



Article

# An Unprecedented Challenge: The North Italian Gastroenterologist Response to COVID-19

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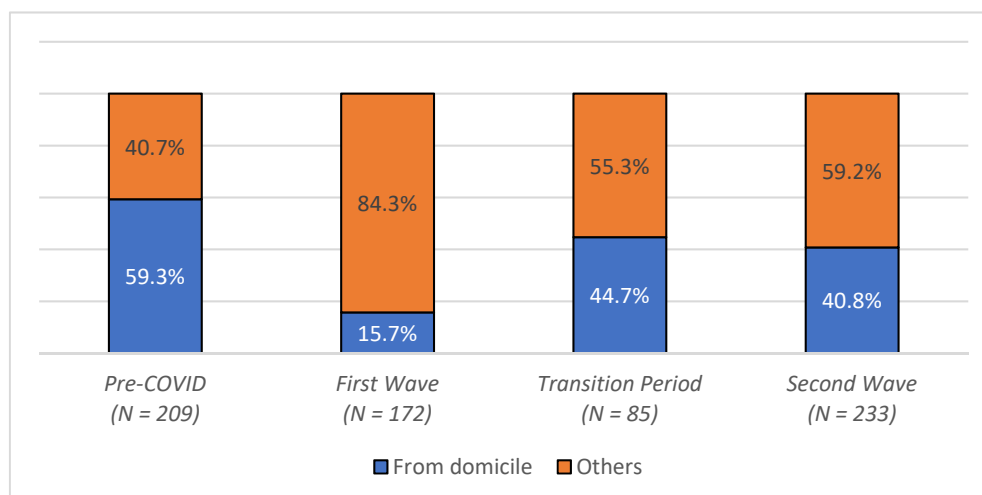
## Supplementary file

### *Supplementary methods*

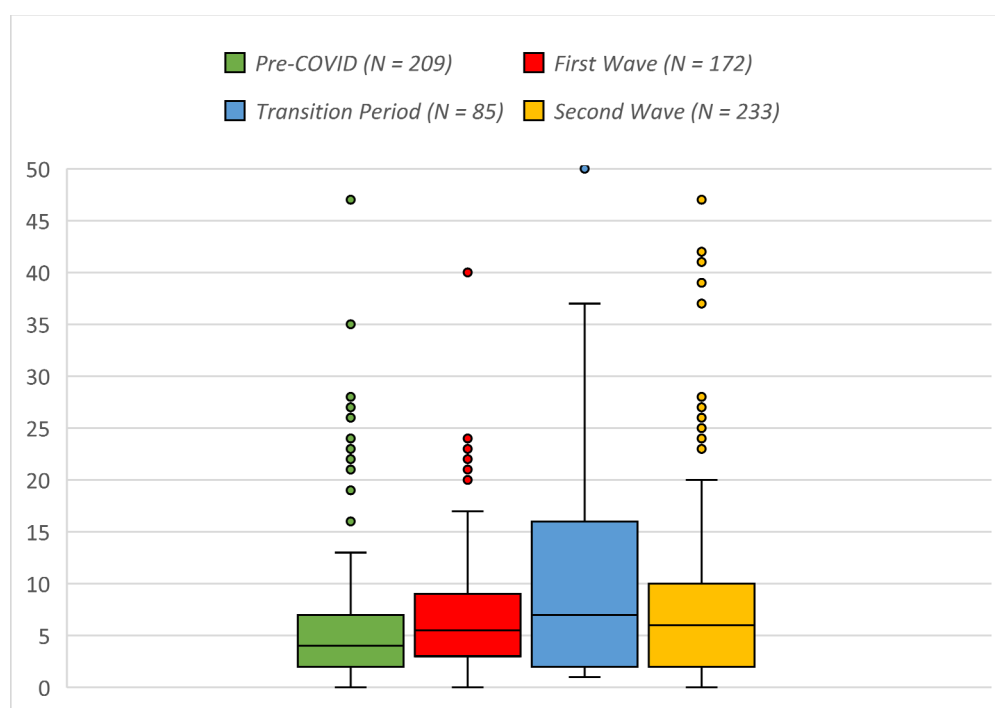
Safety protocols adopted in the gastroenterological ward during the SARS-CoV-2 outbreaks:

- Isolation measures (from March 23, 2020): no entry to non-inpatients; single room for “grey” patients (i.e., those who had only one negative RT-PCR test for SARS-CoV-2 at the admission or with respiratory symptoms while being admitted for less than 5 days); optimization of the healthcare personnel to avoid crowding in the common rooms.
- Active surveillance measures (from March 30, 2020): systematic testing of asymptomatic healthcare personnel and inpatients (before their entrance in the wards, then one and three times per week, respectively).
- Personal protective equipment (PPE): systematic adoption of PPE (i.e., FFP1 mask, gloves, single-use scrub suit) at the ward entrance (from March 13, 2020); systematic adoption of second-level single use PPE (i.e., FFP2 mask plus single-use FFP1 mask, double-gloving, visor, waterproof single-use scrub suit) while visiting each “grey” patient (from March 23, 2020) and the subsequent systematic adoption of the same second-level single use PPE while visiting all the patients (from April 3, 2020).

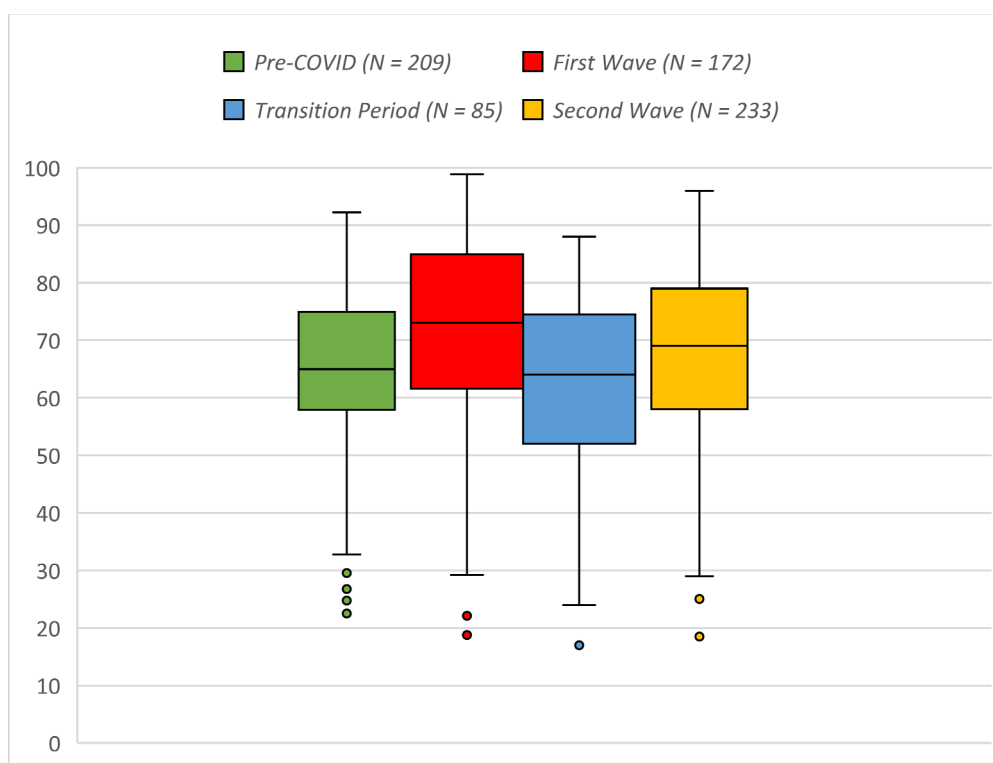
## Supplementary figures



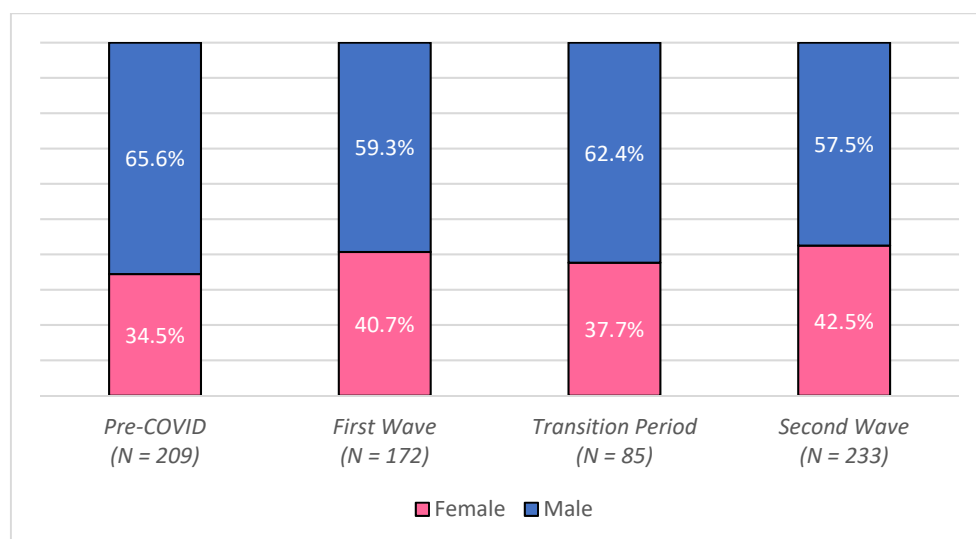
**Figure S1.** Modalities of access. Respect to the pre-COVID era, for each period (first wave, transition period and second wave), the results are: PR 0.26, 95% CI 0.18 to 0.38; PR 0.75, 95% CI 0.58 to 0.98; PR 0.69, 95% CI 0.57 to 0.83.



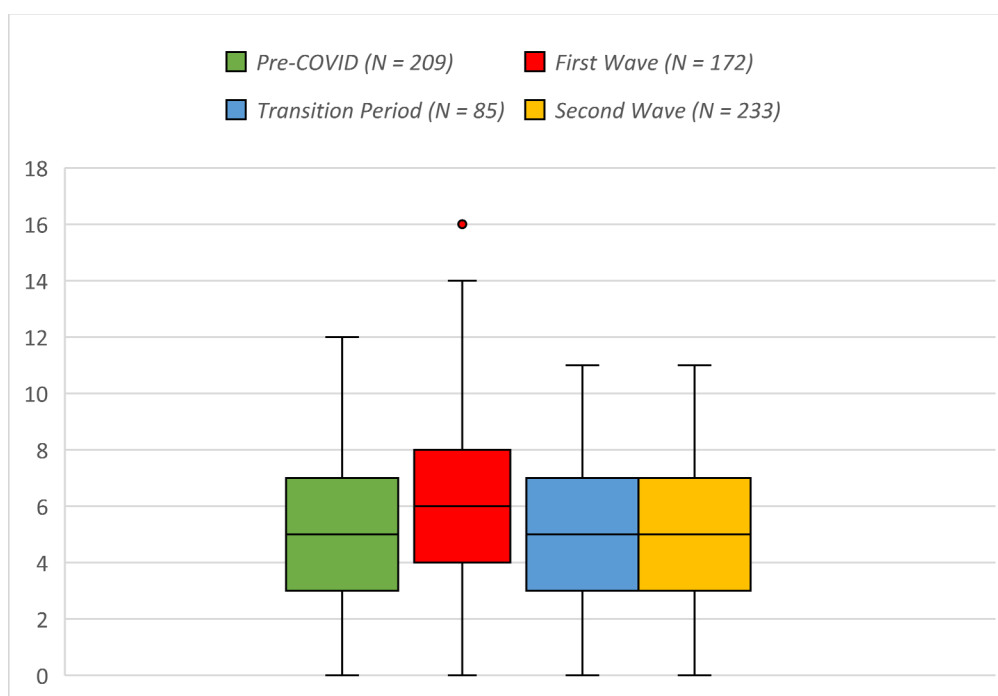
**Figure S2.** Length of stay in the Gastroenterological Unit. Note that patients >50 days are not represented (out of scale).  $p = 0.001$ . The circles are the outliers.



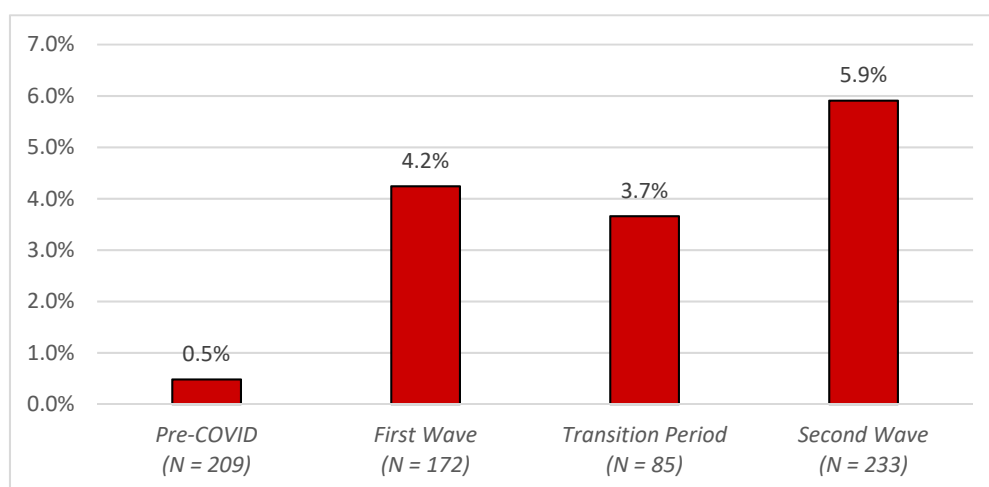
**Figure S3.** Age at the admission.  $p < 0.001$ . The circles are the outliers.



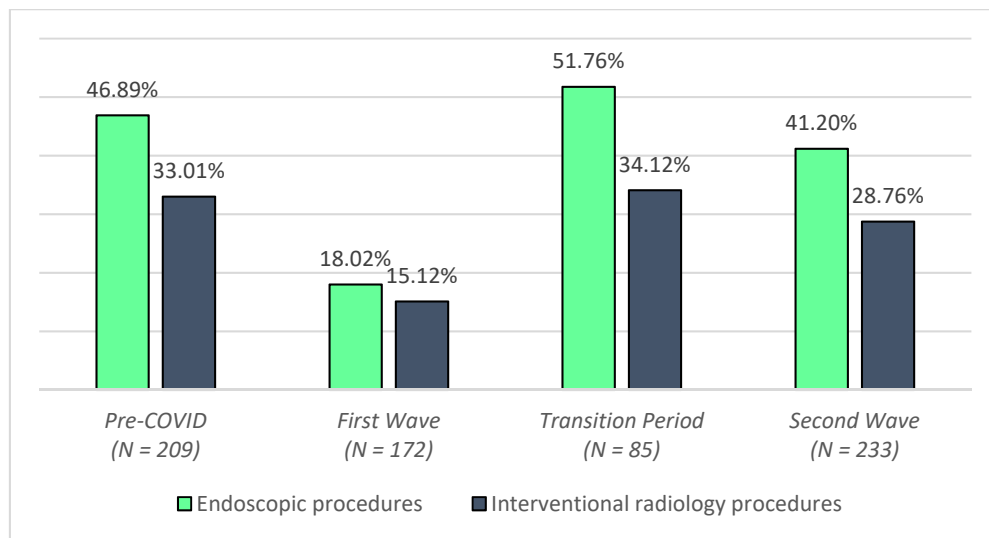
**Figure S4.** Gender distribution; Respect to the pre-COVID era, for each period (first wave, transition period and second wave), the results are: PR 0.90, 95% CI 0.77 to 1.06; PR 0.95, 95% CI 0.78 to 1.15; PR 0.88, 95% CI 0.76 to 1.02.



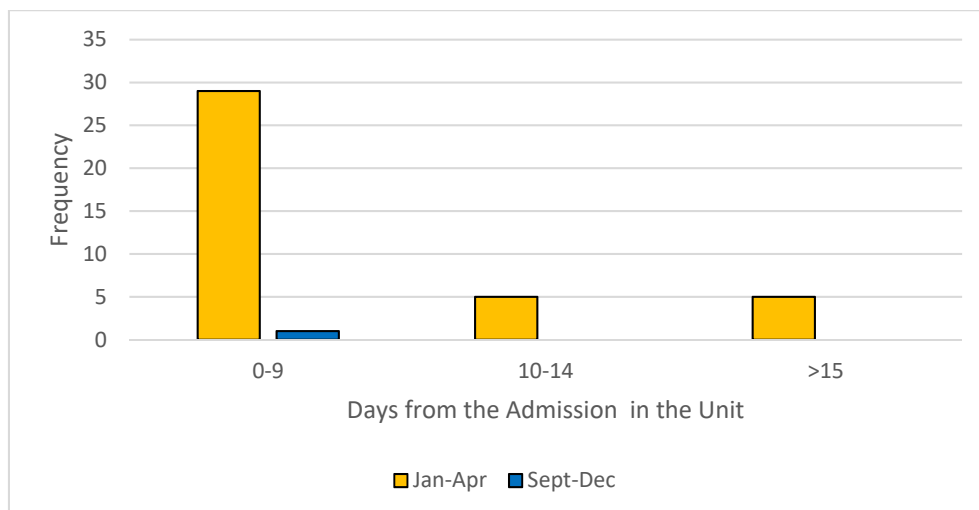
**Figure S5.** Charlson comorbidity index.  $p = 0.02$ . The circles are the outliers.



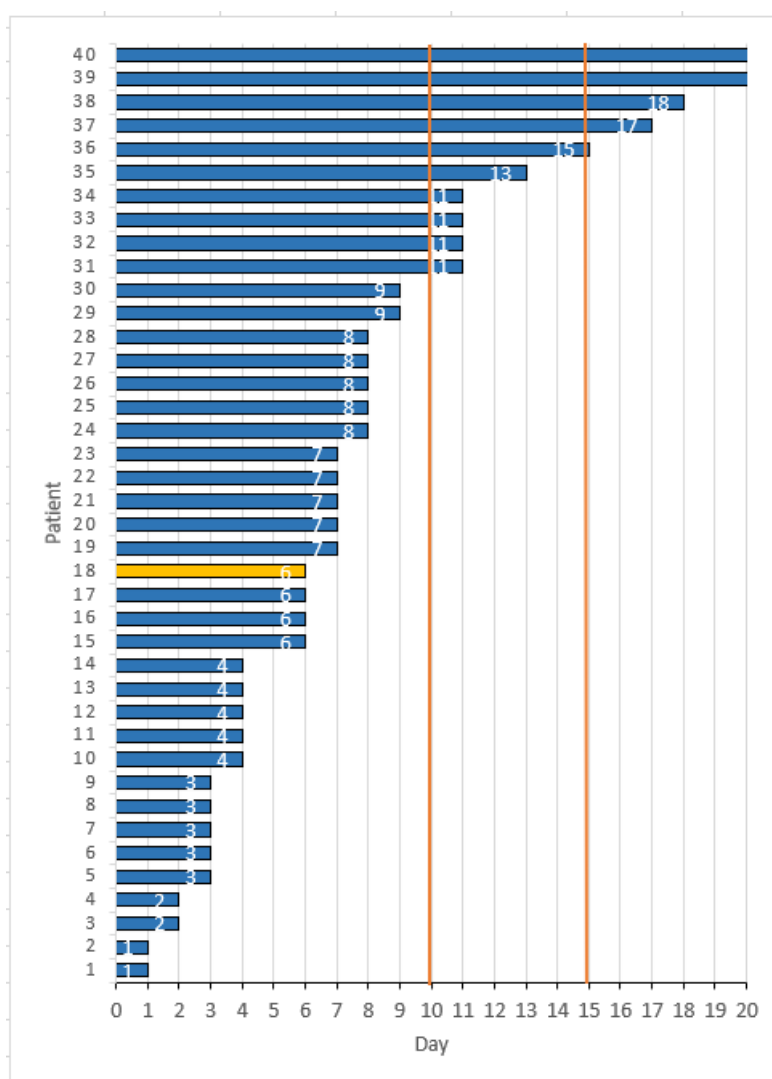
**Figure S6.** Mortality. Respect to the pre-COVID era, for each period (first wave, transition period and second wave), the results are: PR 8.51, 95% CI 1.06 to 68.5; PR 7.38, 95% CI 0.78 to 69.9; PR 11.66, 95% CI 1.54 to 88.4.



**Figure S7.** Patients attending at least one diagnostic procedure. Respect to the pre-COVID era, for each period (first wave, transition period and second wave), the results related to the endoscopic procedures are: PR 0.38; 95% CI 0.27 to 0.55; PR 1.10; 95% CI 0.86 to 1.42; PR 0.88; 95% CI 0.71 to 1.08. Respect to the pre-COVID era, for each period (first wave, transition period and second wave), the results the results related to the interventional radiology procedures are: PR 0.46; 95% CI 0.31 to 0.69; PR 1.03; 95% CI 0.73 to 1.47; PR 0.87; 95% CI 0.66 to 1.15.



**Figure S8.** Days from admission to diagnosis of SARS-CoV-2 infection.



**Figure S9.** Days from the admission in the Gastroenterological Unit to the diagnosis of COVID-19 shown for each case. The orange vertical lines divide the patients into three categories (0-9, 10-14 and >15 days). In yellow, the only patient resulted positive during the second wave.

#### Supplementary tables

**Table S1.** Discharge diagnoses of deceased patients.

Diagnosis at the discharge	No. of deaths
<b>Pre-COVID era</b>	
Advanced gallbladder cancer	1
<b>First wave</b>	
Congestive heart failure	2
Pneumonia	2
Metastatic hepatocellular carcinoma	2
Peritoneal carcinomatosis of unknown origin	1
<b>Transition period</b>	
Sepsis	1
Acute alcoholic hepatitis	1
Sepsis and cholangiocarcinoma	1
<b>Second wave</b>	
Refractory celiac disease and lymphoma	1

Hepatocellular carcinoma	1
Cachexia and pancreatic necrosis	1
Renal failure	2
Septic shock	1
Hepatic abscess and chronic cholecystitis	1
Aspiration pneumonia	1
Metastatic lung cancer	1
Hepatocellular carcinoma	1
Pneumonia and metastatic prostate cancer	1
Liver failure	1
Pneumonia	1

**Table S2.** Days from the admission to the Unit to the diagnosis of COVID-19 during the first wave.

Days	N. of patients	%
0-9	29	74.4%
10-14	5	12,8%
≥15	5	12,8%