Non invasive home ventilation in COPD: a pilot study



Multidisciplinary person-centered nurse-led approach to non-invasive home ventilation in severe COPD patients adds patient value

Christiaan Theunisse, Netty de Graaf, Huibert Ponssen, Maaike Scholten-Bakker, Sten Willemsen, David Cheung Email address: c.theunisse@asz.nl

CONCLUSION

We have developed a multidisciplinary approach to non-invasive ventilation (NIHV) in severe chronic obstructive pulmonary disease (COPD) patients in their home situation which is person-centered, tailor-made and nurse-led ("what matters to you?").

After one year this approach resulted in decreased in hospital days and improved quality of life.

BACKGROUND

- Patients with severe COPD often suffer from dyspnea, depression and fear during the phase of end-stage disease.
- Solid evidence for the effectiveness of NIHV in patients with severe COPD is lacking.
- NIHV may lead to a reduction of dyspnea, reduction in hospital days and an increase in quality of life.
- Recent work suggests that NIHV is more effective when high ventilator settings are used (>18 cm H₂O). However, high ventilator settings are less comfortable for patients which might reduce patient adherence to NIHV.



RESULTS 2

RESULTS 1



METHODS



DISCUSSION

Our findings underscore the need for a prospective randomized controlled trial examining the effects (acceptance, adherence, quality of life) of this multidisciplinary approach to NIHV with low ventilator settings.