

Prize Winning Abstracts: Slovenia 2017

CR03: Associations with incongruence between patient and informal carer symptom reporting in advanced chronic obstructive pulmonary disease

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Aim: Informal carers provide valuable information on patients' symptom experiences to clinicians and researchers, and accurate carer assessment is critical for symptom management by carers themselves. However, few studies have investigated the validity of proxy reporting in COPD or the primary care setting. We aimed to assess agreement between patient and carer reports on symptoms, and identify factors associated with incongruence in a population-based sample of advanced COPD.

Method: A prospective, cross-sectional analysis of data from well-characterised patients with advanced COPD and their carers (119 patient-carer dyads), who separately rated patient symptoms on a 4-point scale. Wilcoxon signed-rank tests determined differences in mean patient and carer symptom scores, and weight-kappa assessed agreement on scores. Spearman's correlation and Mann-Whitney U tests identified characteristics associated with incongruence.

Results: There were no significant differences between mean patient and carer scores for any symptom, although carers more frequently underestimated symptoms (Table 1). Patient-carer agreement was only fair to moderate; higher agreement was found for physical symptoms (constipation, diarrhoea) than psychological (anxiety, depression) or those with emotional valence (dyspnoea, fatigue) (Table 1). Greater estimation by the carer was associated with non-spousal relationship, non-cohabitation, lower carer educational level, greater carer anxiety, more carer unmet support needs, and greater subjective caring burden, and by the patient was associated with younger age, longer duration of COPD, and greater patient anxiety.

Conclusion: Symptom underestimation by carers and poorer agreement on emotional symptoms may reflect patient concealment, long disease trajectories in COPD leading to carer compassion-fatigue and response shift, and lack of symptom awareness in the primary care setting. Incongruence was associated with less patient-carer interaction, greater disease and caring burden, and poorer patient and carer psychological health. Our findings suggest the need to encourage open communication within dyads and educate carers in assessing subjective symptoms.

The authors have no competing interests to declare.

CR34: Penicillin prescribing in primary care in Portugal: a cluster-randomized controlled trial.

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Aim: One important quality indicator of antibiotic prescribing is the relation between broad- and narrow-spectrum antibiotics. Accordingly, the aim of this study is to assess the impact of an educational intervention in penicillin prescribing in primary care in Portugal.

Method: We designed a cluster-randomized trial in the Centre Health Region of Portugal, with a sample size of ~1100 primary care physicians. The multidisciplinary and multifaceted intervention targeted attitudes and knowledge about antibiotic prescribing and resistances and included educational outreach visits, and, included also an intervention in community pharmacists and the distribution of educational materials to the patients. To measure the impact of the intervention on the quality of penicillin prescribing, we've assessed two quality indicators validated by ESAC group: (i) the prescription of β -lactamase sensitive penicillins (J01CE) expressed as percentage and (ii) the prescription of combination of penicillins including β -lactamase inhibitor (J01CR) expressed as percentage. The prescription was evaluated in number of packages *per* 1000 inhabitants *per* day. Intention-to-treat analysis was adopted and Linear mixed models were performed.

Results: The level of participation was high (64%; ~309 primary care physicians) in a total of 25 counties where the intervention was applied. Regarding the prescription of penicillins, a beta-lactamase sensitive penicillins increase was found (~8%; -0.26 to 16.42) simultaneously to a statistical significant decrease of the combination of penicillins including beta-lactamase inhibitors (~-5%; -8.26 to -2.82).

Conclusion: Multifaceted and multidisciplinary interventions, and focused in physicians' attitudes and knowledge can effectively improve the quality of penicillin prescribing, which is one of the main concerns regarding antibiotic use in primary care.

Declaration of Interest: No conflict of interest to declare.

References & Clinical Trial Registry Information

CR25: Improved quality of care by the PRISMS form in supporting self-management in patients with COPD; A Randomized Controlled Trial (RCT)

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Aim: The aim was to investigate if Patient Report Informing Self-Management Support (PRISMS) could improve quality of care when supporting patients with COPD in self-management.

Method: A RCT was conducted in 11 Primary Health Care centers in 2016 and included an intervention group (n=93) and a control group (n=116). The intervention group used PRISMS in consultation with the COPD nurse. PRISMS contain 17 items concerning the most common problems patients with COPD experience in daily life. The patients marked three items for which they wanted self-management support. The patients in the control group received usual care. Quality of care at the consultation was assessed with the, modified for COPD-nurses, questionnaire Quality from the Patients Perspective (QPP) in five domains; information (i.e. examinations, medical regimens, results, and self-management), personal attention (i.e. understanding, contact, sympathy, respect, interest, and engagement), medical knowledge and assessment, patient-participation, and satisfaction with the clinic. The items in QPP estimate in two ways, perceived reality and subjective importance.

Results: Mean ages of the patients were 71 years (SD \pm 9.05) and 71 years (SD \pm 8.14) respectively. The patients in total were retired from work (81%), 2% were current smokers and 57% were cohabiting. The perceived reality in the intervention group indicated a better quality of care regarding personal attention compared to the control group, though not statistically significant (p=0.064). The subjective importance of personal attention showed a difference between the groups, where the intervention group estimated a higher quality than the control group (p=0.046). The information, the COPD-nurse medical knowledge and assessment, patient-participation, and satisfaction with the clinic showed no differences between groups in either perceived reality or subjective importance.

Conclusion: PRISMS could be a useful tool to improve quality of care in supporting self-management. Personal attention is an important part of a person-centered approach.

Declaration of Interest: None

CR27: Is the psychological health of patients and informal carers related in advanced chronic obstructive pulmonary disease?

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Aim: Anxiety and depression are highly prevalent in patients with COPD and their informal carers, and are associated with numerous risk factors. However, few studies have investigated these in the primary care setting, and little is known about the link between patient and carer anxiety and depression. We aimed to determine this association, and factors associated with anxiety and depression in patients, carers, and both in the dyad in a population-based sample of advanced COPD.

Method: Prospective, cross-sectional analysis of data from 119 pairs of well-characterised advanced COPD patients and their carers. Cases of anxiety and depression were defined as Hospital Anxiety and Depression Scale (HADS) scores ≥ 11 and a dichotomous 'psychological morbidity' (PM) variable represented having either anxiety or depression. Chi-square, independent-t, and Mann-Whitney U tests determined characteristics significantly associated with patient or carer PM, which were evaluated by binary logistic regression.

Results: Prevalence of anxiety and depression was 31.3% (n=35) and 16.1% (n=18) in patients, and 26.5% (n=30) and 10.6% (n=12) in carers, respectively. In univariate analysis, patient and carer PM were significantly associated (p=0.005), with odds ratio 3.388 (95% CI 1.414–8.118). Patient PM was also associated with younger age, more physical co-morbidities, more exacerbations at home, greater dyspnoea, fatigue, poorer mastery, and carer PM with female, more physical co-morbidities, greater subjective caring burden, more unmet support needs and more exacerbations at home. Table 1 shows the results of multivariate analysis. Finally, dyad PM was associated with male patients/female carers, living apart, parent-child relationship, and more exacerbations.

Conclusion: Psychological health of patients and carers are independently associated with each other, and with fatigue and poorer mastery, and female sex and unmet support needs, respectively, in advanced COPD. It is necessary to identify and address carer psychological morbidity and unmet support needs.

Declaration of Interest: The authors have no conflicts of interest to declare.

CR39: Risk factors for severe bronchiolitis: a retrospective review of patients admitted to the University Hospital from Central region of Slovenia

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Aim: The objective of our study was to determine the microbiological and clinical factors associated with the severity of bronchiolitis.

Method: A retrospective chart review of children <2 years old, diagnosed with bronchiolitis at the University Medical Centre Ljubljana (UMCL) between 1. 5. 2014 and 30. 4. 2015, who were treated as outpatients (PED group) or as inpatients in the standard hospital setting (WARD group) or in the intensive care unit (PICU group), was performed. Detection of several respiratory viruses in nasopharyngeal swab in a subgroup of patients was accomplished by RT-PCR.

Results: The study included 761 children. The most frequently detected viruses were respiratory syncytial virus (RSV), human rhinovirus (hRV) and human bocavirus (hBoV) (41 %, 18.4 % and 13.1 %, respectively). As expected, patient groups (PED, WARD, PICU) differed in Wang respiratory score for the severity of bronchiolitis ($p < 0.001$). No statistically significant differences regarding the causative viruses were found comparing the three groups, but there was a significantly lower proportion of children with the presence of more than 1 virus in nasopharyngeal swab, in patients who needed treatment in PICU compared to PED and WARD groups ($p = 0.017$). In addition, the three groups statistically significantly differed in age and birth weight, proportion of patients with comorbidities, treatment with bronchodilator, use of antibiotics and in leukocyte counts. However, multiple regression analysis revealed that only younger patient age and the use of antibiotics were associated with a more severe disease course.

Conclusion: RSV, hRV and hBoV were the most frequently detected viruses in our patients with bronchiolitis. The majority of bronchiolitis patients admitted to the PICU had only one virus detected. Younger age and the use of antibiotics were associated with a more severe course of the disease.

Declaration of Interest: None