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Asthma Management Guidelines: The issue of implementation

Since their initial development in the late 1980's in Australia and New Zealand [1] and Canada [2], dozens of different versions of Asthma Management Guidelines have been published worldwide. Advances have been made in their development, and most guidelines are now evidence-based [3] and/or global in their outlook [4]. The Global Initiative for Asthma (GINA) guidelines [4] are the most widely known and disseminated, and are updated yearly on the GINA web-site with the most up-to-date, evidence-based, recommendations on asthma management. Access to these guidelines is relatively easy and inexpensive in most countries: they are thoughtful and appropriate, and recommend the use of very effective medications available in many (but not all countries) at a reasonable cost.

Despite this tremendous progress in guideline development and the wide availability of the most effective medication for asthma (inhaled corticosteroids), the depressing evidence is that guideline recommendations are not being widely implemented. It does not matter whether the information is collected in surveys [5] or prospective clinical trials [6], or is collected in the developed [5] or the developing [7] world, the news is consistently bad. Asthma control is not being achieved by most asthmatic patients, and while asthma death rates and hospitalizations are declining in many countries where this has been measured [8–10], there is much less compelling evidence that asthma morbidity has declined, as measured by days with symptoms, numbers of exacerbations, having to miss school or work, or limitation in daily activities.

Most asthma is managed in primary care practice, and the statistics on asthma morbidity suggest that the recommendations presented in most guidelines, particularly about the remarkable efficacy of inhaled corticosteroids (ICS), are not being as widely implemented as they should be by primary care physicians. There are, of course, other reasons for the persistence of high levels of asthma morbidity, particularly the lack of adherence with ICS use [11]. However, it is likely that the understanding demonstrated by the managing physician, and the belief and conviction with which he or she communicates the evidence for efficacy of treatment according to guideline recommendations, has an important effect on adherence.

The reasons for the lack of guideline implementation in primary care practice (or, indeed, many other levels of practice) are complex. They include: the difficulties in designing effective implementation strategies (a problem for all treatment guidelines); the fact that physicians are inundated with bulky indigestible guidelines for the management of various diseases; and that most guidelines have not been developed by primary care physicians, with their own type of practice at the forefront of the development process.

The problem regarding the lack of asthma management guidelines developed by, and for, primary care physicians has now been addressed in this issue of the Primary Care Respiratory Journal [12]. These guidelines, developed by the International Primary Care Respiratory Group (IPCRG), present evidence-based recommendations which are comprehensive but succinct and which

are useful for asthmatic patients of all ages, including pre-school children who present a large burden of respiratory illness for the primary care physician and in whom asthma is difficult to diagnose accurately. The IPCRG Guidelines are consistent with the goals and management plans of GINA. The fact that they have been developed by a group largely consisting of primary care physicians, and with the clear intent of having recommendations applicable to all primary health care systems, means that they may be more accepted within the primary care community. In addition, the IPCRG guidelines will be widely disseminated.

A major problem, however, still remains with regards to the implementation of these IPCRG guidelines by primary care practitioners. The challenge for the IPCRG is to ensure that the recommendations so clearly described in these guidelines become the standard of care for primary care management of asthma worldwide. Whilst the development of these guidelines took almost three years, this is, in many ways, the easiest part of having relevant guidelines for primary care physicians. Implementation is a tougher proposition and will take innovation, energy and enthusiasm; yet it will be worth every ounce of effort if there is even a small improvement in asthma management, with associated reduction in asthma morbidity.

However, this challenge also provides an important research opportunity - to demonstrate that the IPCRG guidelines and their implementation do, in fact, make a difference. There is a major deficiency in research in this important area, and well-designed studies, which provide convincing information about the value of developing and implementing guidelines for primary care physicians, would be an invaluable additional asset.

References

- [1] Woolcock AJ, Rubinfeld A, Seale P. The Australian asthma management plan. *Med J Aust* 1989;151:650–3.
- [2] Hargreave FE, Dolovich J, Newhouse MT, O'Byrne PM. The assessment and treatment of asthma: a conference report. *J Allergy Clin Immunol* 1990;85:1098–111.
- [3] Lemiere C, Bai TR, Balter M, Bayliff C, Becker AB, Boulet L-P, et al. Adult Asthma Consensus Guidelines Update 2003. *Can Respir J* 2004;11:A9–18.
- [4] Global Strategy for Asthma Management and Prevention. NIH Publication No 02-3659, 2004.
- [5] Rabe KF, Vermeire PA, Soriano JB, Maier WC. Clinical management of asthma in 1999: the asthma insights and reality in Europe (AIRE) study. *Eur Respir J* 2000;16: 802–7.
- [6] O'Byrne PM, Cuddy L, Taylor DW, Birch S, Morris J, Syrotiuk J. The clinical efficacy and cost benefit of inhaled corticosteroids as therapy in patients with mild asthma in primary care practice. *Can Resp J* 1996;3:169–75.
- [7] Rabe KF, Adachi M, Lai CK, Soriano JB, Vermeire PA, Weiss KB, et al. Worldwide severity and control of asthma in children and adults: the global asthma insights and reality surveys. *J Allergy Clin Immunol* 2004;114: 40–7.
- [8] Sly RM. Continuing decreases in asthma mortality in the United States. *Annals of Allergy Asthma & Immunology* 2004;92:313–8.
- [9] Soler M, Chatenoud L, Negri E, Vecchia CL. Trends in asthma mortality in Italy and Spain, 1980–1996. *European Journal of Epidemiology* 2001;17:545–9.
- [10] Ito Y, Tamakoshi A, Wakai K, Takagi K, Yamaki K, Ohno Y. Trends in asthma mortality in Japan. *Journal of Asthma* 2002;39:633–9.
- [11] Rand CS. Non-adherence with asthma therapy: More than just forgetting. *J Pediatr* 2005;146:157–9.
- [12] van der Molen T, Ostrem A, Stallberg B, Stubbe Østergaard M, Singh RB. International Primary Care Respiratory Group (IPCRG) Guidelines: Management of Asthma. *Prim Care Resp J* 2006;15(1):35–47.

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