

A Cross-National Comparison of Health Inequalities and Health Expectancy: The Case of Roma Populations in Europe

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1. Introduction

Despite being the largest ethnic minority in Europe—estimated at approximately 11 million individuals (EU-Commission Roma, 2020)—health disparities affecting the Roma population remain significantly under-researched. The term "Roma" encompasses a diverse set of communities, including Roma, Sinti, Kale, Ashkali, Yenish, Dom, Lom, Travellers, and others, reflecting considerable cultural and linguistic heterogeneity (*Council of Europe, Descriptive Glossary of Terms Relating to Roma Issues*, 2012; Lecerf, 2024). Roma populations across Europe continue to face entrenched structural disadvantages, including systemic discrimination, social exclusion, and marginalization. Contemporary Roma communities are disproportionately affected by poverty, material deprivation, lower educational attainment, higher unemployment, and significantly poorer health outcomes relative to the majority populations in the countries where they reside (Cemlyn, 2009; European Union Agency for Fundamental Rights., 2020, 2022; Mózes et al., 2024; Parekh & Rose, 2011). Empirical research from Central and Eastern European countries—including Bulgaria, Croatia, Czechia, Hungary, Romania, and Slovakia—consistently identifies substantial health disparities between Roma and non-Roma populations. Comparative, quantitative research on the health status of Roma communities across different EU countries remains scarce. One of the few existing studies, conducted by La Parra-Casado et al. (2023) highlights that Roma populations consistently report poorer health outcomes compared to national populations. The study by La Parra-Casado et al. (2023) uses one measure of health, self-rated health, and compares it to Roma neighbors in six countries. This present research uses different datasets and health measures to compare the health status of Roma and national populations. Additionally, we calculate health expectancies, namely years spent in good health, for Roma populations due to the availability of life tables for Roma populations, drawing on research done by Luy et al. (2025).

Using survey data from the general populations of several European countries, along with specific data on Roma communities, we provide a detailed picture of health disparities both within Roma populations and between Roma and the national populations of their respective countries. Our analysis considers not only the probabilities of reporting poor health by age group and gender but also health expectancies—estimating the number of years that Roma and national populations can expect to live in good health from age 50 onward. To our knowledge, this is the first study to estimate health expectancies for Roma populations.

2. Data and methods

This study utilizes cross-sectional data to examine health disparities between the Roma population and the total population across 12 European countries. The Roma data were obtained from two survey waves conducted by the European Union Agency for Fundamental Rights (FRA) in 2016 and 2019. The 2016 wave forms part of the “Second European Union Minorities and Discrimination Survey (EU-MIDIS II)”, filtered for respondents self-identifying as Roma. Data collection in 2016 included Czechia, Spain, Greece, Hungary, Croatia, Portugal, and Romania and holds information on 7,947 respondents. The survey conducted in 2019 – so called “Roma and Travellers Survey” – holds information on 8,200 respondents and specifically targeted Roma individuals in Belgium, France, Ireland, the Netherlands, and Sweden. In both surveys, individuals aged 16 years and older who self-identified as Roma are targeted. The surveys were translated into the national languages of the respective countries and implemented standardized procedures to ensure sample representativeness.

For the respective countries, the European Union Statistics on Income and Living Conditions (EU-SILC) survey, limited to individuals aged 16 years and older, was used as the comparative dataset. The EU-SILC is designed to systematically monitor the health, income, and living conditions of populations across Europe, ensuring cross-national comparability of social indicators. Accordingly, it serves as the reference for assessing and contextualizing the health indicators of Roma populations in relation to the general population.

Both datasets contain the same health indicator on activity limitations. Activity limitations were assessed with the question: “For at least the past 6 months, to what extent have you been limited because of a health problem in activities people usually do?” Response options were ‘severely limited’, ‘limited but not severely’, and ‘not limited at all’. For analysis, good health was defined as reporting no limitations, bad health was defined as reporting being severely limited or limited but not severely.

The statistical analyses were conducted using the survey package in R. Survey weights were used provided by the FRA (for Roma) or Eurostat (EU-SILC). First, a survey design object with the provided weights was generated. Then, a bootstrap replicate design was used for variance estimation. A generalized linear model is then fitted to predict the probability for each health measure, the model is stratified by Roma status and gender and controlled for 5-year age groups and country. In a last step, predicted probabilities and the standard errors were calculated.

Subsequently, the Sullivan method was applied to estimate health expectancy in years at age 50 for the Roma population using data from the 2016 and 2019 surveys. These estimates were compared against Eurostat figures for the general population. Life tables used in the Sullivan calculations were derived from prior research on life expectancy among Roma populations (Luy et al., 2025).

3. Results

Figures 1 and 2 present the predicted probabilities of reporting activity limitations among Roma women and men in 2016, compared with the respective national populations. Across all countries, except Portugal, Roma women consistently reported higher probability of being limited in daily activities compared to both Roma men and the general female population. A similar disadvantage is observed among Roma men relative to the national male populations. These disparities are particularly pronounced at older ages. The gender gap is also evident: Roma men in every country are less likely to report activity limitations than Roma women.

Table 1 presents the estimated life expectancy (LE) derived from Luy et al. (2025) at age 50 in 2016 and 2019, separated by gender for each of the Roma populations compared to the national populations. Among the female populations of the Roma, LE at age 50 ranges from 26.3 years in Croatia to 31.1 years in Sweden. Among the male population of the Roma, LE ranges between 21.7 years in Croatia to 27.4 years in Ireland.

Table 2 presents estimates of healthy life expectancy at age 50 for the years 2016 and 2019, disaggregated by gender, comparing Roma populations to national populations using the Global Activity Limitation Indicator (GALI). The table reflects the number of remaining life years at age 50 spent without limitations. Among Roma women, healthy life expectancy at age 50 ranges from 4.1 years in Croatia to 12.0 years in Portugal. The disparity compared to the general population spans from -22.4 years in Sweden to -0.7 years in Portugal. For Roma men, remaining healthy life years range from 4.5 years in Croatia to 13.6 years in Portugal, with the largest gap observed in Sweden (-22.1 years) and the smallest in Portugal (-1.6 years).

4. Limitations and Strengths

The interpretation of predicted probabilities and healthy life years requires caution, as sample sizes for Roma populations vary considerably across age groups and health measures, with very small numbers at older ages. In countries such as Portugal, the limited survey size may even overrepresent healthier Roma individuals. Moreover, the life tables for Roma populations are based on indirect estimation techniques rather than official census or vital registration data. Despite these limitations, the estimates consistently point to poorer health, shorter life expectancy, and fewer healthy life years among Roma compared to national populations, offering meaningful evidence in the absence of alternative representative data sources.

To the best of our knowledge, this study is the first to estimate health and health expectancy of the Roma population in Europe. By enabling comparisons both across countries and between Roma and national populations, it fills a critical knowledge gap on the health of Europe's largest minority group. The

strength of this study lies in highlighting the markedly worse health outcomes observed among Roma populations, likely driven by underlying social, economic, and institutional inequalities.

5. Conclusions and next steps

The results show an extraordinarily large gap in health expectancy between Roma populations and the national populations in their respective countries. In countries with high levels of health expectancy, such as Sweden, the gap is particularly striking—not because Roma populations report exceptionally low health expectancy, but because the general population achieves exceptionally high values. On average, the gap is wider in Western and Central European countries and narrower in Eastern European countries, largely reflecting the higher overall levels of health expectancy in Western Europe.

The poor health outcomes among Roma populations, along with the limited number of life years spent without limitations, reflect the intersection of cumulative disadvantages. As highlighted by the European Union Agency for Fundamental Rights (European Union Agency for Fundamental Rights., 2020, 2022) Roma populations across Europe face persistent discrimination and harassment, higher rates of housing deprivation, and reduced access to basic utilities such as water. Within Roma communities, women are particularly disadvantaged, often reporting worse health outcomes than their male counterparts (La Parra-Casado et al., 2023). The Roma population exhibits higher prevalence rates of both communicable and non-communicable diseases, a greater burden of cardiovascular risk factors (The HEPA-META team et al., 2013), and reduced life expectancy (Luy, 2021, 2023; Parekh & Rose, 2011). Roma children are also disproportionately vulnerable, with evidence pointing to higher rates of low birth weight and lower vaccination coverage compared to non-Roma children (Cook et al., 2013).

The findings of this study not only confirm the findings of previous one, but add a nuance to it. Even though Roma populations live shorter, the life years spent in bad health are even larger compared to the national populations. It further highlights the disadvantages faced by the surveyed Roma communities in all countries. The social determinants of health act as fundamental drivers of inequality and further exacerbate the disproportionate burden of poor health and shortened healthy life years among Roma populations.

The next steps will involve calculating health expectancy and predicted probabilities using self-rated health and longstanding illnesses, alongside a more detailed analysis of country-specific estimates and their underlying drivers. The Roma Survey 2021 will also be utilized to compare health disparities with national populations and in-between Roma populations. Further research will also seek to explain within-group variation among Roma populations. Finally, country-specific differences will be examined descriptively, with a focus on social and structural determinants of health.

References

- Cemlyn, S. (2009). *Inequalities experienced by gypsy and traveller communities: A review*. Equality and Human Rights Commission.
- Cook, B., Wayne, G. F., Valentine, A., Lessios, A., & Yeh, E. (2013). Revisiting the evidence on health and health care disparities among the Roma: A systematic review 2003–2012. *International Journal of Public Health*, 58(6), 885–911. <https://doi.org/10.1007/s00038-013-0518-6>
- Council of Europe, *Descriptive Glossary of terms relating to Roma issues*. (2012, May 18). <https://rm.coe.int/1680088eab>
- EU-Commission Roma. (2020). https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/combating-discrimination/roma-eu/roma-equality-inclusion-and-participation-eu_en
- European Union Agency for Fundamental Rights. (2020). *Roma and Travellers in six countries: Roma and Travellers survey*. Publications Office. <https://data.europa.eu/doi/10.2811/30472>
- European Union Agency for Fundamental Rights. (2022). *Roma in 10 European countries: Main results : Roma survey 2021*. Publications Office. <https://data.europa.eu/doi/10.2811/930443>
- La Parra-Casado, D., Solheim, E. F., & Estévez, J. F. (2023). Health inequalities between Roma and non-Roma populations in Europe: A study of 118,834 individuals combining the UNDP Roma and the EU-SILC surveys. *Scandinavian Journal of Public Health*, 51(3), 347–354. <https://doi.org/10.1177/14034948211056210>
- Lecerf, M. (2024). *Understanding EU action on Roma inclusion* [Briefing]. European Parliamentary Research Service. [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690629/EPRS_BRI\(2021\)690629_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690629/EPRS_BRI(2021)690629_EN.pdf)
- Luy, M. (2021). Testing and measuring the life expectancy of Roma and Travellers. In *European Union Agency for Fundamental Human Rights: Roma and Travellers in six countries: Vol. Technical report* (pp. 114–139). Publications Office of the European Union.

- Luy, M. (2023). Estimating the life expectancy of the Roma population. In *Roma Survey 2021—Technical report* (pp. 179–202). Publications Office of the European Union.
- Luy, M., Vaz de Moraes Santos, T., Shen, T., Lasar, L., & Di Giulio, P. (2025). *Life expectancy of Roma and Travellers in Europe: Indirect estimations for 17 countries* (VID Working Paper XX/2025). VID/Austrian Academy of Sciences.
- Mózes, N., Takács, J., Ungvari, Z., & Feith, H. J. (2024). Assessing disparities in health and living conditions: A comparative study of Hungarian-speaking Roma and non-Roma women across Hungary, Romania, and Slovakia. *Frontiers in Public Health, 12*, 1438018.
<https://doi.org/10.3389/fpubh.2024.1438018>
- Parekh, N., & Rose, T. (2011). Health Inequalities of the Roma in Europe: A Literature Review. *Central European Journal of Public Health, 19*(3), 139–142.
<https://doi.org/10.21101/cejph.a3661>
- The HEPA-META team, Babinska, I., Veselska, Z. D., Bobakova, D., Pella, D., Panico, S., Reijneveld, S. A., Jarcuska, P., Jarcuska, P., Zezula, I., & Geckova, A. M. (2013). Is the cardiovascular risk profile of people living in Roma settlements worse in comparison with the majority population in Slovakia? *International Journal of Public Health, 58*(3), 417–425.
<https://doi.org/10.1007/s00038-013-0463-4>

Figure 1: Predicted Probabilities for Roma and national populations in 2016 among women of reporting activity limitations

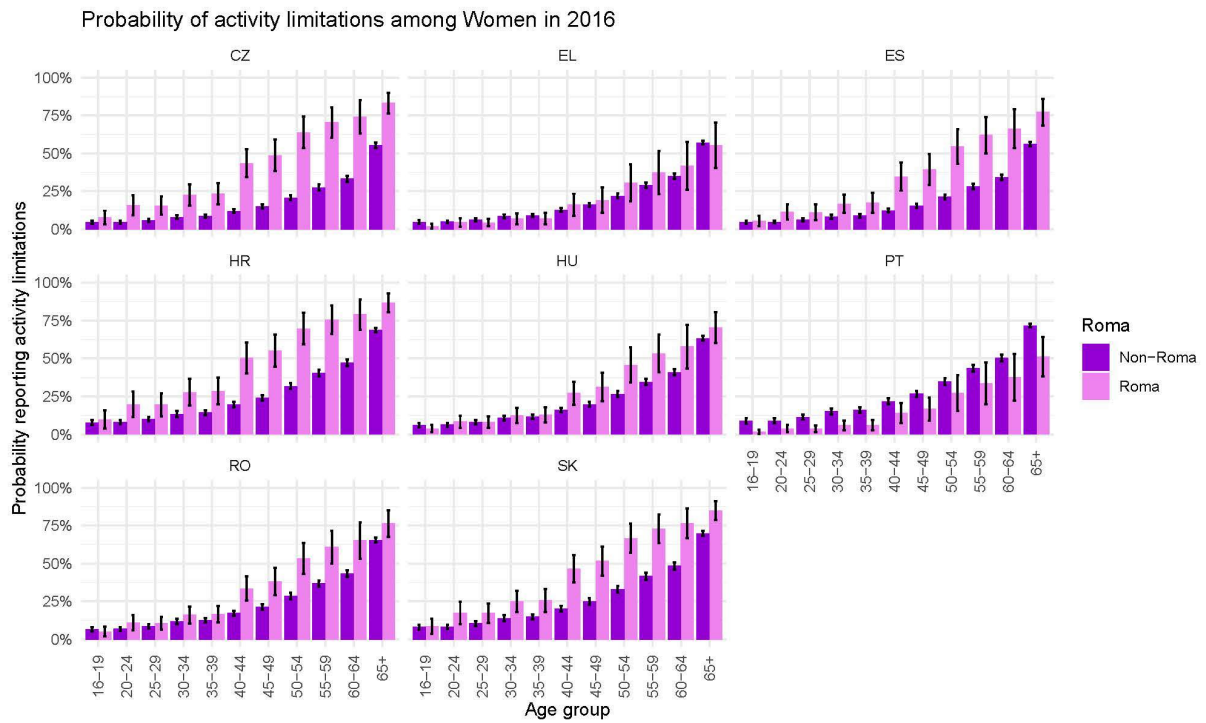


Figure 2: Predicted Probabilities for Roma and national populations in 2016 among men of reporting activity limitations

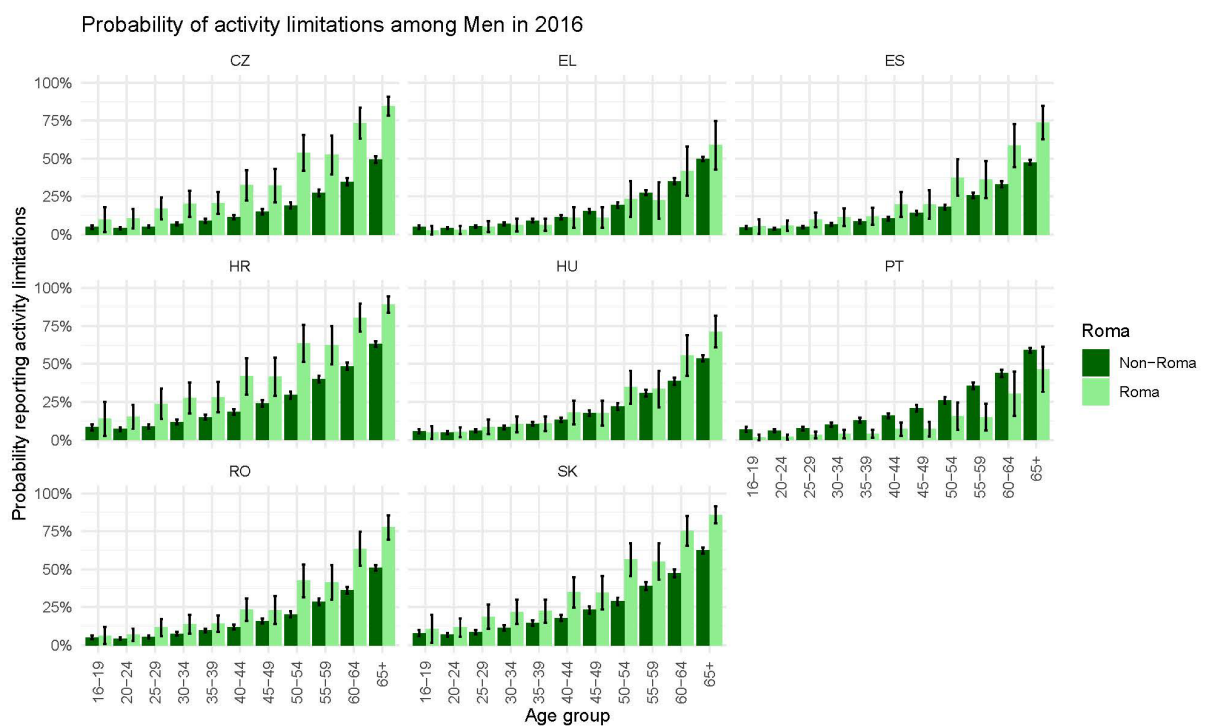


Table 1: Life Expectancy at age 50 for 12 European countries in 2016 and 2019 in comparison to the national populations

		Life Expectancy at age 50					
		National populations		Roma populations		Difference	
Country	Year	Female	Male	Female	Male	Female	Male
Czechia	2016	32.7	27.8	27.4	22.6	-5.3	-5.2
Greece	2016	34.9	30.6	29.1	24.0	-5.8	-6.6
Spain	2016	36.7	31.6	30.0	24.5	-6.7	-7.1
Croatia	2016	31.9	26.6	26.3	21.7	-5.6	-4.9
Hungary	2016	30.5	24.7	27.1	22.8	-3.4	-1.9
Portugal	2016	35.4	30.2	30.5	27.3	-4.9	-2.9
Romania	2016	30.7	24.8	27.8	22.9	-2.9	-1.9
Belgium	2019	35.5	31.7	28.5	25.1	-7.0	-6.6
France	2019	37.3	32.1	29.8	25.9	-7.5	-6.2
Ireland	2019	35.7	32.4	31.0	27.4	-4.7	-5.0
Netherlands	2019	34.8	32.1	29.6	25.5	-5.2	-6.6
Sweden	2019	35.8	33.0	31.1	26.4	-4.7	-6.6
Average (unweighted)		34.3	29.8	29.0	24.7	-5.3	-5.1

Table 2: Health Expectancy at age 50 based on global activity limitations indicator in 2016 and 2019 in comparison to the national populations

		Health Expectancy (GALI) at age 50					
		National populations		Roma populations		Difference	
Country	Year	Female	Male	Female	Male	Female	Male
Czechia	2016	18.6	17.4	5.0	6.0	-13.6	-11.4
Greece	2016	18.0	18.1	11.0	11.2	-7.0	-6.9
Spain	2016	18.9	19.0	6.7	8.7	-12.2	-10.3
Croatia	2016	12.2	11.7	4.1	4.5	-8.1	-7.2
Hungary	2016	14.5	13.5	7.9	9.0	-6.6	-4.5
Portugal	2016	12.7	15.2	12.0	13.6	-0.7	-1.6
Romania	2016	14.3	14.4	6.7	7.7	-7.6	-6.7
Belgium	2019	19.5	19.3	5.8	5.1	-13.7	-14.2
France	2019	21.2	19.9	9.2	10.7	-12.0	-9.2
Ireland	2019	24.9	23.7	8.6	7.2	-16.3	-16.5
Netherlands	2019	18.1	19.3	7.6	8.7	-10.5	-10.6
Sweden	2019	28.0	27.7	5.6	5.6	-22.4	-22.1
Average (unweighted)		18.4	18.3	7.5	8.2	-10.9	-10.1