COVID and Mental Health: the Parma experience

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Outline

- How the MHC changed after the COVID
- Needs and psychological support for different groups
- What does literature tell us and possible research
Parma

**Emilia Romagna**: 1° in Italy for Health Care 2010-2019

**MHC**
- MHCT (CSM)
- CAMHT (NPIA)
- Addiction (SerT)
- Forensic (NarT & REMS)*

**Districts**
(tot area: 430,000 inh)

1 MHC
- 100,000 inh
- 1,000 pts
- 1 ward

3 MHC
- 200,000 inh
- 3,000 pts
- 2 wards
- + University

1 MHC
- 45,000 inh
- 450 pts

1 MHC
- 60,000 inh
- 600 pts
COVID in Parma at the 25\textsuperscript{th} of March 2020

- 1.525 pts COVID+ in Parma \([0,33\% \text{ inh}]\)
- 700 pts at the Parma Hospital \([90\% \text{ wards}]\)
- 48 patients in ICU \([\text{triple}]\)
- 10% deaths w/ COVID \([\text{with or for?}]\)

First case in Italy the 21\textsuperscript{st} of February.
Lockdown starts the 23\textsuperscript{rd} of February

First case in Parma 25\textsuperscript{th} of February.
Lockdown in Parma from the 7\textsuperscript{th} of March
Lockdown for the whole country from the 11\textsuperscript{th} of March

https://lab24.ilsole24ore.com/coronavirus/
Mental Health Care (MHC) for Adults

**Territorial**
- Outpatients
- Day Service
- Low intensity wards
- Residencies/Apartments

**Hospital**
- Specialized Services
- Day Hospital
- PICU + Acute Ward
- Consultation-Liaison

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General Practitioners

A&E

Territorial MHC
## What changed in the Territorial MHC

<table>
<thead>
<tr>
<th><strong>Outpatients</strong></th>
<th><strong>General Practitioners</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Mainly for treatment</td>
<td>- Only if urgent</td>
</tr>
<tr>
<td>- 1 patient a time</td>
<td>- Preceded by phone call</td>
</tr>
</tbody>
</table>

Replaced by
- Phone call/Whatsapp/Skype in smart-working
- Home visits for those more critical wearing Personal Protective Equipment (PPE)
- Avoid A&E as much as possible

### Day Service
Most of activities suspended to avoid gathering

### Less intensive wards
$n=1$ converted into COVID+

### Residencies/Apartments
What changed in the Territorial MHC

Outpatients

March 2019: 4383 pts
March 2020: 5328 pts

-28.3%

It hasn’t been easy to provide PC or webcam to all the health workers

n=113

March 2019: 4383 pts
March 2020: 5328 pts
What changed in the Hospital Outpatients

Specialised Services
- 1 Mood Disorder and OCD
- 1 Personality Disorders
- 1 Psychotic Disorders

• Replaced mainly by Phone call/Skype
• Stop psychoeducation groups for patients and families

- 1 Eating Disorder Team

• Psychotherapists and Nutritionist at home in smart-working
• Most of the visits replaced by Phone call/Skype
• Real problem for stepped-care approach:
  • Severe Patients with low BMI? Which ward?
  • Day Hospital Services with assisted meals?
What changed in the Outpatients Service

e.g. PD outpatient service

-100%

# visits

reserved

urgent

March 2019

March 2020

All the patients have been contacted by phone. Seems increased the # of phone calls received [our bias?]
What changed in the admissions

Day Hospital

- Reduced the number of admissions
- Increased the number of patients in charge
- Visits and assessments replaced by Phone calls/skype
- Blood test & Consultation only if needed

PICU & Acute Ward

- Reduced the number of admissions
- Reduced the number of beds (one patient for each room)
- No more permissions outside the ward
- One visit at a time, only in the evening, with body Temp and mask
- Mask for all when gather + whether patients have symptoms
- If COVID+ ➔ quarantine for 2 weeks [Ward Lockdown]
What changed in the DH and wards

- Admission Beds
  - March 2019: 15
  - March 2020: 35

- Admission Section
  - March 2019: 5
  - March 2020: 10

- Admissions (Day Hospital)
  - March 2019: 10
  - March 2020: 20

- Acute Wards
  - March 2019: 18
  - March 2020: 14
What changed in the Consultation-Liaison C-L Service

- Reduced overall number of consultations
- A&E «clean» vs «dirty»
- Increased perceived risk for the psychiatrists ➔ lack of PPE!

![Bar chart showing A&E and Hospital consultations comparison between March 2019 and March 2020.]

Of which n=2 COVID+
Outline

- How the MHC changed after the COVID

- Needs and psychological support for different groups

- What does literature tell us and possible research
Phone Line opened in Parma

We identified four main at risk populations
- General population on quarantine
- Health workers
- Patients COVID+ admitted in the ward
- Carers of the admitted patients
General population on quarantine

Psychiatrist ➔ Referral through the General Practitioner

Psychologist ➔ Both through
  • Phone Calls
  • E-mails

These are advertise on the Hospital/Local Public Health Websites but still the main problems are
  • the limited **outreach** (>50% of COVID+ are at home or alone)
  • **Lots of different services** promoted by several psycho-associations
Health Workers

Psychiatrist ➔ Support lines (Phone Calls/E-mail for first contact) based on the four district of residence

Psychologist ➔ Both through
   • Phone Calls
   • E-mails

⚠️ Is it really working?
6 calls in two weeks?
Patients COVID+ and Carers

Psychiatrist: C-L services for the patients
NOTHING for the carers

Psychologist: Few sparse and unorganised psychologists
NOTHING for carers

MDs from other wards on a voluntary basis phone call the families reading the daily medical updates

- We are not really screening the patients and their carers.
- Overall our hospital lack of a structured system of psychological care.
Outline

- How the MHC changed after the COVID

- Needs and psychological support for different groups

- What does literature tell us and possible research
### SARS-coV – 2002
8500 contagi – circa 800 decessi
21% health care workers

<table>
<thead>
<tr>
<th>Country</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cina</td>
<td>528</td>
</tr>
<tr>
<td>Taiwan</td>
<td>260</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>87</td>
</tr>
<tr>
<td>Canada</td>
<td>65</td>
</tr>
<tr>
<td>USA</td>
<td>34</td>
</tr>
<tr>
<td>Singapore</td>
<td>5</td>
</tr>
<tr>
<td>Altre</td>
<td></td>
</tr>
</tbody>
</table>

### MERS-coV – 2012
2430 contagi – 838 decessi

<table>
<thead>
<tr>
<th>Region</th>
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<tbody>
<tr>
<td>Arabia Saudita</td>
</tr>
<tr>
<td>Emirati Arabi</td>
</tr>
<tr>
<td>Europa</td>
</tr>
<tr>
<td>Sud Est Asiatico</td>
</tr>
</tbody>
</table>

### COVID19 – 2019
415mila contagi – 20.000 decessi
Literature Overview

Again, with the aim of improving the services we followed the same four at risk populations

- General population on quarantine
- Patients COVID+ admitted in the ward
- Carers of the admitted patients
- Health workers
General population on quarantine

**During the quarantine:** anxious and depressive symptoms, irritability and insomnia

**After the quarantine:** PTSD (up to 54%)

**General Risk Factors?**
- Young
- Female
- Low socio-educational status

**Specific Risk Factors?**
- Quarantine longer than 10 days + several extensions
- Being afraid of being infected/infect the others
- Limited access to food/health care
- Inadequate and non consistent information sources/fake news
- Special attention to kids

- Consistency of Public Health/Communication

*Rubin et al., BMJ 2020*
*CSTS, 2020*
*Wang et al., Lancet 2020*
Patients COVID+ admitted in ICU

What can SARS tell us?

After 3 months: 40% PTSD + 30% anx/dep symptoms  
Kwek et al., JPR 2006

After 30 months: 56% any diagnosis (PTSD, MDE, anxiety)  
Mak et al., GHP 2009

After 4 years: 44% PTSD  
Hong et al., GHP 2009

General Risk Factors of Post Intensive Care Syndrome (PICS)?

• Young
• Female
• Low socio-educational status

Specific Risk Factors?

• Antipsychotics and sedative/restraint [probably symptoms already?]
• Mechanical ventilation
• Absent Medical staff

• Train ICU doctors to recognise psy distress  
• Transitional Care Program  
Wang et al., CritCare 2020
Parents of patients COVID+

Again four main groups

- **Patients at home**: consistency of information and support children
- **Patients in ICU**:
  - 69% anxious + 34% depressive symptoms
  - **ICU survivors** = PICS-Family

**Baseline**:
- 80% anxiety + 50% depression,
- 60% Acute/PTSD

**Complicated grief**:
- up to 50%
- Support in Discharge Letters

**Follow-up 6 months**:
- 20% anxiety + 20% depression,
- 50% PTSD

**General Risk factors**
- Young patients, Female low socio-educational status, spouse

**Specific Risk factors**
- No previous illness
- Lack of regular meeting with health professionals/lack of information and rooms, intensive caregiving (>100h/months)

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Pochard et al., CritCareMed 2001
Davidson et al., CritCareMed 2012
Serrano et al., AJP Geriat 2019
Vlake et al., JIntCare 2020
Health Workers

• PTSD: up to 30% (2% after 2 years)
• 20-50% GHQ cut off

General Risk factors
• Young
• Female
• Living with kids
• Insecure attachment, avoidant coping

Specific Risk factors
• Nurse > doctors
• I line > II line → I st line workers are comparable to COVID+
• Less experienced
• Increased risk perception (lack of PPE)
• Lack of communication within the equipe/between the hierarchies

References:
Bai et al., Psy Serv 2004
Lancee et al., Psy Serv 2008
Lin et al., Em Med J 2007
Lung et al., PsyQ 2008
NHC of China
Maunder et al., PsychosomMed 2004
Li et al., Brain Behav Imm 2020
Phua et al., Ac Em Med 2005
Where and how to act

**TRIGGER EVENTS**

**Individual level**
- Theme 1: My workplace becoming an unsafe area
- Theme 2: Stigmatization on myself and my family

**Organizational level (hospital)**
- Theme 3: Mistake, missing, delay due to communication failure

**Community level**
- Theme 4: Mistrust and blame from the community for loss of responsiveness

**MANAGERIAL IMPLICATIONS**

- Improve the workplace safety
- Establish a crisis communication principle and strategy
- Build a cooperative relationship with the community

Son et al., DisastMed 2005
The Chinese Experience

**Psychological Intervention Team on 4 levels:**
- Psychosocial Response Team
- Psychosocial Intervention Technical Support Team
- Psychosocial Intervention Medical Team
- Psychosocial assistance hotline team

Workers did not attended the services or call and complained of
- Lack of PPE
- Sense of incapacity
- Being afraid of infect the family

Hence they offered
- More PPE
- Specific courses on how to treat COVID
- Psychologist going around in informal way
- Home near the hospital to non infect

Su et al., JPR 2007
Kang et al., Lancet 2020
Chen et al., Lancet 2020
As Academic Doctors what can we do?

The easiest things to advance the knowledge now is:

- Monitor the mental health services ➔ possible rebound later!
  - Low request on emergency now
  - Patients stop the medication now that they are less monitored
  - Schizophrenic patients kinda enjoy it
  - Change in phenomenology of delusion (my fault, China’s fault, Bill Gates mosquitos’ fault; confusion)

- Monitor the number of suicide (n=1)

- Develop psy questionnaires through institutions-spread surveys
  - General population on quarantine ➔ ?
  - Patients COVID+ admitted in the ward ➔ hospital
  - Carers of the admitted patients ➔ hospital/discharge
  - Health workers/Cleaning Services ➔ directions
  - Psychiatrists ➔ MHC
Thanks

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