THE EFFECT OF COVID-19 PANDEMIC ON CURRENT AND FUTURE ENDOSCOPIC PERSONAL PROTECTIVE EQUIPMENT PRACTICES: A NATIONAL SURVEY OF 77 ENDOSCOPISTS

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INTRODUCTION:

- Personal protective equipment (PPE) guidelines serve to prevent transmission of pathogens.
- Prior to COVID-19, compliance to guidelines may have been variable between endoscopists.

OBJECTIVE:

- We aimed to study the PPE practices among endoscopists across Canada before and after COVID-19.

HYPOTHESIS:

- The COVID-19 pandemic would increase the awareness of PPE importance to endoscopists and influence their routine use post-pandemic.

METHODS AND PROCEDURES:

- 74-item voluntary questionnaire e-mailed from June to September 2020.
- Members of Canadian Association of Gastroenterologists (CAG) and Canadian Association of General Surgeons (CAGS)

RESULTS:

Table 1. Basic demographics of survey respondents (N = 66).

	n (%)
Age	
< 30	0 (0.0)
30 to 39	15 (22.7)
40 to 49	28 (42.4)
50 to 59	10 (15.2)
≥ 60	13 (19.7)
Prefer not to disclose	0 (0.0)
Sex	
Female	31 (47.0)
Male	35 (53.0)
Prefer not to disclose	0 (0.0)
Province/Territory	
Alberta	16 (24.2)
British Columbia	7 (10.6)
Manitoba	6 (9.1)
New Brunswick	4 (6.1)
Newfoundland and Labrador	5 (7.6)
Ontario	20 (30.3)
Prince Edward Island	0 (0.0)
Quebec	3 (4.5)
Saskatchewan	2 (3.0)
Territories	3 (4.5)
Prefer not to disclose	1 (1.5)

	n (%)
Specialty	
Gastroenterology	47 (71.2)
General Surgery	14 (21.2)
Other	4 (6.1)
Prefer not to disclose	1 (1.5)
Experience (years)	
< 5	3 (4.5)
5 to 9	17 (25.8)
10 to 14	15 (22.7)
15 to 19	7 (10.6)
20 to 24	9 (13.6)
≥ 25	14 (21.2)
Prefer not to disclose	1 (1.5)
Volume (endoscopies/week)	
< 10	6 (9.1)
10 to 19	23 (34.8)
20 to 29	24 (36.4)
30 to 39	6 (9.1)
40 to 49	2 (3.0)
≥ 50	3 (4.5)
Prefer not to disclose	2 (3.0)



Figure 1. Comparison of pre-COVID-19 (yellow) and post-COVID-19 (white) PPE usage rates broken down by endoscopic procedure.



Figure 2. Comparison of percentage increase of intended post-pandemic PPE use by demographic subgroups.

DISCUSSION:

- Aside from gloves and gowns, the use of PPE prior to COVID-19 was much lower than institutional guidelines.
- Endoscopists intend to wear more PPE after COVID-19, with masks and face shields increasing the most.
- PPE practice did not vary significantly between demographic groups.
- Future research will be needed in order to balance the necessity of infection prevention and control with the rising cost of healthcare and the environmental impact of our practices.

CONCLUSION:

- The use of PPE prior to COVID-19 was suboptimal when compared to established guidelines and recommendations.
- The COVID-19 pandemic has renewed infection control awareness and reinforced the importance of routine PPE practices.