

An educational program for home mechanical ventilation in Amyotrophic Lateral Sclerosis

F. Riva-Rovedda¹, A. Conti², T. Esposito³, G. Tabbia⁴, P. Solidoro^{4,5}, A. Calvo⁶, M. Clari¹, V. Dimonte¹

1. Department of Public Health and Pediatrics, University of Torino, Turin, Italy; 2. Department of Clinical and Biological Sciences, University of Torino, Orbassano, Turin, Italy; 3. Pneumology U, Respiratory Rehabilitation Service, Città della Salute e della Scienza University Hospital, Turin, Italy; 4. Pneumology U, Città della Salute e della Scienza University Hospital, Turin, Italy; 5. Department of Medical Sciences, University of Torino, Turin, Italy; 6. ALS Center, Department of Neuroscience "Rita Levi Montalcini", University of Torino, Turin, Italy

AIM

To describe the **educational program** for managing home mechanical ventilation offered to people with **Amyotrophic Lateral Sclerosis (ALS)** and their caregivers by the ALS Center (CRESLA) of a Northern Italy university hospital. Respiratory failure is the leading cause of death in ALS.¹ **Non-invasive (NIV) and invasive mechanical ventilation (IMV)** support respiratory function¹, but **home management** implies a high demand for informal caregivers and **specific educational interventions lack**.^{2,3}

METHODS

Clinical protocols of CRESLA and of the hospital Respiratory Rehabilitation Service regarding NIV and IMV were analyzed.



For further information:


Federica Riva-Rovedda, RN, PhD student
federica.rivarovedda@unito.it

RESULTS

NIV education is performed at the **outpatient clinic** whereas IMV education in the **hospital**. In both cases, education involves pneumologists, nurses, and respiratory therapists.

NIV

Pneumologists and nurses train about: ventilator functions and management, inhalation therapy, and detection of respiratory deterioration. **Nurses** help choosing the best-tolerated interface and provide insights for maintaining skin integrity and preventing respiratory infections. **Respiratory therapists** train about assisted cough devices.



Multiprofessional Education

IMV

Respiratory therapists and **nurses** train about: ventilator functions, tracheostomy cannula and inner cannula management, tracheal suction, inhalation therapy, and assisted cough devices. Nurses teach how to perform tracheal dressing. A **certification** of the skills acquired is released before discharge.

CONCLUSIONS

The educational program proposed by CRESLA is a genuine example of how **everyday home care** could be supported for people with ALS undergoing mechanical ventilation.

SCAN TO SEE MY
POSTER!



References

1. Radunovic A, Annane D, Rafiq MK, Brassington R, Mustfa N. Mechanical ventilation for amyotrophic lateral sclerosis/motor neuron disease. Cochrane Database Syst Rev. 2017;10(10):CD00442
2. Barry C, Larnar E, Copsey H, Smith M, Peryer G. Non-invasive ventilation support for people with amyotrophic lateral sclerosis: multidisciplinary team management. Curr Opin Support Palliat Care. 2021;15(4):214-218.
3. Gottberg K, Ytterberg C, Sandstedt P, Johansson S, Kierkegaard M. Experiences of next of kin to patients with amyotrophic lateral sclerosis using invasive ventilation via tracheostomy. Disabil Rehabil. 2021;43(17):2403-2410.