I have to quit! Factors that influence quit attempts in smokers with COPD

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ABSTRACT

**Background and aim:** The most effective treatment for patients with chronic obstructive pulmonary disease (COPD) is to quit smoking. Despite this, many patients with COPD continue to smoke. In Sweden, most patients with COPD are treated in primary health care settings. The general aims of the doctoral project presented in this thesis were to describe the care of patients with COPD from the perspective of district nurses and to describe factors that can negatively influence COPD patients' smoking cessation efforts. A further aim was to develop a valid and reliable instrument to assess difficulties smokers with COPD deal with, and that would be useful in dialogues about smoking that are held in a clinical setting.

**Material and methods:** This mixed method thesis project included 4 studies. Study I used phenomenographic approach to analyze data from interviews with 20 nurses responsible for the care of patients with COPD in primary health care settings. Study II used grounded theory method to analyze data from interviews with 14 patients with COPD (smokers and former smokers) and develop a theoretical model describing the process of trying to quit smoking. The results of Study II were used to construct the Trying to Quit smoking (TTQ) instrument, and Study III used exploratory factor analysis on data from 63 smokers with COPD to investigate the psychometric properties of the TTQ. In Study IV, 109 smokers with COPD answered the TTQ at baseline and after 3 months. Unconditional logistic regression was used to analyze the association between the TTQ scale and making a quit attempt, reducing the intensity of smoking and achieving complete abstinence.

**Results:** Study I identified 4 perceptions of care of patients with COPD among nurses and 2 perspectives on care: task-oriented and individual-oriented. Nurses expressed feelings of frustration and powerlessness in their encounters with patients with COPD who smoked and could not quit smoking. Study II found that patients with COPD can develop pressure-filled mental states in the process of quitting smoking. These can be burdensome and patients use a variety of constructive or destructive pressure-relief strategies to find relief. The constructive pressure-relief strategies led to success in quitting or continued efforts to quit. The destructive pressure-relief strategies could lead to loss of hope and resignation to continued attempts in quitting. The TTQ was developed to measure these mental states and strategies. The final instrument includes three factors 1) development of pressure-filled mental states, 2) use of destructive pressure relief strategies, and 3) ambivalent thoughts when trying to quit smoking. Studies III and IV found that the TTQ is a reliable instrument. It can be used to predict factors that have a negative impact on quit attempts in this group of patients, especially pressure-filled mental states in patients ready to try to quit and ambivalent thoughts in patients not ready to try to quit.

**Conclusion:** Care for patients with COPD depended on whether the patient met, a task-oriented or individual-oriented nurse. Both the theoretical model "The process of trying to quit smoking" and use of the TTQ contributes to a better understanding of the negative experiences of some patients with COPD in the process of trying to quit. The model and instrument can help health care providers individualize smoking cessation counseling. Moreover, patients' own awareness of these states and strategies may facilitate their efforts to quit.

**Keywords:** chronic obstructive pulmonary disease, primary health care, interviews, phenomenography, grounded theory method, exploratory factor analyses, smoking cessation, clinical research, TTQ.