

P52 PRISMS: A SYSTEMATIC REVIEW OF THE MRC 'PHASE IV' EVIDENCE ON IMPLEMENTING ASTHMA SELF-MANAGEMENT

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Aim Asthma self-management is effective in clinical trials, widely recommended by guidelines but poorly implemented. We aimed to synthesise the evidence from implementation studies of asthma self-management support interventions to inform delivery in routine clinical practice.

Methods Using systematic review methodology (Cochrane Handbook) we searched eight electronic databases, performed snowball and manual searches, and searched research databases for unpublished and on-going work. We included studies with a range of methodologies, and which evaluated the introduction of an asthma self-management support intervention in routine clinical practice. We assessed included papers for quality (Downs and Black), extracted and synthesised data on process (e.g. number of action plans issued) and clinical outcomes (e.g. measures of asthma control, unscheduled healthcare). Narrative synthesis used the whole systems approach as a framework. [PROSPERO registration: CRD42012002898].

Results We included 18 studies (7 randomised trials, 8 longitudinal database studies, 3 uncontrolled studies) from primary, secondary, community and managed care settings in six countries. Interventions which explicitly addressed patient, professional and organisational factors (n = 7 studies) showed the most consistent improvement in both process and clinical outcomes. Targeting professionals (n = 2 studies) improved process but not clinical outcomes. Targeting patients (n = 6 studies) had inconsistent impact on process/clinical outcomes. Targeting the organisation (n = 3 studies) improved process, and had a small effect on clinical outcomes. Authors highlighted the importance of a healthcare system committed to supporting self-management, skills training for professionals, patient education programmes supported by regular reviews, and on-going evaluation of the implementation process.

Conclusion Effective interventions were complex: actively engaging patients, and training and motivating professionals within the context of an organisation which prioritised supported self-management. Commissioners and providers of services for people with asthma should consider how they can promote a culture of supporting self-management as a normal, expected, monitored and remunerated aspect of the provision of care.

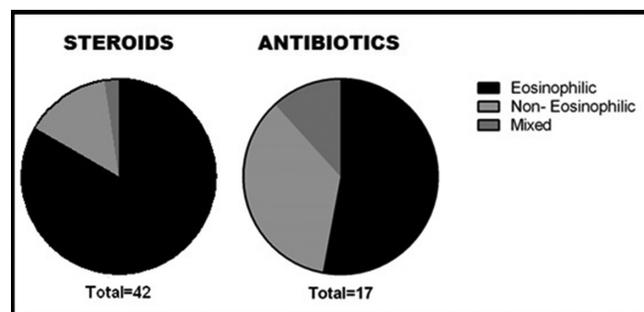
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P53 MANCHESTER DESERT ISLAND QUESTION

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Objectives To determine if specific clinical questions could reliably predict the ultimate inflammatory phenotype of patients



Abstract P53 Figure 1 Pie charts to show the different phenotypes relating to the answer of the desert island question

attending a severe asthma service. The severe asthma clinic at University Hospital of South Manchester now routinely ask the desert island question (DIQ)... "If you were on a desert island and could only have steroids or antibiotics which would you choose?"

Background It is widely accepted that asthma is the result of complex pathological processes giving rise to a variety of different phenotypes, including eosinophilic and non-eosinophilic inflammatory patterns. Phenotype is determined by investigations e.g. baseline blood/sputum eosinophil level and clinical response to treatments including steroid augmentation/withdrawal. Investigations include antibody status to Haemophilus Influenza and Streptococcus Pneumonia.

Methods New patients referred to the severe asthma service were asked the DIQ during their first appointment, prior to any investigations. We collected data from first clinic letters and case notes. Data collected included DIQ answer, phenotype, additional diagnoses, historical steroid and antibiotic use, sputum data and all asthma treatments trialed.

Results A total of 59 patients were identified. 71% answered steroids and 29% answered antibiotics. Of those that answered steroids, 83% had eosinophilic asthma, 14% had non-eosinophilic asthma. The breakdown of the different phenotypes within the different answer groups is illustrated in Figure 1. The positive predictive value (PPV) of the answer "steroids" was 86% and "antibiotics" 47% ($\chi^2=7.182$ p = <0.01). 67% of the "antibiotic" answers and 38% of the "steroid" answers were found to be antibody deficient (Haemophilus Influenza and/or Streptococcus Pneumonia). 30% who answered "antibiotics" were on maintenance steroids compared to 41% of patients who answered "steroids".

Conclusion This small pragmatic study has shown that the answer "steroids" to the DIQ has a high PPV for eosinophilic airway inflammation. The "antibiotic" response is much less useful in predicting inflammatory phenotype, but it does identify a high likelihood of antibody deficiency.

P54 WHICH SECONDARY CARE ASTHMA PATIENTS ARE MOST LIKELY TO OVERESTIMATE THEIR CONTROL? A CROSS-SECTIONAL STUDY

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Introduction Asthma is a global health issue affecting 300 million people worldwide; with increasing prevalence and morbidity and preventable mortality. Despite advances in management the number of asthma related deaths has not improved.