

THE CASUALTIES OF EXCESSIVE SPEED: INNOVATION AND RESEARCH QUALITY ARE VICTIMS OF SHORT-TERM FUNDING OF RESEARCH

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Background and Aims: Assessing the impact of environmental exposures on human health is a long and complex pluridisciplinary task. Between population recruitment and the first statistical analyses, 3 to 5 years can typically elapse, sometimes many more for cohort studies. This is hardly compatible with funding bodies limiting research projects to 3-4 years in some countries. In addition, evaluation of researchers' work relies a lot on measures more related to publications quantity than quality. Our aim is here to discuss the consequences of this time pressure and to discuss the interest of developing a concept of *slow science* in environmental epidemiology, inspired from the *slow food* movement initiated in gastronomy in reaction to the fast-food culture.

Results: Consequences of short-term funding and of focusing evaluations on publications quantity include researchers slicing research projects into small pieces, spending too little time on crucial steps of projects such as statistical analysis and too much on administrative issues... Suggestions to develop a *slow science* approach in epidemiology might imply giving more support for feasibility studies; making it clear that statistical analysis is not a brief and minor task (by formalizing quality controls steps, having detailed analysis plans being defined prior to analysis...); and encouraging institutions to offer a palette of funding proposals of various durations and to promote research quality rather than quantity, as stated e.g. by DFG, the German Research Foundation (by making the evaluation of research groups relying more on an in-depth analysis of a few key publications than on a superficial automated summing of the impact factors of *all* publications).

Conclusions: Moving towards *slow science* should not be seen as implying less science but more sound results and increased innovation, efficiency and diversity in our research field. Achieving this requires increased dialogue between researchers and the 'consumers' of epidemiological science.