



Improving pulmonary auscultation as a tool in the diagnosis of bronchial obstruction--results of an educational intervention.

<https://arctichealth.org/en/permalink/ahliterature72474>

Author: H. Melbye
I. Aaraas
J. Hana
A. Hensrud

Author Affiliation: Institute of Community Medicine, University of Tromsø, Norway.

Source: Scand J Prim Health Care. 1998 Sep;16(3):160-4

Date: Sep-1998

Language: English

Publication Type: Article

Keywords: Adult
Aged
Auscultation - methods
Clinical Competence - standards
Education, Medical, Continuing - methods
Female
Follow-Up Studies
Forced expiratory volume
Humans
Lung Diseases, Obstructive - diagnosis - physiopathology
Male
Middle Aged
Physicians, Family - education
Predictive value of tests
Research Support, Non-U.S. Gov't
Respiratory Sounds - physiopathology
Spirometry

Abstract:

OBJECTIVE: To study the effect of an educational intervention on general practitioners' (GPs') ability to diagnose bronchial obstruction after clinical examination. **DESIGN:** Based on physical chest examination 11 GPs assessed the degree of bronchial obstruction by estimating the patient's predicted forced expiratory volume in one second (FEV1%). Half way in the study the GPs were taught new knowledge on associations between lung sounds and bronchial airflow. The agreements between estimated and measured FEV1% predicted before and after this educational intervention were compared. **SETTING:** 11 GPs in five health centres in northern Norway took part. **PATIENTS:** 351 adult patients were included in phase 1, and 341 in phase 2. **MAIN OUTCOME MEASURES:** Estimated and measured FEV1% predicted were compared in subgroups of patients according to clinical findings in phase 1 and 2. The effect of the intervention on the doctors' weighting of various chest signs could thus be evaluated. Kappa agreement and correlation between estimated and measured FEV1% predicted in both phases were determined. **RESULTS:** The agreement between estimated and measured FEV1% predicted increased from Kw (weighted Kappa) = 0.33 in phase 1 to Kw = 0.43 in phase 2 (95% confidence interval 0.35-0.52). The GPs laid more relevant emphasis on rhonchi in their estimates after the educational intervention, while too much weight was laid on uncertain chest findings in phase 2. **CONCLUSION:** The study shows a potential for better use of physical chest examination in the diagnosis of bronchial obstruction.

PubMed ID:

9800229 [View in PubMed](#) 