

M2 DO PATIENTS AND INFORMAL CARERS AGREE ON SYMPTOM BURDEN IN ADVANCED COPD?

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Introduction Informal carers are a valuable source of information on patients' symptom experiences for clinicians, and carer assessment determines decisions regarding symptom management by carers themselves. However, previous studies have reported that proxies overestimate symptom burden, particularly subjective psychological and emotional symptoms, but proxy studies in COPD are few. We sought to assess congruency between patient and carer assessment of symptom burden, and to identify factors associated with incongruence.

Methods Well-characterised patients with advanced COPD and their carers (n = 117 patient-carer dyads) independently rated patients' breathlessness, fatigue, constipation, diarrhoea, anxiety and depression on a 4-point scale, and average breathlessness in prior 24 hours using a Numerical Rating Scale (NRS). McNemar's and Wilcoxon signed rank test were performed to identify differences between patients and carers in proportions reporting presence and reporting of severity of symptoms respectively. Intraclass correlation (ICC) was used to assess agreement on symptom scores in dyads.

Results Patient mean age was 71.4 (SD 8.7) and 62% were male; carer mean age was 64.2 (SD 14.5) and 27% were male. 87% of patients lived with their carer and 84% of carers were spouses. There were no significant differences between patients and carers in total proportions reporting presence or assessment of severity, of any symptom. ICCs (Table 1) showed 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 (breathlessness, fatigue). Carers more frequently underestimated than overestimated symptoms, with the exception of physical symptoms.

Conclusions Patient-carer agreement on symptom burden was generally low, and differed depending on symptom type. Poorer agreement for emotional symptoms and symptom

underestimation by carers in this prospective population-based study may reflect patient concealment within dyads or the differences of a cohort recruited through primary care, compared to previous proxy studies in secondary care. These findings may also be due to longer disease trajectories in COPD, compared to previous studies in cancer, leading to carer compassion-fatigue or response-shift. Our findings have implications for the interpretation of proxy data in COPD, and suggest the need for carer education and support in symptom assessment.

Abstract M2 Table 1 Intraclass correlation coefficients for patient-carer dyads of symptom scores

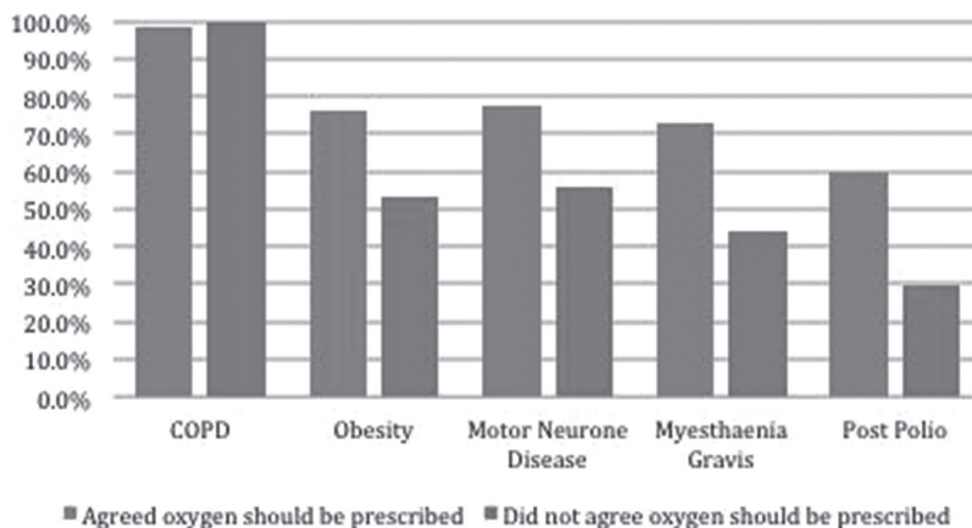
	n ^a	ICC ^b (95% CI)	Interpretation ^c
Breathlessness	106	0.23 (0.05 to 0.40)	Fair
Fatigue	105	0.33 (0.14 to 0.49)	Fair
Constipation	91	0.49 (0.32 to 0.63)	Moderate
Diarrhoea	93	0.46 (0.29 to 0.61)	Moderate
Anxiety	96	0.37 (0.19 to 0.53)	Fair
Depression	100	0.45 (0.27 to 0.59)	Moderate
Average breathlessness in prior 24 hours (NRS)	100	0.38 (0.20 to 0.54)	Fair

(a) Different numbers of pairs for each symptom as not all symptoms assessments were completed by both patient and carer in each pair. (b) Two-way mixed effect model; absolute agreement definition; single measure ICC. (c) <0.20 as poor agreement; 0.20–0.39 as fair agreement; 0.40–0.59 as moderate agreement; 0.60–0.79 as substantial agreement; and 0.80–1.0 as excellent agreement

M3 ATTITUDES AND BARRIERS TO RESPONSIBLE EMERGENCY OXYGEN PRESCRIBING AMONG HEALTHCARE PROFESSIONALS

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Abstract M3 Figure 1 Ability to identify groups at risk of hypercapnic respiratory failure by attitude to O₂ prescribing

Introduction The 2015 BTS Emergency Oxygen Audit showed that 4/10 patients on oxygen did not have a valid prescription, 1/3 patients received inappropriate levels of oxygen and almost 1/10 patients were at risk of iatrogenic hypercapnia. Over half of hospitals didn't provide adequate training in oxygen provision and monitoring. Despite significant efforts to improve practice at King's College Hospital, the audit revealed a drop in appropriate prescribing. We conducted a staff survey of attitudes to and knowledge around oxygen prescribing to better understand the barriers.

Methods Hospital based healthcare professionals completed a survey of attitudes to oxygen prescribing as well as a knowledge quiz using Survey Monkey®.

Results There were 113 respondents. 67% were doctors (13% Foundation Year; 44% ST1-8; 38% Consultants). 29% were nurses, (76% Band 5/6). Most worked in acute specialties (28% A&E, 15% anaesthetics, 14% ICU, 13% acute medicine). Only 66% of respondents believed that oxygen should be prescribed on a drug chart. Among doctors, support for oxygen prescribing was high, especially in acute medicine (93%) and A&E (86%). It was lower amongst ICU doctors (50%). Amongst nurses, support was 41%. Nurses working in medical specialties largely agreed with oxygen prescribing (80%). Those working in A&E and ICU did not (33% and 22% respectively).

Perceived barriers to prescribing were lack of time, lack of awareness/habit, difficulty accessing computers and a perception that the oxygen prescription would not allow for changes in a patient's condition. Those who believed oxygen did not need to be prescribed felt concerned that prescribing could delay emergency treatment. In the quiz, this group was less able to identify patients at risk of hypercapnic respiratory failure (see figure 1).

Conclusion Oxygen prescribing is still seen by many as a cause of possible delays in emergency treatment. Education of clinical staff, particularly nurses, around risks as well as benefits of emergency oxygen therapy is still needed. Emergency oxygen prescription needs to be as flexible as possible so that prescribing is seen

as a means to deliver right care and reduce these risks particularly for those patients at risk of hypercapnic respiratory failure.

M4 LATE ASTHMATIC RESPONSE TO EPOXY RESINS: A CASE REPORT

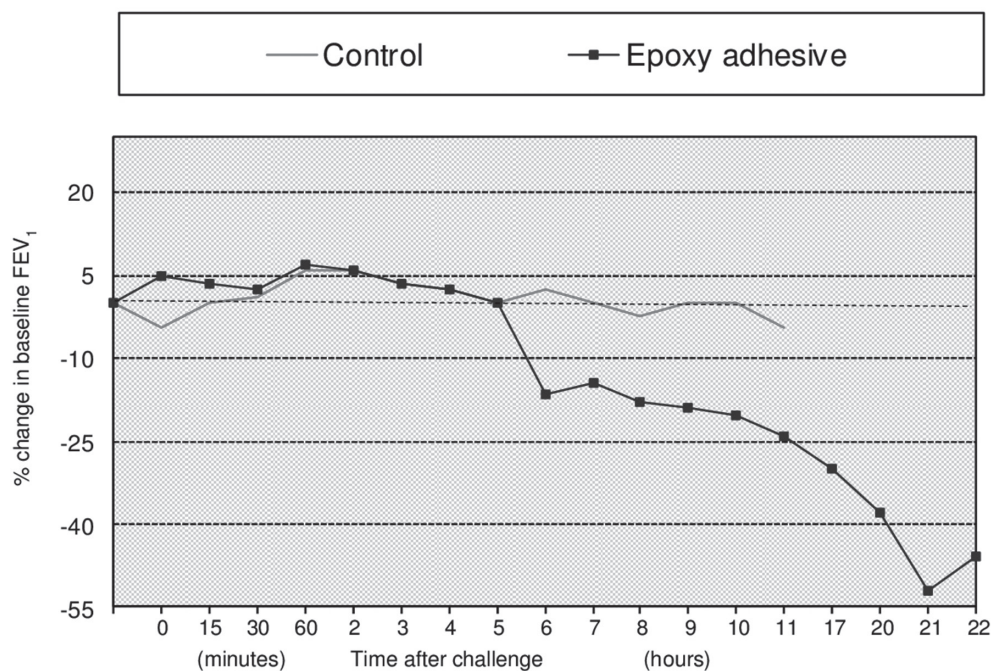
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Introduction Epoxy resins (ER) systems are used extensively in industry in adhesives, reinforced plastics and surface coatings. ER are converted to the final product by mixing with a "hardener" or curing agent to form a polymer. This process releases fumes which can be respiratory sensitisers and a cause of occupational asthma (OA).

Method A non-atopic, non-smoker, 41 year old was referred with a six-month history of new onset asthma and 10 month history of nasal congestion and sneezing. His wheeze and dyspnoea occurred in the evenings and improved on holidays. He worked as a materials technician developing bonding agents and had started to use a new ER system one year previously. OA to the ER system was suspected and an in-patient specific inhalational challenge (SIC) performed. On day 1, a pre-treatment solution and a solvent (negative controls) were brushed on to a hard surface for 30 minutes. On day 2, the challenge was repeated using the same methods but with the addition of the ER system used at work. Histamine responsiveness 24 hours post challenge, FEV₁ and symptoms were all monitored. At baseline FEV₁ was 4.3L and bronchial response to histamine was normal (PC 20 16mg/ml). Blinding was not possible due to the patient's intimate knowledge of the products.

Results Exposure to the control agents induced no symptoms and no change in FEV₁ or histamine responsiveness. Six hours after the active challenge FEV₁ fell by 16% and the patient reported chest tightness and wheeze. 22 h post-challenge FEV₁ reached a



Abstract M4 Figure 1