

# Improving the management of people with bronchiectasis in Saudi: A new beginning

R. J. Thomas<sup>1</sup>, Anne B. Chang<sup>1,2,3</sup>

<sup>1</sup>Department of Respiratory and Sleep Medicine, Lady Cilento Children's Hospital, Brisbane, <sup>2</sup>Children's Centre of Health Research, Queensland University of Technology Queensland, <sup>3</sup>Brisbane and Child Health Division, Menzies School of Health Research, Darwin, Australia

#### Address for correspondence:

Dr. Anne B. Chang,  
Child Health Division,  
Menzies School of Health  
Research, Darwin,  
NT 0811, Australia.  
E-mail: anne.chang@menzies.edu.au

Submission: 04-06-2017  
Accepted: 05-06-2017

Dr. AL-Jahdali and team are congratulated on producing the first published nonWestern country-based management guidelines<sup>[1]</sup> for bronchiectasis. The burden of bronchiectasis is poorly quantified in most countries, but invariably, the burden (prevalence and severity) would be more severe in developing countries compared to developed countries. Yet, until the availability of the Saudi Thoracic Society (STS) guidelines,<sup>[1]</sup> the few available published guidelines on bronchiectasis have been from developed Western countries,<sup>[2,3]</sup> with the first being available only in 2002,<sup>[4]</sup> written as a position statement. Country and/or population specific guidelines are important for best practice clinical care for several reasons. As summarized by Woolf *et al.*, "weighing the magnitude of the difference between the benefits and downsides to develop a recommendation also requires the knowledge of the likely absolute effects for a specific population or situation."<sup>[5]</sup> Specifically for bronchiectasis, there are several reasons that include; first, the relative prevalence of underlying etiologies differs among various settings and countries. Thus, routine testing appropriate in some settings may be inappropriate in others. Examples include bronchiectasis related to tuberculosis infection or HIV is highly prevalent in some countries but rare in others. Second, the major differences of health systems among countries require country-specific recommendations. People with bronchiectasis are under the medical care by primary health practitioners in some countries but under specialists in others. Third, population-specific guidelines are more likely to have specific recommendations. The importance of this relates to the fact that clinical practice guideline formats influence practice whereby specific guidelines are

significantly more effective than non-specific ones.<sup>[6]</sup> Thus, this first national Saudi bronchiectasis guideline<sup>[1]</sup> produced by STS is a commendable start in a setting where the true prevalence of bronchiectasis is likely higher than in developed Western countries.

Not surprisingly, there are similarities between the STS guidelines<sup>[1]</sup> and existing published national guidelines<sup>[2,3]</sup> from Western countries. However, there are also key differences among these guidelines. The key differences reflect local Saudi data and health systems and these include the particular attention to Mycobacterium tuberculosis, the indication for surgery, choice of antibiotics, airway clearance, use of noninvasive ventilation and intersection between primary, secondary, and tertiary care. Furthermore, the several inconsistencies within these existing guidelines which reflect the lack of published data and an adult-type approach. An example is the recommendation in the British Thoracic Society guideline;<sup>[2]</sup> "All children and adults with bronchiectasis should have an assessment of lower respiratory tract microbiology"<sup>[2]</sup> yet the stated indication for routine bronchoscopy in children is only when bronchiectasis affects a single lobe. However, in many young children obtaining lower airway specimens is simply not possible without a bronchoscopy. In contrast, the indication for bronchoscopy

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

**How to cite this article:** Thomas RJ, Chang AB. Improving the management of people with bronchiectasis in Saudi: A new beginning. *Ann Thorac Med* 2017;12:133-4.

#### Access this article online

Quick Response Code:



Website:  
www.thoracicmedicine.org

DOI:  
10.4103/atm.ATM\_183\_17

in both the Saudi<sup>[1]</sup> and Australia and New Zealand guidelines<sup>[3]</sup> are broader and includes right middle lobe syndrome and to obtain a microbiological specimen in those who cannot expectorate.

The STS guidelines<sup>[1]</sup> also advocated appropriate research, for example, the need for a national study to determine the common underlying etiologies among the Saudi population and how much conditions such as tuberculosis, genetic diseases, and other causes are contributing to bronchiectasis. The increased rates of consanguinity in Saudi<sup>[7,8]</sup> would theoretically increase the risk of otherwise rare recessive conditions like severe primary immunodeficiency.<sup>[9]</sup> As advocated by the STS guidelines,<sup>[1]</sup> an epidemiological study of the prevalence of bronchiectasis and the associated morbidity and mortality in Saudi Arabia would greatly help in the push toward bringing this topic into the public health domain.

Guidelines may be evaluated in many ways, and current standards recommend specific standardized method tools such using the Appraisal of Guidelines for Research and Evaluation-II tool ([www.agreetrust.org/agree-ii](http://www.agreetrust.org/agree-ii)). With future updates of this first STS guideline for bronchiectasis,<sup>[1]</sup> further specific formulation of recommendations and using such a tool to enhance further development would be advantageous. At this point, assuming that the guideline will be effectively implemented in all levels of health care, the arrival of the STS guidelines for bronchiectasis<sup>[1]</sup> is a new beginning in Saudi to improved diagnosis and care of this worldwide under-recognized condition.

## References

1. Al-Jahdali H, Alshimemeri A, Mobeireek A, Albanna AS, Al Shiraw NN, Wali S, *et al.* The Saudi thoracic society guidelines for diagnosis and management of non-cystic fibrosis bronchiectasis. *Ann Thorac Med* 2017;12:135-61.
2. Pasteur MC, Bilton D, Hill AT; British Thoracic Society Bronchiectasis non-CF Guideline Group. British Thoracic Society guideline for non-CF bronchiectasis. *Thorax* 2010;65 Suppl 1:i1-58.
3. Chang AB, Bell SC, Torzillo PJ, King PT, Maguire G, Byrnes CA, *et al.*, extended voting group. Chronic suppurative lung disease and bronchiectasis in children and adults in Australia and New Zealand. *Thoracic Society of Australia and New Zealand guidelines Med J Aust* 2015;202:21-23.
4. Chang AB, Grimwood K, Mulholland K, Torzillo PJ. Consensus statement: Bronchiectasis in indigenous children from remote Australian communities. *Med J Aust* 2002;177:200-4.
5. Woolf S, Schünemann HJ, Eccles MP, Grimshaw JM, Shekelle P. Developing clinical practice guidelines: Types of evidence and outcomes; values and economics, synthesis, grading, and presentation and deriving recommendations. *Implement Sci* 2012;7:61.
6. Shekelle PG, Kravitz RL, Beart J, Marger M, Wang M, Lee M. Are nonspecific practice guidelines potentially harmful? A randomized comparison of the effect of nonspecific versus specific guidelines on physician decision making. *Health Serv Res* 2000;34:1429-48.
7. Bener A, Mohammad RR. Global distribution of consanguinity and their impact on complex diseases: Genetic disorders from an endogamous population. *Egypt J Med Hum Genet* 2017. Available from: <https://doi.org/10.1016/j.ejmhg.2017.01.002>. [Epub ahead 20 Feb 2017].
8. el-Hazmi MA, al-Swailem AR, Warsy AS, al-Swailem AM, Sulaimani R, al-Meshari AA. Consanguinity among the Saudi Arabian population. *J Med Genet* 1995;32:623-6.
9. Broides A, Nahum A, Mandola AB, Rozner L, Pinsk V, Ling G, *et al.* Incidence of typically Severe Primary Immunodeficiency Diseases in Consanguineous and Non-consanguineous Populations. *J Clin Immunol* 2017;37:295-300.