

Supplementary material

Supplementary Table 1 The 20 questions used to evaluate both fellows' and fellowship program directors' perspectives regarding the potential impact of COVID-19 outbreak on training

Assessing participants' perspective regarding the potential impact of the coronavirus (COVID-19) outbreak on training						
<i>Please answer the following questions by choosing the most appropriate answer</i>						
Q1	Do you think that the COVID-19 pandemic will affect your/your fellows' training in gastroenterology, overall?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q2	Do you think that the limited available time due to potential involvement with patients suffering from COVID-19 will affect your/your fellows' training?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q3	Do you think that the unknown timeframe of measure implementation in the hospital due to the COVID-19 pandemic will affect your/your fellows' training?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q4	Do you think that the lack of protective equipment in the context of the COVID-19 pandemic will affect your/your fellows' training?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q5	Do you think that postponement of scheduled endoscopic procedures (e.g., screening colonoscopy) during the COVID-19 pandemic will affect your/your fellows' training?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q6	Which of the following do you think that will significantly affect your/your fellows' training during the COVID-19 pandemic?	Reduction of endoscopic procedures volume	Reduction of training time in hospitalized patients	Reduction of training time at the outpatient clinic	Redeployment to COVID-19 treatment department	Lack of protective equipment
Q7	Do you think that the COVID-19 pandemic will affect your/your fellows' training because of cancellation of in-hospital training opportunities (e.g., cancellation of intra-departmental and inter-departmental postgraduate courses)?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q8	Do you think that the COVID-19 pandemic will affect your/your fellows' training through the cancellation of national and European congresses?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q9	Do you think that the COVID-19 pandemic will affect your/your fellows' training in treating patients with general gastroenterology diseases?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q10	Do you think the COVID-19 pandemic will affect your/your fellows' training in treating patients with inflammatory bowel diseases (IBD)?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q11	Do you think the COVID-19 pandemic will affect your/your fellows' training in treating patients with diseases of the liver?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q12	Do you think that the COVID-19 pandemic will affect your/your fellows' training in acquiring/maintaining competence regarding your endoscopic skills?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q13	Do you think that the COVID-19 outbreak will affect the technical domain (i.e., torque steering, loop-reduction techniques) of your/your fellows' endoscopy competence?	Very negative	Negative	No impact/ effect	Positive	Very positive

(Contd...)

Supplementary Table 1 (Continued)

Assessing participants' perspective regarding the potential impact of the coronavirus (COVID-19) outbreak on training

Please answer the following questions by choosing the most appropriate answer

Q14	Do you think that the COVID-19 outbreak will affect the cognitive domain (application of endoscopically derived information to clinical practice, i.e., knowledge of procedural indications and contraindications, involvement in real-time decisions on the urgency and necessity of endoscopic procedures, pathology identification) of your/your fellows' endoscopy competence?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q15	Do you think that the COVID-19 pandemic will affect your/your fellows' training, in acquiring/maintaining competence in the performance of basic diagnostic endoscopic procedures (gastroscopy/diagnostic colonoscopy)?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q16	Do you think that the COVID-19 pandemic will affect your/your fellows' training, in acquiring/maintaining competence in the performance of emergency endoscopic procedures (e.g., gastrointestinal bleeding, foreign object removal)?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q17	Do you think that the use of electronic media and alternative forms of education (e.g., online courses, watching endoscopic videos) could be of value in acquiring/maintaining competence in your/your fellows' endoscopic skills?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q18	Do you think that the COVID-19 pandemic will affect your/your fellows' writing/scientific training activity (participation in scientific projects, writing scientific articles)?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q19	Do you think that the COVID-19 pandemic will affect your/your fellows' academic activity (preparation of a doctoral thesis/participation in a postgraduate program)?	Very negative	Negative	No impact/ effect	Positive	Very positive
Q20	Which of the following do you think could be extremely influential in improving your/your fellows' training after the COVID-19 pandemic?	Extension of fellowship program time	Deployment to a different gastroenterology department	Performance of additional courses by HSG or web	Workload increase after the end of the measures	No additional measures are warranted

Supplementary Table 2 Distribution of answers indicating negative/very negative impact of COVID-19 pandemic on fellows training (n, %) according to baseline demographic characteristics

Demographics	Q1	Q2	Q3	Q4	Q5	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	
Fellows																			
Sex, n (%)																			
Female (n=25)	22 (88)	21 (84)	24 (96)	20 (80)	23 (92)	20 (80)	23 (92)	21 (84)	17 (68)	18 (72)	22 (88)	23 (92)	17 (68)	18 (72)	10 (40)	7 (28)	13 (52)	11 (44)	
Male (n=52)	41 (78.8)	39 (75)	43 (82.7)	36 (69.2)	41 (78.8)	34 (65.4)	43 (82.7)	35 (67.3)	33 (63.5)	30 (57.7)	42 (81)	38 (73.1)	35 (67.3)	36 (69.2)	27 (51.9)	13 (25)	17 (32.7)	22 (42.3)	
P-value	0.555	0.558	0.260	0.417	0.202	0.288	0.274	0.174	0.753	0.345	0.529	0.074	0.783	1	0.344	0.927	0.262	0.989	
Age, n (%)																			
≤30 (n=17)	14 (82.4)	15 (88.2)	16 (94.1)	13 (76.5)	16 (94.1)	14 (82.4)	15 (88.2)	14 (82.4)	11 (64.7)	12 (70.6)	17 (100)	17 (100)	12 (70.6)	17 (100)	6 (35.3)	0 (0)	10 (58.8)	10 (58.8)	
31-35 (n=38)	32 (84.2)	29 (76.3)	34 (78.9)	26 (68.4)	32 (84.2)	25 (65.8)	34 (78.9)	27 (71.1)	26 (68.4)	24 (63.2)	31 (81.6)	31 (81.6)	27 (71.1)	25 (65.8)	22 (57.9)	15 (39.5)	12 (31.6)	15 (39.5)	
36-40 (n=15)	13 (86.7)	12 (80)	13 (86.7)	12 (80)	12 (80)	11 (73.3)	13 (86.7)	12 (80)	11 (73.3)	11 (73.3)	12 (80)	10 (66.7)	10 (66.7)	9 (60)	8 (53.3)	3 (20)	6 (40)	6 (40)	
>40 (n=7)	4 (57.1)	4 (57.1)	4 (57.1)	5 (71.4)	4 (57.1)	4 (57.1)	4 (57.1)	3 (42.8)	2 (28.6)	1 (14.3)	4 (57.1)	4 (57.1)	3 (42.8)	3 (42.8)	1 (14.3)	2 (28.6)	2 (28.6)	2 (28.6)	
P-value	0.205	0.407	0.070	0.830	0.174	0.534	0.157	0.222	0.141	0.044	0.072	0.115	0.731	0.013	0.114	0.103	0.221	0.678	
Year of fellowship, n (%)																			
1 st (n=13)	10 (76.7)	11 (84.6)	12 (92.3)	8 (61.5)	12 (92.3)	10 (76.7)	11 (84.6)	9 (69.2)	6 (46.2)	7 (53.8)	13 (100)	13 (100)	12 (92.3)	12 (92.3)	8 (61.5)	2 (15.4)	5 (38.5)	8 (61.5)	
2 nd (n=19)	16 (84.2)	14 (73.7)	16 (84.2)	15 (78.9)	16 (84.2)	11 (57.9)	16 (84.2)	15 (78.9)	15 (78.9)	13 (68.4)	16 (84.2)	16 (84.2)	12 (63.2)	16 (84.2)	8 (42.1)	7 (36.8)	9 (47.4)	6 (31.2)	
3 rd (n=19)	17 (89.4)	17 (89.4)	18 (94.7)	13 (68.4)	16 (84.2)	14 (73.7)	15 (78.9)	13 (68.4)	13 (68.4)	13 (68.4)	15 (78.9)	14 (73.7)	12 (63.2)	12 (63.2)	10 (52.6)	4 (21.1)	5 (26.3)	8 (42.1)	
4 th (n=26)	20 (76.9)	18 (69.2)	21 (80.8)	20 (76.9)	20 (76.9)	19 (73.1)	24 (92.3)	19 (73.1)	10 (38.5)	15 (57.7)	20 (76.9)	18 (69.2)	16 (61.5)	14 (53.8)	11 (42.3)	7 (26.9)	11 (42.3)	11 (42.3)	
P-value	0.373	(0.374)	0.356	0.558	0.802	0.394	0.651	0.950	0.221	0.065	0.446	0.228	0.490	0.064	0.781	0.054	0.163	0.220	
Fellows in the department, n (%)																			
≤4 (n=22)	20 (90.9)	18 (81.8)	21 (95.5)	16 (72.7)	19 (86.4)	17 (77.3)	19 (86.4)	17 (77.3)	18 (81.8)	15 (68.2)	19 (86.4)	17 (77.3)	13 (59.1)	17 (77.3)	8 (36.4)	4 (18.2)	9 (40.9)	11 (50)	
5-6 (n=36)	29 (80.6)	27 (75)	28 (77.7)	22 (61.1)	29 (80.6)	21 (58.3)	28 (77.7)	24 (66.7)	21 (58.3)	20 (55.6)	29 (80.6)	28 (77.7)	25 (69.4)	25 (69.4)	19 (52.8)	11 (30.6)	12 (33.3)	11 (30.6)	
≥7 (n=19)	14 (73.7)	15 (78.9)	18 (94.7)	18 (94.7)	16 (84.2)	16 (84.2)	19 (100)	15 (78.9)	11 (57.9)	13 (68.4)	16 (84.2)	16 (84.2)	14 (73.7)	12 (63.2)	10 (52.6)	5 (26.3)	9 (47.4)	11 (57.9)	
P-value	0.335	0.825	0.259	0.029	0.840	0.094	0.081	0.531	0.152	0.641	0.840	0.825	0.525	0.611	0.430	0.649	0.104	0.239	
Fellowship program directors																			
Years practicing gastroenterology, n (%)																			
≤25 (n=8)	6 (75)	5 (62.5)	8 (100)	4 (50)	7 (87.5)	6 (62.5)	6 (75)	6 (75)	5 (62.5)	5 (62.5)	4 (50)	5 (62.5)	5 (62.5)	3 (37.5)	2 (25)	5 (62.5)	6 (75)	6 (75)	
>25 (n=10)	4 (40)	4 (40)	7 (70)	2 (20)	5 (50)	5 (50)	6 (60)	6 (60)	3 (30)	3 (30)	1 (10)	2 (20)	3 (30)	1 (10)	0 (0)	3 (30)	2 (20)	3 (30)	
P-value	0.188	0.637	0.216	0.321	0.152	0.664	0.638	0.188	0.128	0.342	0.118	0.145	0.342	0.275	0.183	0.316	0.029	0.148	
Years being director, n (%)																			
≤10 (n=10)	5 (50)	5 (50)	9 (90)	2 (20)	6 (60)	6 (60)	7 (70)	5 (50)	5 (50)	3 (30)	4 (40)	4 (40)	5 (50)	1 (10)	1 (10)	5 (50)	5 (50)	6 (60)	
>10 (n=8)	5 (62.5)	4 (50)	6 (75)	4 (50)	6 (75)	4 (50)	5 (62.5)	5 (62.5)	3 (37.5)	3 (37.5)	2 (25)	3 (37.5)	3 (37.5)	1 (12.5)	1 (12.5)	3 (37.5)	3 (37.5)	3 (37.5)	
P-value	0.664	(1)	0.559	0.321	0.638	(1)	(1)	0.664	0.495	0.664	(1)	(1)	0.664	0.588	1	0.245	0.710	0.407	
Fellows in the department, n (%)																			
≤4 (n=11)	5 (45.5)	5 (45.5)	9 (81.8)	4 (36.4)	6 (54.5)	6 (54.5)	9 (81.8)	5 (45.5)	5 (45.5)	5 (45.5)	3 (27.3)	5 (45.5)	6 (54.5)	2 (18.2)	2 (18.2)	5 (45.5)	7 (63.6)	7 (63.6)	
5-6 (n=5)	3 (60)	2 (40)	4 (80)	2 (40)	4 (80)	3 (60)	2 (40)	3 (60)	2 (40)	2 (40)	1 (20)	1 (20)	1 (20)	0 (0)	0 (0)	3 (60)	1 (20)	2 (40)	
≥7 (n=2)	2 (100)	2 (100)	2 (100)	0 (0)	2 (100)	1 (50)	1 (50)	2 (100)	1 (50)	1 (50)	1 (50)	1 (50)	1 (50)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	
P-value	0.351	0.318	0.795	0.564	0.345	0.966	0.225	0.351	0.936	0.966	0.725	0.590	0.430	0.603	0.489	0.427	0.069	0.012	