Practical advice from the frontline of SARS-CoV-2 outbreak

Dear Friends,

In this time of difficulty, from the frontline of SARS-CoV-2 outbreak in Italy, we would like to transmit some lessons learnt so far that might be of use for your local strategic planning.

1. The situation is quite critical in Milan and the Lombardia Region. Three out of four PICUs are also treating adult patients due to the huge amount of COVID19 patients needing respiratory support. **Currently few children with comorbidities have been admitted to Northern Italy PICUs and ventilated because of SARS-CoV-2 infection**. Newborn infants may be infected by SARS-CoV-2 but do not seem to develop COVID19 disease. Adult patients are admitted to PICU based on their age (usually teenagers or young adults) and paediatric intensivists are actively taking care of them. Other regions have similar plans if the outbreak spreads. Infected and non-infected patients are strictly separated.
2. New ICU beds have been created and ventilators have been purchased, but the situation is still critical and, if the outbreak is not contained, some models predict to have more 3000 ventilated patients by the end of the month. It is difficult to draw conclusions on this outbreak whose quick diffusion has been certainly multifactorial. We will have to analyse all the data at the end to learn a lesson that we can then apply from a public health perspective to future outbreaks.

3. There is no such thing as too much simulation and preparation. You should really simulate and try to prepare your teams as much as possible. Every aspect of COVID patients care may benefit from simulation, particularly high risk procedures (such as intubation, BAL, patients' transportation) but also simple procedures (such as correct use of PPE) that may increase the risk of contamination if not performed adequately.

4. The protection of healthcare personnel is crucial. The outbreak can spread even more if we professionals get infected, and appropriate algorithms should be designed for intubation, CPR and care of COVID19 patients; adequate protection tools are absolutely needed and should be included in these.

High-risk procedures should not be performed without protective tools, in particular, intubation and mechanical ventilation procedures. Plan these procedures ahead, in order to allow sufficient time for staff to apply PPE and barrier precautions. We suggest planning shifts of 6 hours maximum to prevent healthcare providers' contamination due to excessive workload and subsequent human error.

5. Isolation is critical and a key to containing the outbreak. Children do not often have severe COVID19 disease but they may transmit SARS-CoV-2 and must be isolated. Same applies for newborn infants from mothers affected by COVID19. Vertical transmission is possible although rare. Neonates should be separated from their mothers and breastmilk avoided as a precaution (although the virus has not been detected in the milk so far), to minimise the risk of droplet transmission during breastfeeding. Children and neonates that test positive should NOT be transferred pre-emptively to critical care facilities, in order to avoid an unnecessary transmission risk during transfer and over usage of a limited resource.

We are aware that different national societies will implement guidelines adapted to local practice, and the inherent differences and continuous learning about the virus and the disease will led to different approaches and experiences. We urge you to ask for local advice and follow your Institutional and National guidelines.

We will continue to keep fighting for our patients and aim to help, as much as possible, our colleagues from adult practice; we are at your disposal to coordinate any efforts to share relevant information, develop research about this outbreak, and generally help each other for the benefit of our patients and profession.

Daniele De Luca (MD, PhD)
ESPNIC President-Elect

Giovanna Chidini (MD)
Responsible PICU, Fondazione IRCCS Cà Granda Ospedale Maggiore Policlinico, Milan

News

News

EPIC Diploma™ program

JOIN ESPNIC

About

- Mission, Objectives, and Strategy
- History
- Executive Committee
- Statutes
- The Intensive Care Medicine Journal
- Honorary Members
- Contact Us
- Privacy Policy

Membership

- Medical Doctors
- Nurses
- Allied Health Professionals
- Scientific sections
- Funding Opportunities
- Elections
- Award Winners

Events

- Calendar of Events
- Postponed: ESPNIC Winter School 2020
- Portponed: ESPNIC BASIC Course 2020, Udine, Italy
- Endorsement

Scientific Affairs

- Sections
- Section Chairs and Deputy Chairs
- Studies
- Working Groups

Education

- EPIC Diploma
- Professional Resources
- Recommended Books / Downloads
- Useful Info / Tips
- Parent Resources
- Professional Network
- Standards and Guidelines
- ESPNIC Academy

KEEP ME POSTED

To subscribe to our newsletter, please enter your email address below.