

## **Response to Jors et al, Environmental Health Insights**

Author: Eddleston, Michael

Source: Environmental Health Insights, 12(1)

Published By: SAGE Publishing

URL: <https://doi.org/10.1177/1178630218788554>

---

BioOne Complete ([complete.BioOne.org](https://complete.BioOne.org)) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/terms-of-use](https://www.bioone.org/terms-of-use).

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

---

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.



## Response to Jors et al, *Environmental Health Insights*

Michael Eddleston

Centre for Pesticide Suicide Prevention, The University of Edinburgh, Edinburgh, UK.

Dear Madam/Sir

We were pleased to see the editorial by Jors et al<sup>1</sup> introducing a special issue on the major problems of pesticide poisoning facing low- and middle-income countries (LMICs). We were however disappointed to note the paucity of discussion on pesticide self-poisoning, the cause of most deaths from pesticide poisoning.

Pesticide self-poisoning is an occupational condition. If pesticides were not used occupationally in small-scale farming communities, they would not be available for self-harm. Self-poisoning would then be much less lethal (as it is in high-income countries where medicines are most typically taken in self-harm) and the appalling loss of life from pesticide suicide that accompanied the Green Revolution would not have occurred.<sup>2</sup> It is a terrible shame that acute pesticide self-poisoning has been excluded from international treaties, such as the Rotterdam Convention. This has happened at great cost in human lives because it is blamed on the person's action and not on the introduction of these highly hazardous pesticides into rural villages without the resources to use and store them safely.<sup>3</sup>

We also disagree strongly with the author's statement that restricting access has been unsuccessful "largely because of failure to take account of adequate training and awareness about why locking up pesticides is vital" and with their citing our study<sup>4</sup> in support.

Our trial was a large rigorous effectiveness cluster randomized controlled trial (RCT) that aimed to see whether well-designed household pesticide storage containers would prevent pesticide self-poisoning. It unfortunately clearly showed that such an approach is ineffective. The importance of storing pesticides safely was emphasized to householders when the containers were handed over, at 2 weeks when we checked that they had been installed in the ground, and at 6-monthly reminders to intervention communities. Effective use of containers might

require frequent and sustained reminders to householders; however, in our RCT, we did not see any evidence that the approach worked in the first few months when use of containers will have been at its highest.

The belief over the last 10 to 15 years that "safe storage" should work, and the choice to blame suicide on pesticide misuse, thereby removing it from international conventions, has put suicide prevention in LMIC back several years and contributed to a large number of unnecessary deaths. It is time that the global community accepts pesticide self-poisoning as a complication of occupational pesticide use and supports pesticide regulation to completely remove highly hazardous pesticides from poor rural communities. As has been shown in multiple countries, this approach prevents all forms of acute pesticide poisoning and rapidly reduces total suicides.<sup>5</sup>

### Acknowledgements

Michael Eddleston for the Household Pesticide Storage trial co-investigators: M Eddleston, M Pearson (Edinburgh), D Gunnell, C Metcalfe (Bristol), M Weerasinghe (Rajarata), S Jayamanne (Kelaniya), A Dawson (Sydney), K Hawton (Oxford), F Konradsen (Copenhagen).

### REFERENCES

1. Jors E, Neupane D, London L. Pesticide poisonings in low- and middle-income countries. *Environ Health Insights*. 2018;12. doi:10.1177/1178630217750876.
2. Knipe DM, Gunnell D, Eddleston M. Preventing deaths from pesticide self-poisoning-learning from Sri Lanka's success. *Lancet Glob Health*. 2017;5:e651–e652.
3. Konradsen F, van der Hoek W, Gunnell D, Eddleston M. Missing deaths from pesticide self-poisoning at the IFCS forum IV. *Bull World Health Organ*. 2005;83:157–158.
4. Pearson M, Metcalfe C, Jayamanne S, et al. Effectiveness of household lockable pesticide storage to reduce pesticide self-poisoning in rural Asia: a community-based cluster randomised controlled trial. *Lancet*. 2017;390:1863–1872.
5. Gunnell D, Knipe D, Chang SS, et al. Prevention of suicide with regulations aimed at restricting access to highly hazardous pesticides: a systematic review of the international evidence. *Lancet Glob Health*. 2017;5:e1026–e1037.

**RECEIVED:** May 24, 2018. **ACCEPTED:** June 7, 2018.

**TYPE:** Letter to the Editor

**FUNDING:** The author(s) received no financial support for the research, authorship, and/or publication of this article.

**DECLARATION OF CONFLICTING INTERESTS:** The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**CORRESPONDING AUTHOR:** Michael Eddleston, Centre for Pesticide Suicide Prevention, The University of Edinburgh, 47 Little France Cres, Edinburgh EH16 4TJ, UK. Email: m.eddleston@ed.ac.uk



Creative Commons CC BY: This article is distributed under the terms of the Creative Commons Attribution 4.0 License

(<http://www.creativecommons.org/licenses/by/4.0/>) which permits any use, reproduction and distribution of the work without further permission

provided the original work is attributed as specified on the SAGE and Open Access pages (<https://us.sagepub.com/en-us/nam/open-access-at-sage>).

Downloaded From: <https://bioone.org/journals/Environmental-Health-Insights> on 23 Apr 2024

Terms of Use: <https://bioone.org/terms-of-use>