

# Dutch life expectancy from an international perspective



Leyden Academy

ON VITALITY AND AGEING



# Summary



*Between 1934 and 1964, the Dutch repeatedly enjoyed the highest life expectancy in the world. Since then, both men and women experienced a long period of stagnation and by now life expectancy in the Netherlands has been surpassed by many countries. It has dropped from its first place position to the ninth place in the European Union (EU-15). As a longer life expectancy reflects the fact that good health is being maintained for longer, it is of key importance to better understand differences in life expectancy among countries.*

In this report, we have compared trends in life expectancy in the Netherlands to the United States that has a similar pattern, and to Sweden and France, the winners in Europe, and to Japan. Japan has had the highest life expectancy at birth for more than two decades now, currently approximating 79 years for men and 86 years for women. The corresponding life expectancy at birth in the Netherlands is respectively 77 and 81 years. In our study we show that the observed differences in life expectancy between these countries are dominated by mortality after age 65, as mortality at young age has almost vanished and death at middle age is minimised. The period of stagnation in life expectancy observed in the Netherlands is mainly caused by the fact that the rate of mortality in old age has remained constant whereas in other countries, most prominently in Japan, has continued to decrease.

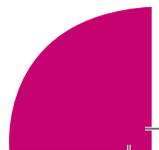
Smoking is an important determinant of mortality in old age. We have therefore closely examined the effect of smoking on life expectancy. At age 65 smoking in the Netherlands shortens life expectancy among men by 3.5 years and 1.5 years among women. We also calculated life expectancy at age 65 after correction for different smoking behaviour in the countries under study and found that the shorter life expectancy after age 65 of Dutch men is by and large attributable to smoking. Among Dutch women of 65 years and older, smoking also explains part of the shorter life expectancy, but, after correction for smoking, life expectancy remains more than two years shorter when compared to Japanese women of the same age.



It remains to be elucidated why older women in the Netherlands live several years less than in Japan. As we show in this report, the increased mortality rate cannot be attributed to a specific group of diseases. An emerging hypothesis therefore is that more general, societal determinants could explain for the shorter life expectancy of Dutch women.

Over the past fifty years, Dutch society has seen major shifts in responsibility for care of the elderly. Traditionally, the family and religious institutions took care, but this responsibility has almost completely shifted to formal and institutionalised care. In this report, we have explored whether this shift in responsibility of care may have contributed to the differences in life expectancy. A widespread idea is that the Netherlands has one of the highest rates of institutionalisation in the world whereas Japan has one of the lowest. We show that this assumption is only correct on first sight. If we take into account the long-term stay in hospitals in Japan, the Netherlands and Japan have a similar rate of institutionalisation above age 65. We therefore believe that institutionalisation cannot be responsible for the differences in life expectancy. Following from this, we concentrated on another striking difference between Japan and the Netherlands, namely the responsibility for informal care. We put forward two observations. First, in Japan older people live far more often with, or in close proximity of their children. Second, we have established that in Japan instrumental support is commonly included in informal care, whereas in the Netherlands emotional support plays a far greater role. It is tempting to speculate that co-residence and the different kind of support, may, in part, be the explanation for the differences in life expectancy.

In conclusion, this international comparison has shown us that life expectancy continues to rise. It is a challenge how to further improve outcomes of older people in the Netherlands and to narrow the gap with countries that have higher life expectancies. Strategies to discourage the habit of smoking in the Netherlands should be intensified and there is no reason to lessen attention for smokers above the age of 65. Next, it is necessary to continue the falsification of hypotheses that can explain the gap between the Netherlands and other countries, and to find positive arguments for causal explanations, further extending the healthy years of life.





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