

## Health and prolonging working lives: an advisory report of the Health Council of The Netherlands

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**Objective** This opinion paper summarizes the main findings and recommendations of an advisory report on health and prolonging working life, which was requested by the Dutch Minister of Social Affairs and Employment.

**Methods** The advisory report was compiled by a multidisciplinary committee of ten scientists appointed by the Health Council of The Netherlands. The committee's aims were to (i) describe the health of the ageing population, (ii) describe how prolonging working life influences health, (iii) describe determinants, besides health, for prolonging working lives, and (iv) review the literature on interventions aimed at retaining or improving employability of older workers.

**Results** The report was presented to the Minister on 26 June 2018. As the likelihood of health problems increases with age, prolonging working life may be difficult. In general, life expectancy increases and gains in life years and health seem mainly attributable to people aged >75 years. Work is good for mental health. However, it may be beneficial for mental health to stop working around the retirement age. Besides health, financial factors, lifestyle, motivation to work, and working conditions play a role in prolonging working life. A systematic review of the evidence indicated that interventions such as worksite health promotion or career development workshops can support older workers in this matter.

**Conclusions** The Health Council advised the Dutch Government to focus on worksite health promotion and career development interventions as well as the improvement of their implementation. This requires a tailored approach as there is a large diversity in health among older workers and particularly between low- and high-educated people. With this in mind, it was further recommended to explore whether flexible pension schemes might better suit this diversity.

**Key terms** chronic disease; disability benefit; functioning; mental health; need for recovery; older worker; retirement; self-perceived health; sickness absence; unemployment; work ability.

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Because populations live longer, policies in Western countries are increasingly aimed at prolonging working lives in order to keep the social security system affordable. For example, in The Netherlands, financially attractive early retirement options have been discontinued and access to other exit routes, such as work disability, have been restricted. Furthermore, the official retirement age is being increased in The Netherlands, just as in many other countries (1, 2). The Dutch Minister of Social Affairs and Employment asked the Health Council of the Netherlands for advice from a health perspective on prolonging working lives (3).

In general, the likelihood of health problems increases with age. This applies not only to illness, but also to poor self-perceived health, physical limitations, and decreased cognitive functioning (4, 5). In addition, older people are more likely to have multiple health problems at the same time. However, there is great diversity within this group when it comes to health (6).

Many factors play a role in prolonging working lives, for example the ability, motivation and opportunity to work (7–9). However, considering the Minister's question, the main focus of the advisory report is on the 'ability' to work, ie, the role of health. Poor health decreases the employability of workers (10–13). For part of the 55–65-year-old workers who exit paid employment before the statutory retirement age (SRA), health plays an important role (14). It mainly concerns people who exit paid employment via work disability, but may also involve people who exit the labor force via unemployment or retirement before their SRA.

The aims of the full advisory report were to (i) describe the health of the ageing population, (ii) describe how prolonging working life influences health, (iii) describe determinants – besides health – for prolonging working lives, and (iv) review the literature on interventions aimed at retaining or improving employability of older workers. This opinion paper summarizes the main findings and recommendations of the full advisory report (available in Dutch) that was submitted to the Dutch Minister of Social Affairs and Employment on 26 June 2018.

### ***The committee and its methodology***

In 2016, the Health Council appointed a committee of ten scientists to address the Minister's questions. The committee members represented multiple disciplines, eg, occupational epidemiology, economics, sociology, human resource management, and occupational medicine. All committee members completed a declaration regarding conflict of interest, which was published on the website of the Health Council ([www.gezondheidsraad.nl](http://www.gezondheidsraad.nl)).

Because the extension of the statutory retirement age has only recently been implemented in The Netherlands and other countries, there is virtually no research on extending working lives (ie, working in a paid job beyond the age of 65 years, the statutory retirement age in the recent past). For that reason, four indicators of decreased employability were used as proxies in this paper: (i) increased need for recovery, (ii) decreased work ability, (iii) increased sickness absence, and (iv) exit from paid employment.

Different data sources and methods were used to answer the questions, ranging from descriptive data and key publications selected by the committee to systematic literature searches in PubMed. To formulate conclusions, the committee also used expert interpretation of the research findings.

### ***Main findings and recommendations***

Based on descriptive data, the committee concluded that currently in The Netherlands, people aged 45–75 years appeared not to be much healthier than people in the same age range two decades ago. Life expectancy at age 65 years has increased, mainly attributable to gained life years between 75 and 84 years of age for men and after 85 years of age for women (15, 16). Healthy life expectancy at age 65 years has also increased. However, this increase was mainly attributable to age-groups >75 years. Despite the positive developments in predicted life expectancy at age 65 years, healthy life expectancy at age 65 years, and health at older ages (17, 18), the committee expected that these future gains will mainly be attributable to people >75 years of age and will not be pertinent to the age range for which retirement age will be raised. However, low-educated older people generally have more health problems and a lower life expectancy and healthy life expectancy than those with a higher educational level (19, 20).

#### **And how does this influence work?**

The committee evaluated population attributable fractions (PAF) to estimate the relative importance of health in exit from paid employment. Based on these PAF, it was estimated that poor health played an important role in 16–27% of Dutch people aged 55–65 years who stopped working due to unemployment (14, 21, 22). Workers who become unemployed at an older age also have a much smaller chance of finding a new job, especially when they have health problems (9).

## Prolonging working life in relation to health

Health not only has an effect on whether or not a person is able to prolong working life, but prolonging working life can also have an effect on a person's health (23–25). Working was found to be good for mental health during working age (23). Around the age of retirement, however, it appeared to be more beneficial for mental health to stop working, according to prospective cohort studies (24, 25). Findings from natural experiments showed a possible decline in cognitive functioning after retirement, suggesting that retirement may not be beneficial for cognitive health (26, 27). However, this has to be confirmed, since work characteristics, timing of retirement (early or 'on time'), and education level seemed to influence this association.

## Determinants of prolonging working life – other than health

According to the committee, financial stimulants seem to play a crucial role in prolonging working lives (28–30). Individual factors, such as a healthy lifestyle and the motivation to work (31, 32), and organizational factors, such as decent working conditions, supportive personnel policies, and sufficient autonomy at work, were also found to play an important role (31, 33). These factors can offer entrees for supportive interventions. Findings suggested that individual and organizational factors that play a role in employability are quite similar for workers with and without chronic diseases (34). However, autonomy at work seems more important for workers with chronic diseases than for those without chronic diseases (34). In addition, it has been found that low-educated people are often exposed to less favorable working conditions (35).

## Interventions aimed at employability of older workers

The committee performed a literature search in PubMed for systematic reviews of randomized controlled trials (RCT) that evaluated interventions to retain or improve the employability of older workers. The included RCT had to meet the following inclusion criteria: (i) describe the effects on at least one of the four outcomes of interest (ie, need for recovery, work ability, sickness absence, or exit from paid work), (ii) describe interventions for the general working population or a working population with mild health problems or with an increased risk of health problems, and (iii) be published in English in a peer-reviewed scientific journal. Studies were excluded if: (i) the intervention was aimed at a population already on sickness absence or not working for other reasons, (ii) the intervention was conducted in a population with a specific disease, (iii) the intervention was conducted

in a student population, (iv) only a per-protocol analysis was available, (v) the methodology was unclear, (vi) only the protocol/design of the RCT was described, (vii) the intervention was a pharmacotherapeutic intervention, or (viii) the intervention took place in a clinical setting.

The search for systematic reviews was supplemented with a systematic search for RCT in PubMed published between 2012 [publication date of the oldest included review (31)] and December 2017 (see table 1). For this search, the same inclusion and exclusion criteria applied as described above. RCT carried out in workers aged  $\geq 40$  years ("older workers") were included.

The committee identified seven systematic reviews: three on interventions specifically in older workers (31, 36, 37) and four umbrella reviews (ie, review of reviews) (38–41). There was a large variation in study populations, outcome measures, and research designs within and between the synthesized studies. Three studies within these reviews met the predefined criteria for inclusion and were supplemented with five more recent RCT from the additional systematic literature search. Thus, in total eight RCT were identified on seven supportive interventions aimed at older workers (42–49).

The seven supportive interventions represented a wide range of measures: career development workshops, worksite health promotion (such as yoga, fitness, availability of free fruits), preventive consultations with an occupational physician, web-based health risk assessment, mental coaching by phone, regular exercise, and Tai Chi. Overall the interventions appeared to have small, positive effects on one or more of the four indicators of employability (ie, increased need for recovery, decreased work ability, increased sickness absence, and exit from paid employment of older workers). However, it has not yet been identified which interventions are most effective for which people at what point of their careers or in what working situations.

**Table 1.** Search strategy

The following search strategy was used for aim 4:

### Outcome

("need for recovery"[All Fields] OR workability[All Fields] OR "work ability"[All Fields] OR "work functioning"[All Fields] OR "sick leave"[MeSH Terms] OR (sick[All Fields] AND leave[All Fields]) OR "sick leave"[All Fields] OR absenteeism[MeSH Terms] OR absenteeism[All Fields] OR "sickness absence"[All Fields] OR "work participation"[All Fields] OR "work disability"[All Fields] OR "unemployment"[All Fields] OR "early retirement"[All Fields] OR "disability pension"[All Fields] OR "disability benefit"[All Fields]) NOT "return to work"

### Study design

"randomized controlled trial"[pt] OR "controlled clinical trial"[pt] OR randomized[tiab] OR

placebo[tiab] OR "clinical trials as topic"[MeSH:noexp] OR randomly[tiab] OR trial[ti] OR evaluation studies[publication type] OR "intervention studies"[MeSH Terms] OR intervention studies[All Fields]

## Policy recommendations

The Health Council advised the government to focus on interventions to support workers in prolonging their working life. Thus far, the positive effects of such interventions have been relatively small, but more effective interventions can be developed, combined with improved implementation of these interventions. Increasing autonomy at work is a promising starting point as well as human resource policies aiming at sustainable employability early in people's careers.

Although problems with employability are not solely observed among low-educated older workers, this group of workers requires special attention when it comes to prolonging working lives. This is because low-educated older workers have more health problems, a lower life (and healthy life) expectancy, and they are often exposed to less favorable working conditions, while they start working at a younger age.

The Health Council also recommended exploring whether flexible pension schemes are a better option compared to today's pension scheme when considering the large diversity in health. This diversity exists within the group of older workers in general and between low- and high-educated people in particular. A specific topic to explore would be whether flexible pension schemes could prevent a health-related exit from work via unemployment.

Furthermore, the Health Council advised to monitor the health of the working population in relation to a longer working life as it is still largely unknown what the health effects are of prolonging working life. It was also recommended to monitor the role of socioeconomic health differences in this perspective. Existing differences in health could be enlarged if people with sufficient personal financial means can afford to exit paid employment when health deteriorates, while people without these means cannot.

## Concluding remarks

In conclusion, from a health perspective, prolonging working lives may be difficult for a substantial minority of workers because the likelihood of health problems increases with age. Moreover, there is a large diversity in health at older age. The Health Council advised to focus on interventions to support workers in prolonging their working lives and to explore whether flexible pension schemes could prevent health-related exit from work via unemployment.

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The Board of the Health Council consciously weighed the interests and decided that UB, AB, DJHD, GAG, CJIMH, IJK, AdL, ML, WvR could participate in the committee without restrictions. AJvdB could participate with the restriction that he would withdraw from the discussion if a subject touches on his consultancy work (did not occur during the course of the project).

The authors declare no conflicts of interest.

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