



European
Reference
Network

Epilepsies (ERN EpiCARE)



EUROPEAN REFERENCE NETWORKS

Helping patients with rare or low-prevalence complex diseases



REORGANIZATION OF EPILEPSY DEPARTMENTS DURING THE COVID-19 CRISIS: PERSPECTIVES FROM ITALY AND SPAIN

THE EXPERIENCE OF THE **EPILEPSY UNIT** AT THE
PAEDIATRIC DEPARTMENT IN
A NON-COVID INSTITUTE IN MILANO, LOMBARDIA (WUHAN OF EUROPE)
A **NEUROLOGIC MONO-SPECIALTY INSTITUTE**
WITH ABOUT 50% OF PATIENTS COMING FROM OUTSIDE LOMBARDIA

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Co-funded by the EU



COVID-19 situation in the WHO European Region
data as of: 05 April 2020, 10:00 (CET)

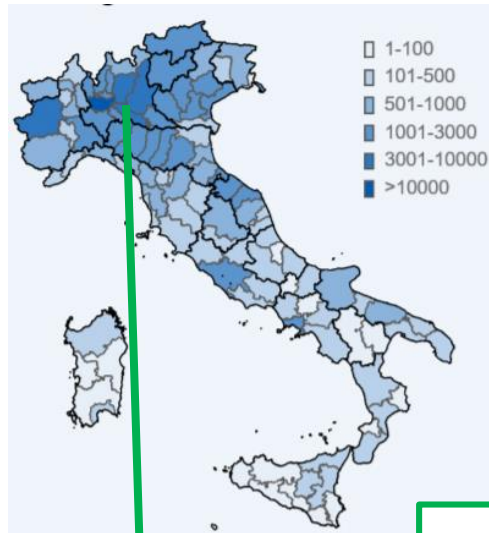
Total confirmed cases	Total confirmed deaths	53 Countries with confirmed cases
622.251	46.430	Spain 124.736
		Italy 124.632
		Germany 91.714
		France 68.605
		United Kingdom of Great Britain and Northern Ireland 41.903

6 April 2020 UPDATE

124,527 cases of COVID-19*

12,681 health-care workers

14,860 associated deaths

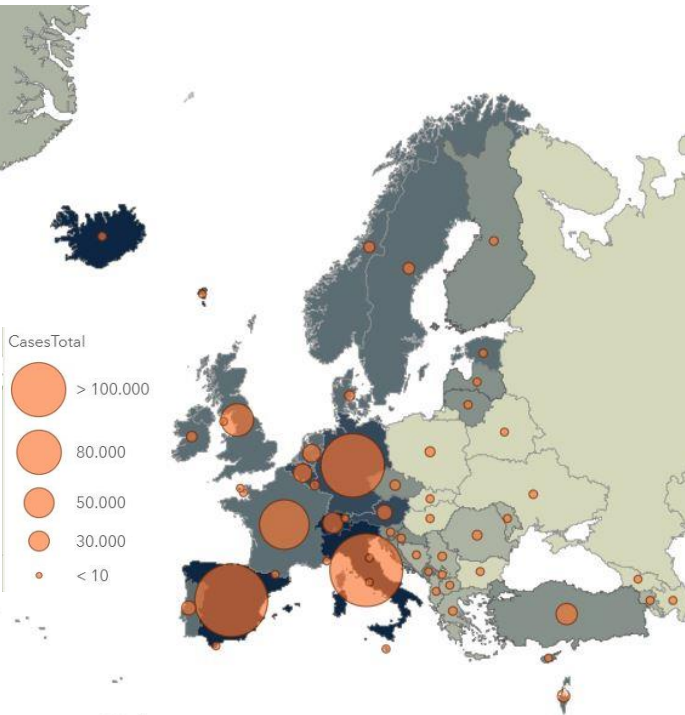


LOMBARDIA

Population: 10.019.166 (2018)

51534 cases of COVID-19

9202 associated deaths
(61% of whole Italy)

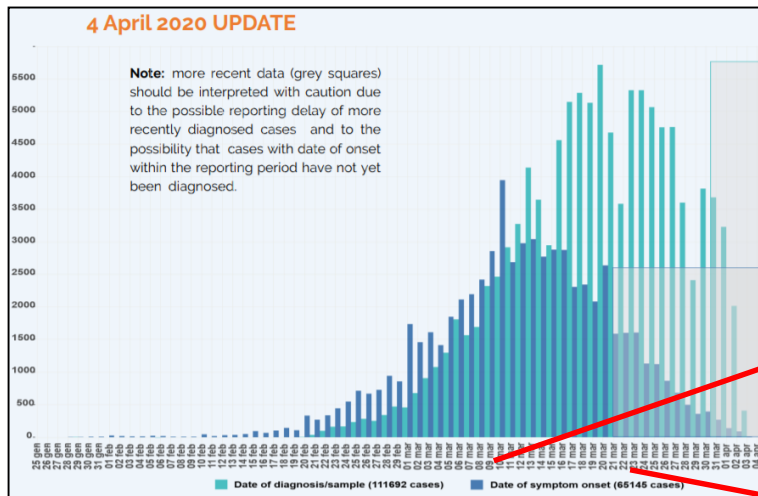


January 29: two Chinese tourists in Rome tested positive for the virus

February 21: first cases in a small area of Lombardia

February 22: first death

Red zone limited to a part of Lombardia



Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
17	18	19	20	21 	22	23
24	25	26	27	28	29	

Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
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**RESTRICTION TO MOST
ACTIVITIES AND TO MOVEMENTS
OF PEOPLE**

LOCKDOWN

March 8-20 quarantine to all of Lombardy and soon after to all Italy, several restrictions

March 21: additional restriction
LOCKDOWN

Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
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THE PLANNING HAS CHANGED

February 21– March 6

INPATIENTS

Progressive decrease of admissions: 50% less

- patients, particularly those coming from outside Lombardia, gave up
- few beds to guarantee one room for each patient/parent
(usually 2-3 pts/room, shared bathroom)

Triage and IPD

- anamnestic triage by phone prior to the admission
- anamnestic and clinical triage on admission
- No individual protective devices (IPD)

To unburden Covid hospitals:

Call for non covid patients from other hospitals

OUTPATIENTS

Progressive decrease of visits: up to 30% less

patients, particularly those coming from outside Lombardia, gave up

No Triage no IPD

About 40% of patients
come from outside
Lombardia

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Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
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RESTRICTION TO MOST
ACTIVITIES AND TO MOVEMENTS
OF PEOPLE

9	10	11	12	13	14	15
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Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
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LOCKDOWN
LOCKDOWN



THE PLANNING HAS CHANGED

March 9 – March 21

INPATIENTS

Further decrease of admissions: 80% less

- All the scheduled admissions cancelled
- Only from Lombardia
- Only urgent patients

Triage and IPD

- anamnestic triage by phone prior to the admission
- anamnestic and clinical triage on admission
- Individual protective devices (IPD)

OUTPATIENTS

- For all the scheduled visits:
 - triage by phone done by doctor:
 - clinical interview to understand
 - the clinical condition
 - the need for in-person visit
 - Most scheduled visits were managed by phone
 - Few in-person visit with IPD
- Start implementing telemedicine

About 40% of patients
come from outside
Lombardia

Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
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Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
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RESTRICTION TO MOST
ACTIVITIES AND TO MOVEMENTS
OF PEOPLE

LOCKDOWN

Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
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LOCKDOWN

THE PLANNING HAS CHANGED

March 23– ongoing **LOCKDOWN**

INPATIENTS

Admissions: less than 10% of beds

- Only from Lombardia
- Only urgent patients

Triage and IPD

- anamnestic triage by phone prior to the admission
- anamnestic and clinical triage on admission
- Patient and parent:

Blood sample for CRP and blood count

Nasopharyngeal swab

- Precautionary isolation of patient and parent until the test results
- Individual protective devices (IPD)

OUTPATIENTS

Unchanged

Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
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24	25	26	27	28	29	

Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
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RESTRICTION TO MOST
ACTIVITIES AND TO MOVEMENTS
OF PEOPLE

LOCKDOWN

LOCKDOWN

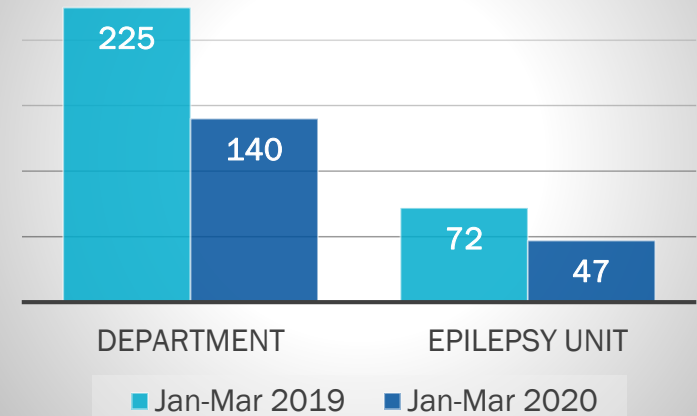
INPATIENTS

DEPARTMENT OF PEDIATRIC NEUROSCIENCE

36 BEDS

40% OUTSIDE LOMBARDIA

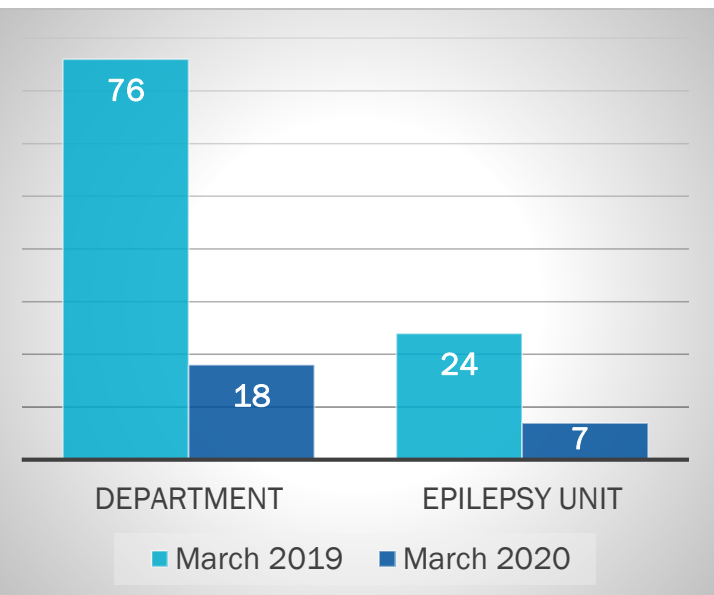
Patients admitted



PEDIATRIC EPILEPSY UNIT

8 BEDS

50% OUTSIDE LOMBARDIA



EEG

OUTPATIENTS

Since March 9:
Cancelled all the scheduled EEGs

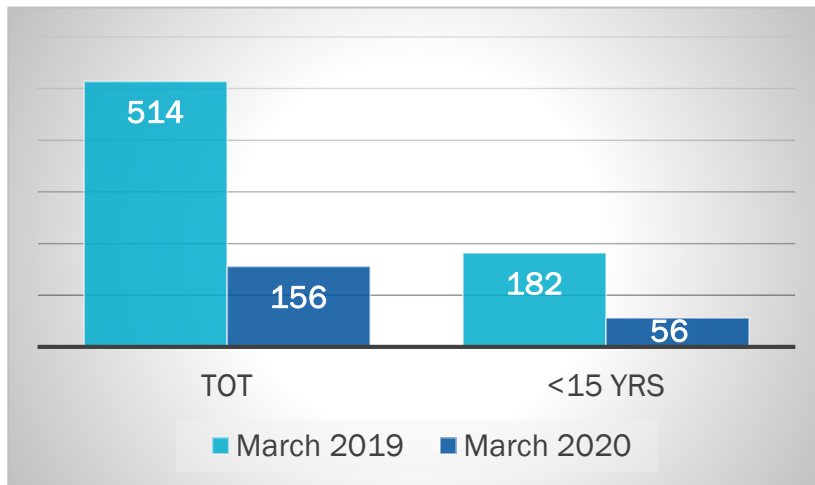
Only urgent EEGs, as judged by the specialist (for example new onset seizure in children) and agreed with the neurophysiologists

INPATIENTS

Very few, urgent, patients in the ward, all admitted after triage and inflammatory screening

No LTM

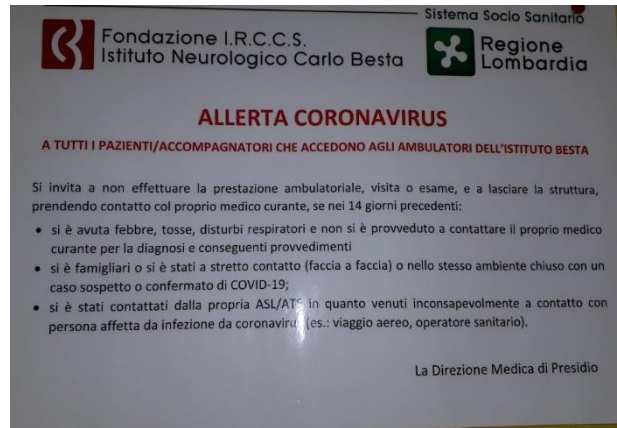
No pre-surgical procedures



EEG 16-31 March 2020
(LOCKDOWN)

All ages: 44 exams
0-15 yrs: 11 exams

TRIAGE FOR OUTPATIENTS



While booking the visit/examination:

anamnestic triage on Covid risk is done by phone.

While entering the hospital:

the patient and accompanying person (only one allowed)

sign a declaration stating that:

they are free of symptoms

that they did not have contact with suspected Covid patients.

have to wear a mask and disinfect their hands

temperature is taken.

Personnel wear protective devices (that vary according to the procedure to do)

TRIAL

TRIALS GO ON, BUT:

NO RECRUITMENT OF NEW PATIENTS
MOST VISIT BY PHONE
DRUGS DELIVERED TO PATIENTS

PERSONNEL

FEBRUARY 21– MARCH 6:

NO LEAVE ALLOWED (MINISTERIAL DECREE)



FROM MARCH 7:

NEED TO REDUCE PERSONNEL IN THE HOSPITAL

MANDATORY LEAVES

SMART WORKING (FELLOWS, RESEARCHERS)

SMART WORKING AND TELEMEDICINE

ALSO FOR REHABILITATION

(PSYCHOLOGISTS, THERAPISTS)

SURPRISED, STUNNED, ASTONISHED

SENSE OF UNREALITY

SENSE OF LONELINESS

SPEECHLESS

FEELING OF FUTILITY IN RELATION TO OUR WORK.

DEPRESSION AND ANXIETY

→ APATHIC, INERT, MOTIONLESS

→ NEED TO ACT: COMPULSIVE
PURPOSELESS BEHAVIOR

INCAPACITY TO CARRY OUT
RESEARCH, PAPER, ETC

THE MIND WAS ELSEWHERE

GRADUALLY WE RESET OUR MINDS

REASONING ABOUT NEXT PHASES

TELEMEDICINE also for the future



PATIENT-DOCTOR RELATIONSHIP

PHONE NUMBER DEDICATED TO PATIENTS

Usual: 9.00 a.m. - 1 p.m.



Covid emergency: 8.00 am – 8 pm

The doctor is in to answer to your questions

Families tend to avoid contacts

Few phone calls

Families favour emails

Only for urgent issues

Sometimes we actively call patients known to be more fragile or at risk



FEAR?

EPILEPSY

No significant change in seizure frequency in most cases

At the beginning of emergency: increase of seizures in children with severe disability (probably apparent, h 24 with parents)

Treatment adjustment only on a clinical basis
(no blood examination, no EEG in most cases)

No weaning of ongoing AE medication.

No change in AEDs (unless urgent)

No presurgical-surgical procedures (to unburden other hospitals in Lombardia, the Institute is now hub for urgent neurosurgery)

BESIDE EPILEPSY

Problems arising from closing the school/ diurnal center & work

- planning of everyday life
- family reorganization: all the family at home
- child to be cared 24/24 hours
- all the patient's disability on the parents' shoulders

Problems arising from

- stop rehabilitation
- stop recreational activities and sports
- **Great differences according to the social status (house, garden, terrace, electronic devices, P.C. and wi.fi. facilities, level of education, severity of the disease)**

Comorbidities:

Worsening or new onset of symptoms:

behavioral disorders, sleep disorders, headache, mood disorders (depression, anxiety)

Major problems in children with intellectual disability or behavior disorders: the loss of acquired routine, rules, and motor activity, resulted in regressive behavior, severe hyperactivity, explosion of anger → INCREASED FAMILY BURDEN

FAMILY SURVEY

20 questions

To evaluate the indirect effect of Covid in patients with epilepsy and their family, with regard to:

- Management of epilepsy: problems arising from the need to cancel or postpone visits, admission, examinations, rehabilitation
- Impact of the Covid crisis on comorbidities, and on everyday life, including the risk for post traumatic stress disorders
- Opinion on potential consultation by remote, also in a post-crisis phase.



MILAN
PIAZZA DUOMO
PRE- COVID19

MILAN
PIAZZA DUOMO
DURING COVID19



THANK YOU

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