Chronic obstructive pulmonary disease (COPD) is a major public health challenge in China. COPD is a lifelong condition, which can leave people breathless, fatigued, prone to chest infections and be life limiting. Most individuals with COPD go undiagnosed or get diagnosed much later in the course of the disease often causing irreversible lung damage, hospitalisation, poor quality of life and death.

National health policies in China do recommend screening for earlier COPD diagnosis but there is no local evidence and consensus on which screening tests are the most accurate and cost-effective. Further, while primary health care is a positive and potentially feasible environment for delivering comprehensive COPD care, the perspectives of patients and general practitioners need to be better understood if large scale primary care COPD diagnosis and management is to realised.

In 2018, through links with the International Primary Care Respiratory Group (UK), the Peking University First Hospital collaborated with the University of Birmingham on the 'Breathe Well' research programme funded by the UK National Institute for Health Research. The Breathe Well programme was implemented in 4 countries - Brazil, China, Georgia and the Republic of North Macedonia. As part of this programme, the team in China conducted two research studies: First, they examined 2445 participants from community health centres in Beijing, Chengdu, Guangzhou and Shenyang and identified the most accurate and cost-effective screening strategies in primary care for detecting COPD. Second, using mixed methods, the team explored the need for and design of a community-based lung health service.
A combination of the Chinese Symptom Based Questionnaire (C-SBQ) and microspirometry was the most accurate test strategy for identifying cases of COPD. This strategy costs ¥385 ($60) for each true case detected.

With adequate training and support, primary care teams, including GPs and nurses, can accurately implement simple lung function tests and identify COPD in undiagnosed individuals.

Patients did not fully understand COPD, its implications and how to manage it, and existing health services did not meet their needs. GPs lacked the capacity and resources to manage COPD.

Patients and GPs were in favour of a community-based lung health service delivered by nurses and physiotherapists, offering education, psychological support and exercise including Tai Chi.

We found that:

1. Simple and low-cost screening strategies can be used to accurately identify undiagnosed cases of COPD for earlier diagnosis, management and, where needed, timely referral. This evidence should inform national health policy and clinical practice for COPD.

2. This study urges decision makers to mandate COPD services in primary care settings as it is feasible to deliver, convenient for patients, and substantially reduces the burden on and costs for secondary and tertiary care.

3. Primary care teams need to be supported with capacity building, screening strategies, medications, resources and financial incentives to deliver COPD screening and a comprehensive lung health service for long-term management (including bronchodilation advised by WHO as a ‘Best Buy’).

4. Primary care teams need to be multidisciplinary and include nurses, physiotherapists and specialists and be adequately supported to deliver COPD services.

5. Communication campaigns are needed to raise awareness about COPD and its consequences and to create a demand for COPD screening and management services in primary care facilities.

6. Tobacco cessation can reduce the risk of developing COPD and also lengthen the life of individuals with COPD. WHO advises counselling to help people quit as a ‘Best Buy’ and pharmacotherapy as a ‘Good Buy’ subject to local pricing. COPD diagnosis should trigger help to quit in primary health care.

What needs to be done?

References:

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