Asthma: Moving toward a global children's charter

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For more on the ***Lancet* asthma Commission** see *Lancet* 2018; **391:** 350–400

Most children with asthma should be easy to manage and achieve good disease control. However, the global quality of asthma diagnosis and its management in children is extremely variable, with consistently high numbers of hospital admissions, avoidable asthma deaths, poor engagement in care by families, and very high financial burdens accrued by health-care systems. There is little evidence that asthma management is improving as the years progress. Great global inequalities continue in both diagnosis and management, with a disproportionate number of children in low-income and middle-income countries with no access to or unable to receive appropriate care. *The Lancet* Clinical Commission, *After asthma: redefining airways diseases*, states that asthma is an umbrella term with differing presentations across the world.

In 2017, the GSK Children's Asthma Project was initiated to better understand the global issues around this disease. An independent advisory board was established to determine what improvements were needed. An independent scientific committee selected experts in children's asthma from all world regions, which comprised primary, secondary, and tertiary care specialists, teachers and trainers, patient representatives and colleagues working in international health organisations. The group has debated and agreed what main obstacles continue to prevent improvement in the global care of children with asthma. By addressing these issues, we believe families, health-care workers, researchers, policy makers, and governments can, together, improve asthma care through better education and training. The plan does not involve newer or more expensive medicines and could well result in substantial cost savings. We call on governments to affirm that every child with asthma, irrespective of where he or she lives, receives the essential standards of care as outlined below (panel).

The quality of asthma diagnosis in children is poor globally, particularly in young children. Overdiagnosis is common in Europe, Australasia, and North America. Elsewhere, underdiagnosis is common. Children have the right to accurate diagnosis by use of objective tests wherever possible, to ensure they can benefit from the available treatment.

All children with asthma need access to an inhaled short-acting β-agonist, an inhaled corticosteroid, oral prednisolone, a simple spacer device, and supplemental oxygen. These medications should be of low cost, of high quality, and easily accessible. Besides in low-income and middle-income countries, there are low-income and middle-income regions in high-income countries. Every child should have access to effective treatment for acute asthma attacks and for chronic symptom prevention for continued asthma control.

We must ensure appropriate engagement, collaboration, and training of children and families in their asthma care. All children and families have the right to receive developmentally appropriate information to understand their asthma and to know what triggers it and how to avoid those triggers. They need an asthma plan to manage their symptoms, if necessary. School teachers should be included in such training.

All countries must have a plan to train primary-care health workers in asthma diagnosis and protocol-driven management pathways. Asthma attack risk assessments need to be regularly undertaken. The height and weight of each child needs to be regularly recorded on a growth chart. Full immunisation, especially against influenza, should be recommended.

Indoor and outdoor pollution threatens lung development and future lung health, with serious long-term consequences, including worsening asthma. Every child should be protected from tobacco, e-cigarettes, biomass fuel, and excessive exposure to traffic and industrial pollutants. We call on all governments to take measures to prevent air pollution and to strengthen smoking cessation programmes especially those targeting women of childbearing age. Airway damage in childhood greatly increases the risk of chronic lung disease in adult life.

Non-response to prescribed treatment mandates referral to an asthma specialist. We call on all countries to implement training programmes to ensure sufficient numbers of trained asthma specialists.

The International Primary Care Respiratory Group is developing a programme, to be piloted in four countries during 2019, which will train selected primary-care professionals. They will then cascade their training to colleagues within each pilot country, with the aim of training and educating whole communities. Such training must be culturally appropriate. It must encompass schools, schoolteachers, and non-medical community workers. The programme will be monitored and audited. The plan is then to extend the programme to other countries worldwide.

Panel: Global asthma diagnosis and management in children—six essential requirements

- Early and accurate diagnosis for all
- Internationally acceptable standards of asthma management in every country
- Knowledge and skills to understand how to control symptoms
- A professional trained in asthma and in child health to monitor progress in each defined health area
- Clean air in every child's home and in their external environment
- The availability of specialist asthma care when needed

The high financial burden of asthma care can be substantially reduced by taking the above steps. We call for a global collaborative effort, including national governments and international organisations to recognise these needs and opportunities, which can improve care of children with asthma wherever they live in the world.

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