS-CoV-2 infection, following the World Health Organization case definition. Data were obtained by patient electronic medical records and by phone interview. **RESULTS:** Eighty-two of 805 patients with IBD (10.2%; 95% confidence interval [CI], 8.3-12.5) were diagnosed as having confirmed (28 patients, 3.5%; 95% CI, 2.4-5.0) or suspected (54 patients, 6.7%) infection. Patient age was 46 ± 14 years, 44 patients were female (53.7%), 17.3% were smokers, 51.2% had Crohn disease (CD), and 39.0% had comorbidities. Digestive symptoms were reported in 41 patients (50.0%), with diarrhea as the most common (42.7%). One patient (1.2%) was diagnosed with IBD flare-up during SARS-CoV-2 infection. Twenty-two patients (26.8%) temporarily withdrew from their IBD treatment because of COVID-19. Most of the patients had mild disease (79.3%), and 1 patient died (1.2%). In the multivariate analysis, the presence of dyspnea was associated with moderate to severe infection (odds ratio, 5.3; 95% CI, 1.6-17.7; $P = 0.01$) and myalgias (odds ratio, 4.8; 95% CI, 1.3-17.9; $P = 0.02$) were related to a milder clinical course. Immunosuppression was not related to severity. **CONCLUSIONS:** SARS-CoV-2 infection in patients with IBD is not rare. Dyspnea is associated with a more severe infection. Therapy for IBD, including immunomodulators and biologic therapy, is not related to a greater severity of COVID-19, and SARS-CoV-2 infections do not appear to be related to IBD flare-ups.

FIGURES

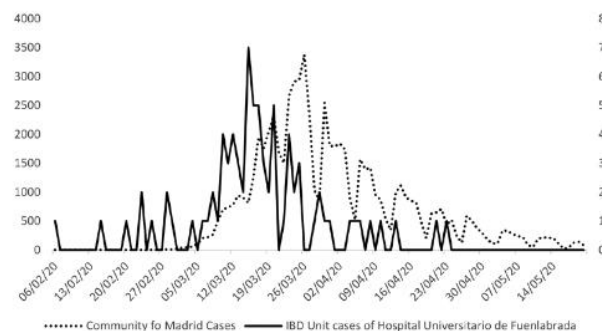


FIGURE 3. Number of patients with COVID-19 cases by date. Comparison of patients with COVID-19 cases by date between Community of Madrid (date of notification of patients with confirmed cases) and IBD unit of Hospital Universitario de Fuenlabrada (date of symptom onset in patients with confirmed and suspected cases). Left y axis: number of cases of infection in Community of Madrid. Right y axis: number of cases of infection in the IBD unit. Data from Community of Madrid extracted from the Spanish Ministry of Health, <https://cneovid.isciii.es/covid19>, accessed May 23, 2020.

TABLE 1. Demographic and Clinical Characteristics of Patients Included in the Study

	Confirmed Cases of Infection (n = 28)	Suspected Cases of Infection (n = 54)	Total (N = 82)
Sex (%)			
Female	13 (46.4)	31 (57.4)	44 (53.7)
Age, y (mean ± SD)	54 ± 14	43 ± 12	46 ± 14
Smoking (%)			
Yes	1 (3.6)	13 (24.5)	14 (17.3)
Type of IBD (%)			
CD	11 (39.3)	31 (57.4)	42 (51.2)
Ulcerative colitis	14 (50.0)	21 (38.9)	35 (42.7)
IBD unclassified	3 (10.7)	2 (3.7)	5 (6.1)
Age at diagnosis, y, CD (%)			
A1 (<16)	2 (18.2)	5 (16.1)	7 (16.7)
A2 (between 17 and 40)	5 (45.4)	18 (38.1)	23 (54.7)
A3 (>40)	4 (36.4)	8 (25.8)	12 (28.6)
Location, CD (%)			
L1 terminal ileum	5 (45.4)	10 (32.3)	15 (35.7)
L2 colon	3 (27.3)	8 (25.8)	11 (26.2)
L3 ileocolonic	3 (27.3)	10 (32.3)	13 (30.9)
L1 + L4 upper gastrointestinal	—	2 (6.4)	2 (4.8)
L2 + L4	—	1 (3.2)	1 (2.4)
Behavior, CD (%)			
B1 nonstricturing/nonpenetrating	8 (72.7)	27 (87.0)	35 (83.3)
B2 stricturing	3 (27.3)	2 (6.5)	5 (11.9)
B3 penetrating	—	2 (6.5)	2 (4.8)
Location, ulcerative colitis (%)			
Extensive colitis	4 (28.6)	4 (19.0)	8 (22.9)
Left-sided colitis	5 (35.7)	13 (62.0)	18 (51.4)
Proctitis	5 (35.7)	4 (19.0)	9 (25.7)
IBD treatment (%)			
Yes	26 (92.9)	48 (88.9)	74 (90.2)
Type of IBD treatment (%)			
Mesalazine	16 (57.1)	25 (46.3)	41 (50.0)
Azathioprine	9 (32.1)	15 (27.8)	24 (29.3)
Mycophenolate	—	3 (5.6)	3 (3.7)
Methotrexate	1 (3.6)	1 (1.9)	2 (2.4)
Infliximab	2 (7.1)	4 (7.4)	6 (7.3)
Adalimumab	2 (7.1)	6 (11.1)	8 (9.8)
Golimumab	1 (3.6)	2 (3.7)	3 (3.7)
Ustekinumab	—	3 (5.6)	3 (3.7)
Comorbidity (%)			
Yes	17 (60.7)	15 (27.8)	32 (39.0)
Type of comorbidity (%)			
Chronic kidney disease	3 (10.7)	—	3 (3.7)
Chronic obstructive pulmonary disease	6 (21.4)	2 (3.7)	8 (9.8)
Congestive heart failure	1 (3.6)	—	1 (1.2)
Coronary heart disease	—	1 (1.9)	1 (1.2)
Cerebrovascular disease	1 (3.6)	—	1 (1.2)
Diabetes mellitus	4 (14.3)	1 (1.9)	5 (6.1)
Hypertension	10 (35.7)	5 (9.3)	15 (18.3)

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TABLE 1. Continued

	Confirmed Cases of Infection (n = 28)	Suspected Cases of Infection (n = 54)	Total (N = 82)
Dyslipidemia	7 (25.0)	9 (17.0)	16 (19.8)
Malignant neoplasm	6 (21.4)	4 (7.4)	10 (12.2)
Chronic liver disease	1 (3.6)	1 (1.9)	2 (2.5)

TABLE 2. Clinical Manifestations of SARS-CoV-2 Infection in Patients With IBD

	Confirmed Cases of Infection (n = 28)	Suspected Cases of infection (n = 54)	Total (N = 82)
Cough	21 (75.0)	44 (81.5)	65 (79.3)
Fever	24 (85.7)	40 (74.1)	64 (78.0)
Dyspnea	13 (46.4)	19 (35.2)	32 (39.0)
Fatigue	19 (67.9)	34 (63.0)	53 (64.6)
Myalgia	11 (39.3)	26 (48.1)	37 (45.1)
Headache	17 (60.7)	28 (51.9)	45 (54.9)
Dysosmia/ dysgeusia*	17 (60.7)	19 (35.2)	36 (43.9)
Sore throat	8 (28.6)	27 (50.0)	35 (42.7)
Rhinorrhea*	5 (17.9)	22 (40.7)	27 (32.9)
Diarrhea	13 (46.4)	22 (40.7)	35 (42.7)
Nausea or vomiting	6 (21.4)	10 (18.5)	16 (19.5)
Abdominal pain	5 (17.9)	7 (13.0)	12 (14.6)

Numbers in parentheses are percentages.

*Statistically significant differences between confirmed and suspected COVID-19 cases of infection ($P < 0.05$).

MENTAL HEALTH & RESILIENCE NEEDS

IMPACT ON PUBLIC MENTAL HEALTH

THE USE OF ONLINE SUPPORT BY PEOPLE WITH INTELLECTUAL DISABILITIES LIVING INDEPENDENTLY DURING COVID-19

Zaagsma M, Volkers KM, Swart EAK, Schippers AP, Van Hove G.. J Intellect Disabil Res. 2020 Aug 24. doi: 10.1111/jir.12770. Online ahead of print.

Level of Evidence: Other - Expert Opinion

BLUF

In August 2020, researchers from Belgium and the Netherlands conducted a retrospective, descriptive study on the use of the online support service DigiContact by individuals with intellectual disability and their loved ones during COVID-19 social distancing (Summary, Figure 1). They found that DigiContact usage was significantly greater during weeks of the COVID-19 outbreak when compared to the first 20 weeks of 2019 and the first 11 weeks of 2020 (Figure 2), indicating that online social services can be important tools in maintaining social support for individuals with intellectual disabilities while adhering to exposure precautions in extenuating circumstances.

SUMMARY

A descriptive analysis on the use of the DigiContact online service was performed by analyzing the number of online users and contacts (both scheduled and unscheduled) per day for three time periods:

- 1) the period of active COVID-19 containment (weeks 12-20 of 2020).
- 2) the week before the active containment (weeks 1-11 of 2020).
- 3) the first 20 weeks of 2019.

Unscheduled use of DigiConnect during the COVID-19 outbreak was significantly greater than its use in the first 11 weeks of 2020 ($z=-4.602$; $P=.000$) and in the first 20 weeks of 2019 ($z=-.5328$; $P=.000$). Scheduled contacts were significantly higher during COVID-19 when compared to scheduled contacts in the first 20 weeks of 2019 ($z=-3.689$; $P=.000$) but not significantly different than scheduled contacts in the first 20 weeks of 2020 ($z=-1.776$; $P=.076$). The researchers noted that data was only collected during the beginning of the COVID-19 pandemic, and that no extensive data has been gathered for the continued use of the service.

ABSTRACT

BACKGROUND: During the COVID-19 outbreak, service providers in the Netherlands had to switch towards providing remote support for people with intellectual disabilities living independently. This study aims to provide insight into the use of online support during the outbreak. **METHODS:** We analysed quantitative data on planned and unplanned contacts between the online support service DigiContact and its service users. **RESULTS:** The results indicate that the COVID-19 outbreak and the related containment measures had a strong impact on online support use, specifically on the unplanned use of online support. **CONCLUSION:** Offering online support as a standard component of services for independently living people with intellectual disability enables service providers to be flexible and responsive towards fluctuations in both support needs and onsite support availability during a social crisis such as COVID-19.

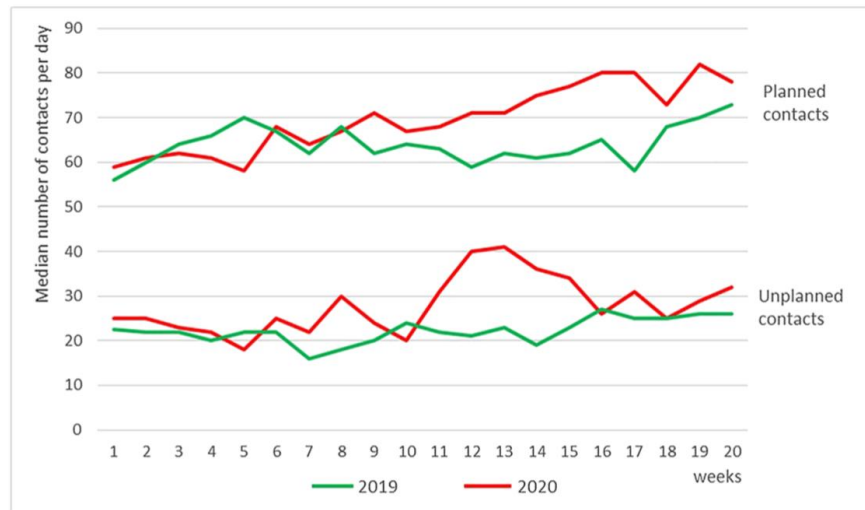


Figure 2: The number of planned and unplanned use of DigiConnect in the first 20 weeks of 2019 and 2020.

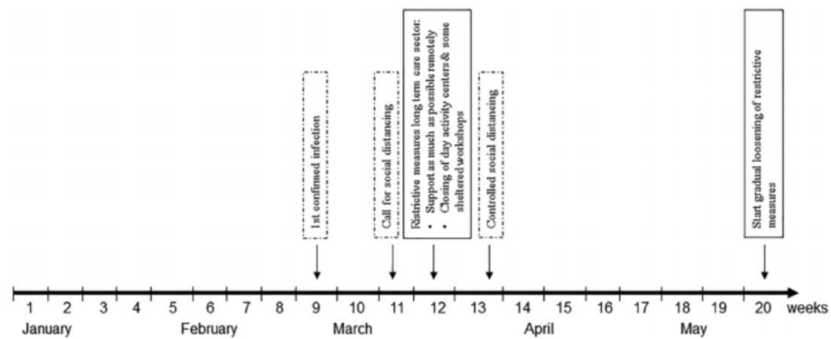


Figure 1. Timeline of Dutch COVID-19 containment measures impacting service provision to people with intellectual disability living independently.

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