

Chest-compression-only versus standard CPR.

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▶ **To cite this version:**

Alexis Descatha, Daniel Jost. Chest-compression-only versus standard CPR.. The Lancet, 2011, 377 (9767), 717-8; author reply 718-9. 10.1016/S0140-6736(11)60267-5 . inserm-00672639

HAL Id: inserm-00672639

https://inserm.hal.science/inserm-00672639

Submitted on 21 Feb 2012

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Caution with conclusion of observational studies in meta-analysis on instruction for bystanders who started cardiopulmonary resuscitation

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(i) **Declaration of interest: the author reports no conflicts of interest. The author alone is responsible for the content and writing of the paper.**
(ii) No copyright constraints.
(iii) No prior or duplicate publication or submission had been made elsewhere
(iv) Author**: contribution: Alexis Descatha and Daniel Jost are responsible for the content and writing of the paper.**

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Funding : none, ICMJE complete, no conflict of interest

Words 250

Sir,

we read with a particular interest the well-conducted meta-analysis performed by Hüpfl, et al (1). However, we feel there is a difference between comparing bystander cardiopulmonary resuscitation (CPR, hands-only and traditional) and what authors concluded the instructions to bystanders from emergency medical services. In the three RCT, the inclusion criteria was clearly randomized instructions given by emergency medical services (2-4). However, in the presented epidemiological studies, the choice of CPR method by bystanders (instruction from EMS or own decision) was unclear at least for 6 on the 7 studies selected (5-10). Furthermore, in these observational studies, the reasons of not to perform complete CPR by bystanders are probably important and might lead to biased conclusions (and probably explained the unspooled meta-analysis in this part). For instance, delay of initiation CPR, level of training of the bystanders, and relationship between the bystander and the victim could influence the choice of CPR and survival (10). A trend for better survival was observed for complete CPR than hands-only recently (11;12). Actually, the study was conducted in a country with a low level of awareness of first-aid in the general population, and complete CPR was here a proxy of a better knowledge of basic life support.

In conclusion, we feel that authors should be more careful in the conclusion of their meta-analysis of observational part. We also feel one important perspective could be added about spreading of basic life support and studies on influence of this knowledge on hands-only CPR assisted by dispatcher.

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