Self-rated health before and after retirement: findings from the French GAZEL cohort study

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Background
Despite the need to increase the proportion of the population in work in most Western countries, few studies have investigated longitudinally how perceived health is influenced by work and retirement among older workers.

Methods
We examined trajectories of self-rated health, chronic conditions, and fatigue in 14,714 employees (79% men) from the national French gas and electricity company, the GAZEL cohort, for up to 7 years prior, and 7 years post-retirement, using yearly measurements from 1989 to 2007. Data were analysed using repeated-measures logistic regression with generalised estimating equations (GEE).

Findings
Overall, suboptimal health increased with age. However, between the year before retirement and the year after, the estimated prevalence of suboptimal health fell from 19.2% [95% confidence interval 18.5%-19.9%] to 14.3% [13.7%-14.9%], corresponding to an 8–10 year gain in health. This retirement-related improvement was found in men and women, across occupational grades, and was maintained throughout the seven-year post-retirement follow-up period.

A poor work environment and health complaints before retirement were associated with a steeper yearly increase in the prevalence of suboptimal health while still in work, and a greater retirement-related improvement.

However, those with a combination of high occupational grade, low demands, and high satisfaction at work showed no such retirement-related improvement. Further analyses show that retirement has no impact on the incidence of chronic conditions, but that fatigue, which is very common among older workers, is greatly relieved at retirement.

Interpretation
These findings suggest that the burden of ill-health, in terms of perceived health problems, is substantially relieved by retirement for all but those with ideal working conditions. This indicates a need to redesign work for older workers in order to achieve higher labour market participation.

Fig. 1 shows the estimated annual prevalence of suboptimal health in relation to retirement. The prevalence increased with increasing age both before and after retirement, broken by a sharp decrease around retirement. We modelled the 15-year trajectory of suboptimal health in three time intervals, from year −7 to −1, from −1 to +1, and from +1 to +7. This function fits the data well and indicates that the increase in prevalence of suboptimal health was steeper before retirement than after.

Fig. 2 shows the estimated trajectories of self-rated health for two scenarios, one a low-risk profile of work-related factors, and one with a high-risk profile. In the low-risk scenario, there is no retirement-related improvement in health, probably indicating that work puts an extra burden on health when it is highly demanding and not satisfying, but that the effects of this burden are reversible.

Fig. 3 shows the cumulative incidence of the two most common causes of death, and the right half prevalence trajectories for mental and physical fatigue. In both halves, the trajectory of suboptimal self-rated health is provided as reference. The patterns indicate that the added health burden of work is largely attributable to fatigue.

Sources

Stress Research Institute is a knowledge centre in the area of stress and health. The Institute is part of the Faculty of Social Science, Stockholm University, Sweden and conducts basic and applied research on multidisciplinary and interdisciplinary methodological approaches.

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