

Abstract ID = 8610

Presented at: 9.3 Oral Abstracts 10 COPD and the Environment 02/06/2018 10:20-11:25

**Critical factors to the implementation of interventions targeting chronic lung disease in lower-resource settings – a FRESH AIR systematic review**

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**Aim:** Chronic lung diseases (CLDs) are a leading cause of death worldwide. While 90% of the associated mortality occurs in low-and middle income countries, evidence on how to implement appropriate interventions remains scarce, paradoxically particularly in these settings. We aim to identify critical factors to a successful implementation of interventions targeting CLDs in lower-resource settings. This is a sub-study of the FRESH AIR implementation science project, aiming to improve chronic lung health in lower-resource settings.

**Methods:** We systematically search in Pubmed, Embase, the Global Health Database, Cochrane, PsychInfo, Emcare, and CINAHL for relevant papers published up to 23 October 2017, without language restriction. We search for (synonyms of) 'implementation', AND 'lower-resource setting', AND 'CLDs', OR specific CLD-interventions (such as 'smoking cessation'). Two researchers independently screen all results, and include relevant studies. Papers are excluded if they focus merely on implementation at national governmental level, present no primary data, or when no full text is available (after contacting the authors). Review references are screened for relevant papers, and from conference abstracts and study protocols a resulting paper is searched. Studies' methodologies are critically appraised. Lastly, implementation factors are extracted and categorised.

**Results:** The search yielded 12,782 results. After removal of duplicates, 5,345 titles and abstracts were screened, of which 290 remained for full text screening. Preliminary results show most authors assessed the implementation process unstandardised, and hardly any paper would meet the recently published 'Standards for Reporting Implementation Studies' recommendations. Stakeholder engagement and adequate knowledge of the local context seem important facilitators. Rigid harmful traditions and lack of resources seem important barriers. Further, final results are currently being evaluated.

**Conclusion:** This systematic literature review identifies critical implementation factors for CLD-interventions in lower-resource settings. Implementers capitalising on these factors will most likely enhance their implementation success.

**Declaration of Interest**

The authors declare to have no conflict of interest.

This study was funded by the EU Research and Innovation program Horizon2020 under grant agreement no. 680997.

**References and Clinical Trial Registry Information**

This study is registered under trial registration number: NTR5759.  
<http://www.trialregister.nl/trialreg/admin/rctsearch.asp?Term=23332>