

Successful contact was made with 112 patients; 50 then attended clinic. Contact was unsuccessful for 212 patients; 59 then attended clinic. Due to a lack of contact details, no contact was attempted in 133 patients; 31 then attended clinic subsequently. The relative increase in clinic attendance following contact was 1.95 when compared to the no contact group, and 1.6 compared to the unsuccessful contact group. Unsuccessful contact produced a relative increase of 1.2 compared to no attempted contact.

Abstract P246 Table 1

Group	Number of patients	Number who attended clinic subsequently	Percent of group that attended clinic subsequently
Total DNAs	457	140	31%
No contact	133	31	23%
Unsuccessful contact (attempted)	212	59	28%
Successful contact	112	50	45%

Conclusion Telephoning patients following a missed asthma clinic appointment is relatively resource intensive method of doubling clinic attendance. In the unsuccessful contact group, telephone calls were frequently not answered or were voicemail messages were not responded to. Yet there does appear to be a small benefit in attendance rates in this group compared to the no contact group. Because the groups were not randomised confounding factors may be present. Services that provide prospective reminders and perhaps use a free text service may be more effective and less labour intensive.

REFERENCE

- 1 McDonough B, Mault S. Non-attendance at a difficult asthma clinic. *Nursing Times* 2013;109(16):2–14

P247 THE PREVALENCE OF ASTHMA AND LEVEL OF TREATMENT IN CURRENT OR FORMER HEROIN SMOKERS

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Introduction We have reported an association between heroin smoking and early onset severe COPD/emphysema and from this screening study reported a COPD prevalence of approximately one third in heroin smokers attending a community drug centre. However, respiratory symptoms were common in people who did not have COPD and a previous report showed a high level of wheeze and bronchial hyper-responsiveness in opiate smokers/insufflators. Therefore, we examined our cohort to determine asthma prevalence and level of symptoms and treatment in this group.

Methods Current and former heroin smokers were recruited from a community-based drug service in Merseyside and completed spirometry with reversibility testing, MRC and CAT score and smoking, drug use, health and treatment questionnaires. They were not selected because of the presence of symptoms. Asthma was defined by either airflow obstruction that normalised with bronchodilation or airflow obstruction with an FEV1 that improved by $\geq 9\%$ with bronchodilation (7 subjects), or a

diagnosis of asthma before age 25 or before the subject had smoked heroin for 2 years (28 subjects).

Results 107 heroin smokers completed the study, the majority of whom had also smoked cigarettes, cannabis and crack. 35/107 (33%) met our diagnosis of asthma and we compared them with 42 heroin smokers with neither COPD nor asthma. The asthma subjects had a significantly lower mean FEV1 (3.26 L vs 3.73 L and 83% vs 97% predicted) and FEV1/FVC (0.71 vs 0.81). Mean age was 42 years and duration of cigarette, cannabis and crack smoking was similar as were MRC and CAT scores. Symptoms were very common in the asthma group – cough 23 (66%), wheeze 23 (66%) and breathlessness 26 (74%) but this was similar to the non-asthmatics. Only 11 (31%) were prescribed short-acting beta-agonists and/or inhaled steroids and only 2 (6%) a long-acting beta agonist despite 32 (92%) having a prior diagnosis of asthma.

Conclusions In an unselected group of current/former heroin smokers the prevalence of asthma was high at 33% and similar to the number diagnosed with COPD. Further detailed assessment of this cohort may be valuable and different methods of engaging with this undertreated and hard-to-reach group worthy of examination.

P248 SELF-REPORTED ACTIVITY LEVELS, BARRIERS AND FACILITATORS TO EXERCISE IN SEVERE ASTHMA

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Introduction and aim The association between physical inactivity and increased morbidity is well documented.¹ It is widely recognised that patients with respiratory disease often have decreased exercise capacity, and therefore may be at increased risk of co-morbidities such as cardiovascular disease, depression and obesity. The latter have been found to be highly prevalent within severe asthma populations.

In recent years there has been a greater emphasis placed on co-production and service user involvement in shaping interventions for patients with chronic diseases.² The aim of this study was to gather self-reported activity levels of severe asthma patients and to determine barriers and facilitators to exercise, in order to focus future interventions.

Method Fifty two patients (40 females) aged 18 to 65 years with a confirmed diagnosis of severe asthma following systematic multidisciplinary assessment took part in this study. Patients completed an activity questionnaire anonymously during their clinic visits. The questionnaire included a mixture of open and closed questions that assessed the level and attitudes to physical activities and exercise.

Results 48/51 (94%) of respondents rated themselves as less active than their peers, and 21/49 (43%) did not participate in any exercise. There was a strong theme of fear of exercise induced exacerbation and breathlessness in 21/52 (40%) of patients, with 21/52 (40%) reporting feeling unsafe to exercise, and 33/52 (63%) reporting exercise induced worsening of their asthma symptoms. 45/52 (87%) wanted to become more active. Patients reported a strong preference for exercising alone or with a health professional present as opposed to group activities or classes. Swimming and walking were the activities patients were most likely to show an interest in.

Poster sessions

Conclusion This data suggests the main barrier to increasing physical exercise in severe asthma was fear/anxiety of worsening asthma symptoms particularly breathlessness. More research is required to investigate the relationship between this fear of exercise and objective measures of asthma worsening.

REFERENCES

- 1 Warburton DE, Nicol CW, Bredin SS. Health benefits of physical activity: the evidence. *CMAJ* 2006;174:801–809
- 2 National Voices. *Policy position on coordinated care* [Online]. Available at: http://www.nationalvoices.org.uk/sites/www.nationalvoices.org.uk/files/policy_position_coordinated_care_v.final_.pdf, 2012

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LONGITUDINAL EVALUATION OF PHYSICAL ACTIVITY IMPAIRMENT USING THE ASTHMA CONTROL QUESTIONNAIRE (ACQ) IN SEVERE ASTHMA

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Background and objective Patients with severe asthma remain highly symptomatic despite high dose anti-inflammatory treatment. Level of asthma control is often assessed in the clinical setting with the asthma control questionnaire (ACQ). Separate components of the ACQ focus on different aspects of control. A high score on the third question (Q3) demonstrates activity limitations and may be caused by factors other than asthma such as physical deconditioning, concomitant cardiac disease and dysfunctional breathing patterns, leading to an overestimation of the severity of asthma. This could potentially lead to overtreatment. The aim of this study was to determine whether patients with severe asthma had a continuously high ACQ score, predominated by the third question despite treatment.

Methods In a group of severe asthma patients, referred to the Royal Brompton hospital in London, UK, an evaluation of ACQ as monitoring tool was performed from May to July 2015, at an index clinic (v3) and two previous attendances (v1–2). The patients suffered from severe asthma (step 4 or 5 BTS/SIGN guideline treatment) and change in ACQ score over time (total and Q3) was compared with other measures of asthma severity such as medication burden and lung function.

Results Forty three patients ($n = 27$ females, 61.4%) of mean (SD) age: 56 (11) years were included. The total ACQ score (median (range)) at index was 2.67 (0.17–5.50), the ACQ score on Q3 was 3.00 (0.00–6.00) and mean (SD) FEV₁ percent of predicted was 61.9 (± 23.78). The total ACQ score was lower at index visit than the first visit (-0.17 (-1.83–1.50; $p = 0.041$). A change in ACQ score in Q5 was found ($p = 0.019$), whereas Q3 was unchanged. A change in FEV₁ percent predicted was -0.62 (± 12.11). A correlation between FEV₁ percent predicted and both total ACQ score ($p < 0.01$) and Q3 ACQ score ($p < 0.01$) was found. There was no correlation between the changes in these three parameters.

Conclusion In patients with severe asthma there is a significant improvement in total ACQ score over three visits, but no improvement in exercise induced symptoms (Q3). This can be correlated with the fact that Q3 can reflect other symptoms than asthma.

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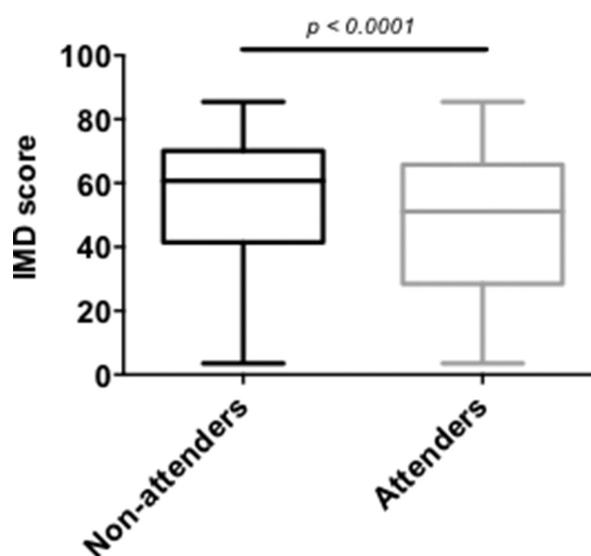
CORRELATION BETWEEN ATTENDANCE RATES AND SOCIOECONOMIC DEPRIVATION AT A DIFFICULT ASTHMA CLINIC IN A LARGE INNER CITY TEACHING HOSPITAL

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Introduction and objectives Missed clinic appointments are a huge financial burden on the NHS, with an average of 6.9 million outpatient appointments being missed each year.¹ The difficult asthma clinic at our inner city hospital is no exception to this trend. Many factors are likely to contribute to missed appointments, which can be summarised in with in socioeconomic deprivation indices. We wanted to confirm whether there is an association between missed appointments and socio-economic deprivation. We hypothesised that non-attenders lived in areas with worse deprivation scores.

Method We compared deprivation scores of English postcodes of clinic attenders and non-attenders of a ‘difficult asthma clinic’ between 2011–2014 inclusive. Indices of multiple deprivation scores were using census related data and Townsend Index via UK data service ©University of Essex and University of Manchester. This provides a validated, relative measure of deprivation across small localities in England to enable comparison. A higher score represents an area with worse socio-economic deprivation, maximum score = 100. Mann-Whitney two-tailed tests to compare non-paired non-parametric data were performed in Prism version 6 (GraphPad).



Line at median with interquartile range and whiskers demonstrating 95% CI

Abstract P250 Figure 1 Indices of multiple deprivation Non-attenders and Attenders at a Difficult Asthma Clinic between 2011–2014

Results The median deprivation score of postcodes of non-attenders ($n = 458$) was 60.69, whereas for attenders it was 51.12 ($n = 505$), with a p value of <0.0001 .

Conclusion These results strongly suggest socioeconomic deprivation has a negative impact on attendance rates at this specific