



The 5P-study: Patient and healthcare Provider Perspectives on Potential Preventability of hospital admission for acute exacerbations of Chronic Obstructive Pulmonary Disease

Anna Leenders¹, Esther Sportel¹, Elise Poppink¹, Wendy van Beurden², Paul van der Valk², Marjolein Brusse-Keizer^{3,4}

1: Department of Clinical Pharmacy Medisch Spectrum Twente, Enschede, The Netherlands. 2: Department of Pulmonary Medicine, Medisch Spectrum Twente, Enschede. 3: Medical School Twente, Medisch Spectrum Twente, Enschede. 4: Section Health Technology and Services Research, Faculty of Behavioural, Management and Social sciences, Technical Medical Centre, University of Twente, Enschede, The Netherlands.

Background

COPD is one of the top three causes of death worldwide.¹ The main treatment goal for COPD consists of reduction of symptoms and future risk of exacerbations. Timely and appropriate outpatient care or self-management might prevent part of acute exacerbations in COPD (AECOPD) and hospitalisations. So it is important to analyse patients' and health care providers' (HCP) perspectives on potential preventability of hospitalisations for AECOPD.

Study aim

To explore patients' perspectives on the potential preventability of their hospital admission for AECOPD and compare these with perspectives of their HCP.

Methods

Semi-structured interviews were conducted with patients admitted for an AECOPD (N=11), their HCP on the respiratory ward (N=11) and their treating pulmonologist (N=10). Interviews were transcribed verbatim and analysed using thematic content analysis.

Conclusions and Relevance

Patients and their HCP have different beliefs about the potential preventability of AECOPD hospitalisation. Although not all patients and HCP believed that hospitalisation was preventable, most did mention factors that could have led to a different outcome for the current exacerbation or for the patient's health status and treatment of exacerbations in the future. We believe shared decision making is crucial to bring to light the perspective and needs of the patient and HCP in order to implement successful personalised treatment strategies.

Results

Patient and HCP perspectives on potential preventability of hospital admission for AECOPD are shown in table 1.

Table 1: Perspective on the question whether or not the hospital admission for AECOPD could have been prevented

	Yes	No
Patients	3	8
Pulmonologist	1	9
HCP (respiratory ward)	7	4

Table 2 shows the level of agreement between patients and HCP. The kappa coefficients are -0.18 for patients and pulmonologists and -0.28 for patients and the HCP on the respiratory ward, indicating that there is poor agreement. The kappa coefficient for pulmonologists and HCP on the respiratory ward is 0.14, showing a slight level of agreement.²

Table 2: Agreement of perspectives about potential preventability of the patient's hospital admission of AECOPD

		Pulmonologist		Kappa
		Yes	No	
Patient	Yes	0	3	-0.18
	No	1	6	
		HCP (respiratory ward)		Kappa
		Yes	No	
Patient	Yes	1	2	-0.28
	No	6	2	
		HCP (respiratory ward)		Kappa
		Yes	No	
Pulmonologist	Yes	1	0	0.14
	No	5	4	

Table 3 presents an overview of the most important themes that emerged during the interviews regarding potential preventability of hospital admission for AECOPD.

Table 3: Identified patient and HCP factors for optimisation

<ul style="list-style-type: none"> • Calling for help • Recognition and taking action on symptoms • Instruction on COPD, treatment and action plans
