Telehealth care vs. standard care in COPD – an international randomised controlled trial (interim analysis)

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Introduction

Background: Different studies investigating telehealth care (THC) for COPD have shown conflicting results. We published a feasibility trial, which showed excellent patient adherence and satisfaction with our THC approach [1].

Aim: The aim was to present an interim analysis of the consecutive international randomised-controlled trial.

Material and Methods

- Patients are randomly assigned to one group with a crossover after 6 months.
- Patients in the intervention daily answer 6 questions, focused on the early recognition of exacerbations (AECOPD), using Evita by Swisscom (extended for COPD by the study team) [1].
- We daily analyse all entries and react according to a pre-specified action plan.
- Patients in the control receive standard care without THC.
- In all, the COPD assessment test (CAT) is measured once weekly.
- Primary endpoint is HRQOL according to CAT.

Results (1)

- Currently, 56 of 175 patients have completed the trial. The overall mean CAT score was 15.3 points (Figure 1). During the intervention, the intraindividual CAT was significantly lower than during the control (mean -0.6 points, p = 0.001). 23% of patients improved their CAT more than 2 points, 62% were stable and 15% worsened while being in the intervention phase.
- Satisfaction with COPD care (visual analogue scale) tended to be better after the intervention as compared to the control (mean 8.8 vs. 8.4 points, p = 0.460). Hospitalisation rate due to AECOPD was 0.18 per patient-year (py) during the intervention vs. 0.25 per py during the control.
- COPD-related costs were 4,619 CHF per py during the intervention vs. 8,230 CHF per py during the control.

Results (2)

- After completing 32% of 175 patients, we found a discrete but significant improvement of HRQOL as measured by CAT after 6 months of our THC.
- Satisfaction with care was already high before the intervention and tended to increase further with THC.
- We found a lower hospitalisation rate during the intervention and consecutively relevantly lower total COPD-related costs.

Conclusions

- After completing 32% of 175 patients, we found a discrete but significant improvement of HRQOL as measured by CAT after 6 months of our THC.
- Satisfaction with care was already high before the intervention and tended to increase further with THC.
- We found a lower hospitalisation rate during the intervention and consecutively relevantly lower total COPD-related costs.

References


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