Methods Consecutive admissions from six UK hospitals were identified from the DECAF derivation and validation studies.[2] All patients (n = 2,645) had definite COPD (including spirometric confirmation) and the primary reason for admission was AECOPD. DECAF indices (dypsnoea, eosinopenia, consolidation, acidaemia and atrial fibrillation) and age were collected.

We captured the number of inpatient deaths per day of admission (compared to the total number of admissions on each day) and per day of death (compared to the total number of bed days for each day). Proportions were compared using Fisher's exact test. The association between period of admission (weekday/weekend) and mortality was assessed in a binary logistic regression model, including the DECAF indices and age.

Results Inpatient mortality was 9.3% (63/676) for those admitted on weekends, compared to 8.4% (165/1969) on weekdays (p = 0.47). For day of death, no clear difference in mortality was seen between weekdays and weekends although fewer deaths were seen on Fridays. Exacerbation severity was similar between weekday and weekend admissions (median DECAF score 2 vs. 2, p = 0.83). Following adjustment for baseline mortality risk, there was no association between weekend admission and inpatient death; OR 1.11 (0.79 to 1.56), p = 0.55.

Abstract P146 Table 1 Mortality by day of admission and day of death

	Mortality by day of admission		Mortality by day of death	
	Died/Admissions	%	Died	Days exposed to risk
Mon	38/436	8.7	38	412
Tue	33/434	7.6	34	407
Wed	23/349	6.6	33	396
Thu	39/372	10.5	40	402
Fri	32/378	8.5	20	394
Sat	26/306	8.5	32	400
Sun	37/370	10.0	31	405
Total	228/2645	8.6		

Discussion In a well-described population with an AECOPD, there is no relationship between inpatient mortality and day of admission or day of death, even after adjusting for baseline mortality risk.

REFERENCES

1 Becker DJ. *Expert Rev Pharmacoecon Outcomes Res* 2008.
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P147 EFFECT OF CANNABIS SMOKING ON RESPIRATORY SYMPTOMS AND LUNG FUNCTION: A STRUCTURED LITERATURE REVIEW

L Ribeiro, P Ind. *Imperial College London, London, UK*

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Background With increasing cannabis use, physicians need to know more about its respiratory effects. However, there are few long term studies of cannabis smoking, due to legality issues and confounding effects of tobacco.

Aims We reviewed effect of chronic cannabis use on respiratory symptoms and lung function, particularly FEV1, FVC and FEV1/FVC ratio.

Methods 19 out of 256 English-language publications, prior to June 2015, from MEDLINE, Scopus, and Web of Science databases, reporting lung function in chronic cannabis users, were examined.

Results 11 cross-sectional studies and 8 observational cohort studies were included. All 9 studies (n = 11,848) examining respiratory symptoms reported an increase with cannabis smoking (odds ratio up to 3.0). 2 studies (n = 1,336) reported that quitting cannabis with/without tobacco reduced chronic bronchitis symptoms to those of never cannabis smokers.

8 studies (n = 9,939) reported no significant changes in FEV1/FVC; 6 (n = 3,722) found a significant decrease (0.5%–1.9%) in chronic marijuana only smokers compared to controls. While most reports omitted absolute FVC results, 3 large studies (n = 13,858) demonstrated increased FVC with marijuana smoking. 4 studies (n = 13, 674) found dose-related reductions in FEV1/FVC. 7 studies associated chronic cannabis smoking with other evidence of airflow obstruction [increased airway resistance in 3; (0.03 to 0.38 cm H_2O/L/s), reduced specific airway conductance in 4; (0.007 to 0.07 mL/s/cm H_2O/L)].

The larger studies (n = 13,858) suggested increased FVC may cause reduced FEV1/FVC chronically.[1] This contrasts with airflow obstruction in tobacco smoking. Anti-inflammatory or acute bronchodilator effects of cannabis, on top of chronic effects, may partly explain these results.

Conclusions Cannabis, like tobacco, smoking causes chronic bronchitis but increased FVC is more consistently found than reduced FEV1. No studies in marijuana smokers have found a linear decline in FEV1 with time. More work is needed to explain the differing effects on lung function and to examine effects on small airways, imaging and histology.

REFERENCE

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Asthma Treatments and What Matters to Patients

P148 MAKING SENSE OF PATIENT-REPORTED CURRENTLY TREATED ASTHMA USING ROUTINELY COLLECTED DATA

[1]MA Al Sallakh, [1]SE Rodgers, [1]RA Lyons, [2]A Sheikh, [1]GA Davies. [1]*Swansea University Medical School, Swansea, UK*; [2]*Usher Institute of Population Health Sciences and Informatics, The University of Edinburgh, Edinburgh, UK*

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Introduction and objectives Currently treated asthma (CTA) is commonly assessed in epidemiological studies and is typically self-reported. We investigated how patient understanding of this label compared with objective measures extracted from routinely collected data.

Methods We used the Welsh Health Survey 2014 results for individuals aged 16+. Self-reported CTA was measured with the question: "Are you currently being treated for asthma?" We included those who had valid responses, are record-linked to the Secure Anonymised Information Linkage databank, and had complete GP practice registrations between 2009 and 2014. From the GP dataset, we queried their most recent prescriptions, if any, and whether they had ever recorded asthma diagnosis, and cross-tabulated these variables with self-reported CTA. We examined the concordance between self-reported CTA and each of 'ever

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