EUSEM Covid-19 Webinar 1 – 28 March 2020

Summary Report of Panellist Presentations

Webinar date: 28/03/2020

Report date: 06/04/2020

The purpose of this webinar was to share information on the impacts of the COVID-19 pandemic on European Emergency Medicine. The session was coordinated by Luis Garcia-Castrillo. Panellists from 9 European countries presented. There were 104 attendees from 26 different countries in remote attendance. There was a facility for attendees to ask questions at the end of each presentation. The full audiovisual presentation and slides were subsequently made available for further viewing on the EUSEM Academy website. At the time of reporting this has been reviewed 600 times.

Panellists:

Paolo Groff (Italy); Marc Sabbe (Belgium); IAN Higginson (UK); Wilhelm Behringer (Germany); Lars Petter Bjornsen (Norway); Orhan Cinar (Turkey); Pasqual Piñera (Spain); Effie Polizogopoulou (Greece); Said Laribi (France); Luis Garcia-Castrillo (Coordinator).

Additional tables and figures provided by Kelly Janssens (Ireland)

Section 1. Actual situation of Covid-19 pandemic in each Country

- Several (7 of the 9) panellists were able to present estimates of the number of cases in each of their countries. Several panellists also provided data regarding geographical region and age and gender distributions within their countries, such as Spain, Germany and France as well as Italy. It was outlined that population density has a significant impact on geographic variability. In some cases, it was highlighted that this variability has facilitated inter-centre transfer of patients.

- There are difficulties in comparing data between countries due to the case definitions and the test use criteria. The represented countries are in different epidemiologic stages, which creates difficulties in making comparisons but does provide a picture of the epidemic at different stages of development. For reference, we have summarised case rates in the represented countries over time using publically available data in Figure 1.

- There are wide geographic and temporal changes in the criteria for test use. There is also significant variability as to which method of testing is used. In some regions, cases are diagnosed without tests. Table 1 summarises, also using publically available data, the positive test rate in each of the countries that were represented in the webinar.

- Several presenters reported on their local Case Fatality Rate (CFR): Germany, Turkey or Norway with less 2% to Spain and Italy close to 10%. This parameter is also difficult

to compare given varying definitions of cases. For reference, we have summarised in using publically available data deaths per million of population in Figure 2 and Table 2.

- Few (3 of the 9) presenters reported on recovery figures in their country. These numbers varied widely. However, if an agreed understanding of recovery definition relevant to our specialty can be agreed (such as survival to hospital discharge) and reported on, this could be an important variable as the pandemic proceeds. For reference, we have summarised in using publically available data in Table 3.

- Severity of the cases: 7 of the 9 panellists were able to present estimates of the number of cases in their regions requiring hospital (general) and ICU admission. These figures are summarised in Table 4.

Section 2. General Approach to a suspected COVID-19 case

- Some countries (2 of the 7) described the creation of a pre-triage process either virtually by phone or physically outside of the ED.

- Nearly all (8 of the 9) panellists discussed to varying extent dual track pathways for managing covid and non-covid patients who presented to the ED.

- Several countries highlighted how they create separate physical spaces for suspected and confirmed covid cases either by zones within their departments, separate buildings within their centre or (in the case of Turkey) a separate hospital.

- Management at the ED: Several countries provided detail of local policies and algorithms for the following

  - Admission / discharge criteria

  - Testing method (swab / CT)

  - Other investigations (such as the use of inflammatory markers i.e. Procalcitonin)

  - Disposition criteria (discharge/admission/icu care)

  - Therapeutic modalities (i.e. antibiotic use)

  - Supportive care, in particular thresholds for intervention and mode of intervention which differs between countries. i.e. NIV is frequent in Italy and Spain. Included in the France protocol.

  - The need for a potential “European Covid ED protocol” that could be adjusted for local use was highlighted. 1

Several elements of the algorithms presented, fall outside the current published best-practice consensus guidelines on the management on management of COVID-19, which focus primarily on critical care. This raises the potential increased need for using the resources within EUSEM to further apply our shared experience, particularly in the pre-intensive care stage, which is a greater proportion of current COVID-19 phenotypes.

Section 3. ED Impact of the Covid-19 pandemic.

- The number of visits to ED generated by suspected covid patients is up to date unknown, we have some information about the number of admission and the severity. (Table 4)

- ICU availability was identified as a critical bottle neck. Table 5 summarises the data presented in comparison to published ICU availability per country pre-covid.

- Panellists from all countries reported dramatic decreases (40-60%) in the regular ED presentation numbers.

- Several highlighted this decrease that creates concern about this patient's clinical severity caused by possible delays in seeking care.

- Covid-19 epidemic has severely affected the health workers, though not uniformly. While Italy and Spain have the high infection rates (health workers are 9%-15 of Covid-19 cases) others seems to have less incidence. Presented data is summarised in Table 6 but this variability would merit further analysis.

- Several panellists discussed the use availability and in fact shortage of personal protective equipment (PPE) especially in Italy and Spain, also others commented this issue. This variability also warrants further exploration.

Section 4. Triage.

- Telephone Triage managed by General Practitioners.

- Pre-Triage (Physical) outside ED.

- Triage base on Symptoms

- Ct is use in some countries (Belgium and Greece)

Section 5. Final lessons learned.

- Previous planning where available has paid dividends during this crisis.

- We were not prepared for PPE supplies failure in this crisis.
- It may be better to work on the concept of severity units than on isolated units.
- Good collaboration of all the hospital members is the norm.
- The differences in epidemic stages allow learning from others experience.
- We must continue to share information to be ahead of the evolution of this pandemic.

Additional information

References

1. https://www.ncbi.nlm.nih.gov/pubmed/32222812
2. https://gateway.euro.who.int/en/indicators/hfa_478-5060-acute-care-hospital-beds-per-100-000/visualizations/#id=19535&tab=table

Figures and Tables

Access to the following data was done 1 Apr.

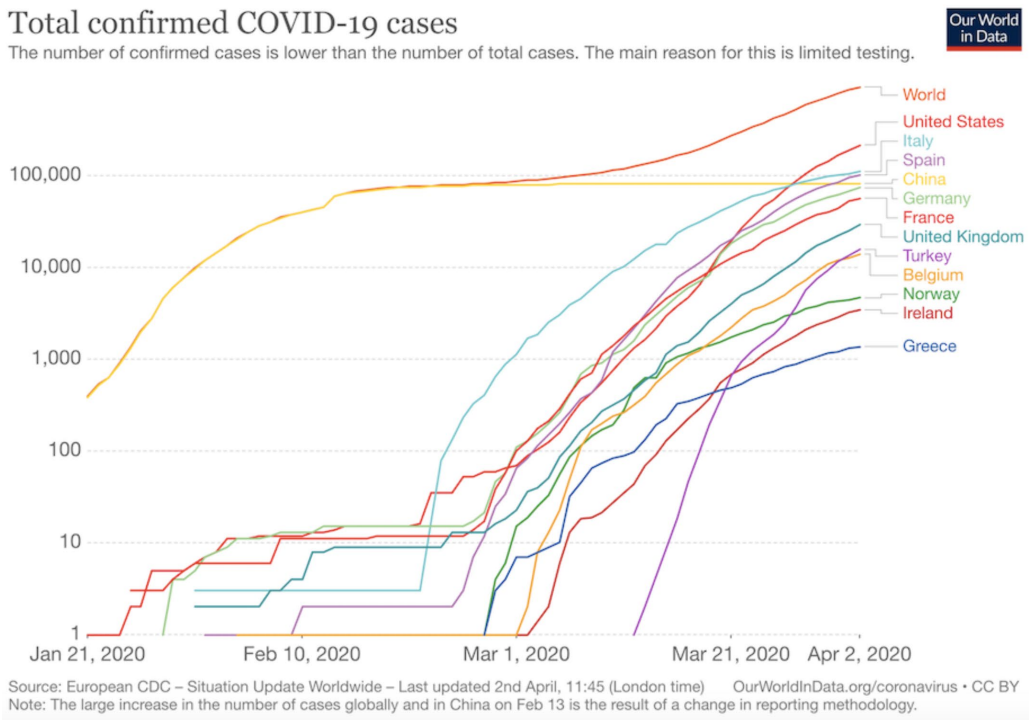

Figure 1.

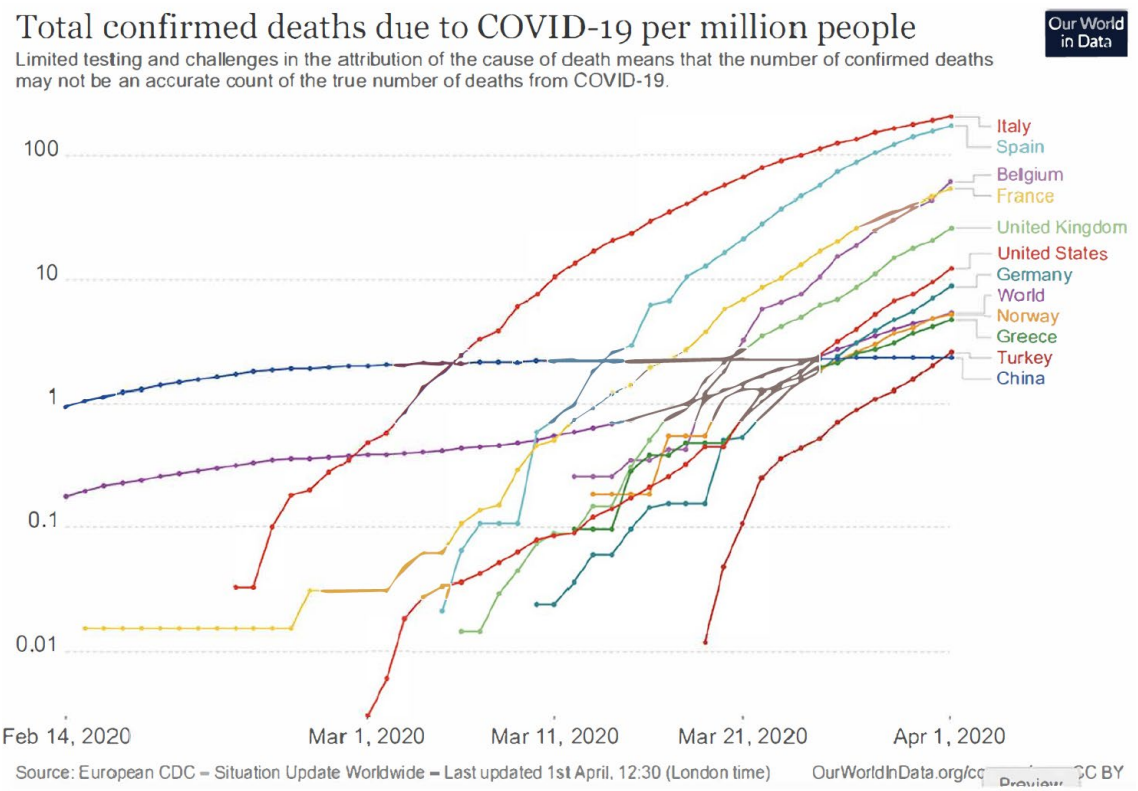

Figure 2.

COUNTRY	Covid Tests / Country	Covid Cases / Country	positive test rate	Cases/ Million population
Italy	206,886	92,472	45%	1530
Spain	30,000	72,248	241%	1546
France	36,747	37,575	102%	561
Belgium	18,360	9,134	50%	800
United_Kingdom	64,621	17,089	26%	257
Germany	167,000	52,547	31%	634
Norway	43,735	3,845	9%	724
Greece		1,061		99
Turkey	2,900	7,402	255%	90

Table 1

COUNTRY	Deaths	Deaths / Case - Case Catality Rate CFR	Deaths/ population (D/M)	Country rank deaths/population (D/M)
Italy	10,775	11.7%	178.3	1
Spain	6,523	9.0%	139.6	2
France	2,673	7.1%	39.9	3
Belgium	425	4.7%	37.2	4
United_Kingdom	1,203	7.0%	18.1	5
Germany	448	0.9%	5.4	6
Norway	22	0.6%	4.1	7
Greece	40	3.7%	3.7	8
Turkey	132	1.8%	1.6	9

Table 2

COUNTRY	Recovered	CRR case recovery rate	recovered / M cases	Country Rank CRR
Italy	12,384	13.12%	205	1
Spain	14,709	0.00%	315	
France	5,700	8.02%	85	2
Belgium	1,359	5.12%	119	4
United_Kingdom	135	0.00%	2	
Germany	8,481	0.00%	102	
Norway	7	3.58%	1	5
Greece	52	5.94%	5	3
Turkey	70	0.00%	1	

Table 3

COUNTRY	Not Hospitalised	All hospitalised	Non-ICU hospital admissions	ICU hospital admissions	ICU per hospital admission rate
Italy	30,920	26,601	23,112	3,489	13.1%
Spain				4,165	
France	5,698	15732	11,945	3,787	24.1%
Belgium		1859	1,478	381	20.5%
United_Kingdom					
Germany					
Norway		303	227	76	25.1%
Greece		139	73	66	47.5%
Turkey				344	

Table 4

COUNTRY	ICU hospital admissions	ICU beds/ M population	Covid ICU occupancy /ICU availability
Italy	3489	28	210%
Spain	4165	24	373%
France	3787	43	132%
Belgium	381	57	59%
United_Kingdom		23	
Germany		62	
Norway	76	34	42%
Greece	66	35	18%
Turkey	344	26	16%

Table 5

COUNTRY	HC workers infected	HC workers isolated
Italy	5,760	
Spain	9,444	
France		
Belgium		
United_Kingdom		
Germany		
Norway	319	6,342
Greece	90	
Turkey		

Table 6

6. Q & A

Q: Were you allowing COVID+ staff work? How were you monitoring this?
A France: Symptomatic Covid+ staff are not allowed to work in France, I suppose this is so everywhere.
A UK: same in the UK.
A Italy: Covid+ staff is confined at home for 14 days in Italy

Q: Do you use full mask NIV or do you also use only nose/mouth NIV?
We don't have full mask NIV in our hospital and there is fear for viral spread.
A Italy: We use both oro-nasal and total face masks for NIV. We use double circuit ventilators wich are less droplets dispersive

Q: What PPE are you using in Italy and how do staff put on and off their PPE?
A Italy: We wear gloves (first pair), gown, FFp2 mask, glasses, headset, boots, gloves (second pair); we remove: boots, gown, gloves (second pair), headset, glasses, mask, gloves (first pair)

Q: Did you ever consider chemoprophylaxis for doctors and nurses?
A Belgium: No proven chemoprophylaxis

Q: Do you scan every Covid + patients?
A Belgium: If we consider an admission, yes

Q: Did you in UK define some hospitals as covid-clear and do not accept to those hospitals any suspected covid cases even for emergency (reserved these hospitals for definitely immune-compromised cases emergency interventions)
A UK: No, there was early talk of this but basically all major public general hospitals are taking COVID patients. Some specialist hospitals aren't directly involved (eg cancer, eye hospitals). We now have private hospitals coming on line and they are being used amongst other things for "clean" surgery or for oncology / haematology

Q: What do you think about the role / rate of vaccination against TBC (BCG), because the countries from 'Soviet block' have a lower infection due to the obligatory vaccination of BCG?
A Germany: I cannot answer the question, since I do not know the literature concerning this question.

Q: How do you manage non typical Covid presentations: no fever in your EDs especially in geriatric population.
A Germany: All patients for admission are tested for Covid and put in a single room until the results. Even patients without symptoms

Q: If a collapsed patient is arrived by an ambulance, how do you manage? Do you accept all patients as suspected case in this situation?
A Germany: We accept all patients in need for resuscitation room, and treat all patients, if they were Covid positive, meaning that the staff is wearing full protection, and the room is cleaned properly between patients

Q: What treatments you are giving in Turkey for the COVID19 and what is the rational for that.
A Turkey: Standard protocol is Hydroxychloroquine + azithromycin. Remdesivir and IL-6 antagonist for selected cases.

Q: What is your opinion about chemoprophylaxis of doctors and nurses
A: There is no proven chemoprophylaxis for non-infected cases

Q: Do infected healthcare workers continue to work if their general condition is not bad?
A Spain: They should be isolated at home
A UK: Agree
A Italy: They are isolated at home in Italy.

Q: Why are there so many infected health care personnel in Spain? Is there a lack of PPE? 15% HCW infected in Spain is a large number, is there any defined reason for that??
A Spain: Indeed, in Spain in the first moments there was a lack of adequate personal protection equipment, so the health workers had to face the problem with highly improvable equipment. This I think is the most important reason that there are so many health workers sick with covid

Q: Do you have COVID-19 cases with diarrhoea?
A Spain: Yes, take a look to table with symptoms.

Q: What is the current situation in the refugee camps on the Greek islands?
A Greece: Surprisingly there were not any cases in refugee camps so far in the Greek islands. Today (2/4/2020) the Ministry of Health announced 23 confirmed cases in a refugee camp in the mainland-they are in quarantine.

Q: Do deaths refer to hospital admitted patients, or they account also patients who die at home?
A Greece: Deaths refer to confirmed hospital admitted patients-there is no reported death of confirmed case at home-also Greek Forensic Society decided not to do autopsy in confirmed cases

Q: In Spain how do you decide testing health workers? do you test them without symptoms?
A Spain: There were two strategies, one health worker presenting a covid-compatible clinic was tested immediately and the other, which included those who had close contact without adequate protection, with a positive test, isolated and the test was performed. test a week

Q: Do you have some recommendation for prevention and early detection regarding to covid-19 pandemic in senior houses.
A Spain: All residents and workers should be tested in all nursing homes in order to avoid infection. The elderly are very sensitive to covid and have a high mortality

Q: What's the French ICU full capacity?
A France: before the crisis 5 000 ICU beds, now we increased this number to 10 000. Our ministry of health would like to further increase this number to 14 000 ICU beds.

Q: Do you use NIV for patients waiting an ICU bed?
A France: We try to avoid NIV as much as possible in Covid-19 patients to avoid coronavirus dispersion

Q: Can we share ICU beds across Europe?
A Board: Transfer of patients to a different country is possible, and some patients had been transferred from France and Belgium: In any case, if there is a tradition of trans border collaboration everything is more accessible during the crisis periods.
A Italy: As far as I know, some patients have been moved from Lombardy to Germany

Q: Would this be fair: general measures to contain the epidemic differ between countries?
A Board: The actual EU has the health services independently regulated by the members. However, some aspect of the Public Health, especially in Article 168 (protection of public health), several common legislation that regulates at the EU level is in place.
With the perspective of global health threats EU has tools for common legislation and collective actions, Covid-19 is a good example. Since now, the preventive and management activities of the different health systems have again manifested the weakness of a joint health approach.
A Italy: Not much longer. As long as the problem is increasing in all countries, policies are getting more uniform

Q: In which case and when do you test ER medical personnel if they were in contact with Covid-19 patients?
A UK: only if symptomatic and then only if testing available
A Italy: If they stayed with the patient at a distance less than 1m, for more than 15 min. unprotected with PPE
A Spain: Healthcare personnel inform the Occupational Risk Service if they have been in contact with a positive patient, the situation, the level of protection they were wearing and whether or not the patient was wearing a mask as well as the time of exposure,
A France: Only symptomatic staff (medical or nurses) are currently tested. In the near future we will test all hospital staff

Q: Most Coronavirus carriers will never develop symptoms ... what is the potential risk of this group of people in sustaining transmissibility. Any insights into research findings or management guidance?
A Spain: Asymptomatic carriers pose a significant risk of regrowth, so I believe that an appropriate strategy would be to test most or all of the population to detect it and that they could be isolated in the necessary time until the test was negative.
A France: The risk of this group of people in transmissibility is huge, reason why most of countries asked people to stay at home to avoid transmissibility. One of the issues will be to deal with the end of containment at home.

Q: Spain is managing able and mobile hypoxic patients by proning on high flow oxygen to delay and sometimes avoiding CPAP or intubation, with some promising improvements in their saturation's. This is from a nurse working in Spain. How does the panel feel about this and is there any other evidence or experience in proning alert able hypoxic patients as a management tool?
A Italy: Frequently done in Italy with patients on non-invasive CPAP (helmet) and not immediately candidate to ETI. Encouraging results. Light sedation needed.
A Belgium: Is a therapeutic option with existing evidence

A Spain: I do not think it is the reality of Spain in general. In fact, the Spanish Society of Emergency Medicine through its working group on non-invasive mechanical ventilation has issued a consensus document with the respiratory society and the intensive care society in which the most appropriate management of these patients should be in all areas. https://drive.google.com/file/d/1a41PuZ4TDmWMBgMIGPDX8m8QQ7pRVsJK/view

Spanish COVID symptoms

Symptoms	Total N(%)	Female N(%)	Males N(%)	
Total Cases	63002 *	31714 (50,3))	31265 (49,6)	
Fever	6065 (76,8)	2834 (72,1)	3227 (81,6)	<0,001
Cough	5829 (76,0)	2906 (75,6)	2917 (76,3)	0,484
Shore throat	1677 (26,2)	984 (30,1)	688 (21,9)	<0,001
Dyspnoea	4988 (48,8)	2261 (45,5)	2725 (52,0)	<0,001
Shaking chills	1969 (35,6)	955 (34,3)	1011 (36,8)	0,053
Vomiting	615 (9,6)	367 (11,3)	247 (7,9)	<0,001
Diarrheal	1956 (29,6)	1063 (31,6)	891 (27,6)	<0,001
Pneumonia	17117 (41,0)	6873 (34,1)	10243 (47,4)	<0,001
ARDS	934 (6,3)	337 (4,6)	597 (8,0)	<0,001
Respiratory symptoms	3519 (9,3)	1548 (8,4)	1971 (10,2)	<0,001
ARF	743 (2,0)			

* Table 7: A registry of 130.000 country cases.