



Annual Meeting 2020

12 Dec 2020

Part 2: Co-existing with COVID-19

Co-existing with COVID-10

Sharing of experience

- Bangladesh
- Hong Kong
- India
- Italy
- Malaysia
- Others

Coronavirus Cases:

71,578,588

[view by country](#)

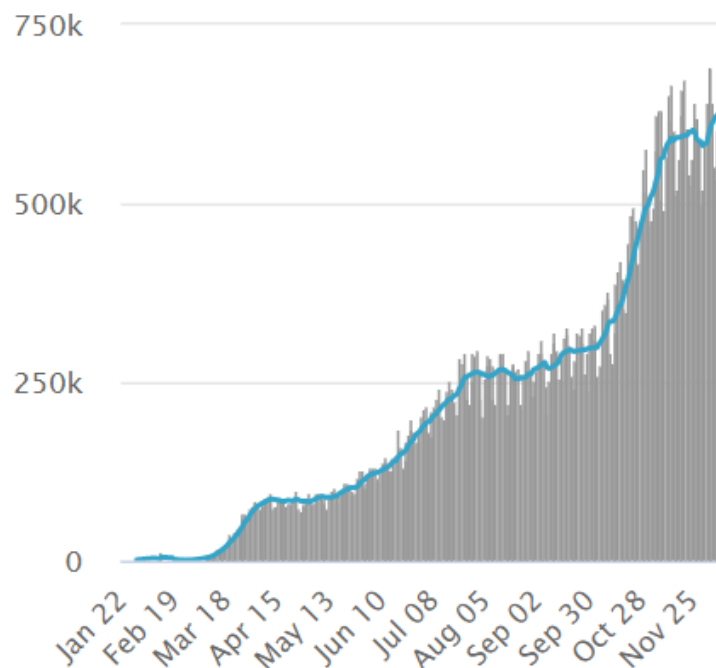
Deaths:

1,604,136

daily linear logarithmic

Daily New Cases

Cases per Day
Data as of 0:00 GMT+0

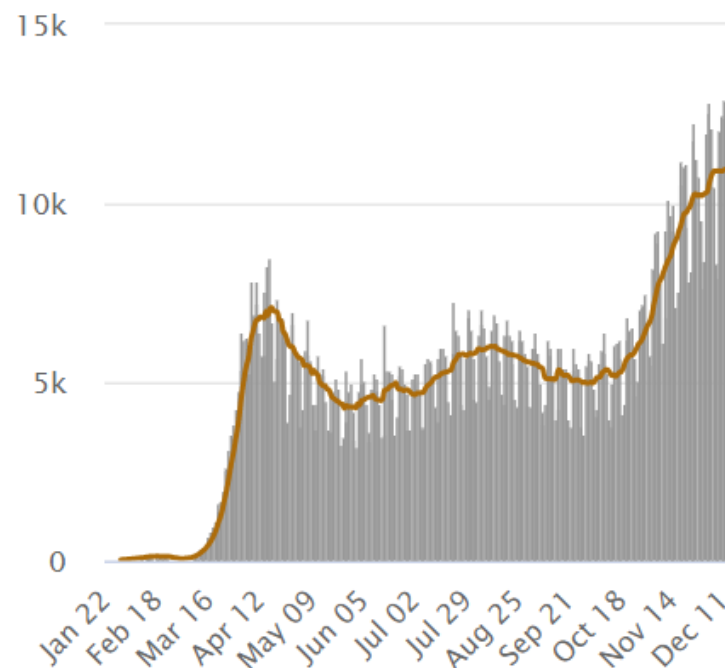


7-day moving average ☒

daily linear logarithmic

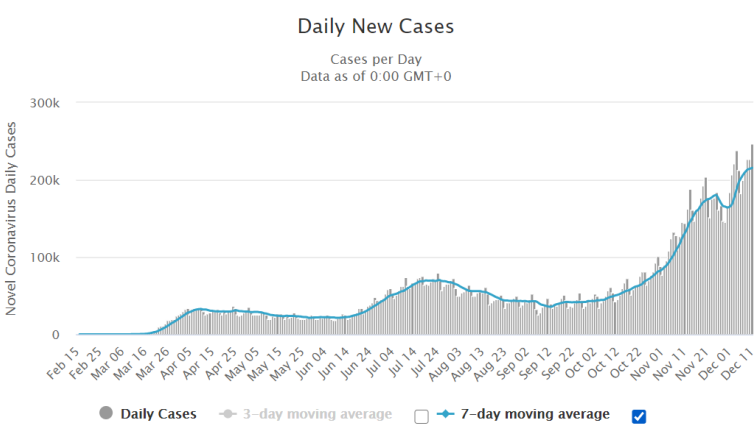
Daily Deaths

Deaths per Day
Data as of 0:00 GMT+0

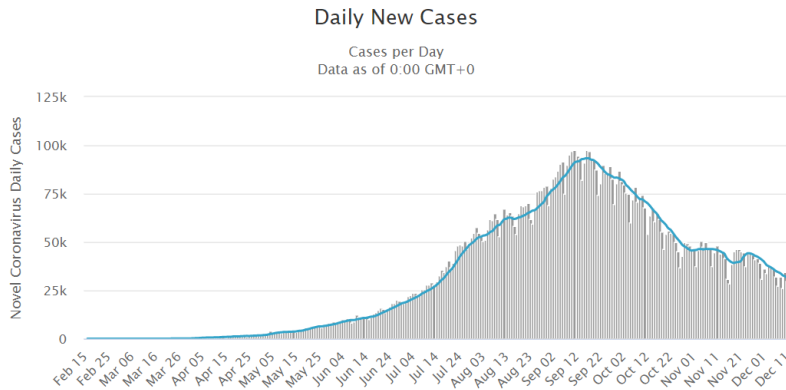


7-day moving average ☒

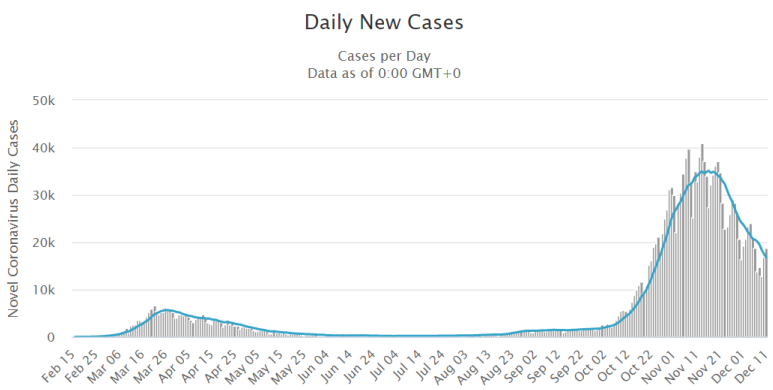
Daily New Cases in the United States



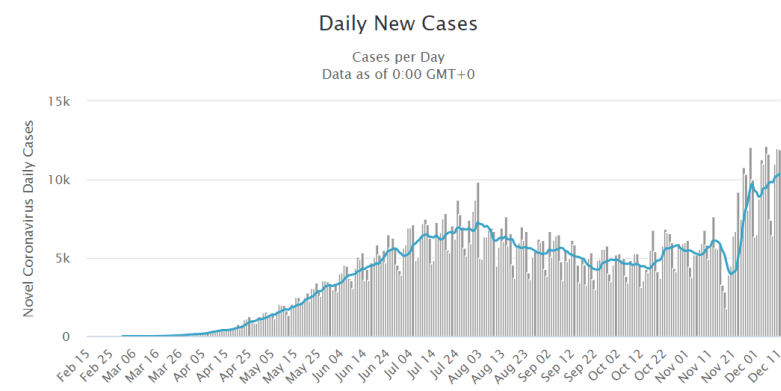
Daily New Cases in India



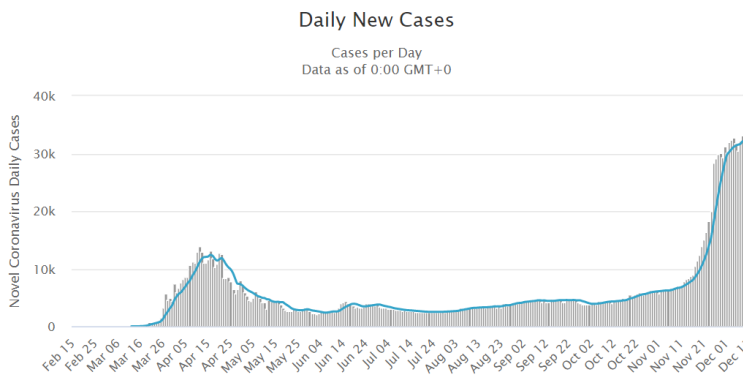
Daily New Cases in Italy



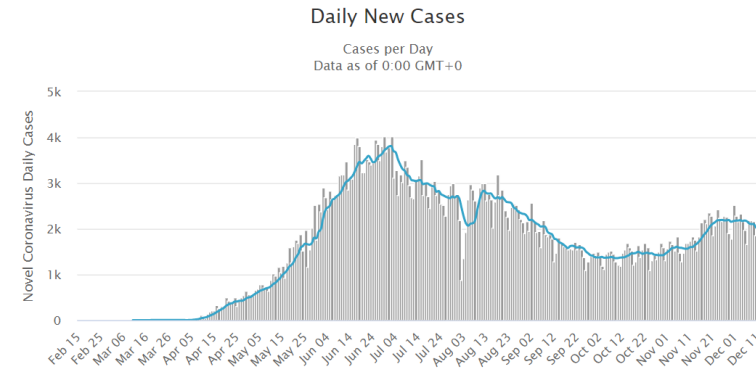
Daily New Cases in Mexico



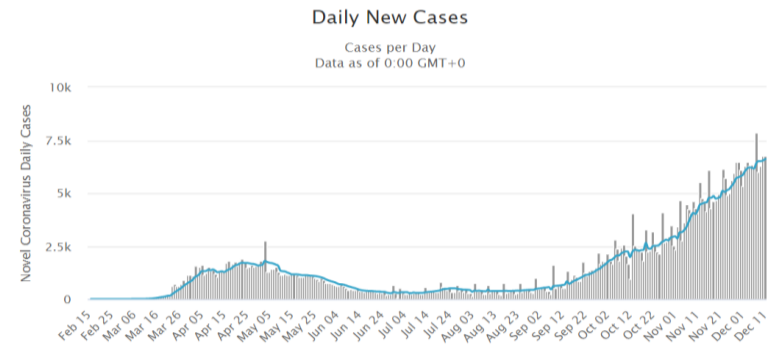
Daily New Cases in Turkey



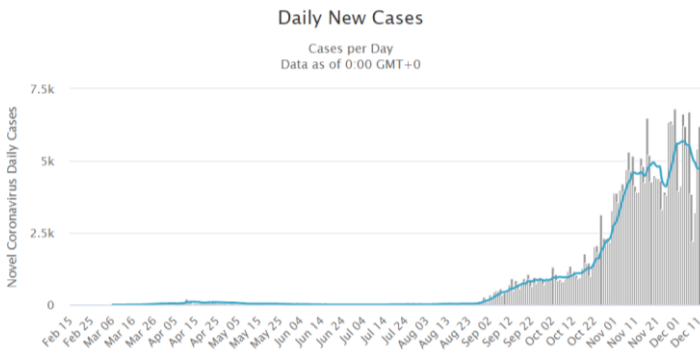
Daily New Cases in Bangladesh



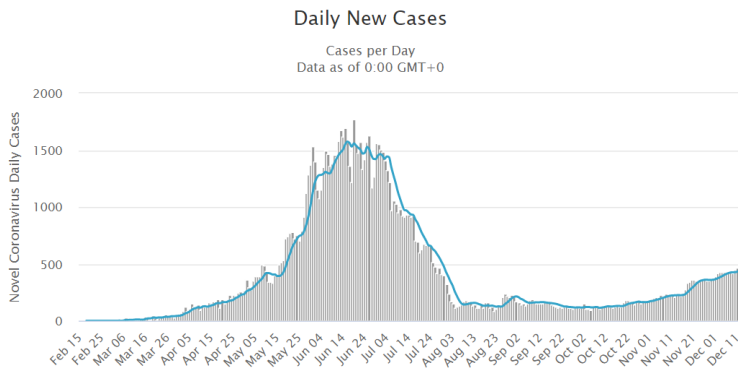
Daily New Cases in Canada



Daily New Cases in Hungary



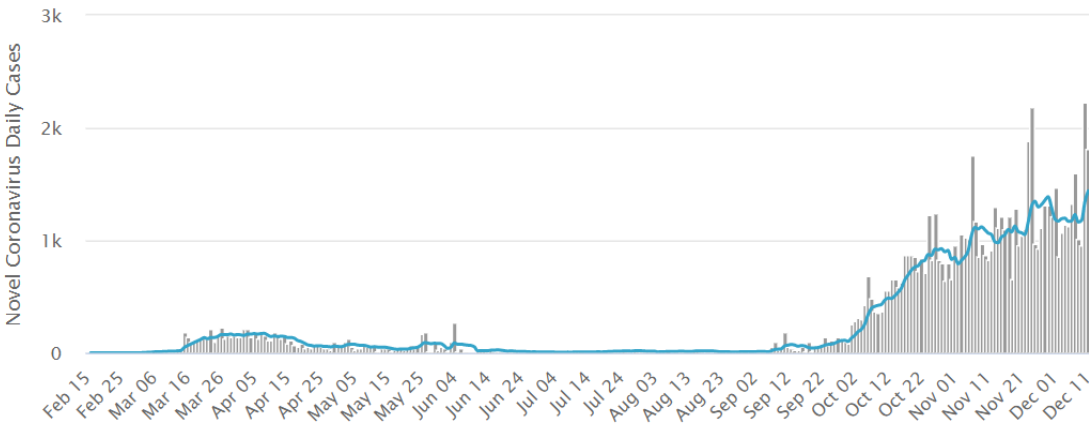
Daily New Cases in Egypt



Daily New Cases in Malaysia

Daily New Cases

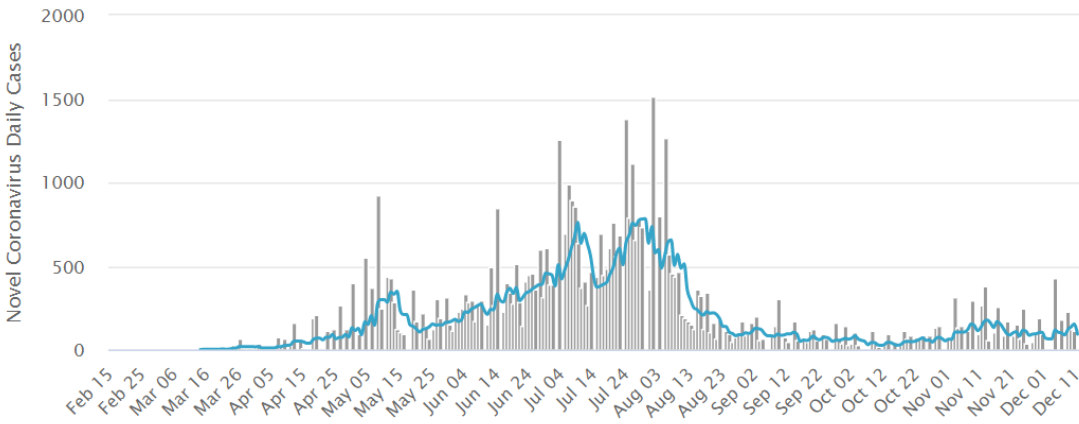
Cases per Day
Data as of 0:00 GMT+0



Daily New Cases in Ghana

Daily New Cases

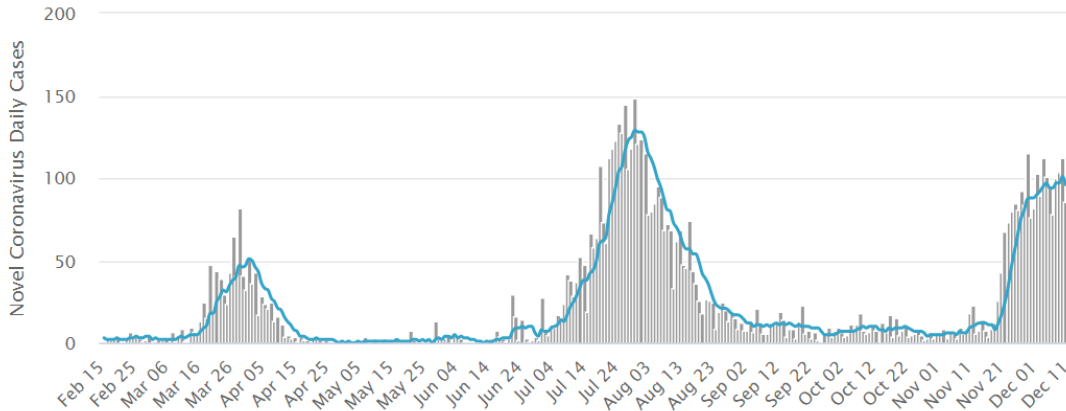
Cases per Day
Data as of 0:00 GMT+0



Daily New Cases in China, Hong Kong SAR

Daily New Cases

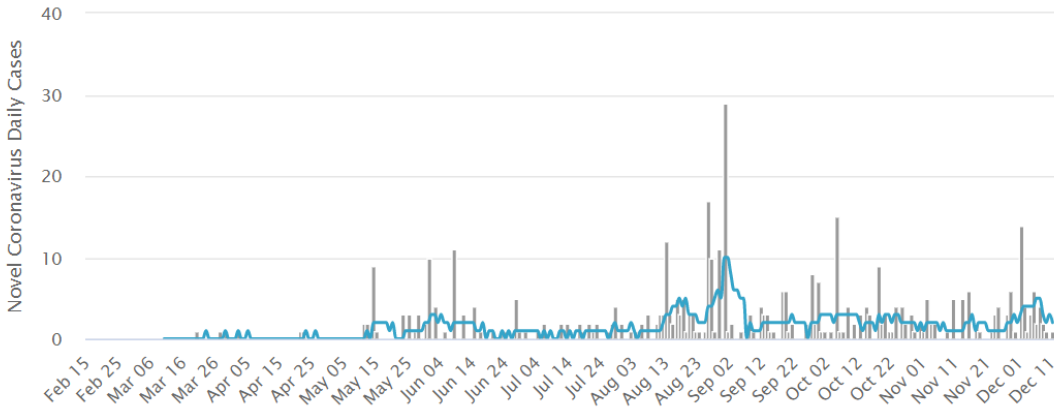
Cases per Day
Data as of 0:00 GMT+0



Daily New Cases in Bhutan

Daily New Cases

Cases per Day
Data as of 0:00 GMT+0



Co-existing with COVID-10

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Kidney disease is associated with in-hospital death of patients with COVID-19

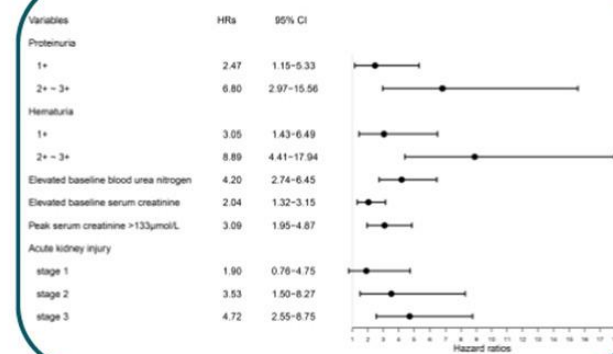


Confirmed COVID-19
 Age > 18 y
 No maintenance dialysis
 No renal transplatation

N=701
 Age 63y
 52.4% male
 42.4% severe
 42.6% comorbidity
 16.1% in-hospital death

Prevalence of kidney abnormalities

14.4% Elevated Scr
 13.1% Elevated BUN
 13.1% eGFR<60 ml/min/1.73m²
 43.9% Proteinuria
 26.7% Hematuria
 5.1% Acute kidney injury



CONCLUSION:

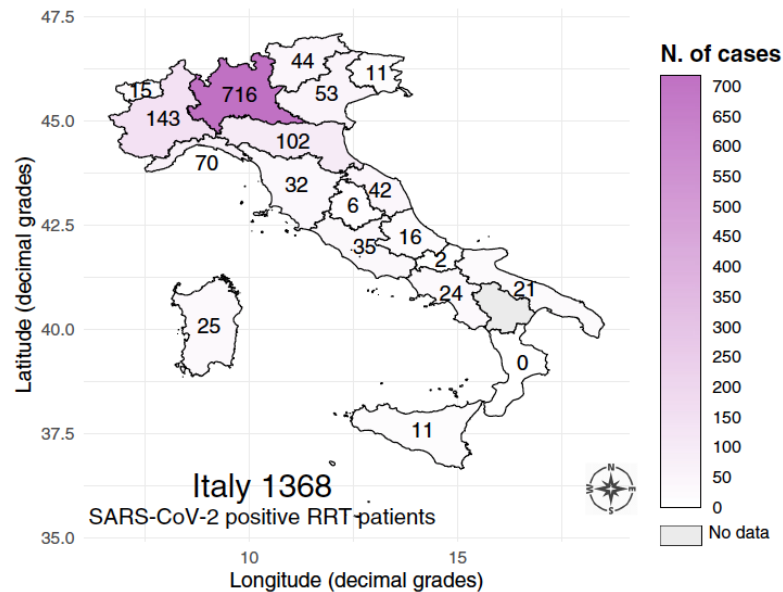
Clinicians should increase their awareness of kidney disease in patients with COVID-19.



Exposure to novel coronavirus in patients on renal replacement therapy during the exponential phase of COVID-19 pandemic: survey of the Italian Society of Nephrology

Giuseppe Quintaliani¹ · Gianpaolo Reboldi² · Anteo Di Napoli³ · Maurizio Nordio⁴ · Aurelio Limido⁵ · Giorgio Messa⁷ · Giuliano Brunori^{1,8} on behalf of the Italian Society of Nephrology COVID-19

SARS-CoV-2 Positive RRT patients



Region effect
 $p < 0.001$
Latitude effect
 $p < 0.001$

Table 1 Exposed patients, SARS-CoV-2 positive cases and incidence rate by treatment modality and overall

Treatment modality	Exposed patients	SARS-CoV-2 positive cases	IR per 100	95% CI
HD	30,821	1093	3.55	3.34 3.76
PD	4139	57	1.38	1.04 1.78
Tx	25,481	218	0.86	0.75 0.98
RRT	60,441	1368	2.26	2.14 2.39

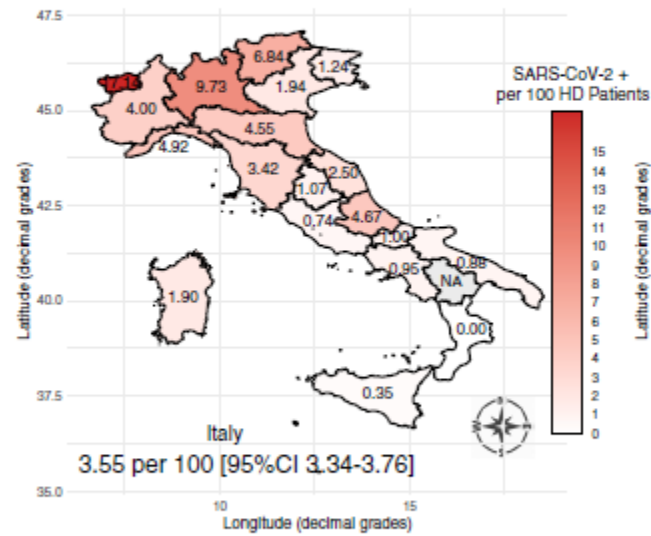
HD hemodialysis, PD peritoneal dialysis, Tx transplant, RRT renal replacement therapy, IR incidence rate

Modality effect
 $p < 0.001$

- Variabilità regionale dell'incidenza con gradiente Nord-Sud.
- Incidenza molto più alta di COVID-19 nei pazienti in terapia sostitutiva, rispetto alla popolazione generale
- Incidenza più elevata in emodialisi che in dialisi peritoneale e in trapianto.

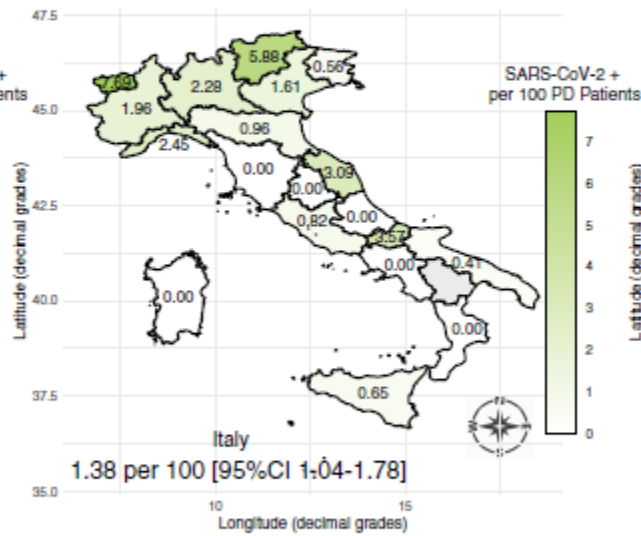
SARS-CoV-2 Infection Rates by Modality

A) Hemodialysis



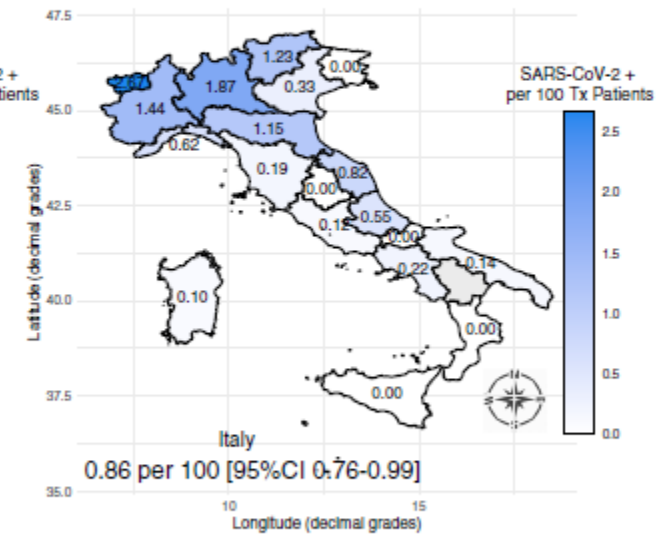
Region effect $p < 0.001$
Latitude effect $p < 0.001$

B) Peritoneal Dialysis



Region effect $p < 0.001$
Latitude effect $p < 0.001$

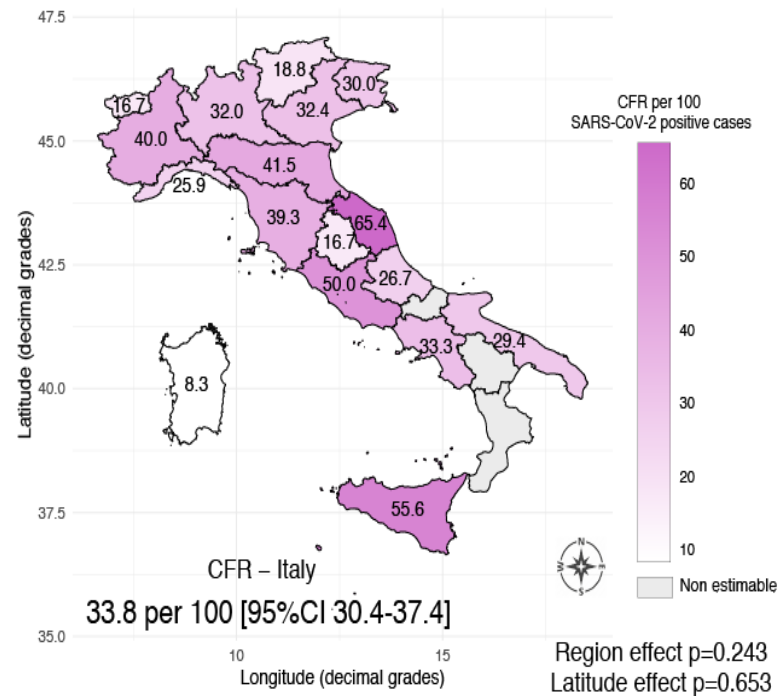
C) Transplant



Region effect $p < 0.001$
Latitude effect $p < 0.001$

Macroregion effect $p < 0.001$

Case Fatality Rate per 100 SARS-CoV-2 positive HD Patients



Treatment	SARS-CoV-2 positive patients	Deaths	Fatality rate per 100	95% CI	
HD	1093	369	33.76	30.43	37.42
PD	57	26	45.61	29.80	66.83
Tx	218	54	24.77	18.61	32.32
RRT	1368	449	32.82	29.86	36.00

Mortalità più alta in RRT che nella popolazione generale.

Regioni con almeno 10 decessi

Macroregion effect $p=0.648$

Kidney disease is associated with in-hospital death of patients with COVID-19

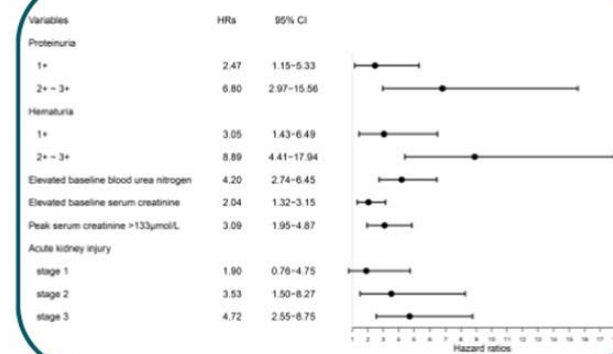


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