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**BREATHLESSNESS AND PALLIATIVE OXYGEN THERAPY IN ADVANCED CHRONIC OBSTRUCTIVE  
PULMONARY DISEASE**

**Short title:** Palliative oxygen therapy in COPD

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**Acronyms**

COPD – Chronic obstructive pulmonary disease

POT – Palliative oxygen therapy

**To the editor**

We recently reported in the IMJ that junior doctors report high awareness, confidence, willingness and experience prescribing opioids to COPD patients with refractory breathlessness [1]. However, opioids are only the final step in a comprehensive management plan, which should first include non-pharmacological strategies such as smoking cessation, self-management education, physical activity, pulmonary rehabilitation, breathing exercises and the use of a handheld fan [2-4]. In this letter, we describe junior doctors' knowledge and views regarding these strategies and palliative oxygen therapy.

From the 223 full survey responses received, there was limited recommendation of non-pharmacological strategies for refractory breathlessness, with the three most commonly recommended being pulmonary rehabilitation (30.0%), using a handheld fan (14.8%), and anxiety management and relaxation techniques (13.0%). Similarly, very few trainees recommended multidisciplinary input from nursing or allied health professionals such as community nurses (3.6%) or physiotherapists (8.1%), and only 6 (2.7%) recommended patient and carer education to reduce breathlessness

Approximately half of the respondents (116, 52.0%) believed that palliative oxygen therapy (i.e. oxygen therapy used at rest in patients who do not qualify for long-term oxygen therapy) relieved refractory breathlessness in patients who do not have severe hypoxaemia, while 45 (20.2%) were unsure. Twelve trainees indicated that oxygen might improve dyspnoea by reducing anxiety or by having a placebo effect. The belief that oxygen relieves refractory breathlessness was not associated with any trainee demographic characteristics.

These findings may be explained by the trainees' early career stage and the fact that they predominantly work as part of a consultant-led team managing inpatients. In that setting, there is

ready access to an expert, multidisciplinary team including physiotherapists and occupational therapists, who can educate patients regarding self-management and non-pharmacological breathlessness strategies. Thus, the medical team may be more focussed on diagnosis and prescribing appropriate medications for refractory breathlessness. Additionally, trainees may assume that similar structures of multidisciplinary care are in place and accessible in the community.

Recent studies suggest that palliative oxygen therapy (POT) is burdensome and does not improve refractory breathlessness, quality of life or survival [5, 6]. However, in a small minority of patients POT may relieve breathlessness, therefore oxygen prescription must be individualised [7]. Physicians are divided as to the benefits of POT, with 58% of respiratory physicians and palliative care specialists in Australia and New Zealand surveyed in 2005, believing that palliative oxygen therapy is beneficial [8]. Given the similar results in our recent study, disappointingly the latest evidence has not translated into clinical knowledge.

Surveys are challenging as respondents have to choose definitive answers to clinical questions, which in reality require cautious evaluation for individual patients. Similarly, participants may make implicit assumptions regarding clinical management, when responding to case vignette scenarios. However, our findings suggest that Australian junior doctors' focus on pharmacological treatments [1] and oxygen for refractory breathlessness, and have less awareness of the evidence-based, multidisciplinary, non-pharmacological interventions, which come first in clinical practice. Further education regarding refractory breathlessness management and particularly using a comprehensive, stepwise approach is required to translate evidence into practice.

**Declaration of interests**

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