Diagnosing asthma in UK primary care: A qualitative study of current practices and challenges

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Clinical Research Results

Aim: Over-diagnosis and under-diagnosis of asthma are common. Under-diagnosis can lead to avoidable morbidity and mortality, while over-diagnosis exposes patients to unnecessary side-effects of treatment. This study aimed to explore the diagnostic approach and challenges faced by general practitioners (GPs) and practice nurses when making a diagnosis of asthma.

Methods: GPs and nurses working in NHS Lothian, Scotland were interviewed using semi-structured qualitative interviews. Participants were asked how they made a diagnosis of asthma, the challenges they faced when making a diagnosis of asthma and their perspectives on asthma misdiagnosis. Participants were also asked to comment specifically on ideas to improve asthma diagnosis including a prediction tool to determine the probability of asthma during consultations and provision of diagnostic hubs for patients to receive all necessary assessments.

Results: 10 GPs and 5 nurses were interviewed. Participants used heuristic approaches to assess the clinical probability of asthma and then decide what tests to do, selecting peak expiratory flow measurements, spirometry and/or a trial of treatment. Challenges in the diagnostic assessment of asthma were time pressures, the variable nature of asthma and overlapping clinical features of asthma with other conditions such as chronic obstructive pulmonary disease in adults and viral illnesses in children.

To improve diagnostic decision-making, participants suggested regular educational opportunities and better diagnostic tools. The idea of a prediction tool to guide the diagnosis of asthma was appealing to the nurses interviewed, however, most GPs felt that their clinical judgement would be preferable. Participants felt diagnostic hubs would provide greater availability of tests. However, some raised concerns about funding and deskilling primary care practitioners.

Conclusions: Clinical judgement of the probability of asthma was fundamental in the diagnostic process. Tests (including trial of treatment) to confirm or refute the working diagnosis were chosen based on probability.