

## LETTERS

## Work-related premature ageing: old concept but emerging stakes

Many industrial countries try to raise the retirement age in a context of economic constraints, ageing populations and public pension funds financial difficulties.<sup>1,2</sup> One important barrier for delaying retirement is premature ageing caused by arduous and difficult working conditions, a situation known for many decades, if not centuries.<sup>3</sup> Although general health has improved in the last century in most industrial countries, clearly indicating more successful ageing, many social inequalities remain.<sup>4</sup> These inequalities stem in part from different work trajectories, which in turn, may explain premature ageing,<sup>5</sup> without existing cellular ageing indicator.<sup>6</sup> This concept of work-related premature ageing is an important aspect of retirement policy reforms, where the objective is to define an optimal retirement age, one which is both economically and socially sustainable.

The difficulty here is to find an operational definition of work-related premature ageing in order to be able to determine who might be granted earlier retirement if they experienced such conditions, or who may see their retirement delayed if they did not, and thus to manage retirement flows in a more appropriate manner. Some countries chose to have a retirement age that may vary according to working conditions. In those countries, difficult working conditions have often been defined by their consequences, the presence of a recognised and specific occupational disease or injury. However, there are many types of exposure to high-risk situations that may be considered arduous without having an observable effect on health at the time of retirement, and therefore, would not justify early retirement under such rules. Moreover, 'global burden' resulting from exposure to lifelong multiple exposures could result in premature ageing and frailty without specific diseases. The quest for this philosopher's stone should probably be conducted both at the national and international levels. An international network is necessary to achieve a standardised definition, that is, what combinations of exposures are responsible for increased morbidity and mortality, decreased disability-free life expectancy and impaired quality of life. This network should comprise members of national committees

involved in defining their own country's retirement policies, and come from different disciplines including economics and politics, and also health and epidemiology, in order to develop an evidence-based methodology. Indeed, defining such thresholds of exposure requires a global, multidisciplinary decision-making process in order to optimise national systems.

In conclusion, there is an urgent need for an operational definition of this concept given the emerging stakes related to ageing populations.

Alexis Descatha,<sup>1,2,3</sup> Diane Cyr,<sup>1,2</sup>  
Zakia Mediouni,<sup>1,2,3</sup> Marcel Goldberg<sup>1,2</sup>

<sup>1</sup>Univ Versailles St-Quentin, Versailles, France

<sup>2</sup>Population-Based Epidemiological Cohorts' Research Platform, Inserm, Centre for research in Epidemiology and Population Health (CESP), U1018, Villejuif, France

<sup>3</sup>AP-HP, Occupational Health Unit/EMS (Samu92), University hospital of West suburb of Paris, Garches, France

**Correspondence to** Dr Alexis Descatha, Unité de pathologie professionnelle, U1018 INSERM/SAMU92, CHU Poincaré, 104 bd Poincaré Garches 92380, France; alexis.descatha@rpc.aphp.fr

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