



CAUSINEQ: SUMMARY OF FINDINGS

Causes of health and mortality inequalities in Belgium: multiple dimensions, multiple causes.

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In Belgium, life expectancy is now twice what it was 170 years ago due to improvements in public and private hygiene, nutrition, medical progress and health services. The average lifespan of a Belgian resident is now over 80 years, but inequalities persist. In Belgium, like in other European countries, a negative relationship has been demonstrated between socio-economic position on the one hand and health and mortality on the other hand. The CAUSINEQ-project aimed to investigate these social inequalities in health and mortality in Belgium, their evolution in recent years and the role of de-standardised employment arrangements and family situations. The goal was to obtain information on the structural drivers of social differences in mortality and health and generate policy-relevant findings.

The evolution of life expectancy and inequalities in mortality. Using a multidimensional indicator of socio-economic position – combining educational level, employment status and housing characteristics – we show that social inequalities in death are significant in Belgium and that they have been increasing both for men and women since at least the 1990s.

In Belgium, in the period 2011-2015, the gap in life expectancy between the extremes of the social pyramid amounts to 9 years for men and 6 years for women.

In relative terms, gaps between social groups are especially wide between the age of 25 to 50, but the impact on differences in life expectancy is limited because of the low risk of dying at these ages. Today it is mainly the decline in mortality among the elderly that explains the gains in life expectancy at birth. However, also this age group drives (increasing) inequality in life expectancy. The gains in the older age groups are far more pronounced for the most privileged social groups. Therefore, social disparities in mortality for older people (65+) have a strong effect on socio-economic differences in life expectancy. Social inequalities in mortality and their variation along the social continuum exist for each of the major causes of death, but they are particularly pronounced for diseases of the respiratory and circulatory systems.

Between 1950 and 2015, life expectancy at birth increased by just over 20%, while life expectancy at 65 and 80 years increased by 50% and more than 60% respectively.

We also find that spatial disparities in mortality between regions, districts and municipalities linger and have been worsening for at least a quarter century. The spatial pattern of mortality for the less-privileged social group resembles the spatial patterns of the privileged and intermediate social groups. Within the same social group, spatial disparities persist. This indicates that beyond the socioeconomic composition of regions and districts, other than individual socio-economic factors (e.g. environmental, cultural and behavioural) affect mortality across social groups in a similar way. However, the pattern of spatial inequalities is more pronounced among the less-privileged social groups, compared to the most privileged.

Between districts, for the less-privileged men, there is a gap of 7.4 years in life expectancy, for privileged men it is 4.5 years. The gap for women ranges from 4.4 to 5 years.

Employment status as a driver of mortality inequalities. Patterns of mortality inequalities by employment status were investigated in detail at the individual level for the period 2001-2011. In Belgium the unemployed have a two times higher mortality risk than the employed. Even assuming similar educational levels, housing conditions and living arrangements, unemployed men still have a higher mortality risk than their employed counterparts. Conclusions for women are comparable, but inequalities are smaller. Analyses show that the mortality excess of the unemployed results from an excess mortality in practically all main causes of mortality. A slight protective effect of education against the detrimental impact of unemployment was demonstrated. Higher educated unemployed men have a somewhat lower mortality than lower educated unemployed men, but their mortality is still significantly higher compared to employed men (in each educational group). Moreover, comparing the mortality gap between employed and unemployed within the same educational groups shows that this gap is greatest among the highly educated. In other words, the latter experience the highest 'mortality penalty' from unemployment. Furthermore, our results illustrate that also 'context' (e.g. deprivation level, unemployment rate as characteristics of districts and municipalities) matters regarding the mortality risks associated with unemployment. We found that the mortality excess of unemployed men and women was smaller in districts with higher aggregate unemployment levels. This is in line with earlier findings on the 'social norm of employment' hypothesis.

In Belgium, someone who was unemployed in 2001, had a two times higher risk of dying before the year 2011, compared to someone who was employed in 2001.

The higher mortality of the unemployed suggests a positive effect on life expectancy of having a job. This statement is true; however, our analyses also show that men in non-standard types of employment (e.g. temporary agency work, fixed term contracts, seasonal work) experience an excess in all-cause mortality and cancer mortality. Female non-standard workers' relative mortality risks are less pronounced than those of their male counterparts but follow a similar pattern. Results from cross-classifications between employment type in 2001 and employment status (employed versus unemployed) in 1991 show that nearly all categories of male workers whose employment trajectory deviated from stable permanent employment in 1991 and 2001 had elevated all-cause mortality, after controlling for confounders.

Male and female workers holding a temporary agency contract in 2001 respectively had a 57% and 31% higher chance to die in the period between 2001 and 2016, compared to male and female workers holding a permanent contract.

Mortality and living arrangements. To account for the de-standardisation of family formation processes, mortality differentials by marital status and type of family situation were studied. Matrimonial behaviour varies between the Belgian regions: Flanders is characterised by a greater share of married couples and a lower proportion of divorced and single people. In Brussels isolated individuals are overrepresented, compared to Flanders and Wallonia. At the same time, married individuals and those who are not married but live in a couple

experience lower levels of mortality in each of the three regions. Interactions between the 'undermortality' of (married) couples and differences in matrimonial behaviour between the three regions are relatively small and do not provide an explanation for observed regional mortality differences.

Also, excess mortality was revealed for children under 5 years of age living in single-parent families, even after controlling for the main socio-demographic variables. This excess mortality is particularly pronounced for violent deaths. Tentative explanations for this finding might be less parental supervision or less safe housing and living conditions.

Children under five living in single-parent families have a 40% higher mortality risk, compared to children of the same age living in a coupled household.

Employment quality, living arrangements and health. A typology representing the quality of the employment situation was constructed based on survey-data. Employees were grouped into a limited number of categories, based on the characteristics of their employment situation. Other activity statuses (e.g. self-employed, unemployed) were added to this typology. This endeavour shows Belgium as a country with a stable, low prevalence of precarious employment when compared to other EU-countries. However, the prevalence of one particular type of precarious employment is considerable and growing in Belgium, namely 'precarious unsustainable employment', characterised by low working hours and low monthly wages and often held by female workers. The employment typology shows clear relationships with health outcomes, net of social and living arrangements. Three labour market positions are most likely to be associated with general and mental health problems: unemployment, precarious employment and instrumental employment. Our results moreover show that unstable employment is only marginally better for the health of workers than unemployment.

Workers in precarious jobs have 50% higher odds to be in adverse health, compared to workers in a stable job, while for the unemployed this gap amounts to 85%.

Conclusion and implications of the project. The results of the CAUSINEQ-project reveal recent figures on inequality in health and mortality in Belgium, while it also presents groundbreaking insights on the structural drivers of these inequalities. The main conclusion of this research is that, while life expectancy increases for all, the socio-economic inequalities in life expectancy are persistent and generally increasing. Moreover, the de-standardisation of working and living arrangements in the past decades did come with a penalty in terms of mortality and ill-health. In fact, labour market and family related instability and uncertainty are powerful drivers of persisting socio-economic inequalities in health and mortality in Belgium. To the extent that these tendencies towards de-standardisation are difficult to prevent, our study results suggest that current policy institutions are insufficiently equipped to alleviate the consequences of this de-standardisation in terms of public health. The wider implications of this project are of great importance for different actors, from health professionals over social partners and non-profit organisations to policymakers at different policy departments of the federal and regional entities of Belgium.

