



The FRESH AIR Horizon 2020 project: An introductory briefing (February 2016)

FRESH AIR is an implementation science project exploring how to improve the prevention, diagnosis and treatment of chronic lung diseases in contexts with limited health care resources. Chronic lung diseases include Chronic Obstructive Pulmonary Disease (COPD) and asthma. Worldwide about 210 million people have COPD and it is now the third leading cause of death worldwide.¹ Asthma affects an estimated 300 million people. Chronic lung diseases cause frequent symptoms which prevent people being active and reduce their quality of life. Although these diseases are not curable, with proper treatment their symptoms can usually be controlled and their progression slowed.

Exposure to smoke from tobacco and indoor and outdoor air pollution causes chronic lung diseases and makes people's symptoms worse. The Kyrgyz Republic has very high rates of tobacco smoking, especially amongst men. WHO figures indicate that in the Kyrgyz Republic 22% of deaths amongst men are caused by tobacco. Indoor air pollution, also known as household air pollution (HAP), is caused by using solid fuel derived from plant material or coal in an open fire or simple stove with incomplete combustion and poor ventilation. In the Kyrgyz Republic, many people rely on on these fuels for cooking, heating or lighting. Children's lung development and health can be damaged from exposure to smoke from tobacco and HAP. Exposure of pregnant women also leads to poor maternal and child health outcomes and increases the likelihood of children's lungs never fully developing.

According to the World Health Organization (WHO) over 90% of COPD deaths and over 80% of asthma deaths occur in low and middle-income countries (LMICs), like the Kyrgyz Republic. The Kyrgyz Republic has the highest mortality from respiratory diseases in the WHO European Region. Countries like the Kyrgyz Republic are low-resource settings for healthcare that experience significant challenges in implementing clinically and cost-effective interventions, including lack of awareness of chronic lung diseases and their risk factors amongst decision makers and the public, poor access to diagnosis and treatment and inadequate numbers of trained healthcare staff.

The FRESH AIR project seeks to address these challenges by developing capacity for the implementation of evidence-based interventions for prevention, diagnosis and treatment in low-resource settings and, in so doing, to improve health outcomes for people at risk of, or suffering from, chronic lung diseases in low-resource settings. It has seven specific objectives:

1. Identify factors influencing the implementation of evidence-based interventions;
2. Explore which awareness-raising approaches are most effective in achieving public and professional behaviour change;
3. Adapt interventions for tobacco dependence that help people quit ;
4. Test innovative diagnostic methods for detecting COPD;
5. Promote pulmonary rehabilitation as a low cost and high value treatment;
6. Reduce children's risk of lung damage and early mortality; and
7. Generate new knowledge, innovation and scalable models

The project consists of inter-related activities arranged in five work packages, with two supporting work packages. These take place in four countries that are part of the International Primary Care Respiratory Group's (IPCRG) global network: the Kyrgyz Republic, Uganda, Vietnam and Greece. Each of these is a low-resource setting with high levels of tobacco consumption and population groups exposed to household air pollution. These countries also present a range of different challenges because they have diverse demographic, geographic, economic, health system and cultural characteristics. The learning from the project is widely disseminated nationally, regionally and internationally.

The FRESH AIR project will achieve impacts at four levels:

- Public health policy: By providing evidence, information and support for decision making and improving understanding and knowledge of the links between risk factors, interventions and health outcomes.
- Healthcare provision for individuals and populations: By developing and adapting evidence-based interventions for prevention, diagnosis and treatment of chronic lung diseases and generating new knowledge on how best to implement these;
- Professional awareness and skills: By teaching healthcare workers and developing new feasible and scalable teaching models;
- Public perceptions and opinions: By developing and testing models that increase awareness and motivation for behaviour change and generating new knowledge on these.

The project has been funded by the European Commission Horizon 2020 research programme. It began in October 2015 and will continue until September 2018. A consortium of 14 organisations from nine countries implement the project with the support of a Scientific Advisory Committee made up of internationally renowned clinicians, scientists and researchers.

The FRESH AIR project involves patients, community groups, health care workers, policy makers, and other stakeholders through Stakeholder Engagement Groups in each of the four countries. These stakeholders are essential to provide input on local priorities and other contextual factors which are used in the detailed design of interventions. If you are interested in knowing more about the project, please look at the FRESH AIR website (<http://www.ipcrg.org/freshair>) which includes a range of resources and details of how to get involved.

i Full references for the figures used can be found on the IPCRG website at <http://www.ipcrg.org/freshair>



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