Task shifting: a common-sense approach in children with asthma?

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Over the last 9 months, the COVID-19 pandemic has been all consuming for virtually every country of the world; destroying lives, overwhelming health services and perplexing governments alike. Other medical disorders have taken a 'relative' back seat resulting in research and resources being diverted to best manage the devastating pandemic.

Asthma is a good example being the most common disorder seen in children worldwide but with a recent profile lower than previously, despite its continuing and significant morbidity. The Lancet Commission¹ has re-enforced our understanding that asthma is a spectrum of airway diseases often poorly diagnosed and frequently inadequately treated. In previous decades, it was believed to be a disease solely of temperate climate countries, but we now know its frequency and particularly its severity have been rapidly climbing in low-income and middle-income countries. In sub-Saharan Africa (sSA), urbanisation, poverty, air pollution and lack of resources have all been implicated as causative factors. In a systematic review, 10%-20% of all children in sSA were reported to have symptomatic or severe asthma.² This in countries where there may be only 2 trained doctors per 100 000 population. Even in high-income countries, it is unlikely that doctors or nurses, fully trained in asthma care in children, are available in sufficient numbers to effectively manage so common a disorder but particularly in sSA new methods of management are urgently required to prevent the inevitable continuing morbidity and mortality. Rylance et al present such a plan. They ask the question 'Can an enhanced asthma care package undertaken by trained lay-persons improve asthma management in children in a resource-limited setting in Malawi?"

Given the competing resource demands of other diseases in children in sSA (tuberculosis, HIV, bacterial sepsis, etc), it seems unlikely major levels of funding could be diverted to their asthma care but instituting innovative training of volunteers may be a novel way forward. We do know asthma is

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inadequately diagnosed universally. It differs significantly between countries and world areas depending on its aetiology, the environment, genetic influences and its presenting symptoms but we know it is best managed locally by those who are aware of the social and cultural influences specific to that area.⁴ Managing asthma in children is not rocket science but it appears that universally we are failing to improve our standards of asthma care in children and a new approach is needed, perhaps by enrolling asthma champions at national and at local levels.⁵

In the study in Malawi, children aged 6-15 years old were only included if they had already been given a doctor diagnosis of asthma, were being followed up in a government hospital and had no evidence of tuberculosis, fever, weight loss or haemoptysis. Those in the intervention group, in addition to routine care, received a clinical assessment, inhalation technique optimisation and asthma education lasting for 1 hour from 'lay-educators' who were secondary school graduates with no previous clinical experience other than a short, structured training programme in childhood asthma. Essentially, the study was to discover if the plan was feasible and, if so, was there any evidence that those in the intervention group showed any early clinical benefit. From this small beginning can the scale of support be escalated to include patients of all ages with the aim of improving management over a wide area of sSA?

This pilot study is timely as the protocol for the impressive 'Achieving Control of Asthma in Children In Africa' (ACACIA) study was recently published, the aim of which is to better understand the burden imposed by asthma on 3000 children with asthma aged 12-14 years old in six SSA countries. ACACIA includes a breathing survey based on the Global Asthma Network questionnaire, spirometry prebronchodilatation and postbronchodilatation, measurement of exhaled nitric oxide levels, the use of a modified Asthma Control Test to assess control and the identification of barriers to good asthma control. Hopefully the study will highlight opportunities for improved care in large numbers of children with asthma throughout sSA.6 Such benefits, however, will only be achieved with governments

acknowledging they also have a part to play in reducing poverty, reducing environmental aspects such as indoor and outdoor air pollution and improving nutrition.⁷ Focusing on children in the first instance makes eminent clinical sense because if successful it will result in better health through into adult life. Almost all respiratory diseases seen in adults invariably have their origins very early in life or indeed before birth. Similar templates may well be applicable to other common disease states. Addressing diseases early must be the way forward if global public health is to improve.

We must continue to learn from our experiences and from those of others. The paper by Rylance et al might be about children with asthma in Malawi but it is also applicable to all countries of the world.³ At the present time in the UK, the National Health Service is being overwhelmed by patients with COVID-19 but volunteers, willing to return to service after retirement, are being required to complete hours of online training including modules on conflict resolution and preventing radicalisation within a checklist of 21 training requirements. How many of these are of value for the task in hand?⁷ Moving forwards is difficult or worse still, impossible, unless we adopt more flexible attitudes. Safety is one thing but surely common sense and expediency are also vital.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Commissioned; externally peer reviewed.

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To cite Lenney W. Thorax 2021;76:430-431. Accepted 15 January 2021

Published Online First 4 February 2021



► http://dx.doi.org/10.1136/thoraxjnl-2020-216065

Thorax 2021;76:430-431. doi:10.1136/thoraxjnl-2020-216695







REFERENCES

- 1 Pavord ID, Beasley R, Agusti A. After asthmaredefining airways diseases a Lancet Commission. *Lancet* 2018;391:350–400.
- Adeloye D, Chan KY, Rudan I, et al. An estimate of asthma prevalence in Africa: a systematic analysis. Croat Med J 2013;54:519–31.
- 3 Rylance S, Chinoko B, Mnesa B, et al. An enhanced care package to improve asthma management in Malawian children: a randomised controlled trial. *Thorax* 2021;76:434–40.
- 4 Lenney W, Bush A, Fitzgerald DA, et al. Improving the global diagnosis and management of asthma in children. *Thorax* 2018;73:662–9.
- 5 Szefler SJ, Fitzgerald DA, Adachi Y, *et al*. A worldwide charter for all children with asthma. *Pediatr Pulmonol* 2020;55:1282–92.
- 6 Mosler Get al. Bmj open 2020;10:e035885.
- 7 The Times Jan 2 2021 'Bureaucracy baffles retired doctors:9.