

Odense, February 6, 2018

Stephen Leeder
Editor-in-Chief
International Journal of Epidemiology

Dear editor,

We are pleased to submit our paper entitled **“Potential gains in life expectancy by reducing inequality of lifespans in Denmark: An international comparison and cause of death analysis”** for consideration as original article in *IJE*.

The importance of lifespan inequality as health indicator and policy goal, alongside life expectancy, is increasingly recognized. These indicators need not agree. For instance, mortality reduction amongst the very old increases both life expectancy and inequality. Yet, when it can be convincingly demonstrated that both indicators can materially improve through the same causes of death, it gives a clear and consistent message.

We present a strategy, applied to the case of Denmark, to analyze and explain the evolution of life expectancy and lifespan inequality over time (1960 to present) and identify causes of death and age-groups that contributed most to changes over time, and to unravel contemporary differences with Sweden. The proposed framework allows us to translate decreases in lifespan inequality into potential gains in life expectancy.

Our key message is that Denmark can markedly reduce inequality in lifespans and increase life expectancy through a consistent policy target: reducing cancer and infant mortality. This finding vindicates our approach.

Our manuscript addresses the important social issue of lifespan inequality alongside life expectancy, highlights the impact of major epidemiological trends, like the smoking epidemic and the cardiovascular revolution, and presents a strategy which can be broadly applied to other countries. Therefore, we hope you see our paper as fitting in *IJE*'s rich history of publishing in-depth explorations of causes of death, epidemiological advances and international health. We look forward to your response.

Sincerely,

José Manuel Aburto
Maarten Wensink
Alyson van Raalte
Rune Lindahl-Jacobsen