

**ABI018: Can asthma liaison nurses reduce unscheduled care in a deprived multiethnic population? ELECTRA: the East London controlled trial for high-risk asthma** *Prim Care Respir* 2002 **01(2):6**

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**Objective:** To determine whether asthma liaison nurses reduce unscheduled care for asthma in a deprived multiethnic population

**Design:** Cluster randomised control trial comparing liaison nurse intervention versus best usual practice

**Setting:** 44 general practices in Tower Hamlets, east London

**Participant:** 324 adults and children with asthma recruited after hospital admission or accident and emergency attendance

**Intervention:** Intervention practices received two educational visits from liaison nurses to promote care of high-risk patients. Participants from intervention practices received structured self-management education from a liaison nurse. Control practices received one liaison nurse visit to discuss standard asthma guidelines. Participants from control practices received an inhaler technique check

**Main outcome measures:** Participants free of unscheduled care; frequency of unscheduled care; time to first unscheduled contact; frequency of review; time to first review

**Result:** 450% of participants were south Asian, 34% white and 16% other ethnicities. Primary outcome data was available for 319/320 (98%) participants. There were no significant differences in percentage of participants free of unscheduled care [57% intervention vs 50% control] or in frequency of unscheduled care between groups (1.24 vs 1.46 contacts/pt/yr). Time to first unscheduled contact did not differ between groups. Participants from intervention practices were reviewed earlier in primary care ( $P=0.014$ ). Frequency of review did not differ between groups.

**Conclusion:** Asthma liaison nurse intervention did not reduce unscheduled care in a deprived multiethnic population, but did promote earlier review. Possible reasons for the failure to reduce unscheduled care were explored in a parallel qualitative study

**Key word:** Asthma liaison nurse, ethnicity, deprivation, primary care

**ABI019 Use of inhalation corticosteroids (ICS) in children with asthma in general practice.** *Prim Care Respir* 2002 **11(2)** 60

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**Background:** To prevent airway remodelling and the development of irreversible airway obstruction, inhaled corticosteroids (ICS) should be introduced in an early phase of the disease. Dutch guidelines recommend ICS for children with moderate to severe asthma

**Aim of the study:** To evaluate the use of ICS in relation to the severity of asthma

**Method:** We evaluated asthma symptoms during 2 weeks, bronchial hyper-responsiveness (BHR), and the use of ICS in 74 children (age 7-16) who were previously prescribed anti asthma medication in general practice. BHR was measured by using a Methacholine inhalation challenge test. Doubling doses of methacholine, beginning with 0.03 mg to a maximum of 1.8 mg (cumulated dose max. 3.6 mg), were administered with the Jeager Masterscope, Aerosol Provocation System (APS), medic aid side stream nebulizer. The degree of bronchial responsiveness was expressed as a PD<sub>20</sub>, a provocation dose that induces a 20% fall in FE<sub>1</sub> from baseline.

**Result:** Thirty-eight children (51%) reported asthma symptoms on four or more days in their 2 weekly diary. Twenty-seven of these children (71%) had moderate to severe BHR (PD<sub>20</sub> <300 μg). Two of these children did not use ICS at all, fourteen used ICS intermittent only eleven used ICS as a maintenance therapy.

**Conclusion:** Our data indicate undertreatment of asthma in children. Health care providers, patients and parents should be more aware of the importance of maintenance therapy of ICS. There seems to be considerable room for improvement

**(ABI020: Validation of a single concentration inhalation provocation test (SCIPT) in children.** *Prim Care Respir* 2002 **11(2)** 60

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**Background:** A new method to assess bronchial responsiveness (BR) using a single concentration methacholine has already been validated in adults with asthma. Since the geometrical dimensions of the airways in children are different, and deposition of the inhaled aerosol differs in children, results from studies in adults cannot simply be extrapolated to children.

**Aim of the study:** validation of a single-concentration inhalation provocation method in children.

**Method:** Twenty-three subjects performed three methacholine inhalation challenge tests. The first two challenges according to method A: doubling doses, beginning with 0.03 mg to a maximum of 1.8 mg (maximal cumulated dose 3.6 mg), were administered with the Jeager Masterscope, Aerosol Provocation System (APS), medic aid sidestream nebulizer. The third challenge according to method B: doubling doses beginning with 0.002mg to a maximum of 1.8mg (maximal cumulated dose 3.5 mg), were administered with a Devillbiss 646 nebulizer. The degree of BR is expressed as a PD<sub>20</sub>. A difference of <1.5 dose step is assumed to be due to intra individual variation

**Result:** ILCC between method A and B is 0.80 and between both tests according to method A 0.91. Comparing challenges 1 and 2, and 2 and 3 showed good agreement according to Bland and Altman<sup>2</sup>

**Conclusion:** This single concentration method is an accurate method of measuring BR in children

**Reference:**

1.Kobrich R, *et al* abstract ERS 1999.

2.Bland J.M., Altman D.G. *Lancet* 1986 **i**:307-310