

# M8 THE EFFECT OF DISTANCE FROM THE HOSPITAL, PUBLIC TRANSPORT AVAILABILITY AND SOCIOECONOMIC DEPRIVATION ON NON-ATTENDANCE AT A DIFFICULT ASTHMA CLINIC

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**Introduction** Regular clinic review is an important factor in reducing morbidity in asthma<sup>1</sup>. In a specialist difficult asthma clinic at our large city centre teaching hospital seeing more than 100 new primary and secondary care referrals per year, 'did not attend' (DNA) rates were 9% higher than in a general respiratory clinic led by the same consultant. A previous study has demonstrated an association between socioeconomic deprivation and non-attendance<sup>2</sup>. We hypothesised distance from the clinic, long public transport journeys and socioeconomic deprivation were related to an increased number of missed appointments.

**Methods** Data were collected between April 2011 and March 2012 inclusive. Patient criteria included those with a Liverpool postcode who had missed one or more of their appointments. Patients were grouped into categories according to number of DNAs. Distance from hospital; availability and time taken by public transport and socioeconomic status of postcode were reviewed. These were calculated using Google maps; local public travel information services and the Indices of Deprivation 2010 dataset<sup>3</sup>.

Abstract M8 Table 1. Results

No. of DNAs	No. of patients	Mean distance from hospital in miles (Standard Deviation)	Mean time taken by public transport in minutes (Standard Deviation)	Mean Index of Deprivation <sup>1</sup> (Standard Deviation)
1	55	3.09 (1.64)	28.69 (10.79)	5250 (6477)
2	20	3.44 (2.41)	27.45 (12.53)	3554 (5465)
3	9	3.78 (3.70)	27.00 (14.27)	3427 (4007)
4	3	4.00 (0.59)	14.00 (6.24)	402 (519)
5	1	N/A	N/A	N/A
6	1	N/A	N/A	N/A
p value		0.70	0.20	0.39

<sup>1</sup>Whereby 1 indicates most deprived region. Total rank out of 32482 in England

**Results** Eighty-nine patients with Liverpool postcodes were included in the study. Number of DNAs ranged from 1 to 6. Data according to patient group by number of DNAs is displayed below. Only two patients had missed 5 and 6 appointments therefore these groups were excluded from analysis. There was no statistical difference between distance from hospital, time to get to hospital by public transport or socioeconomic status on the number of missed appointments. See Table 1.

**Discussion** Reasons for missing clinic appointments are multifactorial and, in our cohort, there was no association found between distance from the hospital, time taken by public transport to reach the hospital or economic deprivation. Assumptions of low socioeconomic status relating to poor clinic attendance are often made by clinicians however there is no evidence to suggest this is valid in our patient group. Reducing DNA's remains an important area of investigation and a key objective of NHS Institution of Innovation and improvement.

## REFERENCES

- Gibson, PG, Powel H, Coughlin J, *et al*. Self management education and regular practitioner review for adults with asthma *Cochrane Database Syst Rev* 2003;(1): CD00117
- Hamilton, W., Round, A. & Sharp, D. Patient hospital and general practitioner characteristics associated with nonattendance: a cohort study. *British Journal of General Practice*. 2002; (314) 317–319.
- English Indices of Deprivation 2010, Department for Communities and Local governments March 2011, Available from [www.gov.uk/government/publications/english-indices-of-deprivation-2010](http://www.gov.uk/government/publications/english-indices-of-deprivation-2010)

# M9 THE PREVALANCE AND EFFECTS OF SMOKING AMONGST PATIENTS ATTENDING A DIFFICULT ASTHMA CLINIC

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**Introduction** The proportion of asthmatics that smoke is no different to that in the general population<sup>1,2</sup>. In patients with asthma, smoking has been associated with decline in pulmonary function, poor symptom control and reduced quality of life.

**Objectives** To evaluate the differences in lung function, number of asthma admissions in the previous year, asthma control, quality of life and treatment between non-smokers, ex-smokers and current smokers attending an asthma clinic. **Methods:** Retrospective study of 92 patients from a dedicated asthma clinic. Patients

Abstract M9 Table 1.

	Non-Smoker (n = 66)	Ex-Smoker (n = 17)	Current Smoker (n = 9)	ANOVA / Chi-squared test
FEV1	2.3 ± 0.1	2.0 ± 0.2	1.8 ± 0.2	F (2, 89) = 1.83, p = 0.17
FEV1%	85.3 ± 2.7	79.1 ± 5.8	66.5 ± 6.7	F (2, 89) = 3.14, p = 0.048
FVC	3.2 ± 0.1	3.0 ± 0.2	3.1 ± 0.3	F (2, 89) = 0.45, p = 0.64
FVC%	100.9 ± 2.6	94.9 ± 5.8	99.4 ± 5.8	F (2, 89) = 0.55, p = 0.58
FEV1/FVC ratio	71.8 ± 1.3	68.7 ± 3.1	59.2 ± 4.8	F (2, 89) = 5.00, p = 0.009
Number of hospital admissions with asthma in the preceeding year	1.0 ± 0.1	1.2 ± 0.4	1.2 ± 0.4	χ <sup>2</sup> = 13.1, df = 12, p = 0.36
AQLQ score	3.8 ± 0.2	3.4 ± 0.3	3.8 ± 0.5	χ <sup>2</sup> = 79.3, df = 98, p = 0.92
ACT score	13.6 ± 0.7	12.5 ± 1.0	11.1 ± 1.9	χ <sup>2</sup> = 38.2, df = 40, p = 0.55
BTS step in Asthma Management	3.8 ± 0.1	3.6 ± 0.2	3.4 ± 0.3	χ <sup>2</sup> = 10.3, df = 8, p = 0.25