

**EXAMINING HEALTH  
INEQUALITIES  
IN SLOVENIA  
DURING THE  
FINANCIAL CRISIS**

**Key takeaway  
messages**

## Foreword

*The publication “Examining Health Inequalities in Slovenia During the Financial Crisis – Key Takeaway Messages” is a shorter version of the report in Slovene bearing the same title and published by the National Institute of Public Health Slovenia (NIJZ) in 2018. The report is available free of charge online (<https://www.nijz.si/sl/publikacije/neenakosti-v-zdravju-v-sloveniji-v-casu-ekonomske-krize>), printed copies can be ordered at [info@nijz.si](mailto:info@nijz.si). This publication came about in the framework of the Slovene Resolution on the National Health Care Plan 2016–2025 “Together for a Healthy Society”, which lists better health and less health inequalities among the Slovene population as one of its key objectives. This brief, yet concise version of the publication aims to provide readers with our key findings and takeaway messages on health inequalities in Slovenia in a clear, easy to understand format, which is nonetheless scientific and evidence-based.*

*We are aware of the fact that (in)equalities in health are a reflection of complex real-life situations, mainly dependent on the wider societal context of the places where we are born, live, work...Health inequalities do not adhere to the principles of social justice, since these inequalities are avoidable. Health inequalities do not occur at random. They are determined by contexts outside the direct control of the individual. These factors limit individuals of their potential to live longer, healthier lives.*

*This publication shares the same main conclusion as our first report on inequalities in Slovenia, published in 2011 – **namely, that just as in other countries health inequalities in Slovenia do exist.** As a general rule, better health is connected to higher socioeconomic status, whereas lower socioeconomic status is linked to worse health. Individuals are therefore unable to achieve the highest possible standard of mental and physical health that is within their rights. The main goal of this report and publication is therefore to raise awareness amongst key stakeholders that can contribute to a reduction of inequalities. The publication puts forth the key findings and analyses of experts in the field of public health employed at NIJZ and the Institute of Macroeconomic Analysis and Development of the Republic of Slovenia, while also including cross-sectoral approaches. This publication reflects the current state of affairs in society and explores the effects of the financial crisis on health. As also stated in the foreword to the full report, it is difficult to*

accurately measure the effects of the financial crisis, as these effects are long-term and not yet fully recognised. We have tried to paint an accurate picture using the full arsenal of tools and knowledge at our disposal. **We have demonstrated that health inequalities based on socioeconomic status have not increased in Slovenia during the financial crisis.**

An individual's educational attainment is the main indicator of socioeconomic status as illustrated in this publication; in Slovenia, education is currently correlated with income levels. The field of health inequalities is complex and we have done our best to illustrate inequalities through a prism of differing perspectives and throughout different life stages – spanning a comparison of Slovenia with other EU countries, a display of inequalities in various health conditions and health determinants in different life stages, inequalities of particularly vulnerable groups, inequalities based on financial access to healthcare services and examples of good practices that reduce inequalities. We have used all the available data produced by various institutions during our analyses.

Our wish is that this publication will serve as a building block and foundation for future decisions that may reduce inequalities and create a more just environment and life for the entire population.

In-depth analyses, descriptions of vulnerable groups, examples of good practice and further information on methodology and references are available in the full version of the report.

## How Healthy are Slovenes in the Context of the EU?

Slovenia has managed to maintain its traditionally good ranking in regards to certain health indicators (such as infant mortality rate), whilst also ranking amongst the worst countries in the EU in others (such as suicide rate); numerous other health indicators place Slovenia roughly in the middle of the EU ranking (such as life expectancy).

Life expectancy at birth is somewhat above the EU28 average, while Slovenia lags behind the EU28 when it comes to life expectancy at 65 years of age.

### Legend:

- Shade of orange indicates a deviation of the indicator that is NEGATIVE from a public health perspective.
- Shade of green indicates a deviation of the indicator that are POSITIVE from a public health perspective.

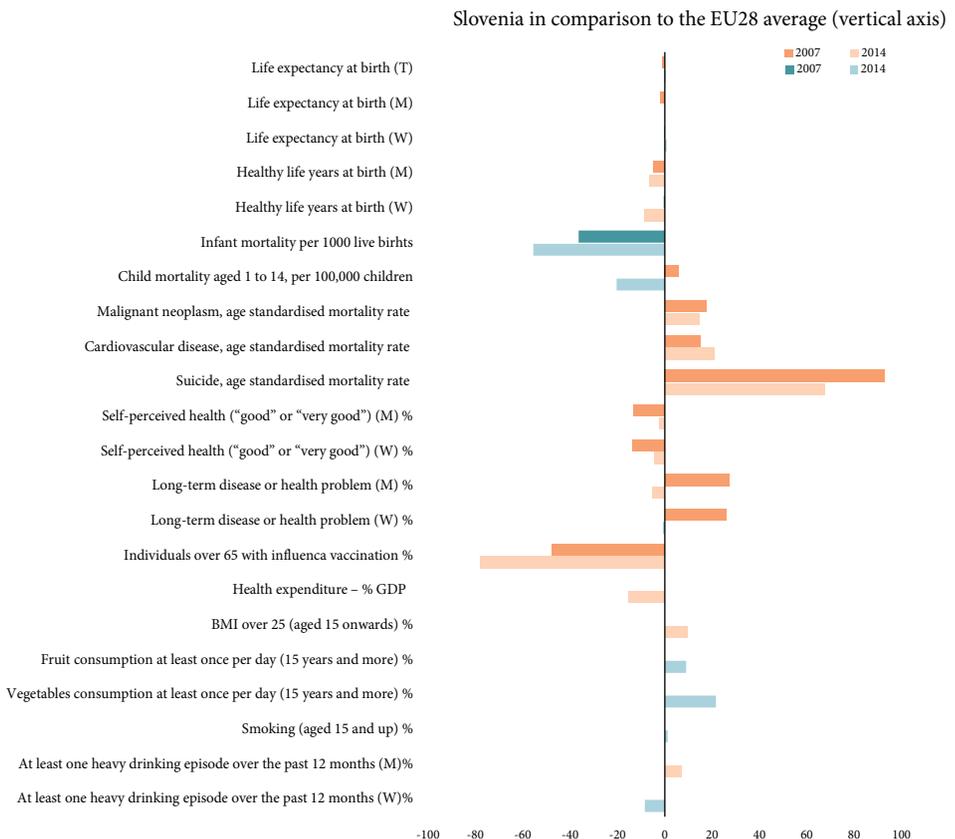


Figure 1: Selected health indicators, comparison of Slovenia (horizontal bars) and the EU28 average (vertical line), for 2007 and 2014

Slovenia has been fortunate in maintaining the relatively good health of the population throughout the financial crisis despite relatively low health expenditure in comparison to other EU Member States.

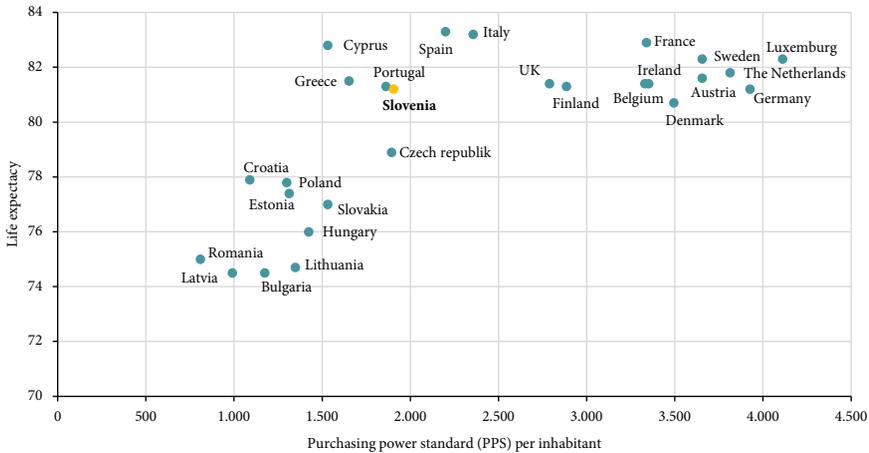


Figure 2: Life expectancy based on health expenditure per capita, European countries, 2014

## Life Expectancy and Healthy Life Years

- Highly educated Slovenes live longer and are in better health than individuals with lower attained levels of education.
- The gap in life expectancy for individuals aged 30 based on educational attainment decreased in the period 2012–2014 compared to the period 2006–2008, in both sexes.

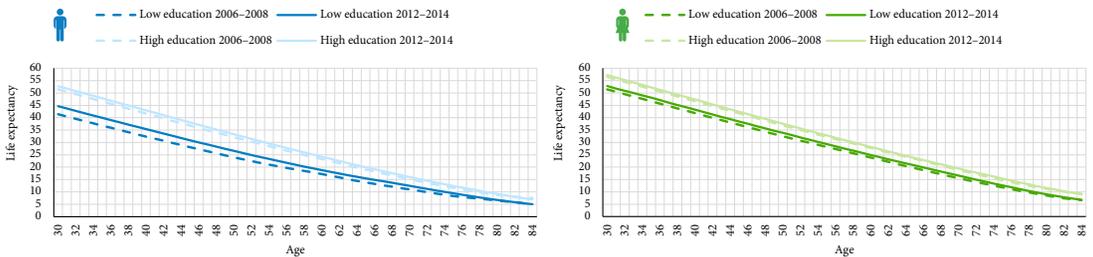


Figure 3: Life expectancy in men and women with lower/higher educational attainment in Slovenia in the periods 2006–2008 and 2012–2014

- The gap in life expectancy at 30 years between individuals with high vs. low educational levels decreased in both sexes in the period 2012–2014 in comparison to the period 2006–2008. There was a greater reduction of inequality for the life expectancy of men than for women, due to increased life expectancy in individuals with lower education and decreased life expectancy in individuals with higher education.
- Individuals with lower educational attainment require additional attention in order to achieve their potential, actively contribute to society and live to a healthy old age.

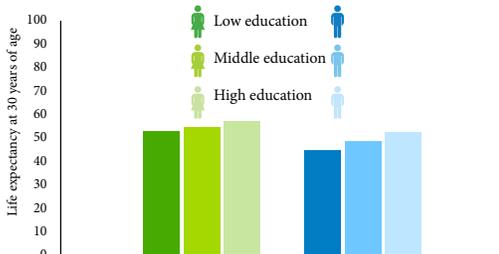


Figure 4: Life expectancy at 30 years of age according to educational attainment in men and women in Slovenia, average in period 2012–2014

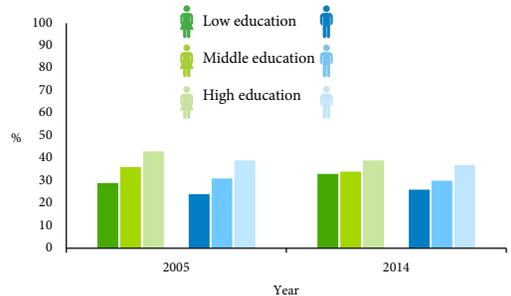


Figure 5: Expected healthy life years at 30 years of age, according to education and sex, 2005 and 2014

## Socioeconomic Inequalities During Pregnancy

Planned pregnancies result in better outcomes. Women with the lowest educational levels are more likely to suffer from unwanted pregnancies, as their abortion rates are higher than those of more highly educated women..

Less educated women face a higher risk for negative outcomes during pregnancy. There was no change in the frequency of premature labour and low infant birth weight amongst mothers of different educational levels during the financial crisis.

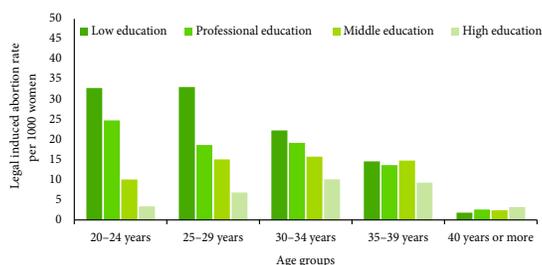


Figure 6: Rate of legal induced abortions based on education and sex in Slovenia

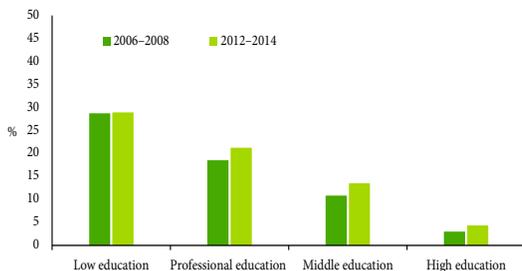


Figure 7: Percentage of pregnant women smokers in Slovenia, according to educational attainment, 2006-2008 and 2012-2014

Young, uneducated women are most likely to smoke during their pregnancies. The percentage of pregnant smokers increased during the financial crisis, as did the percentage of pregnant women with increased bodyweight.

Less educated women are less likely to receive prenatal care and more likely to present late for prenatal visits. Similarly, less educated women attend prenatal and parenting courses less frequently. The financial crisis had no impact on the educational stratification of expecting women attending prenatal/parenting courses.

## Health and Behaviour of Slovene Youth

- Youth that self-assess their family's financial status as lower exhibit worse health indicators and behavioural traits.
- There was no increase in inequality among youth in the period from 2006 to 2014, with the exemption of smoking on a weekly basis.
- Slovenia ranks in the countries with lower to mid-size disparities among youth with high/low family wealth.

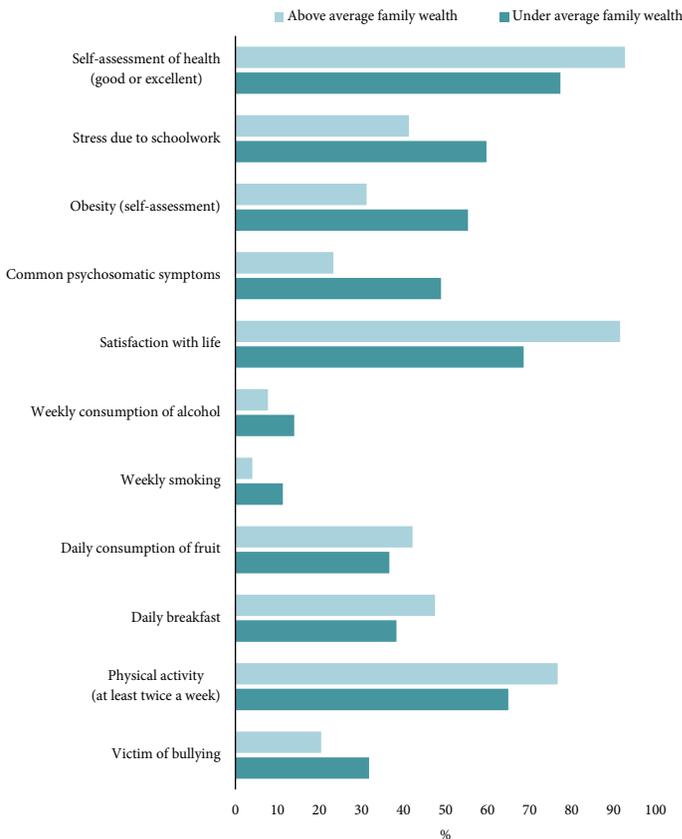
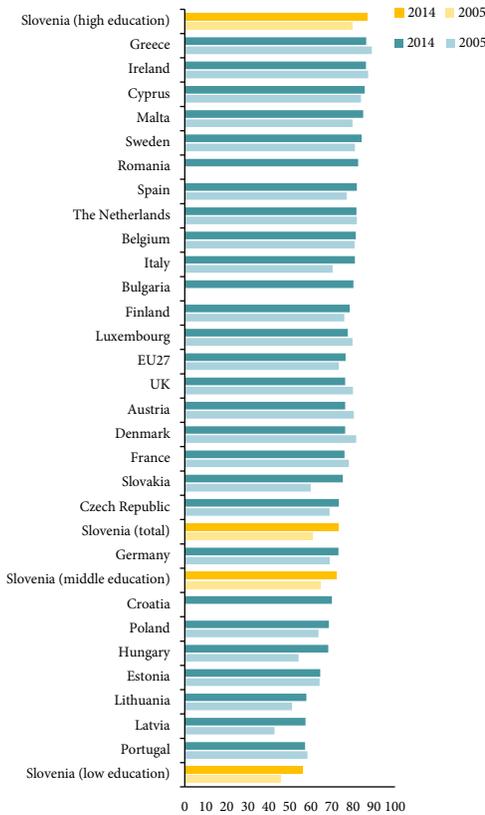


Figure 8: Selected indicators in youth with below- and above-average self-assessment of perceived family wealth 2014, Slovenia

## Self-assessment of health



- Self-assessment of one's health differs according to education and income – individuals with lower educational levels and lower incomes are less likely to rate their health as good.
- Inequalities in self-assessment of good health occur less often in men than in women and did not statistically differ in the observed period.

Figure 9: Percentage of adults, aged 16–64, who rate their health as “good” or “very good”, EU Member States and Slovenia, by educational attainment, 2005 and 2014

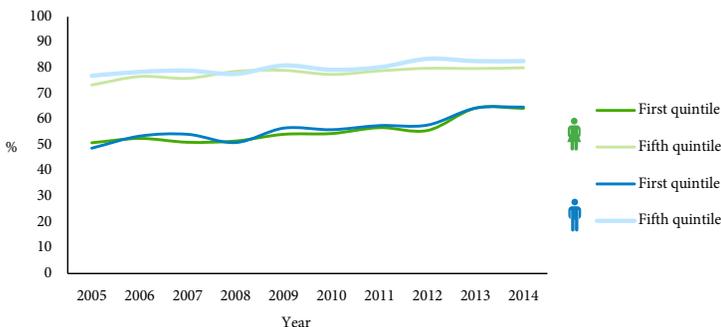


Figure 10: Percentage of adults, aged 16–64, who rate their health as “good” or “very good”, according to sex and financial income (in quintiles), Slovenia, 2005 and 2014

## Smoking

Men with lower educational levels and women with middle educational levels are more likely to smoke. There has been a decrease in the percentage of highly educated female smokers over the last period.

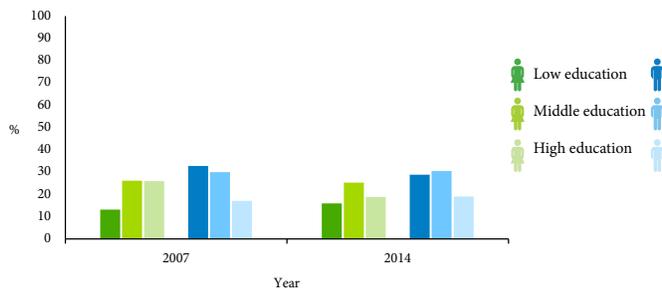


Figure 11: Percentage of male/female smokers, according to educational attainment, 25 and older, in 2007 and 2014

Men with lower educational levels were 2.5 times more likely to die of lung cancer than men with higher educational levels, while there was no such difference observed in women. There was no difference in mortality over the two observed time periods.

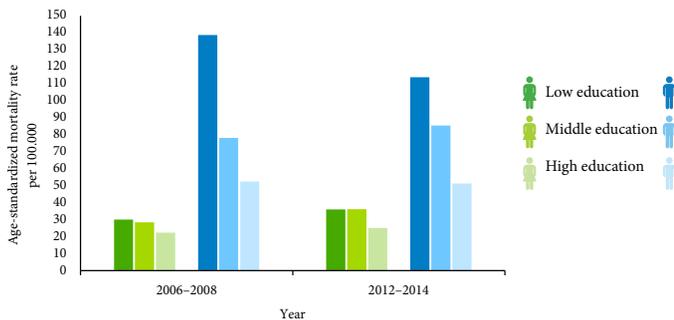


Figure 12: Age standardised mortality rate due to lung cancer in adults aged 25–75, based on education, comparison of periods 2006–2008 and 2012–2014

## Alcohol

Mortality directly attributed to alcohol has increased in the last period, regardless of sex and educational attainment. Inequalities based on educational attainment have not increased over the last period.

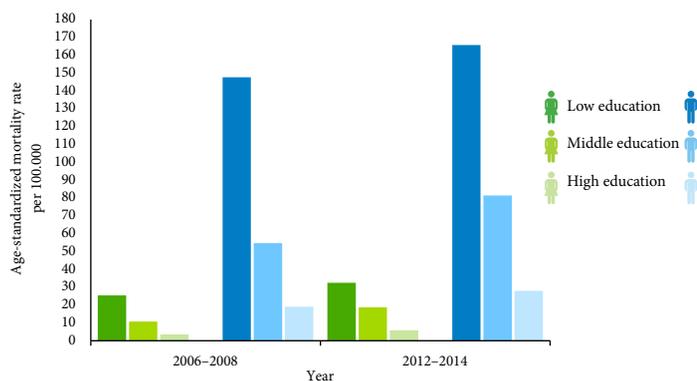


Figure 13: Age standardised mortality rate directly attributed to alcohol, per 100,000 inhabitants, based on sex, averages 2006–2008 and 2012–2014, Slovenia

Drinking patterns are largely dependent on cultural environments and attitudes to alcohol consumption. In Slovenia, the frequency of high-risk drinking behaviour increases with higher educational levels.

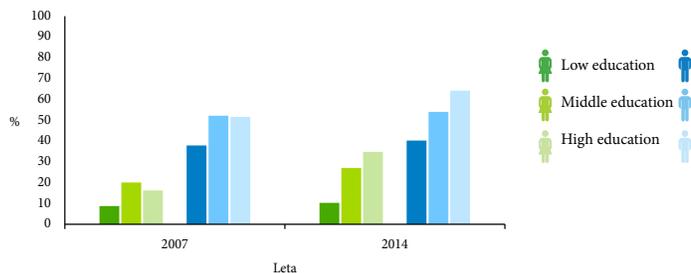


Figure 14: Percentage of men and women, 25 and older, with at least one heavy drinking episode over the last 12 months, in 2007 and 2014, according to age and education, Slovenia

## Mental health

Highly educated individuals are less likely to present symptoms consistent with clinical depression. Likewise, the employment status of an individual significantly impacts their feelings of anxiety and the frequency of clinical depression.

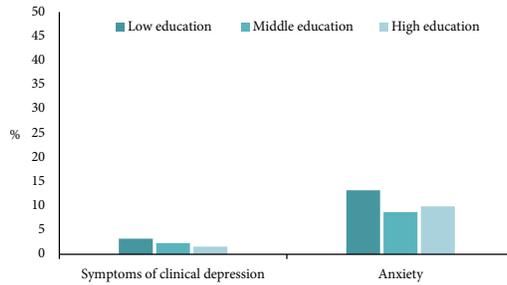


Figure 15: Presence of symptoms of clinical depression (DSM-IV) over the past two weeks, presence of anxiety over the past 12 months, based on education, Slovenia, 2014

Individuals with lower levels of education are more likely to be prescribed at least one anti-anxiety and antidepressant medication, for all age groups and in both sexes (except for men over 65 receiving prescription anti-anxiety medication) than highly-educated individuals.

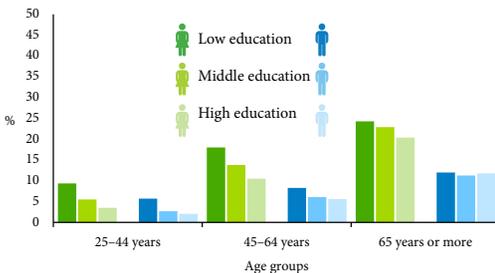


Figure 16: Percentage of individuals with at least one prescription for anti-anxiety medication, by sex, age and education, Slovenia, 2015

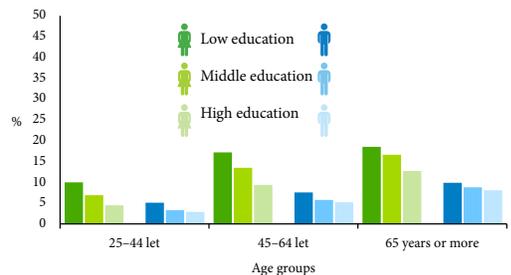


Figure 17: Percentage of individuals with at least one prescription for antidepressant medication, by sex, age and education, Slovenia, 2015

The trend of suicide reduction in men has come to a halt in the last observed period. Inequalities based on educational attainment have not changed over the two compared periods .

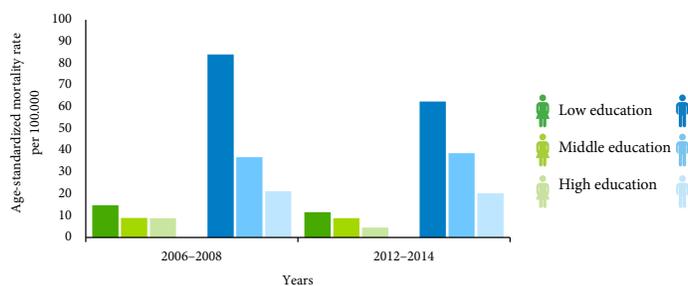


Figure 18: Age standardised mortality due to suicide according to education, comparison between periods 2006-2008 and 2012-2014, and according to sex, Slovenia

## Obesity, risk factors and cardiovascular disease

- Consumption of the recommended daily amount of vegetables does not differ by educational attainment. Women consume vegetables more frequently than men.
- Men are more likely to participate in the recommended amount of physical activity, but those with a lower level of education are less physically active. Likewise, women with a lower level of education are also less physically active.

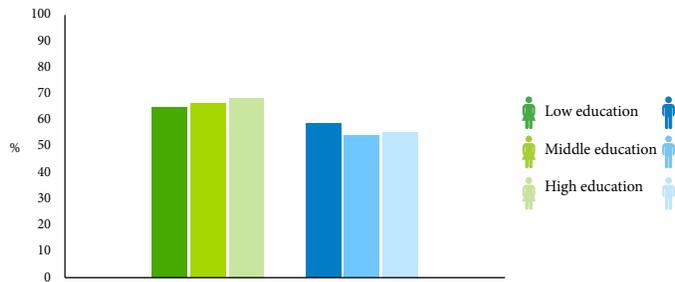


Figure 19: Frequency of recommended amount of vegetable consumption - once or more per day, based on sex and education, Slovenia, 2014

- The percentage of obese individuals decreases as educational levels get higher and has increased in the observed periods (2007 and 2014), particularly among individuals of both sexes with a secondary-school education and men with a college education.
- Inequality in obesity levels has not changed in the observed period.

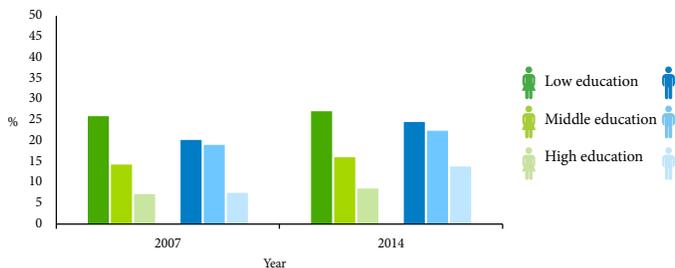


Figure 20: Percentage of obese individuals (BMI  $\geq$  30) based on sex and education, Slovenia, comparison between 2007 and 2014

- Obese individuals with lower levels of education are most susceptible to cardiovascular disease.
- Individuals with lower educational attainment are more often hospitalised due to cardiovascular disease.

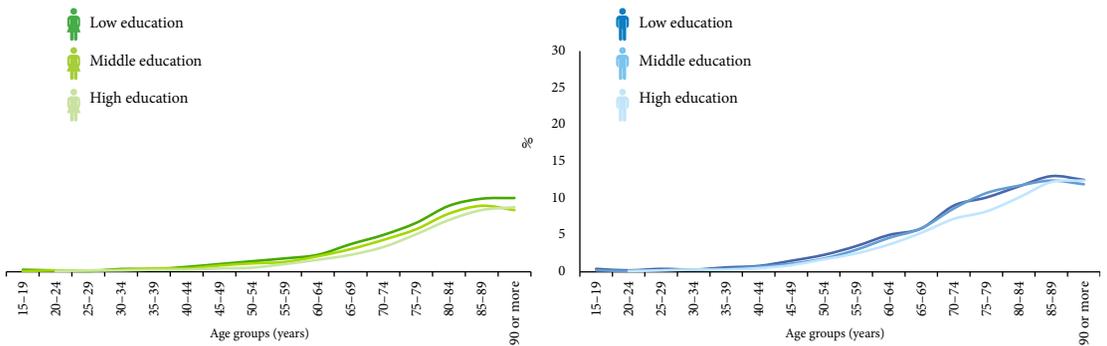


Figure 21: Percentage of individuals hospitalised due to cardiovascular disease, compared to individuals in all age categories, based on educational level, Slovenia, 2015

We have observed education-based inequalities in both sexes as regards prescriptions for antihypertensive medication, but more so in younger men than in women.

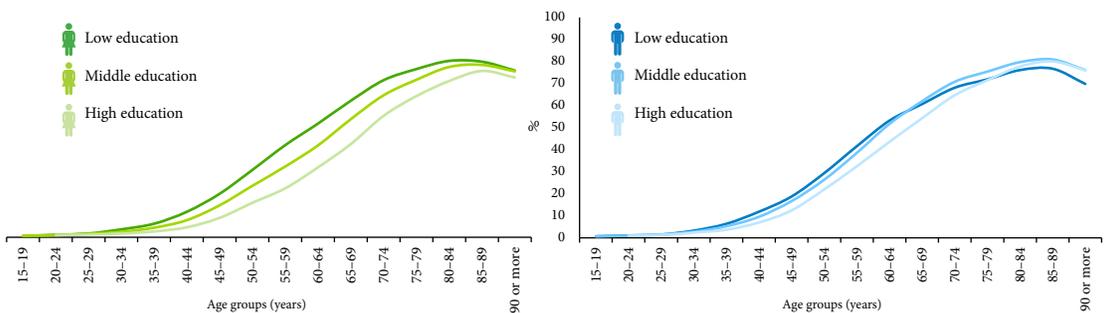


Figure 22: Percentage of individuals with prescriptions for antihypertensive medication, based on educational attainment, Slovenia, 2015

## Unintentional injuries in adults

Inequalities in unintentional injuries lessened during the financial crisis, particularly due to a reduction in mortality of men with lower educational levels.

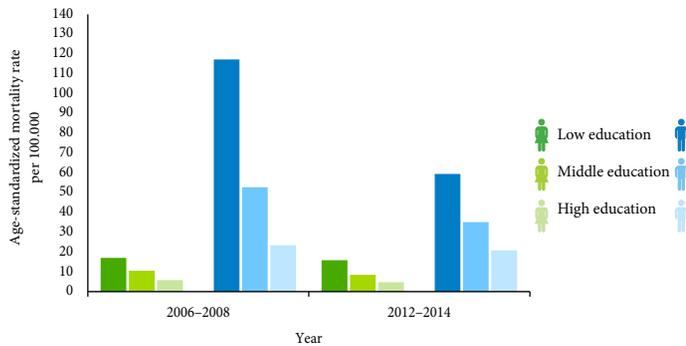


Figure 23: Age standardised mortality (per 100,000 inhabitants) of men and women aged 25–74 due to unintentional injuries, according to educational attainment, Slovenia, 2006–2008 and 2012–2014

In times of financial insecurity, individuals tend to act with greater caution and abuse alcohol to a lesser extent.

During the financial crisis, the percentage of deaths in traffic accidents in Slovenia due to intoxicated drivers has decreased.

# Vaccination Against Tick-borne Meningoencephalitis

Vaccination against tick-borne meningoencephalitis (TBE) is largely dependent on education – individuals with higher levels of education are vaccinated in higher percentages than those with middle or lower levels of educations.

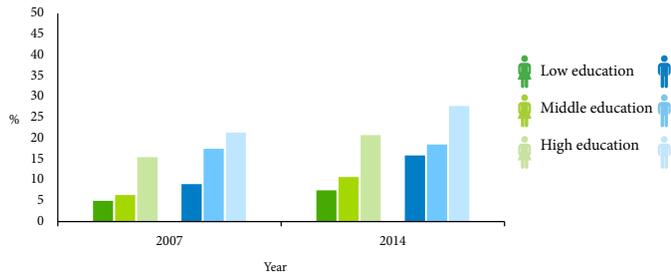


Figure 24: Percentage of individuals vaccinated against TBE at least once in their lifetime, men and women, according to educational attainment, 2007 and 2014

Individuals with low levels of education expressed the least interest in TBE vaccination and furthermore, would be interested in TBE vaccination only if it were free of charge.

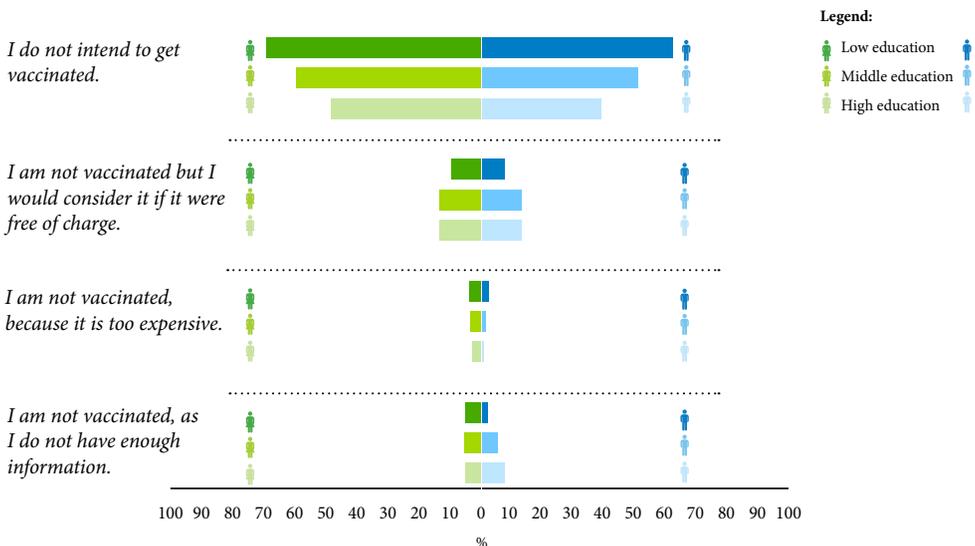


Figure 25: Reasons reported by individuals for not having received TBE vaccination, according to sex and education, Slovenia, 2014

## Health in the Elderly

- We have not observed a change in inequalities of the elderly when it comes to their own assessment of their health - individuals with lower levels of education rated their health as “good” least often.
- Elderly individuals with lower education are less capable overall – they tend to be more dependent on others for their care, are less mobile and less likely to be in control of their personal finances. This is why the risk of age-related frailty is larger for this group.

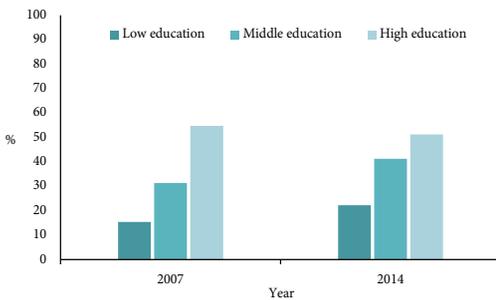


Figure 26: Percentage of individuals over 64 who rated their health as “good” in 2007 and 2014, based on level of attained education, Slovenia

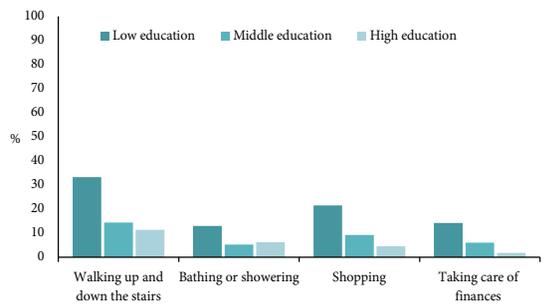


Figure 27: Percentage of individuals over 64 who cannot perform the listed activities or can do so only with great difficulty (based on questionnaire about everyday habits), Slovenia, 2014

Elderly with lower levels of education visited the dentist and underwent dental care less frequently.

- In the elderly, lower levels of education are connected to higher mortality due to falls.
- Inequalities in fall-related mortality have decreased during the global financial crisis.

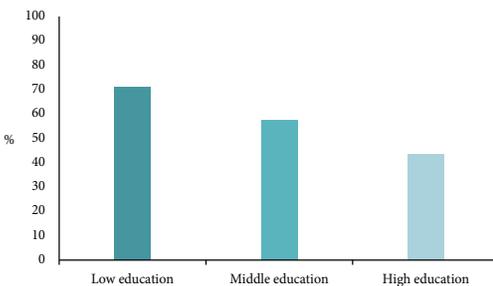


Figure 28: Percentage of individuals over 65 who answered that they had last visited a dentist over 12 months ago or had never before visited a dentist, according to educational attainment, Slovenia, 2014

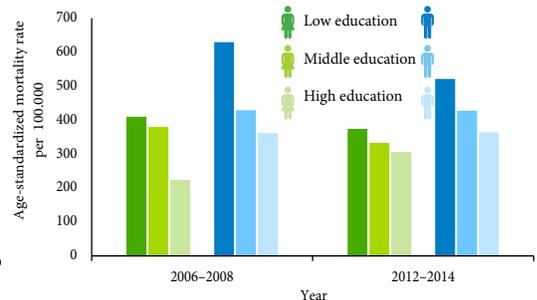


Figure 29: Standardised fall-related mortality (per 100,000 inhabitants) for women over 64, according to educational attainment, Slovenia, 2006-2007 and 2013-2014

## Financial Accessibility to Healthcare

All internationally comparable indicators show that the Slovene population (all income categories) has very good access to the healthcare system, thus providing households with an additional level of financial security. This feature of the Slovene healthcare system has therefore been successfully maintained also during the financial crisis.

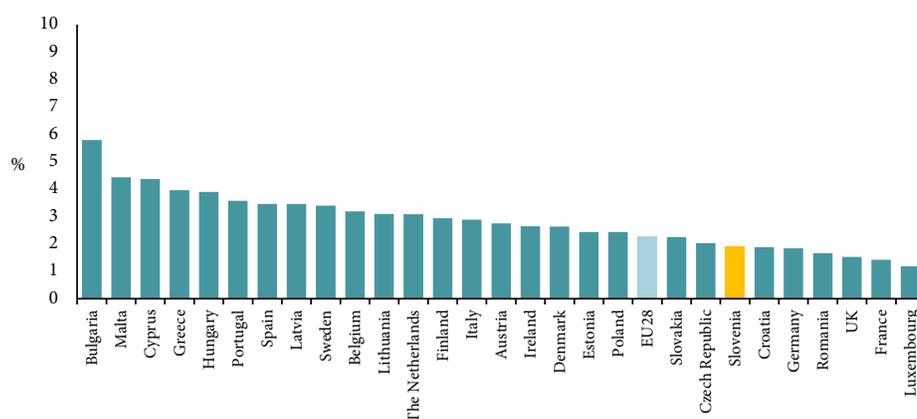


Figure 30: Percentage of health out-of-pocket expenditure in total household consumption, Slovenia and EU countries, 2014

Differences in the scope and structure of direct healthcare expenditure based on household income categories in Slovenia have increased significantly over the past fifteen years.

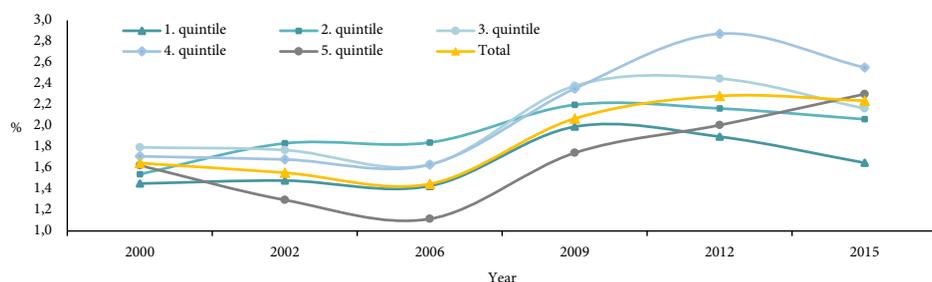


Figure 31: Percentage of health out-of-pocket expenditure in total household consumption according to income quintiles, 2000–2015

Table: Overview of indicators based on educational gradient (inequalities in health due to educational differences) and change in inequality

Indicator		Educational gradient	Inequality in the observed time period
Life expectancy at age 30		●	↘
Expected years of life in good health at age 30		●	↘
Early life	Smoking during pregnancy	●	↔
	Prenatal care and preparation for delivery	●	↔
	Pregnancy outcomes	●	↔
Health of youth	Self-assessment of health	●	↔
	Preoccupation with school	●	↔
	Obesity	●	↔
Self-assessment of health		●	↔
Smoking and lung cancer	Percentage of smokers	●	↘↔
	Mortality due to lung cancer	●	↔
Vaccination against tick-borne meningoencephalitis		●	/
Alcohol and mortality	High-risk drinking	●	↘↔
	Mortality directly attributable to alcohol	●	↔
Nutrition, physical activity, obesity and cardiovascular disease	Consumption of vegetables	●	/
	Physical activity	●	/
	Obesity	●	↔
	Cardiovascular disease	●	/
	Hospitalisation due to cardiovascular disease	●	/
	Prescription medications due to pulmonary hypertension	●	/
	Mental health	Signs of clinical depression	●
	Feelings of anxiety	●	/
	Use of antidepressants	●	/
	Use of anti-anxiety medication	●	/
	Suicide	●	↔
Mortality due to unintentional injury		●	↘
Health in the elderly	Self-assessment of good health	●	/
	Functionality	●	/
	Visit to dentist/orthodontist	●	/
	Mortality due to falls	●	↘

**Legend:**

● Inequalities in health observed. Individuals with low levels of education have worse health.

● Inequalities in health observed. Individuals with high levels of education have worse health.

● Inequalities in health have not been observed. Education levels and health are not linked.

↘ Inequalities in health have decreased within the observed time period.

↗ Inequalities in health have increased within the observed time period.

↔ Inequalities in health based on educational attainment have not changed within the observed time period.

/ No data.

## The Vulnerability of the Unemployed during the Financial Crisis

- Unemployment in Slovenia increased during the financial crisis, especially long-term unemployment, which mainly affected those with lower educational attainment and younger adults aged 15 to 24.
- The health of the unemployed is typically worse than that of employed individuals. This is true for the following indicators: obesity and malnutrition, recommended physical activity, smoking, overconsumption of alcohol.

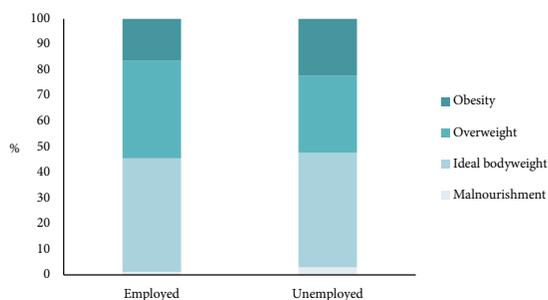


Figure 32: BMI in employed and unemployed individuals, Slovenia, 2014

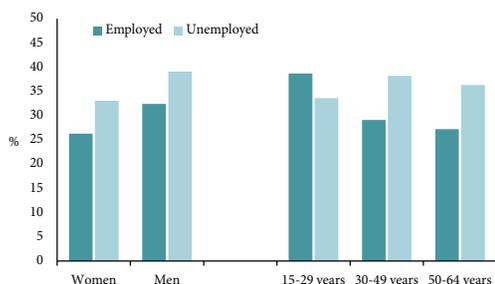


Figure 33: Percentage of employed/unemployed individuals who smoke, according to sex and age group, Slovenia, 2014

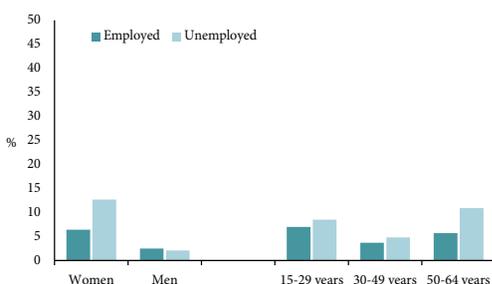


Figure 34: Hazardous drinking of alcohol in employed/unemployed individuals, based on sex and age group, Slovenia, 2014

The unemployed rate their health as »good« less often than employed individuals and often suffer from chronic diseases. They have fewer social connections and have more forms of moderate to severe disability in everyday activity due to health-related conditions. They experience anxiety and depression more often, along with other mental disorders.

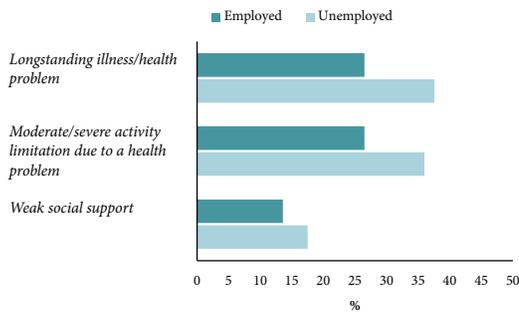


Figure 35: Longstanding illness/health problem, impairment in everyday activity and social support in employed/unemployed individuals, Slovenia, 2014

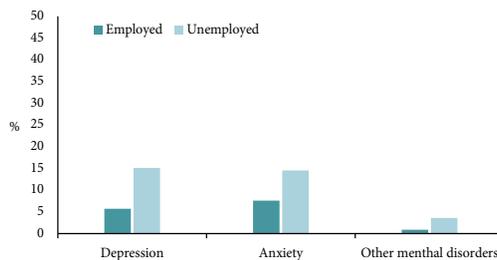


Figure 36: Self-assessed diagnoses and mental health disorders in employed/unemployed individuals, Slovenia, 2014

The unemployed use dental services less often than the employed.

The unemployed are less likely to participate in population-based cancer screening programmes such as ZORA (cervical cancer) and SVIT (colorectal cancer) (self-reported data).

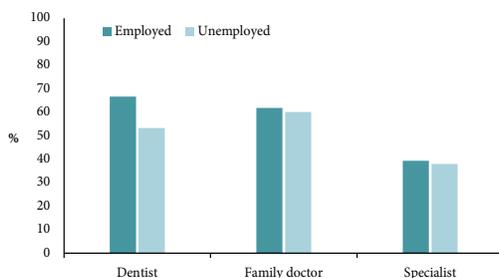


Figure 37: Percentage of employed/unemployed individuals who visited a dentist, family doctor or specialist at least once over the last 12 months, Slovenia, 2014

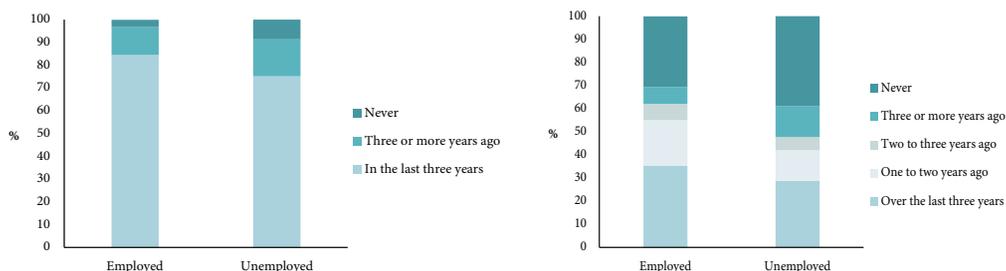


Figure 38: Percentage of employed/unemployed women who report having had a pap smear test, aged 20-64, Slovenia, 2014

Figure 39: Percentage of employed/unemployed individuals who report having done a fecal occult blood test, aged 50-69, Slovenia, 2014

## Good practices for tackling inequality

### The School Fruit and Vegetable Scheme

Good practice in reducing health inequalities in children and youth

- Fruit and vegetable consumption in schools is decreasing despite the implementation of the School Fruit and Vegetable Scheme, however there are differences in schoolchildren of different socioeconomic classes. In girls of lower socio-economic status, consumption has increased, whereas the decrease in consumption was the lowest for boys of lower socio-economic status.
- In the context of comprehensive inter-sectoral measures, the School Fruit and Vegetable Scheme provided a significant countermeasure to the trend of falling consumption of fruit and vegetables amongst children.

### Together for Health – For Better Health and Reduction of Health Inequalities

Good practice of recognising and including vulnerable individuals in prevention programmes

- The average vulnerable individual included in this pilot programme was female, aged 52.
- The most frequent vulnerabilities included unemployment, socio-economic risks and mental health issues.
- The most common obstacles to the participation of vulnerable individuals in prevention programmes were being uninformed, health issues and lack of motivation.
- The first point of contact to treat vulnerable individuals was most often a regional office of the Unemployment Service of Slovenia, followed by non-governmental organisations, home care units and health promotion units (within individual community healthcare centres).
- Broader local teams were established following a community-based approach and proved to be an excellent tool for stakeholder networking at local level.

## The Svit programme

Population-based screening and early detection programme for colorectal cancer– example of targeted activities for reducing inequalities

- The Svit screening programme carried out a precise communications strategy aimed at the general public, but taking special notice of marginalised groups – such as the less educated, hearing and verbally impaired and speakers of minority languages. Svit directed specific efforts to increase the lower participation rate detected in certain local communities and the male population, through the activities of healthcare professionals, non-governmental organisations, other local stakeholders and Svit programme ambassadors.
- While well-thought out communication channels and simplified messages brought about an improvement in educational inequalities for participation in the Svit programme, there nonetheless remains a very large gap between participation of individuals with higher vs. lower education.

EXAMINING HEALTH INEQUALITIES IN SLOVENIA DURING THE FINANCIAL CRISIS -  
Key takeaway messages

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*Slovenia is a country of great social responsibility, but lacks equality.*

Vlasta Nussdorfer,  
Human Rights Ombudsman  
of the Republic of Slovenia

*The inequalities we see in health are only the tip of the iceberg.*

Jasminka Dedić,  
Government Office for Development and European  
Cohesion Policy of the Republic of Slovenia

*Striving for equality in health is a dynamic process, dependent on many factors.*

Magda Zupančič,  
Ministry of Labour, Family and Social Affairs  
of the Republic of Slovenia

*A systems approach and inclusion of key target groups are the main building blocks leading to better health as a fundamental value.*

Lea Javornik Novak,  
Ministry of Labour, Family and Social Affairs  
of the Republic of Slovenia

*Societal changes can shift our attitudes to health and make specific elements of health more relevant.*

Andreja Barle Lakota,  
Ministry of Education, Science and Sport  
of the Republic of Slovenia

*Agricultural policy is an additional tool for reducing health inequalities.*

Tanja Polak Benkič,  
Ministry of Agriculture, Forestry and  
Food of the Republic of Slovenia

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