Results 43 patients (21 with CRD and 22 with BPD) completed questionnaires; mean (SD) age 55 (17) yrs, 32 female. The overall prevalence of borderline anxiety was 17% and clinically significant anxiety 37%. The overall prevalence of borderline depression was 15% and clinically significant depression 29%. Of the patients with CRD, 29% had anxiety and 29% depression. In the BPD cohort, anxiety and depression were found in 45% and 30% of patients respectively. The difference between these groups was not statistically significant (anx: $P = 0.42$; dep $P = 0.19$). Independent predictors for anxiety and depression were higher SGRQ (anx: $P = 0.001$; dep: $P < 0.0001$), lower SF-12 Mental (anx: $P < 0.0001$; dep: $P < 0.0001$) and Physical (anx: $P = 0.042$; dep: $P = 0.0027$) Health Composite Scores, and lower FEV_1% predicted (anx: $P = 0.0043$; dep: $P = 0.016$).

Conclusions Anxiety and depression are present in a significant numbers of individuals in both CRD and BPD, with no difference between these groups, so efforts should be made to screen for psychological problems in patients with both CRD and BPD. Worse respiratory function and more symptoms are important contributing factors to patients' risk of anxiety and depression.

M4 ASSOCIATION OF DESCRIPTORS OF BREATHLESSNESS WITH DIAGNOSIS, SELF-REPORTED SEVERITY OF BREATHLESSNESS AND SELF-REPORTED DISTRESS DUE TO BREATHLESSNESS IN PATIENTS WITH ADVANCED CHRONIC OBSTRUCTIVE PULMONARY DISEASE OR CANCER

S Chowienczyk, S Javadzadeh, S Booth, M Farquhar. *University of Cambridge School of Clinical Medicine, Cambridge, UK*

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Introduction and objectives Verbal descriptors are important in understanding patients' experience of breathlessness. The selection of breathlessness descriptors may depend on the severity of breathlessness.[1] Our objective was to examine the association between selection of the breathlessness descriptors devised by Simon *et al*. with diagnosis, self-reported severity of breathlessness and self-reported distress due to breathlessness.[2]

Methods We studied 132 patients grouped according to their diagnosis advanced COPD (n = 69) or advanced cancer (n = 63), self-reported severity of breathlessness: mild breathlessness (Numerical rating scale (NRS) ≤3, n = 53), moderate breathlessness (4≤NRS≥6, n = 59) or severe breathlessness (NRS ≥7, n = 20), and distress due to breathlessness: mild distress (NRS ≤3, n = 31), moderate distress (4≤NRS≥6, n = 44) or severe distress (NRS ≥7, n = 57). Patients selected three breathlessness descriptors. The relationship between descriptors selected and patient groups was evaluated by cluster analysis.

Results Cluster analysis identified six clusters of descriptors: 'breathing restrictions', 'enough air', 'out of breath', 'air hunger', 'effort' and 'chest tightness'. Different combinations of clusters were associated with each diagnostic group. The association of clusters with patient groups differed depending on their severity of breathlessness and their distress due to breathlessness. The 'air hunger' cluster was associated with patients with moderate or severe breathlessness, the 'chest tightness' cluster was associated with patients with mild breathlessness. The 'air hunger' cluster was associated with patients with severe distress due to breathlessness.

Conclusions The relationship between clusters and diagnosis is not robust enough to use the descriptors to identify the primary cause of breathlessness. Further work exploring how use of breathlessness descriptors reflects the severity of breathlessness and distress due to breathlessness could enable the descriptors to evaluate patient status and target interventions.

Abstract M4 Table 1 Association of clusters with diagnosis, with severity of breathlessness and distress due to breathlessness[1]

Patient group	Cluster 1 Breathing restrictions	Cluster 2 Enough air	Cluster 3 Out of breath	Cluster 4 Air hunger	Cluster 5 Effort	Cluster 6 Chest tightness
Diagnosis of advanced:						
Cancer	*	*	*	*	*	
COPD	*	*	*	*		
Severity of breathlessness (NRS):						
Mild (NRS ≤3)	*	*		*	*	
Moderate (4≤NRS≥6)	*	*	*	*		
Severe (NRS≥7)	*	*	*	*		
Distress due to breathlessness (NRS):						
Mild (NRS≤3)		*		*	*	
Moderate (4≤NRS≥6)	*	*		*		
Severe (NRS≥7)	*	*	*	*		

[1] * indicates that the cluster is associated with the patient group.

REFERENCES

1 Von Leupoldt A, Balewski S, Petersen S, *et al*. Verbal descriptors of dyspnea in patients with COPD at different intensity levels of dyspnea. *Chest* 2007;**132**:141–147

2 Simon PM, Schwartzstein RM, Weiss JW, *et al*. Distinguishable sensations of breathlessness induced in normal volunteers. *Am Rev Respir Dis*. 1989;**140**:1021–1027

M5 COMPARISON OF RESPIRATORY HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH INTRACTABLE BREATHLESSNESS DUE TO ADVANCED CANCER OR ADVANCED COPD

[1]S Javadzadeh, [1]S Chowienczyk, [2]S Booth, [1]M Farquhar. *[1]Department of Public Health & Primary Care, Cambridge, UK; [2]University of Cambridge, Cambridge, UK*

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Introduction and objectives Breathlessness is common in patients with advanced cancer and almost universal in advanced chronic obstructive pulmonary disease (COPD), but studies suggest their experiences of breathlessness vary. Our objective was to seek quantitative evidence of differences in respiratory health-related quality of life (HRQoL) between these groups using the Chronic Respiratory Questionnaire (CRQ) and to contribute to the debate on the validity of CRQ in patients with cancer.

Methods The CRQ-Original was completed within baseline interviews for a randomised control trial of a palliative intervention for breathlessness. Independent-Samples Mann-Whitney U Tests were performed to identify significant differences in median scores for the four CRQ domains (mastery, dyspnoea, emotional function, fatigue) in patients with advanced COPD (n = 73) or advanced cancer (n = 67.) The Minimally Clinically