Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Inflammatory Bowel Disease Management During the Coronavirus-19 Outbreak: A Survey From the European Crohn's and Colitis Organization

As of December 2019, some cases of pneumonia of unknown origin were reported in Wuhan, China.[1] Over the course of a few weeks, a new coronavirus, named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was identified, leading to the onset of coronavirus disease 2019 (COVID-19).[2] COVID-19 primarily causes respiratory symptoms, but it was also associated with gastrointestinal effects.[3,4] The virus was genetically similar to its predecessor, severe acute respiratory syndrome coronavirus (SARS-CoV), although it had greater person-to-person transmission capacity.[5] In a very short time it spread worldwide, forcing the World Health Organization to declare the state of pandemic.[6] Many preventive measures were taken to decrease contagion, including recommendations for the use of masks and gloves, greater attention to hand hygiene, social distancing, quarantine, and lockdown of nonessential activities.[7,8] In this context of global urgency, physicians are dealing with difficult and never experienced situations.[9] Little is known about this new viral agent, and the information obtained evolve continuously, making patient management even more complex. In addition, the lack of evidence is highlighted for the management of patients with inflammatory bowel disease (IBD) treated with immunosuppressive drugs or biological agents as occurs for chronic IBD. In fact, it is uncertain whether Crohn's disease and ulcerative colitis are associated with an increased risk of infection and whether some drugs modulating the immune system contribute to the risk of exposure.[10] Importantly, no specific recommendations from international organizations were available regarding the management of patients with IBD at the time of the survey.

For this reason, we designed a survey to investigate current management of patients with IBD and to define fears and difficulties that physicians were facing during the global SARSCoV-2 pandemic. A 39-question anonymous web survey was conducted with the logistic support of the European Crohn's and Colitis Organization between March 20 and 30, 2020. All European Crohn's and Colitis Organization members were invited to participate in this survey through collective e-mails. The questionnaire mainly consisted of multiple-choice questions; only 3 questions assessed the physicians' fear of infectious risk in patients with or without IBD using a numerical scale from 0 to 10. We collected data on the number of positive COVID-19 cases, diagnostic approach in asymptomatic patients, discontinuation of immunosuppressive and biological drugs (Supplementary Table 1). We also investigated the recommendations given to patients, the preventive measures for patients and physicians (eg, masks, gloves, goggles, and disinfectants), and any organizational changes imposed by hospitals.

Physician demographics and incidence of COVID-19 among patients with IBD are summarized in Supplementary Table 2. Eight hundred thirteen physicians from 72 countries responded to the survey and more than two-thirds of participants answered all the questions. The number of answers varied according to the queries. Most respondents (253 [39.9%]) worked in small IBD centers (1–500 patients), whereas the number of hospitals managing 501–1000, 1001–2000, and >2000 patients was superimposable (146 [23.0%], 117 [18.5%], and 118 [18.6%], respectively). Confirmed cases of COVID-19 among patients with IBD were detected by 66 physicians (10.4%) and there were mostly few cases (1–10) per center (58/66 [87.9%]). Eight people (12.1%) reported 11–50 cases diagnosed in their hospital and none had >50 infected patients with IBD. Three-quarters of the respondents (470 [76.5%]) believed that COVID-19 was more severe than flu, and a minority of participants disagreed or were uncertain (12.2% and 11.3%, respectively) (Table 1). Respiratory transmission was considered the only transmission way by 68 of 614 persons (11.1%), whereas other sources of infection were thought possible for the majority of respondents (79.1%). Interestingly, the transmission of COVID-19 infection from an asymptomatic patient was a possible option for most physicians (580 [94.5%]), although only a small percentage disagreed or were doubtful about it (1.8% and 3.7%, respectively). In addition, 334 respondents (54.4%) stated that patients with IBD were not associated with an increased risk of COVID-19, whereas for the other respondents it was uncertain or possible (30.5% and 15.1%, respectively). In contrast, IBD drugs were recognized as predisposing factors for COVID-19 in 161 cases (26.2%). This hypothesis was likely for an additional 255 respondents (41.5%), whereas 119 (19.4%) and 79 (12.9%) physicians disagreed or were uncertain.

Most physicians (73.7%) reported feeling stressed by COVID-19 pandemic (Table 1). An increase in the number of working hours was reported by one-third of persons, whereas in 61.6% of cases there was no difference compared with standard working hours. Most respondents were afraid of being infected (349 [57.7%]) and infecting patients (494 [81.8%]). Physical contact with other people was feared by about one-half of respondents (45.1%), although the remaining persons (51%) did not report this fear. Many physicians (40.6%) were worried about being quarantined, but quarantine was considered important for preventing contagion by almost all persons (93.8%). Moreover, a relevant number of physicians reported being afraid of

Table 1. Physicians' Knowledge of COVID-19, Fears, and Diagnostic Approach to Patients

	n (%)
Information on COVID-19	
COVID-19 is more severe than flu:	
Yes	470/614 (76.5)
No	75/614 (12.2)
Uncertain	69/614 (11.3)
Respiratory transmission is the only transmission way:	
Yes	68/614 (11.1)
No	486/614 (79.1)
Uncertain	60/614 (9.8)
COVID-19 transmission from an asymptomatic subject is possible:	
Yes	580/614 (94.5)
No	11/614 (1.8)
Uncertain	23/614 (3.7)
IBD are associated to an increased risk of COVID-19:	
Yes	93/614 (15.1)
No	334/614 (54.4)
Uncertain	187/614 (30.5)
IBD drugs are associated to an increased risk of COVID-19:	
Yes	161/614 (26.2)
Likely	255/614 (41.5)
No	119/614 (19.4)
Uncertain	79/614 (12.9)
Perceptions and fears of physicians	
Do you feel stressed from this situation?	
Yes	439/596 (73.7)
No	143/596 (24)
Uncertain	14/596 (2.3)
Do you think you are working more than your usual working hours due to coronavirus?	
Yes	212/596 (35.6)
No	367/596 (61.6)
Uncertain	17/596 (2.8)
Are you afraid of getting infected?	
Yes	349/605 (57.7)
No	231//605 (38.2)
Uncertain	25/605 (4.1)
Are you afraid of infecting your patients?	
Yes	494/604 (81.8)
No	83/604 (13.7)
Uncertain	27/604 (4.5)
Are you afraid of physical contact with other people?	
Yes	269/596 (45.1)
No	304/596 (51)
Uncertain	23/596 (3.8)
Are you worried about being in quarantine?	
Yes	242/596 (40.6)
No	341/596 (57.2)
Uncertain	13/596 (2.2)
Do you think quarantine is important to prevent contagion?	
Yes	559/596 (93.8)
No	16/596 (2.7)
Uncertain	21/596 (3.5)
Are you afraid of dying from COVID-19 infection?	
Yes	183/604 (30.3)
No	371/604 (61.4)
Uncertain	50/604 (8.3)
Please specify from 0 to 10 the fear that your IBD patients may become infected:	
Number of respondents	587
Average	6.57
Standard deviation	2.08

dying from COVID-19 (30.3%), although most people did not have this fear (61.4%). Physicians were also asked to quantify (from 0 to 10) their fear that patients with and without IBD could be infected with SARS-CoV-2. The average fear value was greater for patients with IBD than patients without IBD (6.58 $\pm$ 2.08 vs 5.16 $\pm$ 2.13). It is important to emphasize that a high average fear value was detected for patients with IBD treated with immunosuppressant drugs or biologics (7.45 $\pm$ 1.95). Finally, one-quarter of physicians was optimistic about the rapid resolution of the pandemic, whereas 106 (18.5%) and 319 (55.9%) respondents were uncertain or not optimistic, respectively.

According to most of the survey participants, the coronavirus test should not be performed in asymptomatic patients without IBD (80.5%) (Table 1). Similarly, in patients with IBD without symptoms suggestive of infection, the swab should not be performed (75.1%). In asymptomatic patients with IBD treated with immunosuppressants and biologics, the test was considered unnecessary by about two-thirds of physicians. In contrast, in patients with IBD with suspicious symptoms, systematic coronavirus testing was supported by 312 participants (54.6%), whereas the remaining one-half of respondents discredited this approach.

Most respondents (80.1%) believed that the use of protective aids (eg, mask, gloves) was effective in preventing viral transmission (Table 2). Only a small percentage of persons denied or were uncertain about their efficacy (8.6% and 11.3% respectively). Protections during an IBD patient consultation were used by three-quarters of physicians and the most adopted aids were disinfectants (88.4%), masks (72.4%), gloves (56%), and goggles (9%). About one-quarter of physicians did not use protections during their consultations. SARS-CoV-2 testing was performed in 40 asymptomatic respondents (7%); the remaining physicians were not tested.

Most physicians (87%) received information from their center regarding the management of COVID-

Table 1. Continued

	n (%)
Please specify from 0 to 10 the fear that your IBD patients treated with immunosuppressant drugs or biologics may become infected:	
Number of respondents	588
Average	7.35
Standard deviation	1.95
Please specify from 0 to 10 the fear that your non-IBD patients may become infected:	
Number of respondents	588
Average	5.16
Standard deviation	2.13
Diagnostic approach	
Should COVID-19 be tested in all asymptomatic non-IBD people?	
Yes	64/599 (10.7)
No	482/599 (80.5)
Uncertain	53/599 (8.8)
Should COVID-19 be tested in all asymptomatic IBD patients?	
Yes	89/598 (14.9)
No	449/598 (75.1)
Uncertain	60/599 (10)
Should COVID-19 be tested in all asymptomatic IBD patients on immunosuppressive or biological drugs?	
Yes	154/599 (25.7)
No	376/599 (62.8)
Uncertain	69/599 (11.5)
Do you systematically perform COVID-19 testing in IBD patients with suspicious symptoms?	
Yes	312/571 (54.6)
No	259/571 (45.4)

COVID-19, coronavirus-19; IBD, inflammatory bowel disease.

19 patients; only 74 respondents (13%) were not given indications (Table 2). Three-quarters of physicians were satisfied with the recommendations received, although a low percentage of persons was unsatisfied or uncertain (19.3% and 8.1%, respectively). As for treatment, most physicians (72.5%) thought they knew how to properly manage patients with suspicious symptoms of COVID-19, although a few respondents were uncertain (14.5%) or believed they did not know how to manage appropriately COVID-19 patients (13%). Furthermore, most specialists (73.2%) canceled or rescheduled consultations owing to the pandemic and two-thirds of respondents reported hesitating to start a new biological therapy. In contrast, 153 physicians (26.8%) did not modified their consultations and in 217 cases (38%) the start of a new biological drug was not postponed. Protective aids (eg, masks, gloves) for patients with IBD during their daily life were recommended in 309 cases (53%), whereas in 274 cases (47%) they were not (Table 2). Similarly, quarantine was suggested by about one-half of physicians (48.2%), whereas the remaining respondents (51.8%) did not propose it. A common recommendation was to avoid travel (95.9%). Only a few physicians (9.6%) stopped IBD drugs as preventative strategy. The discontinued drugs were thiopurines (72.7%), steroids (43.6%), anti-tumor necrosis factor agents (30.9%), methotrexate (20%), ustekinumab and tofacitinib (20% each), vedolizumab (3.6 %), and other (1.8%). Additional recommendations were provided by 210 physicians (36.8%).

To the best of our knowledge, this is the first survey investigating physicians' fears and the management of patients with IBD in the context of many uncertainties regarding COVID-19 pandemic. More than 500 persons participated in our study, providing information from all continents. Most physicians worked in small IBD centers (39.9%) and in a few hospitals there were confirmed cases of patients with IBD with COVID-19 at the time of the survey (10.4%). COVID-19 was generally considered more severe than the flu (76.5%) and the possibility of further transmission ways beyond the respiratory one was a common idea (79.1%). Most respondents believed that IBD were not associated with an increased risk of infection (54.4%), although a significant group of physicians speculated that immunosuppressive and biological drugs could be a predisposing factor for infection (67.7%). Accordingly, the fear that patients with IBD could be infected with SARS-CoV2 was greater than the fear for patients without IBD and these data were further emphasized in patients with IBD receiving IBD drugs. Physicians' fears of being infected with the new coronavirus and of infecting patients were common (57.7% and 81.8%). In addition, a significant percentage of people (30.3%) reported a fear of dying from COVID-19. Most of the respondents (73.7%) reported being stressed by the pandemic situation and 35.6% of the physicians declared they worked more than the standard number of hours.

These results are in line with a cross-sectional study assessing the mental health burden of Chinese health care workers.[11] The majority of workers (75%) were stressed and professionals personally involved in diagnosis, treatment, and care of COVID-19 patients had a greater risk of psychological burden.[11] From a diagnostic point of view, common opinion was not to perform the test for coronavirus in asymptomatic respondents regardless of IBD or immunosuppressive treatment. Only a small number of physicians had been tested (7%). Preventive measures were not adopted by all respondents during their consultations and although there was extensive use of disinfectants and masks, gloves and goggles were used less frequently. These data should be underlined in light of the high rate of health care personnel recently diagnosed with COVID-19.[12,13] Moreover, the increasing evidence of fecal–oral

Table 2. Preventive Measures Taken by Physicians, Recommendations for Patients, and Organizational Management during the COVID-19 Pandemic

	n (%)
Preventive measures for physicians	
Protective aids are able to prevent contagion	
Yes	467/583 (80.1)
No	50/583 (8.6)
Uncertain	66/583 (11.3)
Do you use protective aids when you see an IBD patient?	
Yes	421/583 (72.2)
No	162/583 (27.8)
What protective aids do you use?	
Disinfectants	372/421 (88.4)
Masks	305/421 (72.4)
Gloves	236/421 (56)
Goggles	38/421 (9)
Other	17/421 (4)
Have you been tested yourself for COVID-19?	
Yes	40/571 (7)
No	531/571 (93)
Organizational management	
Did your center provide you with recommendations on how to manage patients with COVID-19 infection?	
Yes	497/571 (87)
No	74/571 (13)
Are you satisfied with the information your center has provided you?	
Yes	361/497 (72.6)
No	96/497 (19.3)
Uncertain	40/497 (8.1)
Do you think you know how to manage patients with suspicious symptoms in an appropriate manner?	
Yes	414/571 (72.5)
No	74/571 (13)
Uncertain	83/571 (14.5)
Did you cancel or reschedule visits for your IBD patients due to COVID-19?	
Yes	418/571 (73.2)
No	153/571 (26.8)
Do you hesitate to start an IBD drug due to the pandemic COVID-19 infection?	
Yes	354/571 (62)
No	217/571 (38)
Recommendations for patients	
Have you recommended the use of protective aids to your IBD patients during their daily life?	
Yes	309/583 (53)
No	274/583 (47)
Have you recommended quarantine to some of your IBD patients?	
Yes	281/583 (48.2)
No	302/583 (51.8)
Have you recommended to avoid travels to your patients?	
Yes	559/583 (95.9)
No	24/583 (4.1)
Have you stopped an IBD drug as preventive strategy?	
Yes	55/571 (9.6)
No	516/571 (90.4)
Specify which drug(s) you stopped:	
Thiopurines	40/55 (72.7)
Steroids	24/55 (43.6)
Anti-TNFs	17/55 (30.9)
Methotrexate	11/55 (20)
Ustekinumab	3/55 (5.4)
Tofacitinib	3/55 (5.4)
Vedolizumab	2/55 (3.6)
Other	1/55 (1.8)
Have you provided any additional recommendation for your IBD patients?	
Yes	210/571 (36.8)
No	361/571 (63.2)

COVID-19, coronavirus-19; IBD, inflammatory bowel disease; TNF, tumor necrosis factor.

transmission of the virus suggests the need to implement the use of gloves and goggles.[4,14] It is also interesting to note that, although the use of protective aids was considered important to prevent infection, a high percentage of physicians did not recommend the use of protective aids for patients with IBD during their daily life (47%).

Interestingly, only a small group of physicians stopped immunosuppressive or biological treatments (9.6%) and the most discontinued drugs were thiopurines, steroids, and anti-tumor necrosis factor agents (72.7%, 43.6%, and 30.9%, respectively). In a recent study conducted in an IBD center in Wuhan, all IBD treatments were stopped.[15] Over a period of about 2 months, no IBD patient was infected with the new coronavirus and drug discontinuation was suggested as a viable option to decrease the risk of infection.[15] In contrast, in an Italian study,[16] 522 patients with IBD were continuously treated with biological and immunosuppressive therapies and no case of infection was found after >1 month of follow-up. Long-term data are needed to define which is the best strategy. Importantly, stopping therapy exposes patients to a greater risk of disease recurrence and therefore this decision should be individualized.[17,18] In fact, the International Organization of IBD has recommended discontinuing immunomodulators (thiopurine and methotrexate) and tofacitinib in positive SARS-CoV2 patients and all therapies systematically in patients with confirmed diagnosis of COVID-19.[19] In the remaining cases, the decision should be made by the physician, in agreement with the patient, based on the risk/benefit ratio for each patient.

As regards the work organization, most of the consultations were rescheduled and the start of new biological therapies was frequently postponed. This strategy was also supported by the Chinese gastroenterology society, which first had to deal with COVID-19 outbreak, and should allow to decrease travel and person-to-person contact.[20]

The high number of physicians from different countries who participated in the survey is the main strength of our work, suggesting that the data are reliable and representative of clinical practice. However, some relevant limitations must be reported. First, a significant percentage of respondents did not answer all the questions, and this could be a bias for the interpretation of results. Second, the results of this survey represent a photograph of a specific time period. Because new information is acquired every day, many responses given by physicians may have changed over time. For this reason, it would be necessary to re-propose the survey after some time to evaluate how physicians' concerns and management of patients with IBD change with the progress of COVID-19 knowledge.

In conclusion, the SARS-CoV2 pandemic has revolutionized the management of patients with IBD, forcing physicians to face new problems and make decisions in the absence of certainties to prevent viral transmission. Further studies are needed to clarify the relationship between COVID-19 and IBD and to define the best approach for patient management. National and international registries could be useful to monitor the epidemiological data of the virus in IBD and to identify the characteristics of COVID-19 in our patients.

Recommendations for Clinical Care

- Immunosuppressive and biological drugs should not be discontinued as a preventive strategy in patients with IBD without symptoms suggestive of COVID-19.
- The SARS-CoV-2 test should not be performed in patients with IBD without symptoms suggestive of COVID-19.
- All physicians should use protective aids (eg, gloves, masks, and disinfectants) during outpatient visits.
- Physicians should discourage all nonessential travel and recommend protective aids to their patients during daily life activities.
- Nonurgent outpatient visits should be postponed while the start of new biological drugs should be allowed if the IBD center/hospital can guarantee adequate protective measures.

Research Questions That Need to Be Addressed

- Do patients with IBD carry an increased risk of COVID-19 infection?
- Do immunosuppressive and biological drugs protect against the development of severe forms of COVID-19 infection?
- Will patients who stopped IBD drugs experience IBD flares leading to hospitalizations and surgeries?
- Should we favor ambulatory treatment (subcutaneous injections, oral administration) over intravenous administration?
- Is the initiation of IBD drugs (steroids, immunosuppressants, and biologics) safe during the COVID-19 pandemic?

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Supplementary Material

Note: To access the supplementary material accompanying this article, visit the online version of *Gastroenterology* at www.gastrojournal.org, and at https://doi.org/10.1053/j.gastro.2020.04.059.

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Conflicts of interest

The authors have made the following disclosures: F. D'Amico declares no conflict of interest. S. Danese has served as a speaker, consultant, and advisory board member for Schering-Plough, AbbVie, Actelion, Alphawasserman, AstraZeneca, Cellerix, Cosmo Pharmaceuticals, Ferring, Genentech, Grunenthal, Johnson and Johnson, Millenium Takeda, MSD, Nikkiso Europe GmbH, Novo Nordisk, Nycomed, Pfizer, Pharmacosmos, UCB Pharma and Vifor. L. Peyrin-Biroulet has served as a speaker, consultant and advisory board member for Merck, Abbvie, Janssen, Genentech, Mitsubishi, Ferring, Norgine, Tillots, Vifor, Hospira/Pfizer, Celltrion, Takeda, Biogaran, Boerhinger-Ingelheim, Lilly, HAC-Pharma, Index Pharmaceuticals, Amgen, Sandoz, Forward Pharma GmbH, Celgene, Biogen, Lycera, Samsung Bioepis, Theravance.

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Supplementary Table 1. Questionnaire for Physicians

1) Please specify the total number of IBD patients regularly followed in your center:
   a. 0–500
   b. 501–1000
   c. 1001–2000
   d. >2000
2) Do you have proven cases of COVID-19 among your IBD patients?
   a. Yes
   b. No
3) If you have proven cases of COVID-19 among your IBD patients, please specify the number of patients:
   a. 1–10
   b. 11–50
   c. 51–100
   d. >100
4) Is COVID-19 infection more severe than flu from your point of view?
   a. Yes
   b. No
   c. Do not know/no answer
5) Is respiratory transmission the only possible transmission way?
   a. Yes
   b. No
   c. Do not know/no answer
6) Can an asymptomatic person transmit the COVID-19 infection?
   a. Yes
   b. No
   c. Do not know/no answer
7) Does IBD predispose to catch COVID-19 infection?
   a. Yes
   b. No
   c. Do not know/no answer
8) Do some IBD drugs predispose to catch COVID-19 infection?
   a. Yes
   b. No
   c. Likely
   d. Do not know/no answer
9) Do you feel stressed from this situation?
   a. Yes
   b. No
   c. Do not know/no answer
10) Do you think you are working more than your usual working hours due to coronavirus?
   a. Yes
   b. No
   c. Do not know/no answer
11) Are you afraid of getting infected?
   a. Yes
   b. No
   c. Do not know/no answer
12) Are you afraid of infecting your patients?
   a. Yes
   b. No
   c. Do not know/no answer
13) Are you afraid of physical contact with other people?
   a. Yes
   b. No
   c. Do not know/no answer
14) Are you worried about being in quarantine?
   a. Yes
   b. No
   c. Do not know/no answer
15) Do you think quarantine is important to prevent contagion?
   a. Yes
   b. No
   c. Do not know/no answer

Supplementary Table 1. Continued

16) Are you afraid of dying from COVID-19 infection?
    a. Yes
    b. No
    c. Do not know/no answer
17) Are you worried that your IBD patients may be infected with COVID-19? Please specify from 0 to 10 how worried you are (0 = not worried, 10 = maximum worry):
18) What is your fear about COVID-19 for your IBD patients on immunosuppressant drugs or biologics? Please rank your fear from 0 to 10 (0 = minimum fear, 10 = maximum fear):
19) What is your fear about COVID-19 for your non-IBD patients? Please rank your fear from 0 to 10 (0 = minimum fear, 10 = maximum fear):
20) Are you optimistic about the fast resolution of the problem?
    a. Yes
    b. No
    c. Do not know/no answer
21) Should COVID-19 be tested in all asymptomatic non-IBD people?
    a. Yes
    b. No
    c. Do not know/no answer
22) Should COVID-19 be tested in all asymptomatic IBD patients?
    a. Yes
    b. No
    c. Do not know/no answer
23) Should COVID-19 be tested in all asymptomatic IBD patients on immunosuppressive or biological drugs?
    a. Yes
    b. No
    c. Do not know/no answer
24) Do you systematically perform COVID-19 testing in IBD patients with suspicious symptoms?
    a. Yes
    b. No
25) Do you think protective aids (eg, masks, gloves, disinfectants) are able to prevent contagion?
    a. Yes
    b. No
    c. Do not know/no answer
26) Do you use protection (eg, masks, gloves, disinfectants) when you see an IBD patient?
    a. Yes
    b. No
27) If you use protective aids when you see an IBD patient, please specify which one(s) you use (more than one answer is allowed):
    a. Mask
    b. Gloves
    c. Disinfectants
    d. Goggles
    e. Other
28) Have you been tested yourself for COVID-19?
    a. Yes
    b. No
29) Did your center provide you with recommendations on how to manage patients with COVID-19 infection?
    a. Yes
    b. No
30) If your center provided you with recommendations, are you satisfied with the information your center has provided you?
    a. Yes
    b. No
    c. Do not know/no answer
31) Do you think you know how to manage patients with suspicious symptoms in an appropriate manner?
    a. Yes
    b. No
    c. Do not know/no answer
32) Did you cancel or reschedule visits for your IBD patients due to COVID-19?
    a. Yes
    b. No
33) Do you hesitate to start an IBD drug due to the pandemic COVID-19 infection?
    a. Yes
    b. No

Supplementary Table 1. Continued

34) Have you recommended the use of protective aids (eg, masks, gloves, disinfectants) to your IBD patients during their daily life?
   a. Yes
   b. No
35) Have you recommended quarantine to some of your IBD patients?
   a. Yes
   b. No
36) Have you recommended to avoid travels to your patients?
   a. Yes
   b. No
37) Have you stopped an IBD drug as preventive strategy?
   a. Yes
   b. No
38) If you have stopped an IBD drug as preventive strategy, please specify which drug(s) you stopped (more than one answer is allowed):
   a. Corticosteroids
   b. Thiopurine
   c. Methotrexate
   d. Anti-TNF-α
   e. Ustekinumab
   f. Vedolizumab
   g. Tofacitinib
   h. Other
39) Have you provided any additional/specific recommendation for your IBD patients that differs from standard recommendations?
   a. Yes
   b. No

COVID-19, coronavirus-19; IBD, inflammatory bowel disease; TNF, tumor necrosis factor.

Supplementary Table 2. Physician Demographics and Incidence of COVID-19 among IBD Patients

	n (%)
Respondents to the survey	813
Respondents who completed all questions	570 (70.1)
Mean age (years)	47.02
Country	
Africa	4/72 (5.5)
America	12/72 (16.7)
Asia	14/72 (19.4)
Australia	2/72 (2.8)
Europe	40/72 (55.6)
IBD patients regularly followed	
0–500	253/634 (39.9)
501–1000	146/634 (23)
1001–2000	117/634 (18.5)
>2000	118/634 (18.6)
Confirmed cases of COVID-19 among IBD patients	
Yes	66/632 (10.4)
No	566/632 (89.6)
Number of confirmed cases of COVID-19 among IBD patients	
0-10	58/66 (87.9)
11-50	8/66 (12.1)
51-100	0
>100	0

COVID-19, coronavirus-19; IBD, inflammatory bowel disease; TNF, tumor necrosis factor.