



EUROPEAN POLICYBRIEF

NO-FEAR



TITLE

Non Invasive respiratory therapy from Covid experience

31/05/2023

INTRODUCTION

This policy brief is relative to the main medical lesson learned during COVID related to respiratory therapy (see also documents from WP4). Before COVID, intensive care medicine had a well consolidated policy of respiratory assistance in patients that required it: intubation was the preferred method to ventilate patients also at the cost of sedating them to accept the ventilatory procedures. Non-invasive ventilation (NIV) therapy was known but not applied as first response.

EVIDENCE AND ANALYSIS

Covid experience from an Acute Care Medicine point of view: Invasive respiratory therapy must be avoided as much as possible substituting it with Non-Invasive Ventilation (NIV). NIV is a breathing support administered through a face mask, nasal mask, or a helmet. Air, usually with added oxygen, is given through the mask under positive pressure; generally the amount of pressure is alternated depending on whether someone is breathing in or out. While there are similarities with regards to the interface, NIV is not the same as continuous positive airway pressure (CPAP), which applies a single level of positive airway pressure throughout the whole respiratory cycle. Partners of NO-FEAR during their meetings and webinar the utility of the Boussignac valve (a disposable and low cost device) to perform NIV. In patients with Acute Hypoxemic Respiratory Failure (AHRF), applying a positive pressure to the airway opening has been shown to mitigate the reduction in functional residual capacity and to improve respiratory mechanics and gas exchange. For patients with AHRF, NIV achieved early physiologic improvement.

POLICY IMPLICATIONS AND RECOMMENDATIONS

Operational implications and recommendations

- 1) Due to the results seen with NIV in patients with AHRF (this is a lesson learned by COVID). NIV ventilation should be considered as a first line therapy in many patients with AHRF.

- 2) It is necessary to institute a campaign to sponsor the use of this technique. This campaign could be diffused to all medical doctors, not only to Intensive Care doctors, because it is easy to apply and with Boussignac's valve costly devices are not necessary. Even General Practitioners and Family Doctors should acquire this expertise in prevision of a new pandemic.

SUSTAINABILITY AND LEGACY

This medical policy has its own sustainability due to the evident progress in ventilatory therapy since it also reduced the occupancy of the precious respiratory therapy beds in ICUs. It is one of the legacies of the COVID pandemic.

PROJECT IDENTITY

PROJECT NAME Network Of practitioners For Emergency medical systems and cRitical care (NO-FEAR)

COORDINATOR Francesco Della Corte, Università del Piemonte Orientale, Novara, Italy,
info@no-fearproject.eu

CONSORTIUM

- Albert Ludwig Universitaet Freiburg - Freiburg im Breisgau, Germany
- Assistance Publique-Hôpitaux de Paris – Paris, France
- Ayuntamiento de Madrid – Madrid, Spain
- Health Service Executive HSE – Dublin, Ireland
- Magen David Adom in Israel – Or Yehuda, Israel
- Ministère de l'Intérieur – Paris, France
- Ministerul Afacerilor Interne – Bucharest, Romania
- Nederlands Normalisatie Instituut – Delft, Netherlands
- Norges Rode Kors – Oslo, Norway
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- Université Côte d'Azur – Nice, France

Vrije Universiteit Brussel – Brussels, Belgium

Waismed Ltd - Rosh Haayin, Israel

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DURATION

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BUDGET

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WEBSITE

<https://no-fearproject.eu>

**FOR MORE
INFORMATION**

Sabina.magalini@unicatt.it



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