Author's response to reviews

Title: Improved stove interventions to reduce household air pollution in low and middle income countries: a descriptive systematic review

Authors:

Emma Thomas (emmathomas51@gmail.com)
Kremlin Wickramasinghe (kremlin.wickramasinghe@dph.ox.ac.uk)
Shanthi Mendis (mendiss@who.int)
Nia Roberts (nia.roberts@bodleian.ox.ac.uk)
Charlie Foster (charlie.foster@dph.ox.ac.uk)

Version: 2 Date: 10 April 2015

Author's response to reviews: see over
Dear BMC Public Health Editorial Team,

We are pleased to submit our manuscript “Improved stove interventions to reduce household air pollution in low and middle income countries: a descriptive systematic review” to your journal for consideration. This paper was commissioned by the World Health Organization and provides the first peer-reviewed systematic review on stove interventions to reduce household air pollution (HAP).

HAP resulting from the use of solid fuels presents a major public health hazard. The 2010 Global Burden of Disease Study ranked HAP as the third highest global risk factor. The health impact is even greater for those in low and middle income countries where solid fuels are commonly used for cooking and heating. In South Asia and sub-Saharan Africa, HAP accounts for the first and second highest risk factor for burden of disease respectively. Globally, 3.5 million deaths and 4.3 per cent of disability-adjusted life years (DALYs) in 2010 have been attributed to HAP from solid fuels.

Improved (i.e. high-efficiency and low emission) stoves have been offered as a potential tool to reduce exposure to HAP and improve health outcomes. This review is important as it synthesises the best available evidence on improved stove interventions to reduce HAP and important study characteristics to consider for implementation and scale-up. The international interest in this topic is acute. Given the scale of HAP, it is imperative that current interventions are well understood to facilitate policy and funding decisions. We hope this article will significantly contribute to the scientific literature while highlighting the need for future research to provide greater emphasis on process evaluation and consider study designs that will increase understanding of population-level impact of stove interventions in real world contexts.

The following amendments have been made to the original manuscript:

- A PRISMA checklist has been added (Additional file 2)
- A ‘competing interests’ section has been added after the conclusions/abbreviations
- An ‘author’s contribution’ section has been added after the ‘competing interests’ section

Thank you for your time and consideration.

Yours Sincerely,

Emma Thomas (On behalf of all authors)

Researcher
British Heart Foundation Health Promotion Research Group
Nuffield Department of Population Health, University of Oxford