EDITORIAL

Guideline-defined asthma control: a challenge for primary care

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Primary care health professionals are faced with many challenges, not least of which are related to the complexities involved in diagnosing, investigating and managing asthma patients. This is further complicated by the fact that general practitioners (GPs), in their daily routine, are faced with patients presenting with hundreds of different types of medical, social and general problems, as opposed to specialist colleagues who deal with a relatively limited number of medical conditions. A typical consultation in general practice involves identifying the patient's presenting problem, hypothesising possible aetiologies, examination, performing and arranging investigations, decisions on further management, addressing preventative medical issues (such as immunisations, cervical cytology and advice on lifestyle) and sometimes referral for specialist advice or care, all within time slots of 6–12 mins. It is therefore not surprising, though still shocking, that asthma diagnosis, reduction of symptoms through treatment and management of severely ill patients, who subsequently die from asthma [1], have been and continue to be major challenges for those working in primary care.

Given the varying circumstances and working conditions experienced by GPs, application, implementation and adherence to guidelines in practice, during the consultation, provide further challenges. This subject has been researched and discussed extensively in the last two decades. NEVILLE et al. [2] and later PINNOCK et al. [3] demonstrated a clear lack of adherence in the 1990s to the British Guidelines for asthma care [4, 5], both by primary and secondary care colleagues. More recently, in 2005–2006, 15 Scottish general practices participated in an evaluation study [6] implementing three recommendations of the recent British Guidelines on the Management of Asthma [7]. While the GPs' awareness of the recommendations was fairly good, their implementation of one of these in particular was disappointing: only 58 (23%) out of 254 of the patients surveyed reported having been given a written asthma action plan. Furthermore, implementation of key guideline recommendations was variable, both within and between practices. Some authors have suggested that shared patient goals may be a way of improving adherence to guidelines [8, 9]. This in itself is a wonderful aim; to include patients in determining acceptable outcomes. However, it presents yet another major challenge for GPs and primary care asthma nurses, particularly considering the time constraints faced by these individuals.

In the case of asthma care, current focus in the literature includes debate regarding "control" and "severity". A recent review by HUMBERT et al. [10] encapsulated the issues. HUMBERT et al. [10] state that in the first National Heart, Lung and Blood Institute guidelines [11] the main emphasis in asthma care was on assessment of asthma severity, which was based on clinical features of treatment, indicating the underlying disease severity. The early Global Initiative for Asthma (GINA) Guidelines also included responsiveness to treatment [12]. Asthma control, in contrast, refers to the extent to which the manifestations of the disease are suppressed. This area has attracted so much interest that a joint American Thoracic Society (ATS)/European Respiratory Society (ERS) Task Force was set up and has recently concluded nearly 3 yrs of work (personal communication; D.R. Taylor, Otago Respiratory Research, Dunedin, New Zealand). Some of the Task Force conclusions were reported at the ATS meeting in San Francisco (CA, USA) in 2007.

Asthma control is a central focus of the updated version of the GINA Guidelines, in which clinicians are encouraged to concentrate on assessment of control, defined by symptoms, lung function and the presence or history of exacerbations [13]. The main question, of course, is whether guideline-defined asthma control is achievable. The Asthma Insights and Reality surveys of over 10,000 adults and children with asthma [14] revealed a shortfall in the current level of asthma control worldwide, compared with guideline-defined goals of asthma care. While the majority of patients can achieve control of their asthma under strict research study conditions, as demonstrated in the recent Gaining Optimal Asthma Control (GOAL) study, a significant minority cannot [15]. Furthermore, the level of control achieved and the time taken to do so depends upon the asthma measures utilised [16], with more time required to attain control using composite measures [17].

In the present issue of the *European Respiratory Journal*, CHAPMAN et al. [18] have tried to address the important question of achievable *versus* ideal aims for asthma treatment. Their study set out to obtain an unbiased assessment of asthma control by providing Canadian primary care physicians with questionnaires for their next 50 consecutive patients, all of whom had a previous "physician diagnosis" of asthma. After reading the answers to the questionnaires, the doctors indicated whether they believed their patients were controlled

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according to criteria from the previously provided national consensus guidelines. Some of the criteria for control were similar to but not the same as those of the current GINA Guidelines [13]. The primary care doctors then stated whether they would change the patient's medication and, if so, how they would change it. The authors' main conclusion was that the majority of asthma patients treated in primary care were ''uncontrolled''. They argue further that their methodology avoided bias towards the high proportion of patients with uncontrolled asthma, and contend that their survey is more reliable than general population-based telephone surveys [18], although this is debatable.

The fact that those surveyed were attending for medical reasons (albeit for routine checks in some cases) could have biased the results in favour of patients attending because they were suffering in some way, possibly from underlying symptoms of asthma. There is evidence in the literature that shows poor compliance and attendance at routine follow-up for asthma, resulting in studies trying to overcome this in various ways, including the use of telephone consultations [19–23]. Therefore, patients who consulted for ''routine asthma care'' could conceivably be attending because they are concerned about their asthma. Similarly, patients consulting for ''other reasons than asthma'' might have been motivated to attend due to worries about their underlying asthma. Further possible bias may have been inadvertently introduced through the use of an instrument that was not validated as such, and it might have been better to use a validated composite measure of asthma control. It is of concern that physicians over-estimated their patients' levels of control despite being provided with copies of the national guidelines at the start of the study; they were also discordant with guideline classification of control in 31% of uncontrolled patients.

However, on a more positive note, physicians' statements (in the questionnaires) in the study by CHAPMAN et al. [18] did demonstrate that they were more likely to intervene when the patient's asthma was uncontrolled, particularly by adjusting medication by increasing prescriptions for inhaled corticoster-oids alone or in combination with long-acting β-agonist bronchodilators, in keeping with a current popular trend towards attempts to reduce exacerbations [24]. An inexplicable negative association with asthma control was found between demonstrating inhaler technique and performing spirometry; this clearly needs further research.

No GP can know everything about medicine, and few of us can keep up to date in the many disease areas we care for, and this is one of the principles underpinning guideline development. However, evidence of the lack of health professionals' adherence to guidelines persists; perhaps we need to revisit earlier studies such as that by CABANA et al. [25] to understand and counter the barriers to physician adherence to clinical guidelines.

Keeping up to date is a major problem for all health professionals. The volume of workload, coupled with the constant flow of new research developments needing to be incorporated and applied in general practice, the fear of litigation and the ongoing barrage of political ''interference'', further complicate matters. Interpreting and applying research

evidence is a further challenge for GPs. Most pharmaceutical company-sponsored studies utilise group mean data to summarise and compare the effects of one treatment with another; as a result, the final emphasis rests upon those patients who do well, usually supporting a conclusion in favour of a particular drug formulation. Sadly, the significant minority who do not improve or achieve particular study outcomes are often forgotten, as is the fact that asthma is a heterogeneous condition with a wide spectrum of response to any one particular intervention or therapy. It may be that by emphasising, through extrapolation, the treatments favoured in these studies, we are creating a population of ''poorly controlled patients'', in fact representative of those who were shown to be nonresponsive in the very trials used to promote therapy approaches.

The study by CHAPMAN et al. [18] is thought provoking. The new Global Initiative for Asthma Guidelines [13], with their focus on assessment of asthma control, offer us a tool we can use to take this work forward in identifying and managing our uncontrolled patients.

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