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The impact of (early) retirement on the subsequent physical and mental health of the retired: a survey among general practitioners in Belgium.

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Abstract
Objectives: to investigate, on the basis of the perceptions of general practitioners (GPs) in Belgium, the impact of (early) retirement on subsequent physical and mental health.
Method: A cross-sectional survey on the basis of a self-completed anonymous questionnaire sent at random to 120 GPs in Flanders (Belgium) to which 81 responded.
Results: According to GPs, the mere fact of retiring early may be a (very) important cause of mental health problems, in particular depressions (due to the disappearance of social networks) and deterioration of cognitive capacities. GPs claim that most physical health problems that appear after retirement, like obesity and cardiovascular diseases, are due to insufficient adaptation (in terms of food consumption and physical activities) of the retired to a new lifestyle.
Conclusion: GPs claim that health problems may frequently arise as a consequence of the retirement event. Since the factors causing these problems point to unhealthy behaviour, there is scope for health improvement: firstly, by stimulating older people to postpone retirement or to continue some professional activities during retirement and secondly, by making them aware of the role of social networks, physical activity and food consumption. At the same time, this would help to control increasing pension and health care expenditures.
Keywords: cardiovascular disease; obesity; depression; retirement; Belgium; survey

1. Introduction

Early retirement threatens the financial viability of the pension system in Belgium. The age at which male workers effectively retire decreased from 64.3 in 1965 to 57.9 in 1996 and slightly increased to 59.6 in 2007, still far below the OECD average of 63.5 in 2007. Consequently the government is urged to increase the age at which workers retire from the labour market. To the extent that an increased retirement age affects, in a positive or negative way, the future mental and physical health of the retired, it may also affect the level of health care expenditure on the elderly.

Theoretically, the impact of retirement on physical health is unclear. On the one hand, one may expect that more leisure allows the retired to invest more time in maintaining and improving their health status through increased physical activities. On the other hand, the absence of the daily discipline inherent in the rhythm and routine of a working life might reduce the incentive to invest in health-preserving behaviour and, especially if the food consumption during retirement is not reduced following lower consumption needs, result in obesity and cardiovascular diseases. Similarly, as far as mental health is

concerned, the decision to retire gives the retired more leisure time that could be spent on social networks and that could relieve them of the stress of a working environment. Conversely, retirement may isolate the retired from social life if social networks were strongly related to their previous employment. Due to this theoretical ambiguity, the impact of retirement on subsequent health becomes an empirical question.

Numerous empirical studies have examined the impact of health status on the timing of retirement. In contrast, relatively few studies have analysed the reverse relationship, i.e. the possible impact of (early) retirement on subsequent health status. In addition, the empirical literature on this topic, while expanding, is not very conclusive. The reason is that when one has data on retirement and health, it is difficult to disentangle whether it are health problems that cause retirement or retirement that causes health problems. The lack of consensus in the literature on the impact of retirement on subsequent health can be imputed to the different strategies used by researchers to account for the possible fact that retirement itself was already caused by bad health. One identification strategy **would be to replace the retirement variable by a variable strongly correlated with retirement but not with previous health status.** In this way, Neuman [1] and Coe and Lindeboom[2] find[1] no impact of retirement on objective health and a positive impact on subjective self-assessed health. Coe and Zamarro[3] find[2] a weak positive impact of retirement on subjective health. In contrast, Rohwedder and Willis[9] [3], Peracchi and Mazzonna[10] and Adam et al. [11][4] show that early retirement has a significant negative causal impact on the cognitive ability of people: if people want to preserve their memories and reasoning abilities, they should continue working. A second identification strategy would be to **restrict the sample to individuals that did not retire because of health reasons.** In this way, Dave et al.[5] found a significant negative impact of retirement on objective physical and subjective mental health[5]. They also found evidence that "adverse health effects tend to operate through lifestyle changes including declines in physical activity and social interactions. The adverse health effects are mitigated if the individual is married and has social support, continues to engage in physical activity post-retirement, or continues to work part-time upon retirement"[6]. For Greece, Bamia et al. [6] found that postponing the age of retirement by 5 years would decrease the risk of mortality, especially due to cardiovascular diseases, by 10%. The mechanism behind this result is that "retirement may involve abandonment of health habits or taking up of unhealthy ones as well as psychosocial consequences"[7]. These results indicate that early retirement may be a risk factor for cardiovascular mortality in apparently healthy persons. In contrast, Ekerdt et al.[4] found no impact of retirement on subsequent physical health status. Thirdly, Behncke[4] includes in the sample those that retire because of health reasons but **controls explicitly for a health problem before retirement.** She finds[8] that retirement significantly increases the risk of health problems like cardiovascular diseases.

1 On the basis of HRS data for the US.
2 On the basis of SHARE data for the EU.
3 On the basis of HRS, SHARE and ELSA data.
4 On the basis of HRS and SHARE data.
5 On the basis of HRS data.
6 p.522.
7 P.568.
8 On the basis of ELSA data for the UK.

We circumvent these problems related to individual survey data by directly asking GPs, who are experts on the basis of their experience, what is the impact of retirement on health, regardless of health status before retirement. The aim is to assess whether, according to GPs, the transition from work to effective retirement has an impact on both the physical and mental health status of the retired population and what are the factors associated with the retirement event that intensify or attenuate the impact of retirement on future health status.

2. Materials and methods

We undertook a cross-sectional survey using a self-completed anonymous questionnaire. The questionnaire was tested by two GPs for face and content validity. It was sent by post and by email to 120 GPs in Flanders (Belgium) at random. The response rate was 68%. Data were collected during the month of May 2009.

One could argue that by questioning GPs, results risk being biased to the extent that low socio-economic groups more often contact a GP than would be expected based on their health status. However, Vanderheyden et al.[12] showed that in Belgium there is no socio-economic **gradient** among older people in their contacts with GPs.

Before filling in the questionnaire, the attention of the respondents was directed towards the **definition of early and normal retirement** used throughout the questionnaire. Retirement is defined as "leaving definitively the labour market", early retirement as "leaving the labour market before the age of 60 through all kinds of retirement pathways like early retirement schemes, unemployment, occupational pension plans,…" and normal retirement as "leaving the labour market from the age of 60 on through the old-age pension system". Indeed, besides the usual old-age pension available at the age of 60, Belgian workers can stop working much earlier. Confronted with restructuring in the traditional industries in the 70s, the Belgian government and social partners developed early retirement and unemployment schemes involving the passive receipt of benefits that were easily accessible for workers above 50 but turn out to be at relatively low levels. Unemployment is the most frequent exit route for those aged 50-54, early retirement for those aged 55-60 and old-age retirement for those older than 60. Early retirement schemes taken up at the conventional ages of 57, 58, 59 are generous while early retirement-schemes "offered" by restructuring firms at the ages of 52 or 54 are markedly less generous. Therefore, by distinguishing between early and normal retirement, we may be able to account indirectly for the distinction between voluntary and involuntary retirement. Gallo et al. [7] show that in particular **involuntary job loss** at the end of a career (due to lay-offs in the firm) may increase the risk of cardiovascular problems given the role of stress in vascular diseases. It also increases the risk of self-reported mental health problems whereas people for whom retirement is a voluntary and anticipated choice tend to feel better after retirement (Van Solinge [8] for the Netherlands).

The questionnaire contains 22 questions, 18 multiple choice and 4 open questions. The questions evaluate GPs' perceptions about the health problems of normally retired as

compared to early retired individuals; the type of physical and mental health problems among the retired as a consequence of retirement; a ranking of the factors responsible for the appearance of physical and mental health problems among the retired; information on the weight of those who retired due to health problems; information on gender, experience and the geographical location of the GP.

By questioning GPs, we try to measure the **objective** health status. This contrasts with the National Health surveys organized by the Belgian government in 1997, 2001, 2004 and 2008 and the SHARE-data that were gathered by asking retired and working people directly about their subjective health status. Although these surveys have large sample sizes, they are cross-sectional or very short panels, thus complicating the measurement of the causal impact of retirement on health. Furthermore, we shall see that according to GPs, retirement may have a negative impact on subsequent objective health. Notwithstanding this, 68% of GPs declare that their patients themselves experience retirement as positive or very positive for their health status whereas only 10% of GPs declare that their patients self-assess retirement as (very) bad for their health status. Apparently the diagnoses of GPs may differ considerably from the subjective self-assessed health status of their retired patients.

3. Results

According to merely 20% of GPs, **early** retirement is an important or very important factor in the development of physical health problems among the retired, while 80% of GPs consider that early retirement as such does not generate physical health problems after retirement. In contrast, when it comes to mental health problems, **more than 45% of GPs consider that the simple fact of retiring early is an important or very important cause of mental health problems after retirement.**

Among the **factors** that are considered to be important or very important in causing the development of **physical** health problems due to retirement, 95% of the GPs indicate the drop in physical activities after retirement, 90% indicate excessive food consumption past retirement, 68% indicate stress in the last job and only 60% indicate physically hard work in the last job. This suggests that the elderly develop physical health problems during retirement because they do not adapt the lifestyle they had prior to retirement (in terms of food consumption and physical activities) to a different lifestyle that accords with lower consumption needs.

According to the GPs, the most frequent physical health problems among the retired are **cardiovascular diseases** (hypertension) and related to that o**besity or overweight**. Research has indeed shown that obese people have an increased risk of diabetes type II and cardiovascular diseases. Note that according to the National Health Survey of 2004, 41.8% of Belgian citizens over 55 are overweight or obese (BMI>25).

Among the **factors** that are considered to be important or very important in causing the development of **mental** health problems after retirement, 89% of the GPs indicate living alone during retirement, 89% indicate the lack of social contacts, 68% indicate a decrease

in physical activities after retirement and 55% the absence and the want of a professional activity. This suggests that people develop depressions during retirement because they do not anticipate the disappearance of social networks and do not actively engage in maintaining previously existing social networks like those related to their previous job. According to the Social Security Statistics[14] of 2009, in Belgium only 4% of the people over 65 earn some income from a professional activity as self-employed or employee.

GPs unanimously agree that the most important mental diseases among the retired population are first of all**, depression**/isolation from social life/feeling of uselessness in society and secondly the deterioration of cognitive capacities. More than 75% of GPs considers that these mental health problems may be caused by the retirement event itself.

We also asked whether the socio-economic profile of people may play a role in their sensitivity to the development of health problems after quitting their job. According to 55-65% of GPs, **the education level** in Belgium has no influence at all on the risk of future health problems. Nonetheless, 36% of GPs indicate that less educated workers have a significantly higher risk of physical health problems and for 41% of the GPs, the workers with very high and those with very low levels of education (university + primary school) have a significantly higher risk of mental health problems after their transition to retirement. This does not really confirm a well-known result in the literature which suggests that more educated individuals are more efficient in maintaining a good health

Finally, it is interesting to note that GPs consider **health problems to be a marginal factor in explaining why people retire:** according to 85% of GPs, less than 10-20% of the people that retire do this because of health problems; the remaining 15% of GPs note that between 30-40% of retirement is due to health problems. This confirms results of Gruber-Wise(15) that retirement in most OECD countries is mainly caused by work disincentives in social security schemes for elderly.

4. Discussion and conclusion

GPs consider that the retirement event may frequently affect the subsequent mental and physical health status of the retired in an unfavourable way. Nonetheless, the type of health problems that arise (obesity and related cardiovascular diseases, depression and social isolation) seem avoidable in the sense that they reflect individual health behaviour. This suggests that individuals have some control over the evolution of their health status, and that there is scope for policy interventions to affect health behaviour. Policies could attract the attention of workers that are about to retire in order to encourage them to adapt their lifestyle (in terms of food consumption and physical activities) and to actively maintain social networks. Gradual transition from the labour market seems a natural way to achieve this in a smoothed way.

Fewer health problems arise among the retired people that maintain continuity in their life habits and social relations during the transition from work to retirement. This supposes that retirement is a planned and anticipated retirement decision. Anticipation of the retirement event may make older workers aware of the eventual rupture in their

lifestyle and social relations and this allows them to smooth this transition by cognitive training and investment in social relations.

The **main disadvantage** of this study is that the sample size is limited: one should be careful in generalizing results to the whole population of 14624 GPs in 2010. This is therefore more of an exploratory study indicative of future interesting areas for research. The **contribution** of this study is that for the first time in Belgium the impact of retirement on objective health is explored. Although using a limited sample size, the results are striking and indicate to policymakers that there is scope for improvement in wellbeing among the retired and at the very same time for lower health care spending. The results lead us to question the strong work disincentives to which older workers are confronted in Belgium. The dismantling of early retirement schemes and implementation of work incentives for continued professional activity would not only improve the well-being of the elderly population, but also would have a healthy impact on the governmental budget for pension and health care.

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