

SURVEY

Q1. What are the endoscopic services offered in your unit?

1. EGD
2. Colonoscopy
3. ERCP
4. EUS
5. Emergency endoscopy
6. Capsular endoscopy
7. Other procedures

Q2. What is the type of your facility?

1. University/Teaching hospital
2. General hospital
3. Private hospital
4. Private practice

Q3. What is the current status of your region/country regarding COVID-19 pandemic?

1. Pre-peak
2. Peak
3. Post-first peak
4. Second wave

Q4. Is your unit a designated facility for covid-19 patients?

1. Yes
2. No

Q5. Do you classify patients according to the risk of infection before the procedures?

1. Yes
 - a. Symptoms
 - b. Body temperature
 - c. PCR
 - d. Antibodies test (IgM, IgG)
 - e. Chest CT
2. No

Q6. What is the status of routine endoscopic service in your unit?

1. Resumed
2. Resuming

3. Being planned
4. Not yet ready

Q7. Waiting lists, increased approximately by what (-----%) percentage?

1. 0-25%
2. 26-50%
3. 51-75%
4. 76-100%
5. > 100%

Q8. Did you increase working hours/day to cope with the increase in workload?

1. Yes
2. No

Q9. Is the full of cadre of staff recovered (either from disease or deployment to COVID-19 wards)?

1. Yes
 - a. Specialists
 - b. Nurses
 - c. Trainees
 - d. Center considered this as a barrier for resumption
 - e. Center NOT considered this as a barrier for resumption
2. No

Q10. Do you have a suitable waiting area accommodating the regular numbers of patients with appropriate social distancing?

1. Yes
2. No

Q11. Do you have separate endoscopy rooms for confirmed/ suspected COVID-19 patients?

1. Yes
2. No

Q12. Do you have adequate recovery rooms/ward that accommodate the usual number of patients with appropriate social distancing?

1. Yes
2. No

Q13. Did endoscopy training come back to normal in your unit?

1. Yes
 - a. For fellows

- b. For residents
- c. Both

2. No

Q14. Do/Will you select endoscopist, assistant and scope based on patient's diagnosis?

- 1. Yes
- 2. No

Q15. What do you expect regarding procedures volume?

- 1. Same
- 2. Increased
- 3. Reduced

Q16. Do you consider resumption with pre-pandemic indications for all procedures?

- 1. Yes
- 2. No

Q17. Do you have a special track for confirmed COVID-19 cases?

- 1. Yes
- 2. No

Q18. Do you consider the shortage of PPE would be a barrier for resuming regular endoscopic service?

- 1. Yes
 - a. All cases
 - b. Suspected cases
 - c. Confirmed cases
 - d. Special designated cases
- 2. No

Q19. Do you expect/experience delay in cases turn over due to room cleaning after each case?

- 1. Yes
 - a. Increased time for inspection per case
 - b. Time for inspection per case unchanged
- 2. No

Q20. Do/Will you survey the patients post procedure after 7 and 14 days for possibility of infection?

- 1. Yes
 - a. Residents do the follow-up via phone calls
 - b. Endoscopy staff do the follow-up via phone calls

- c. Endoscopy unit nurses do the follow-up via phone calls
- d. Administrators do the follow-up via phone calls

2. No

METHODS (SUPPL.)

The study was conducted via a web-based questionnaire, which consisted of 20 short, multiple choice questions, including those with additional inquiries based on certain responses from the surveyors. The questionnaire was written in English and was available online from July 30th to August 19th, 2020. The questionnaire was distributed via the following gastroenterology societies:

1. Society of Gastrointestinal Endoscopy in India (SGEI)
2. Endoscopy section of the Croatian Society of Gastroenterology
3. Iran Khuzestan Society of Gastroenterology
4. Egyptian Association for Research and Training in Hepatogastroenterology (EARTH)
5. Vietnam Federation of Digestive Endoscopy
6. Peruvian Society of Gastroenterology
7. The Malaysian Society of Gastroenterology and Hepatology
8. Hungary National Society of Gastroenterology (Magyar Gasztroenterologiai Tarsasag-MGT).
9. Korean Society of Gastrointestinal Endoscopy

Only heads of endoscopy centers/units were invited to participate. Invitations were sent out via email through the above mentioned societies and personal emails of 47 countries across 5 continents, which are divided into 7 regions: North America, South America, Europe, Africa, West and Middle East Asia, North, Far East, and Southeastern Asia and Oceania. In total 322 individual emails were sent, for which a reminding round was distributed to the same list of recipients two weeks after the initial invitation.

The questionnaire began with an inquiry regarding if the participants would be willing to take part in the survey; those responders with “no” answers would be rendered incomplete so that they would be excluded from the subsequent analysis. After the initial engaging question, the survey was divided into three domains. The first domain contained three demographic questions regarding the participant’s country of practice, what kind of performed endoscopic procedures, and the current healthcare setting. The second domain was dedicated to assessing the COVID situation at the participant’s location, the resumption of endoscopic practice, its scope of recovery, and any accountable barrier; this domain consisted of questions 3 to 9. The last domain, which contained questions 10 to 20, determined in detail the endoscopic practice in respect of COVID-19 pandemic. In some questions (5, 9, 13, 18, 19, and 20), side quests would be displayed if the respondent chooses the respective answers. All questions could be answered by clicking on predefined options, no open questions were addressed. In some cases,

multiple answers were accepted. Only the country of practice, not the name and institution of the participants was recorded.

TABLES

Table 1 – Data Distribution According to Region, Country and Number of Responses

Region	Country/Region	Number of Responses (N)	Regional Percentage (%)	Global Percentage (%)
<i>North America</i>	United States of America	23	79.3	7.9
	Canada	6	20.7	2.1
<i>Central and South America</i>	Argentina	1	8.3	0.3
	Brazil	2	16.7	0.7
	Colombia	2	16.7	0.7
	Cuba	1	8.3	0.3
	Peru	6	50	2.1
<i>Europe</i>	Belgium	13	11.5	4.5
	Croatia	9	8	3.1
	Denmark	2	1.8	0.7
	France	2	1.8	0.7
	Germany	14	12.4	4.8
	Hungary	23	20.4	7.9
	Italy	9	8	3.1
	Netherlands	1	0.9	0.3
	Romania	3	2.7	1
	Poland	20	17.7	6.9
	Portugal	8	7	2.8
	Spain	3	2.7	1
	Sweden	1	0.9	0.3
	Turkey	1	0.9	0.3
	United Kingdom	4	3.5	1.4
<i>Middle East and South Asia</i>	India	33	70.2	11.4
	Iran	2	4.3	0.7
	Iraq	1	2.1	0.3
	Isreal	1	2.1	0.3
	Kuwait	6	12.8	2.1
	Qatar	1	2.1	0.3
	United Arab Emirates	3	6.4	1
<i>North, Far East and Southeast Asia</i>	China	8	12.5	2.8
	Indonesia	1	1.6	0.3
	Japan	5	7.8	1.7
	Laos	1	1.6	0.3
	Malaysia	11	17.2	3.8
	Myanmar	1	1.6	0.3
	Philippines	4	6.3	1.4
	Russia	1	1.6	0.3
	South Korea	14	21.9	4.8
	Thailand	3	4.7	1
	Vietnam	14	21.9	4.8
	Taiwan	1	1.6	0.3

<i>Africa</i>	Egypt	14	66.7	4.8
	Morocco	2	9.5	0.7
	Sudan	1	4.8	0.3
	Zambia	3	14.3	1
	Zimbabwe	1	4.8	0.3
<i>Oceania</i>	Australia	4	100	1.4

Table 2 – Facility Setting Distribution

Region	University/Teaching Hospital	General Hospital	Private Hospital	Private Practice
<i>America</i>	19	9	10	3
<i>Europe</i>	64	40	7	3
<i>Middle East and South Asia</i>	12	7	24	4
<i>North, Far East and Southeast Asia</i>	40	11	12	0
<i>Africa</i>	15	1	5	0
<i>Oceania</i>	3	0	1	0
Total	153 (52.8%)	68 (23.4%)	59 (20.3%)	10 (3.4%)

Table 3 – Patient’s Risk of COVID Infection Based on Strategy(ies) of Choice Throughout the World

	America	Europe	Middle East and South Asia	North, Far East and Southeast Asia	Africa	Oceania
Symptoms	28,6	26,5	30,1	33,3	30,9	28,6
Body Temperature	28,6	30,4	27,4	34	32,7	28,6
PCR	23,5	27,6	29,2	20	7,3	14,3
Antibodies	11,8	10,2	2,7	8,7	1,8	14,3
Chest CT	7,6	5,3	10,6	4	27,3	14,3

Table 4 – Training Restoration in World’s Different Regions Post-COVID

Training resumption? If yes, for whom?	North and South America	Europe	Middle East and South Asia	North, Far East and Southeast Asia	Africa	Oceania	Total
Yes	17	50	9	39	3	4	122
No	24	63	38	25	18	0	168
Fellows	8	9	6	15	1	2	41
Residents	2	11	1	2	1	1	17

Both	7	30	2	22	1	1	63
------	---	----	---	----	---	---	----

FIGURES

Figure 1 – Types of Performed Endoscopic Procedures Global View

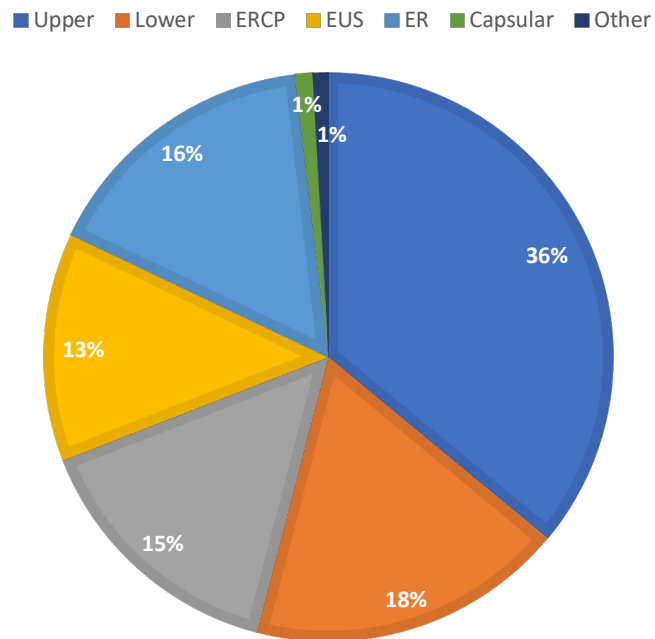


Figure 2 – World's Patient Stratification Strategies

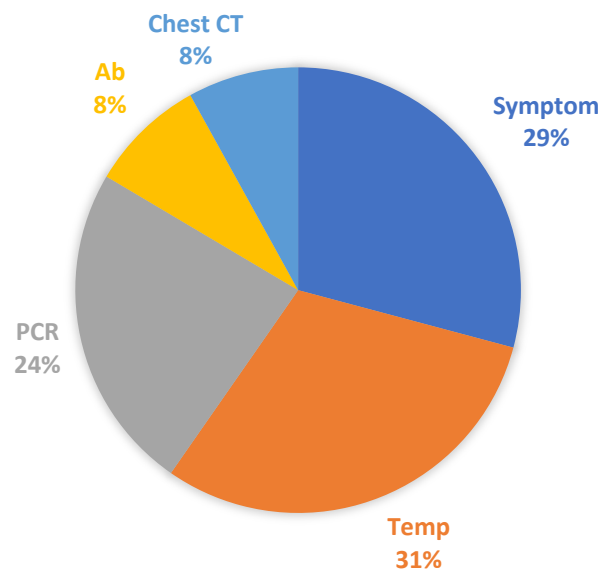


Figure 3 – Recovery of Full Cadre in Endoscopic Centers Worldwide

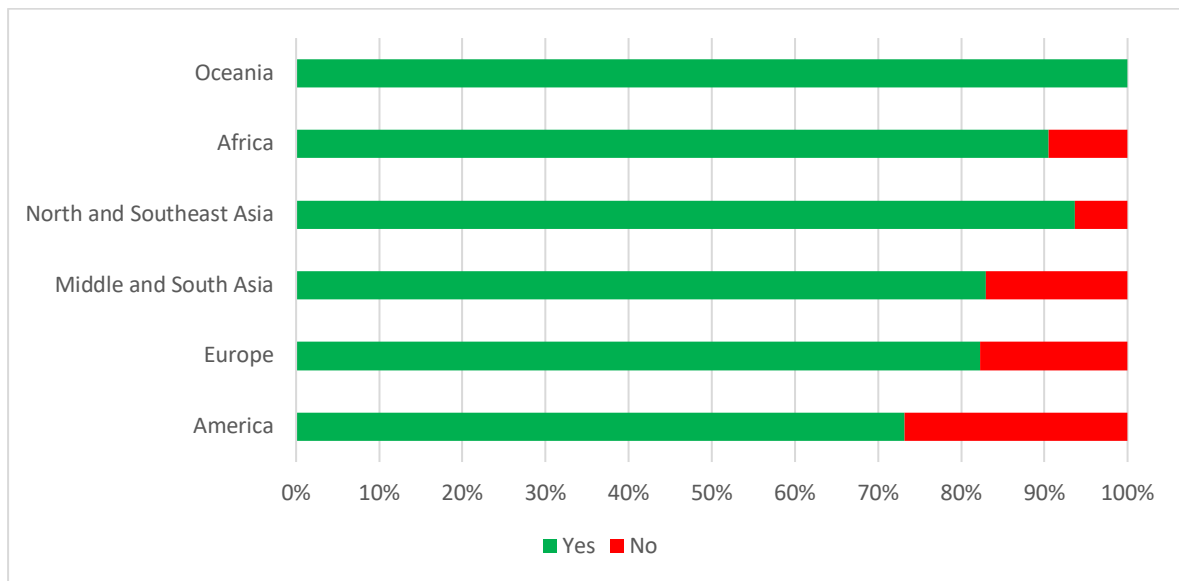


Figure 4 – Staff Resumption in Different Regions of the World

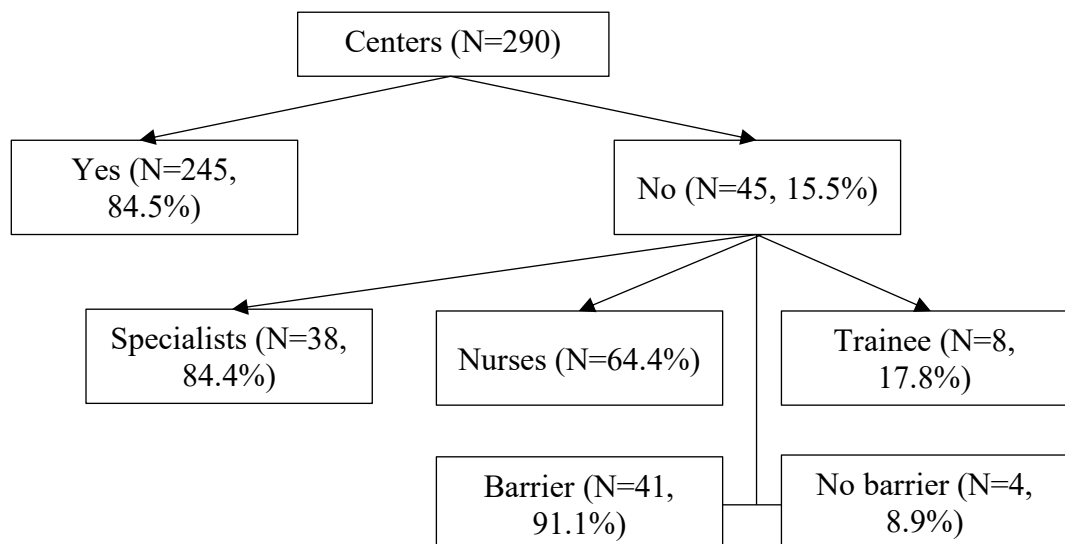


Figure 5 – Endoscopic Facility in Perspective of COVID Across the World

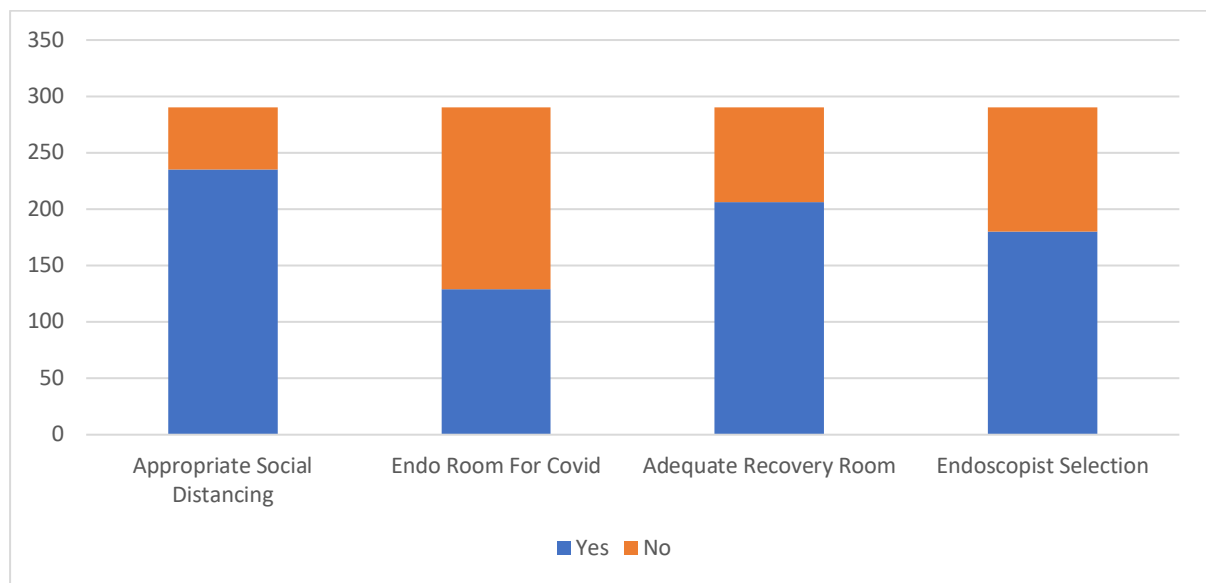


Figure 6 – Endoscopic Procedure Volume Change Due to COVID (?)

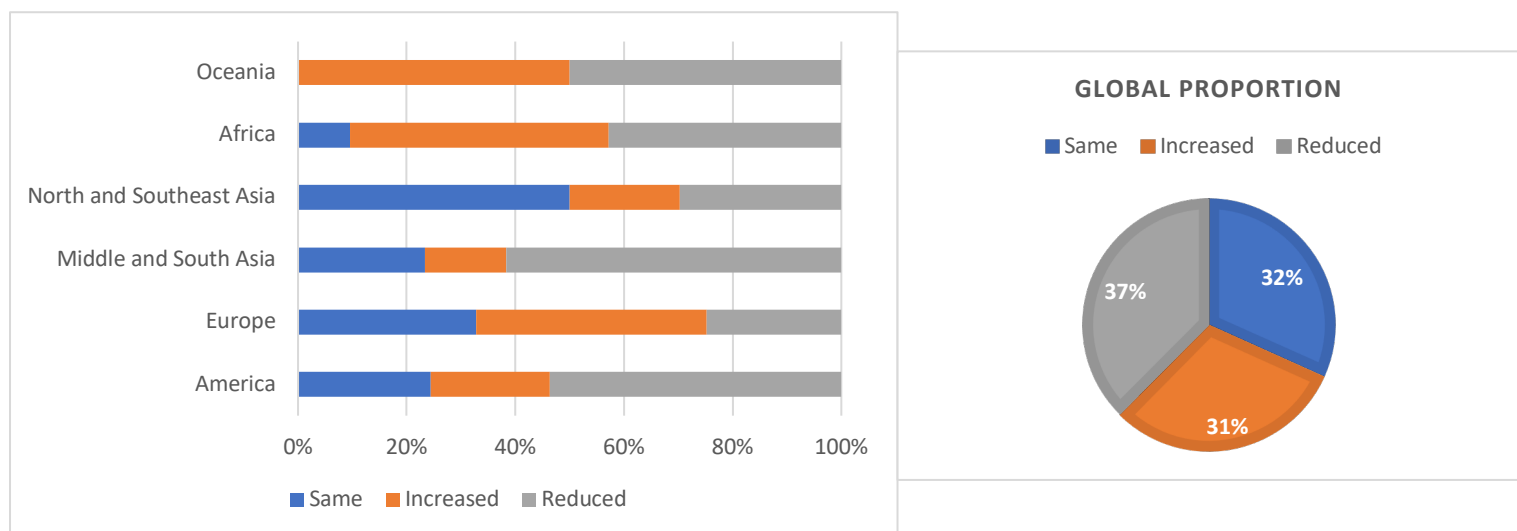


Figure 7 – Post-procedural Disinfection Time Response

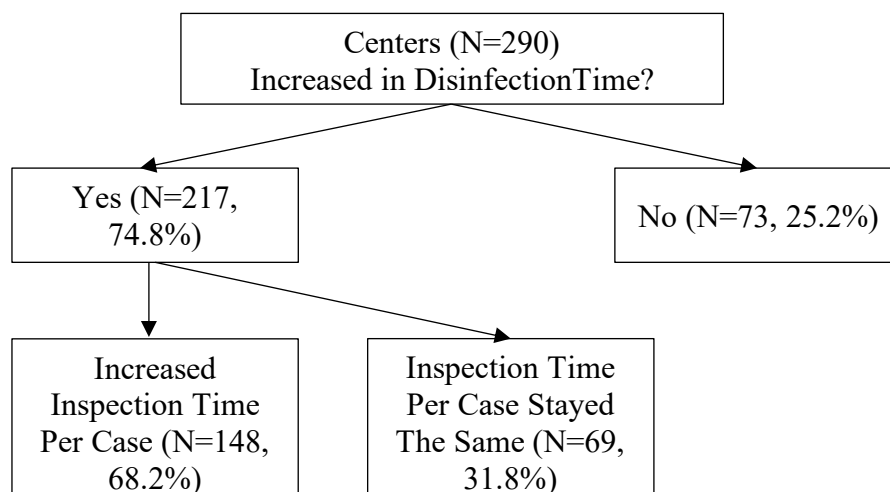


Figure 8 – Consideration of Resumption with Pre-pandemic Indications for All Endoscopic Procedures

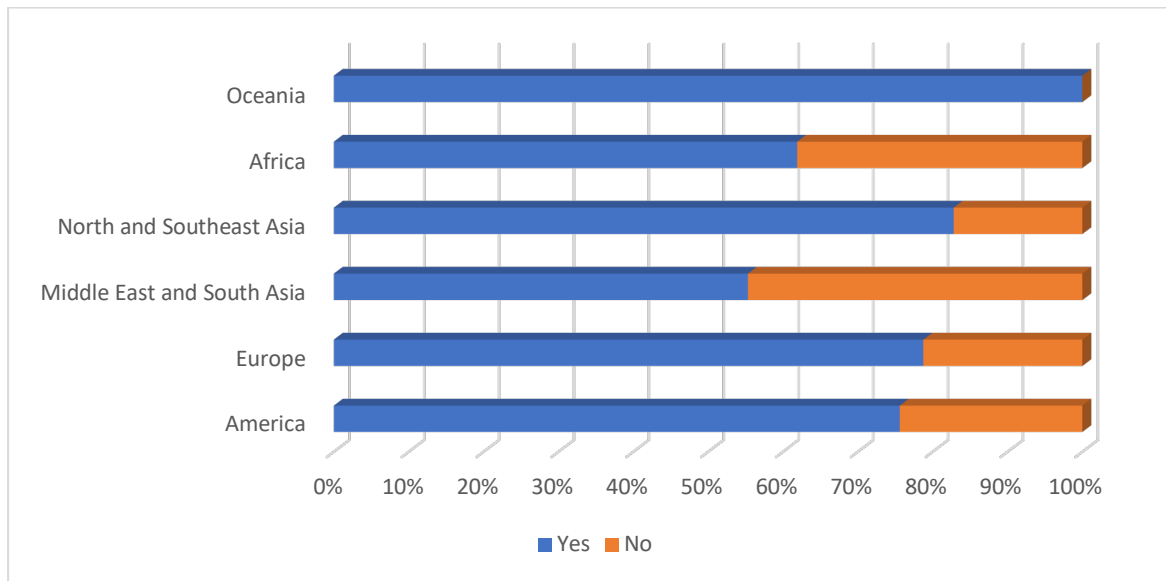


Figure 9 – Implementation of Special Track for COVID Patients and 14 Days Post-Procedural Patient Surveillance 14 Days

