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Life expectancy has steadily increased with around 2.5 years per decade over the past 150 years and continuous to do so at a similar rate.[1] Before 1950, the increase in life expectancy was primarily driven by reductions in child mortality. During the last decades, however, the increase in life expectancy is mainly the result of mortality reductions at old age.[2] Better living conditions and hygiene have saved us from an early death, while incremental health care innovations have brought us an old age.

When confronted with the increasing life expectancy, individuals are uncertain whether they would like to live longer than the nowadays average of 80 years. In sharp contrast almost everybody prefers to maintain a good health when growing old. This notion is even more pertinent as not only life expectancy has greatly increased, but the prevalence of life-style related diseases such as cardiovascular disease, obesity and diabetes as also increased.[3] It seems, that the increase in longevity comes at a cost of ill health. Here however, we reason that this conclusion is unjust and that we live longer in better health. To unravel this paradox, we should not only consider life expectancy with and without chronic diseases, but also life expectancy with and without disabilities, and life expectancy in self-perceived health.

For several decades in the Netherlands, life expectancy without disability and life expectancy in good self-perceived health have increased parallel to the increase in life expectancy.[4] During the same period life expectancy without chronic diseases has decreased, in line with the international trends. There is a sound logic that the reduction of years without chronic diseases can coincide with living in better health for longer. First, changes in life-style have increased the prevalence of hypertension, obesity, diabetes and other life-style related diseases. Second, ailments associated with ageing are diagnosed earlier due to increased health awareness and screening. But third, treatment outcomes of disease states are ever improving and permanent damage is increasingly being prevented. The net result is that life-style changes and earlier diagnosing have contributed to an increased number of years ‘suffering’ from chronic diseases, but at the same time appropriate treatment of these ailments provided us with an extra number of years without disabilities. We now live healthier for longer than ever before.

Some have a more pessimistic view and argue that longer lives bring with it worsening health.[5] This is an often-made misinterpretation when looking at trajectories of the number of years with and without chronic diseases only. Being diagnosed with disease by the doctor is not the same as being disabled. To illustrate this stand, we take hypertension as an example, the occurrence of which has greatly increased over the last decades. With
improved screening algorithms for hypertension, we managed to reveal the ailment, to treat it and to delay the occurrence of cardiovascular disease. By preventing stroke and heart failure at an early age, disability and death are postponed to a higher age. When diagnosed with hypertension, one is labelled as being diseased but it allows for adequate intervention. As a result of our impetus, life expectancy in good self-perceived health is still on the increase.

One thing that should be noted is that there is a considerable female-male difference in morbidity, which has been observed in various countries and persists up to old age. Although women have higher life expectancy than men, they proportionally live more years in ill health. There is little known about the exact mechanisms behind this sex difference. It is partly explained by differences in the prevalence of non-lethal chronic conditions. Women for instance suffer more from osteoporosis and musculoskeletal disorders. Furthermore, it has been argued that women have a shorter ‘patient delay’, are more rapidly seeking medical attention and are consequently diagnosed with disease earlier than men.

It is a daunting task to predict the shape of health and disease trajectories in the future, but past performance in healthy life expectancy allows some probabilistic conclusions. People born today, will survive up to very old age while maintaining a good self-perceived health. This has important implications for society. One of the fears of our ageing populations is that this fuels an explosion of health care expenditures. The highest costs appear at the end of life, to accommodate disability and frailty, but as the data show, this number of years is not likely to expand. At the end of life there will remain a period of frailty that cannot be further compressed, but is delayed to later age. It is a well-known fact among health economists that the increase in expenditures is primarily driven by health care innovations.

It is a privilege to live in a society where so many people live up to old age and never before have we enjoyed so many years without disability that are well perceived. Some argue that this longevity revolution becomes untenable, as social and pension systems will fail. The new insight is that the extra years that we have gained are good years and need to be exploited. It allows people to stay active and be vital for a longer period of their life course. It is a challenge to rearrange our societies in such a way that older people can contribute and participate for longer. Postponing pension age, for example, can help to accommodate the labour shortage that is projected and will reduce the burden on the pension systems.[6]
It is time people realise that they can foresee a healthier and longer life and plan their life course accordingly.
REFERENCE LIST
