One additional educational session in inhaler use for patients with COPD in primary health care – a controlled clinical trial

Annika Lindh a, b, Kersti Theander b, Mats Arne b, c, Karin Lisspers d, Lena Lundh e, f, Hanna Sandelowsky e, f, Björn Ställberg d, Elisabeth Westerdahl g, Ann-Britt Zakrisson g

^a School of Health Sciences, Faculty of Medicine and Health, Örebro University, Sweden. ^b Centre for Clinical Research and Education, Region Värmland, Sweden. ^c Department of Medical Sciences, Respiratory, Allergy & Sleep Research, Uppsala University, Sweden. ^d Department of Public Health and Caring Sciences, Family Medicine and Preventive Medicine, Uppsala University, Sweden. ^e Academic Primary Health Care Centre, Stockholm, Sweden f Karolinska Institute, NVS, Division of Family Medicine and Primary Care, Stockholm, Sweden. ^g University Health Care Research Center, Faculty of Medicine and Health, Örebro University, Sweden



Conclusion

One additional educational session in inhaler use for patients with COPD was effective in improving the proportion of patients making errors related to handling of their devices.



Background

Incorrect use of inhalers is common, only one third of the patients used their inhaler correctly and that number had not improved the past 40 years (1). As efficient use of resources and time is essential in primary care, we need to find simple and effective educational efforts to improve patients' inhaler use.



To investigate whether one additional educational session about inhaler use, delivered to patients with COPD in primary healthcare, could affect the patients' skills in inhaler use. Specifically, we aimed to study the effects on errors related to handling the device, errors related to inhalation technique, and errors related to both.



Method

Baseline

Assessment and education in inhaler use. (both groups)

Start

Intervention

Additional educational session in inhaler use. (intervention group)

2 weeks

Follow-up

Reassessment and reeducation in inhaler use. (both groups)

6 months



Results

| | Patients | Mean age | Devices/patient | Proportion better at follow-up Category: Errors related to the device |
|--------------------|----------|----------|-----------------|---|
| Intervention group | n = 28 | 73 ± 10 | 2.1 ± 0.64 | 0.89 |
| Control group | n = 36 | 71 ± 8 | 1.6 ± 0.55 | 0.32 |
| | | | p = 0.003 | p = 0.006 |
| | | | | N.S improvement in the other categories. |



