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Poster Abstract

## IN SEARCH OF PSYCHOLOGICAL DETERMINANTS OF ADHERENCE AND SELF-MANAGEMENT IN PATIENTS WITH COPD IN THE NETHERLANDS: DEVELOPING A QUESTIONNAIRE

*Maarten Voorhaar, Boehringer-Ingelheim, The Netherlands*

*J. Tiemensma, University of California, Merced, Psychological Science, United States of America*

*GM Asjee, Maastricht University, CAPHRI School for Public Health and Primary Care, The Netherlands*

*JWM Muris, Maastricht University, CAPHRI School for Public Health and Primary Care, The Netherlands*

*AA Kaptein, Leiden University Medical Center, Medical Psychology, The Netherlands*

Correspondence to: **Maarten Voorhaar**, Boehringer-Ingelheim, The Netherlands, E-mail: [maarten.voorhaar@boehringer-ingelheim.com](mailto:maarten.voorhaar@boehringer-ingelheim.com)

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### Abstract

**Background:** Medication adherence and self-management are essential in the treatment of chronically ill patients, including those with COPD. However, many patients are non-adherent to their medication regime and most patients' self-management abilities are not utilized to their full potential. One explanation is the lack of tailored support in addressing patients' illness behavior. To facilitate tailored support, it is necessary to assess patients' behavior regarding medication adherence and self-management. In addition to socio-demographic and clinical characteristics, psychological determinants appear to be major drivers of adherence and self-management.

**Objective:** To develop a clinically useful questionnaire to assess the psychological determinants of medication adherence and self-management of patients with COPD.

**Method:** We collected data of COPD patients in a pharmacy setting in the Netherlands to assess the relationship between medication adherence, self-management and the determinants of illness behavior: pro-active coping, self-efficacy, illness perceptions and treatment beliefs. These variables were assessed by questionnaires and by calculating the medication possession rate (MPR) for COPD maintenance therapy based on pharmacy data. For the questionnaires where a relationship between adherence, self-management and determinants of illness behavior was found, we performed a component analysis. Based on the outcome of these analyses, items with eigenvalues >0.7 were selected to form shortened questionnaires. When the shortened questionnaires were considered reliable and valid, these questionnaires were combined to form

the basis of the new questionnaire. The shortened questionnaires were considered reliable when Cronbach's  $\alpha > 0.8$  and valid when the correlation between the shortened and original questionnaire was strong (Pearson's  $r > 0.7$ ).

**Results:** The MPR correlated strongly with treatment beliefs and most illness perceptions (i.e., consequences, timeline, identity, concerns, and coherence) but not with self-reported medication adherence or self-management abilities. However, self-management abilities correlated strongly with proactive coping and self-efficacy, and not with medication adherence or treatment beliefs. We found a weak but significant correlation between self-management abilities and patient's perception on illness concerns but not with other illness perceptions. Based on these analyses a questionnaire was constructed to assess patients' illness behavior towards self-management related to pro-active coping and self-efficacy. These results confirm the relationship between medication adherence and illness perceptions and medication beliefs. Furthermore, evidence from this study confirmed the strong relation between self-efficacy, proactive coping and self-management abilities.

**Conclusion:** We developed a questionnaire to assess the determinants of medication adherence and self-management in patients with COPD. Since there was no evidence that medication adherence and self-management are related, we conclude that in order to provide patients with tailored support, different methods and/or questionnaires are needed. Future studies should focus on the validity and reliability of the proposed questionnaire as well as the clinical usefulness for tailored interventions for adherence and self-management.

## **Keywords**

**self-management; behaviour; adherence; assessment; questionnaire**

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## **PowerPoint presentation**

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