

Editorial

General practitioners' central role in management of asthma and allergic rhinitis

C. van Weel

Department of General Practice, Radboud University
Nijmegen Medical Centre, Nijmegen, the
Netherlands

Dr C. van Weel
Department of General Practice
Radboud University Nijmegen Medical Centre
PO Box 9101
6500 HB Nijmegen
the Netherlands

Accepted for publication 20 December 2007

Asthma and allergic rhinitis are common health problems in communities around the world (1), and in respect of adolescents and young adults they will often be the most frequently encountered chronic conditions (2). This results in a substantial impact on society (3), in terms of suffering, use of healthcare services and socio-economic resources. International multidisciplinary action is co-ordinating to respond to this impact (4–6). As primary care is the preferred focus in responding to communities' health needs (7), general practitioners (GP) and other professionals in the primary care setting have a key role to play in this response.

Essential for the quality of the response is to organize knowledge, skills, technology and facilities as much as possible in primary care in local communities. This issue puts this theory into practice: it presents two guidelines – for allergic rhinitis (8) and asthma (9) – that review the international evidence (4, 5) and expertise in the context of primary care. This will help realize the objectives of the Global Alliance of Respiratory Diseases (GARD) (6), an international collaboration under the World Health Organization. The World Organization of Family Doctors (Wonca) (10), in collaboration with the International Primary Care Respiratory Group (11) initiated this, but its true importance is in the interdisciplinary approach (6), directed to strengthen self-care whenever possible, ensure high quality professional support accessible in the community and organize specialist facilities as a back-up for those who need more intensive diagnosis and treatment.

As these guidelines have the objective to strengthen primary care, it is important to specify the conditions under which general practice operates. As the point of first contact, a substantial part of the work of GPs is directed at diagnosis of undifferentiated symptoms. The evidence base of diagnostic reasoning is in general limited and as a consequence underrepresented in guidelines, and this is also true for allergic rhinitis (12) and asthma.

The emphasis of guidelines is on therapeutic performance, but this should not distract us from the key importance of the diagnostic interpretation of signs and symptoms. On a yearly basis, a GP may diagnose more than 4000 different new episodes of illness, in response to patients presenting undifferentiated health problems, with the respiratory tract accountable for about 30% of these episodes (13, 14). As allergic rhinitis and asthma represent only a small part of all these episodes, it emphasizes again that guidelines focusing on these two diseases – relevant and appropriate as they are – will only be able to partly guide GPs' performance.

The diagnostic context of primary care is characterized by the fact that only a small part of the patients (about 10%) with health problems consult their GP – the iceberg of symptoms (15). For allergic rhinitis about the same proportions between experienced and presented symptoms have been found (12). Directly related to the diagnostic interpretation of signs and symptoms, is the clarification of why the patient is actually presenting: understanding the patient as much as the illness. There is a variation of patients' reasons to consult and present

health problems: to seek symptom relief, because of worries and anxiety of severe morbidity, to receive clarification and reassurance, for certification of their fitness or otherwise to work. Consulting the GP does in no way imply that the GP is expected to take-over the (entire) treatment, and understanding patients' expectations is critical in the pursuit of state of the art management. This stresses the fact that, in daily practice, disease-directed guidelines have to be integrated in a patient-centered approach, and not the other way round, and allergic rhinitis and asthma are no exceptions to this. The value of the guidelines is in adding knowledge and skills to an otherwise strong comprehensive and integrated primary care, and it is the responsibility for Wonca and ICPRC to secure this vital basis (16). Communication skills and the ability of active listening (17), knowledge of patients' and their families' medical life history, values and expectations are the necessary skills to direct diagnostic and therapeutic interventions from this personalized basis. The two guidelines present, as a diagnostic tool, questionnaires for allergic rhinitis (8) and asthma (9). Their application marks one of the implications of the patient- or person-centered approach: although the diagnostic value of the questionnaires is undisputed, it would be an unacceptable corruption of the GP-patient encounter if the ticking-off of a questionnaire were to become the prime response to presented allergic rhinitis or asthma-like symptoms. The spontaneous presentation of the patient's story, supported by active listening and occasional prompting by the GP, will more often than not disclose the diagnosis, including the individual expectations. Questionnaires, like any other diagnostic test should only be turned to at a later stage, when there is still need for further clarification.

Next to the patient-centered approach of primary care is its community orientation, and this again influences the

actual use of the guidelines. Communities vary in their exposure to allergens and irritants – through the living environment and working conditions. Knowledge of the local environment enables GPs to specify their diagnostic and therapeutic interventions towards the local *a priori* chances. Allergic rhinitis and asthma occur in particular in adolescents and young adults. And as communities vary in their age-composition, this again is a factor that determines the *a priori* chances of allergic rhinitis and asthma, and the additional value of diagnostic testing.

A major limitation of international guidelines is posed by the differences in healthcare structure and consequent availability of diagnostic and therapeutic facilities. Although spirometry, allergy testing and inhaled corticosteroids are widely used in primary care, some countries' healthcare structure only makes it available after referral to specialist care, or in economically disadvantaged countries and regions these facilities may not be available at all. For that reason, these guidelines will have to be fine-tuned to national, regional and local circumstances. This is in fact the crucial step in the process of implementation and in itself presents an opportunity to foster local collaborative relations between GPs, other primary care providers and respiratory specialists.

And this leads us back to the importance of international, interdisciplinary collaboration of GARD (6). This is practical, in terms of making knowledge and skills available, but at the same time spelling-out the best response to the respiratory care needs of patients and populations. It advocates that this is best served by its integration in comprehensive primary care, directed at (i) fostering self-care in the community for all; (ii) diagnosis, treatment and support in primary care for most patients and (iii) specialized facilities available for those who need more intensive care.

References

1. Bauchau V, Durham SR. Prevalence and rate of diagnosis of allergic rhinitis in Europe. *Eur Respir* 2004;**24**:758–764.
2. The International Study of Asthma and Allergies in Childhood (ISAAC) Steering Committee. Worldwide variation in the prevalence of symptoms of asthma, allergic rhinoconjunctivitis, and atopic eczema: ISAAC. *Lancet* 1998;**351**:1225–1232.
3. Leynaert B, Neukirch C, Liard R, Bousquet J, Neukirch F. Quality of life in allergic rhinitis and asthma. a population-based study of young adults. *Am J Respir Crit Care Med* 2000;**162**:1391–1396.
4. Allergic Rhinitis and its Impact on Asthma ARIA. <http://www.whiar.org/>; accessed 6 February 2008.
5. The Global Initiative for Asthma GINA. <http://www.ginasthma.com/GuidelinesResources.asp?l1=2&l2=0> (accessed 12 November 2007).
6. Global Alliance against Chronic Respiratory Diseases GARD. <http://www.who.int/gard/en/> (accessed 12 November 2007).
7. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005;**83**:457–502.
8. Bousquet J, Reid J, van Weel C, Baena Cagnani C, Canonica GW, Demoly P et al. Allergic rhinitis management pocket reference 2008. *Allergy* 2008;**63**:990–996.
9. van Weel C, Bateman ED, Bousquet J, Reid J, Grouse L, Schermer T et al. Asthma management pocket reference 2008. *Allergy* 2008;**63**:997–1004.
10. World Organization of Family Doctors Wonca. <http://www.globalfamilydoctor.com> (accessed 12 November, 2007).
11. International Primary Care Respiratory Group IPCRG. <http://www.theipcr.org> (accessed 12 November 2007).

12. Ryan D, van Weel C, Bousquet J, Toskala E, Ahlstedt S, Palkonen S et al. Primary care: the cornerstone of diagnosis of allergic rhinitis. *Allergy* 2008;**63**:981–989.
13. van de Lisdonk EH, van den Bosch WHJM, Lagro-Janssen ALM (eds). *Ziekten in de huisartspraktijk*, 4th edn. Maarssen: Elsevier, 2003.
14. van Weel C. Longitudinal research and data collection in primary care. *Ann Fam Med* 2005;**3**(Suppl. 1): S46–S51.
15. van de Lisdonk EH. Perceived and presented morbidity in general practice. *Scand J Prim Health Care* 1989;**7**: 73–78.
16. The European definition of general practice/family medicine <http://www.woncaeurope.org/Web documents/European Definition of family medicine/Definition 2nd ed 2005.pdf> (accessed 12 November 2007).
17. McWhinney IR. *A Textbook of Family Medicine*. Oxford: Oxford University Press, 1989.