LUXEMBOURG INSTITUTE OF HEALTH

Gender Matters in Health

Describing gender health gaps in Luxembourg

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Content

Abbreviations

CHD	Coronary heart disease
COPD	Chronic obstructive pulmonary disease
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders
EHIS	European Health Interview Survey
EU	European Union
Eurostat	European statistics
G-Health	Gender Inequality in Health
ISCED	International Standard Classification of Education
LIH	Luxembourg Institute of Health
MEGA	Ministry of Gender Equality and Diversity
MICE	Multivariate imputation by chained equations
PHQ-8	8-item Patient Health Questionnaire
PP	Percentage points
SDH	Social Determinants of Health
SDG	Sustainable Development Goals
GDP	Gross Domestic Product
WHO	World Health Organization

Summary

When discussing gender equality in Luxembourg, a common response is that women earn nearly as much as men and have relatively better job opportunities compared to other European Union (EU) countries. However, this view overlooks a critical issue: health inequality. Women in Luxembourg spend, on average, more than 13 years of their lives in poor health, which is higher than men (10 years of their lives in poor health). Health inequalities between men and women are often explained through a biological lens, emphasizing genetic, physiological, and hormonal differences. Yet, the influence of socio-economic conditions is frequently underestimated. Addressing gender- health inequalities requires a broader perspective that considers these social and economic factors. Acknowledging existing health problems and improving access to healthcare services for disadvantaged gender groups not only enhances overall well-being but also promotes workforce participation, productivity, and social cohesion. It also encourages innovation and contributes to a more prosperous and equitable society.

This report examines gender differences in three health domains: physical health (including multimorbidity, accidents and injuries, and severe pain), mental health (depressive symptoms), and healthcare use (unmet need for healthcare). These health outcomes often differ between men and women and are unequally distributed across genders due to the intersection of gender with various socioeconomic and demographic factors. The report compares the gender health gap in Luxembourg with that of other EU countries for the years 2014 and 2019, using data from the European Health Interview Survey (EHIS), wave 2 (2014) and 3 (2019). It also discusses how gender intersects with socioeconomic and demographic factors, highlighting both between- and within-gender health gaps in Luxembourg in 2019.

In both 2014 and 2019, women in Luxembourg reported higher rates of multimorbidity, severe pain, depressive symptoms, and unmet healthcare needs than men. The gender gap in multimorbidity and severe pain were below the EU average, but increased more over time in Luxembourg than in most EU countries. The gender gap in depressive symptoms and unmet healthcare needs in Luxembourg increased between 2014 and 2019 and exceeded the EU average by 2019, contrasting with a declining trend at the EU level. For accidents and injuries, men had higher rates in 2014, but the gap nearly disappeared by 2019 due to an increase among women. In 2019, the gender gap in multimorbidity was largest among those aged 45–64 and 65+, highly educated, EU born residents, and those who were married/in a registered partnership or never married. For severe pain, the gender gap was significant among those aged 45–64, low-educated individuals, native-born residents, and divorced individuals. The gender gap in depressive symptoms were significant among those aged 15–44, with low education, non-EU-born residents, married, and with low social support.

For unmet healthcare needs, the gap was significant among residents aged 15–44, with low education, non-EU-born, never married, and those with poor social support.

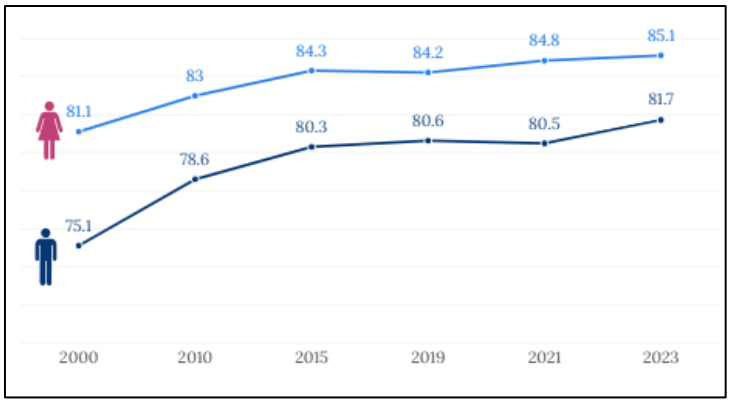
We analysed gender variation in health by age groups and observed that women aged 65 and above with poor social support were more than twice as likely to experience multimorbidity compared to their men counterparts. A similar pattern was also seen with older women living alone. Young women aged 15 to 24 with low education were over six times more likely to report depressive symptoms than young men with low education. Additionally, non-EU-born women in this age group were nearly five times more likely to report depressive symptoms than men. This strong link between low education and the prevalence of depressive symptoms among women was also observed in the 25–34 and 35–44 age groups. Regarding unmet healthcare needs, women aged 15–44 with low education and those with poor social support were more likely to report unmet healthcare needs due to distance, compared to men with the same characteristics.

This report raises several critical questions for future research. The authors advocate for more gender-sensitive studies in Luxembourg that consider the complex intersection between gender, socioeconomic status, and demographic factors in health. They call for information on gender identities, beyond the binary gender spectrum, in large-scale surveys. They also encourage prioritising gender-transformative research, exploring how harmful gender roles and power dynamics affect health equity in Luxembourg.

1. Introduction

Over the past decades, life expectancy in Luxembourg has increased for both men and women.[1] In 2000, men had an average life expectancy of 75.1 years, while women lived an average of 81.1 years (**Figure 1**).[2] By 2023, these figures had increased to 81.7 years for men and 85.1 years for women, indicating that women live almost three and a half years longer than men. However, this information does not reflect the entire situation.

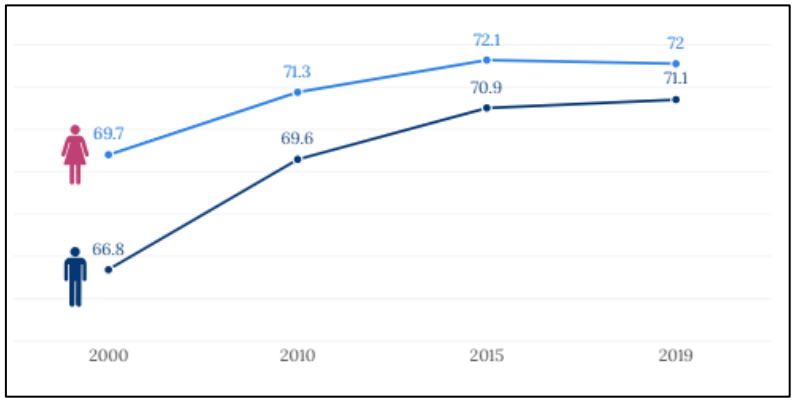
Figure 1: Life expectancy at birth, Luxembourg, 2000 – 2023



Note: The values indicate the average number of years a newborn could expect to live. **Source**: *Eurostat.*

The World Health Organisation (WHO) estimated that, in 2019, women in Luxembourg could expect 72 years of full health from birth, compared to a total life expectancy of 84 years (**Figure 2**).[3] Fore men, the figures were 71 years of healthy life and an overall life expectancy of 80 years. These estimates indicate that women in Luxembourg spend around twelve years (men nearly nine years), living with illness and/or disability, indicating a longer period of poor health for women despite their higher life expectancy.

Figure 2: Healthy life expectancy (HALE) at birth, Luxembourg, 2000 2019



Note: The average number of years that a person can expect to live in "full health without diseases" from birth. Source: *World Health Organization, Global Health Estimates.*

Health inequalities are often interpreted through a biological lens, focusing on genetic, physiological, and hormonal differences. However, this perspective frequently overlooks the influence of socio-economic factors. Therefore, addressing gender-based health inequalities from a socio-economic perspective becomes relevant in any population.[4] Acknowledging and understanding these inequalities in context can lead to more inclusive healthcare systems that respond effectively to the different needs of all genders. Further, improving access to healthcare services for disadvantaged groups not only improves overall well-being but also promotes workforce participation and increases productivity, thus contributing to the overall welfare of communities. In addition, achieving gender equality in health fosters social cohesion, encourages innovation, and contributes to a more prosperous and equitable society.

The research project *Gender Inequality in Health (G-Health),* funded by the Ministry of Gender Equality and Diversity (MEGA), aims to provide a descriptive overview of gender inequalities in health and healthcare in Luxembourg. It examines the gender gap by considering the intersection of socioeconomic and demographic factors, such as education, immigration and age that influence health outcomes and access to care across genders. The report compares the situation in Luxembourg with other EU countries and focuses on three main health domains: physical health, mental health, and healthcare utilization, using data from the second (2014) and third (2019) waves of the European Health Interview Survey (EHIS).

The report has three key objectives. First, it estimates the prevalence and gender gap in five health outcomes for the period 2014–2019 in EU member states: multimorbidity, accident and injury, severe pain, depressive symptoms, and unmet need for health care (*Section 1*). Second, it examines the prevalence and gender gap in these health outcomes across socioeconomic and demographic factors such as age, educational level, immigration status, marital status, and social support, in Luxembourg (*Section 2*). Finally, the report assesses the likelihood of reporting poor health outcomes and barriers in health care use across genders and overlapping socioeconomic and demographic groups in Luxembourg in 2019 (*Section 3*).

Gender as terminology: This report limited its analysis to men and women due to data constraints, while acknowledging the importance of health issues and healthcare needs for non-binary, transgender, and other gender-fluid communities. The authors also acknowledge that not all individuals identifying as women and men were assigned female and male respectively at birth and emphasize the necessity for future research to address the health gaps and requirements of gender minority populations, thus fostering a more inclusive and comprehensive health status

2. Background

2.1. *Gender and health: an overview*

Gender-based inequalities in various domains of life are widely acknowledged.[5, 6] Researchers also emphasize a strong connection between gender inequalities and adverse health outcomes, as well as challenges in healthcare utilization.[5,7] Gender-based health differences arise from structural inequality factors such as power dynamics, decision-making, and resource access. However, public health researchers and epidemiologists have traditionally approached gender and health through the lens of biological sex, often focusing on physiological, hormonal, genetic, and epigenetic factors.[7, 8] This approach tends to overlook the complex, multidimensional nature of gender and its impact on health.

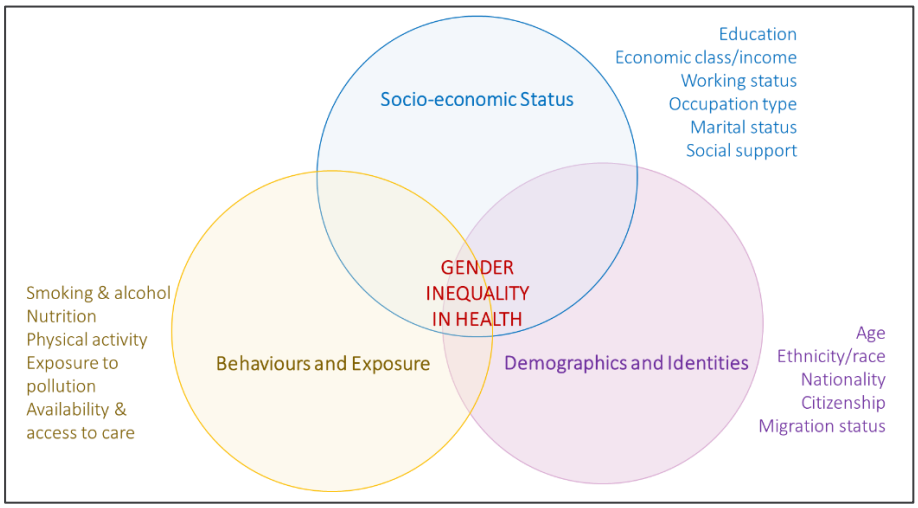
A gendered analysis of health estimates health outcomes for men and women separately and explores the gender relations, interactions, and roles that contribute to health inequalities.[9] Gender-based health differences largely arise from the different sociocultural, political, and economic roles of men and women.[10] The Commission on Social Determinants of Health (SDH) framework similarly recognizes the structural nature of gender-based health inequalities.[11] In addition to intermediate determinants such as social, economic, political, and behavioral factors, the SDH framework identifies gender as a critical determinant of health. Thus, by integrating gender into the other social, economic, cultural, and behavioral determinants, healthcare practitioners and policymakers can more effectively address health inequities and promote gender equality, working toward good health and well-being for everyone (*Sustainable Development Goals 3 and 5*).[12]

2.2. *Gender and health: an intersectional perspective*

In 1989, legal scholar Kimberlé Crenshaw introduced the term intersectionality to describe how overlapping characteristics can create forms of discrimination, particularly in Black women's lives.[13] Since then, the concept of intersectionality has expanded understating forms of oppression and inequality resulting from structural disadvantages in our society.[14] The intersectionality approach

provides a more profound understanding of how the convergence of various socioeconomic and demographic characteristics —such as sex, gender, race, ethnicity, age, class, socioeconomic status, religion, language, geographical location, disability status, migration status, gender identity, and sexual orientation—creates hierarchies of privilege and disadvantage, ultimately leading to inequality. In the context of gender and health, intersectionality has emerged as a critical framework for understanding how gender interacts with power hierarchies to create unequal health outcomes (Figure 3).

Figure 3: Gender, health and intersectionality



Source: *Gendered Innovations.*[14]

It reveals how intersecting factors influence access to resources, treatment, quality of treatment, and overall health experiences. By adopting an intersectional approach, researchers and policymakers can better address the complexities of health inequities and work toward more inclusive and equitable healthcare systems.

2.3. *Luxembourg: gender equality and health*

Luxembourg, one of the wealthiest EU countries by gross domestic product per capita, has made major progress in gender equality across various of social and economic domains.[15] According to the 2023 EU gender equality report, Luxembourg ranked first in financial equality, third in access to and participation in education, and fourth in employment-related gender equality among all EU

countries.[16] These rankings reflect Luxembourg's strong performance in promoting gender equity and improving women's socioeconomic conditions compared to other EU countries. However, the same report shows persistent disparities in health outcomes and care access, with Luxembourg ranking seventh in gender equality in the health domain.[16] Although the report provides an overview of gender and health, it leaves several key questions unanswered. For instance, which groups experience the greatest gender gap in health, and have these gaps remained consistent over time in Luxembourg? Addressing such health-related gender inequalities is crucial for developing targeted efforts to promote a more balanced and inclusive approach to gender equity in Luxembourg.

3. Methods

3.1. *Data source: The European Health Interview Survey (EHIS)*

This report used the second (2014) and third (2019) waves of the European Health Interview Survey (EHIS), a cross-sectional population-based survey mandatory for all EU Member countries.[17] Developed by Eurostat, the EHIS is a pan-European survey conducted every five years. The first EHIS pilot survey was conducted between 2006 and 2009 across seventeen EU member states (excluding Luxembourg). In the EHIS 2, thirty EU countries participated, including the United Kingdom. However, in the EHIS 3, the same number of EU countries participated, with the United Kingdom excluded and Serbia participating for the first time.

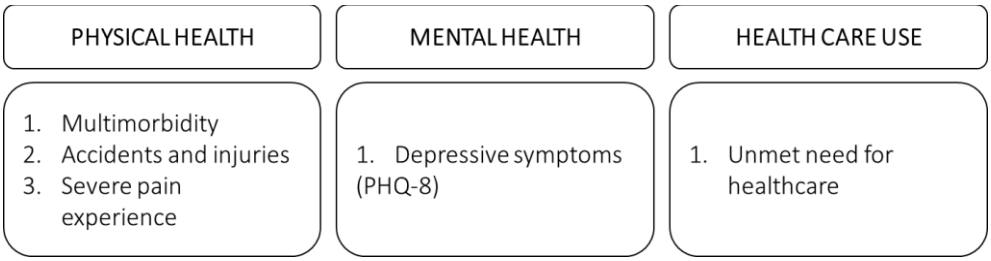
The EHIS follows a one-stage random sample approach to invite and select participants from the general population. The survey collected information on three health domains (health status, health determinants, and healthcare) along with sociodemographic characteristics of the resident population living in private households aged 15 years and over.

In Luxembourg, 16,000 individuals were invited to participate in the EHIS 2, while 18,000 individuals were invited to the EHIS 3. The final datasets included information from 4,004 and 4,504 individuals, respectively, yielding a final participation rate of 25% for both surveys.[18]

3.2. *Summary of key health outcomes and their definition*

This report included five health outcomes across three broad health domains (**Figure 4**): i) Physical health domain, including multimorbidity, accidents and injuries, and experiences of severe pain; ii) Mental health domain, focusing on depressive symptoms; and iii) Healthcare usage domain, focusing on unmet needs for healthcare.

Figure 4: Health outcomes considered in the report



Physical health domain:

Multimorbidity

The EHIS provides information on 14 self-reported diseases and chronic conditions that respondents experienced within the past 12 months. These include: asthma (including allergic asthma), Chronic Obstructive Pulmonary Disease (COPD), myocardial infarction or its chronic consequences, angina pectoris, high blood pressure (hypertension), stroke (cerebral haemorrhage or cerebral thrombosis) or its chronic consequences, arthrosis (excluding arthritis), lower back disorders or other chronic back conditions, neck disorders or other chronic neck conditions, diabetes, allergies (such as rhinitis, hay fever, eye inflammation, dermatitis, food allergies, or other allergies, excluding allergic asthma), liver cirrhosis, urinary incontinence (difficulty controlling the bladder), and kidney problems.

Each chronic condition was assessed through a separate question, with response options coded as *no* (0) and *yes* (1). In this report, multimorbidity was defined as the co-occurrence of two or more of the chronic health conditions listed above.[19]

Accidents and injuries

The EHIS collects information on the occurrence of accidents and injuries over the past 12 months. It includes three types of accidents and injuries: road traffic accidents, home accidents, and leisure accidents. Each type was assessed through a separate question, with response options coded as *no* (0) and *yes* (1). In this report, the experience of accidents and injuries was defined as the presence of at least one of these accident types.

Severe pain experience

The EHIS collects information on the severity of bodily pain (general musculoskeletal pain). In the EHIS survey, responses were collected in five categories: none, very mild, mild, moderately severe, and very severe. In this report, responses were classified into two categories to define severe pain experience coded as: (0) *not having severe pain experience* for answers indicating "none" or "very mild" or "mild" or "moderately", and (1) *having severe pain experience* for responses indicating "severe", and "very severe".

Mental health domain:

Depressive symptoms

In EHIS, depressive symptoms were estimated utilizing the internationally recognised Patient Health Questionnaire (PHQ)-8.[20-22] The PHQ-8 measures symptoms of major depression experienced over the past two weeks, in line with the criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV). The PHQ-8 includes the following questions: (1) "Little interest or pleasure in doing things", (2) "Feeling down, depressed, or hopeless", (3) "Trouble falling or staying asleep, or sleeping too much," (4) "Feeling tired or having little energy", (5) "Poor appetite or overeating", (6) "Feeling bad about yourself—or that you are a failure or have let yourself or your family down," (7) "Trouble concentrating on things, such as reading the newspaper or watching television", and (8) "Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual." Each question was answered on a scale from 1 (not at all) to 3 (nearly every day). Responses were classified into two categories: (0) *no* for answers indicating "not at all" or "several days" and (1) *yes* for responses indicating "more than half of the days" or "nearly every day". A cumulative score, ranging from 0 to 8, was estimated. If the individual responded to "little interest or pleasure in doing things" or "feeling down, depressed, or hopeless" affirmatively with a score value of 2 or higher, the individual was classified as having depressive symptoms.[20,21]

Healthcare use domain:

Unmet need for health care due to financial barriers, long waiting lists, or distance/transportation problems

The report analyzed respondents who indicated a need for health care and reported experiencing unmet health care needs. The EHIS had not directly provided information on unmet healthcare needs; instead, it collected data on unmet care needs from the previous 12 months through three specific questions. (1) "Unmet need for health care attributed to extended waiting lists", (2) "Unmet need for health care due to distance or transportation issues", and (3) "Inability to afford medical examination or treatment ". Each response was coded as *no* (0), *yes* (1) and *did not need health care* (2). To construct this health outcome, only individuals who required health care were included. Any individual responding *yes* to at least one of the three questions was classified as having an unmet need for health care.[20,21]

3.3. *Covariates*

The EHIS collected information on the sex of the respondents, which was recorded as male or female. However, there was no specific information on gender identity in the survey. While it is not appropriate to equate sex with gender, some of the EU-based reports, such as the Gender Equality Index report (2023), used this information as a proxy for gender.[16] Therefore, due to the lack of other relevant data sources and established practices, we also considered the sex of respondents as a representation of gender.

Based on the literature and the information available in EHIS, five main demographic and socioeconomic factors were included in the present report: age, educational level, immigration status, marital status and social support.[8,9] Age was categorized in three groups: 15-44 years as the young age group, 45-64 years as the middle age group, and 65+ as the older age group. Educational level was grouped into three categories based on the International Standard Classification of Education (ISCED) levels. ISCED levels 0 to 2 were classified as low education, levels 3 to 4 as medium education, and levels 5 to 8 as high education. Immigration status was classified as native-born (born

in Luxembourg), born in another EU country, and born in a non-EU country. Marital status was categorized as never married, married or registered partnership, divorced, and widowed. Social support was categorized as low, moderate, and high social support using the questions: "How much concern do people show in what you are doing?" and "How easy is it to get practical help from neighbours if you should need it?" Apart from the five main demographic and socioeconomic factors, the report also considered the living arrangement of individuals, defined by whether the respondent lived in a single-person household or in a household with more than one person.

3.4. *Statistical analysis*

First, the report estimated the prevalence and gender gap of five health outcomes (previously described). Gender-specific prevalence rates (presented as percentages (%)) were estimated by applying sampling weights. Gender gap values for each health outcome were estimated and presented as percentage points (PP).[16]

The gender gap in health outcome (in percentage points or PP) = prevalence of health outcome in women (in percentage, %) - prevalence of health outcome in men (in percentage, %)

A positive gender gap value indicated that women had a higher health outcome prevalence compared to men, while a negative gender gap value means that men had a higher health outcome prevalence than women. In this section, the analysis was performed for individuals aged 15 and above. This analysis was carried out across all EU countries with available information for 2014 and 2019.

Since the sampling weights provided by the EHIS survey were applied in prevalence estimation, they also accounted for age-structural effects on prevalence across countries.[a] In addition to covering all EU countries, the report gives special attention to the top six gender-equal countries according to

[a] The most effective strategy for spatial or country-level comparisons in the health outcome prevalence involves estimating age-standardized prevalence rates. However, the quality report on the EHIS data indicates minimal changes in the prevalence of health outcomes after age-standardization. The use of weights is sufficient for estimating and comparing the prevalence of health outcomes across countries, thereby reducing the necessity for age-standardised prevalence rates.

the 2023 EU Gender Equality Report: Sweden, Netherlands, Denmark, Spain, Belgium, and France.[16] [b] Germany was also included for a comparative country-level analysis, given its proximity to Luxembourg. We also estimated the relative change in the gender gap from 204 to 2019, focusing on Luxembourg and top gender-equal EU countries.

*The relative change in gender gap in health outcome (in percentage, %) = (gender gap value in 2019- gender gap value in 2014) / gender gap value in 2014*100*

Similarly, age adjusted gender-specific prevalence rates (presented as percentages (%)) were estimated by applying sampling weights only for Luxembourg in 2014 and 2019 across categories of five socioeconomic and demographic factors (age, education level, immigration status, marital status, and social support).

This report also highlights socioeconomic and demographic categories within which the statistically significant gender health gap existed for Luxembourg in 2019. For this purpose, we applied logistic regression models and estimated the marginal mean proportion of gender gap across socioeconomic and demographic categories.[c] The values were presented as proportions. The primary explanatory variable was gender, coded as (0) for men and (1) for women. The analysis was controlled for age of the respondent.

Finally, the report also assessed the likelihood of health outcomes and unmet healthcare needs across genders and overlapping socioeconomic and demographic categories, highlighting variations in health between men and women in Luxembourg in 2019. To do so, we applied logistic regression models with interaction terms. The analysis included a reference group representing the most favourable position in terms of health outcomes and healthcare use, against which the other categories were compared. For example, men with a high level of education or men with strong

[b] Data for this project was sourced from Eurostat. Eurostat provided data for 30 countries involved in the EHIS Wave 3. Nevertheless, no information was accessible for France, despite its participation. Therefore, France was excluded from all country comparative analyses for 2019. In addition, there were specific health outcomes for which we lacked information in certain countries. Details were provided in a subsequent section.

[c] https://www.stata.com/features/overview/marginal-analysis/

social support served as a reference category to assess the likelihood of health outcomes for men and women with different levels of education or social support. The results were presented as odds ratios derived from the logistic regression models age adjusted. We further analyzed gender variation in health by age groups, focusing on relatively high-risk groups specific to each health outcome.

While the EHIS data presented complete information on sex and age, several covariates had missing information in both waves. To address this, we applied the Multivariate Imputation by Chained Equations (MICE) method to handle missing information for these factors.[23] All statistical analyses were carried out in STATA 17 version.[24]

4. Results

4.1. *Gender gap in health in Luxembourg and EU countries in 2014 and 2019*

In this section, we presented the gap between women and men in health in Luxembourg and compared it with other EU countries for 2014 and 2019. For that we estimated the prevalence (in %), and gender gap (in PP) in the prevalence of the selected health outcomes. However, the gender gap only provided insight into the gender perspective; higher or lower gender gap values did not necessarily reflect the overall prevalence of a health outcome. A country may have a smaller gap in health outcomes between men and women compared to other countries, yet exhibit a higher overall prevalence of those health outcomes (Appendix tables 1-5). Here, particular emphasis was placed on the leading gender-equal countries, as identified in the 2023 EU Gender Equality Index.[6] We also focused on the relative change in the gender health gap from 2014 to 2019 for Luxembourg and the top gender-equal countries.

Physical health domain:

Multimorbidity

Table 1 shows the gender prevalence of multimorbidity for Luxembourg and compares it with the EU average and countries with the highest and lowest values for 2014 and 2019. Results highlight regional variations. Women consistently had a higher prevalence of multimorbidity compared to men, both in the EU average and in Luxembourg. While the EU average remained almost the same for both genders from 2014 to 2019, Luxembourg experienced a slight decline. Ireland had the lowest multimorbidity rates, while Portugal (2014) and Finland (2019) recorded the highest prevalence of multimorbidity for women, and Germany (2014) and Croatia (2019) for men.

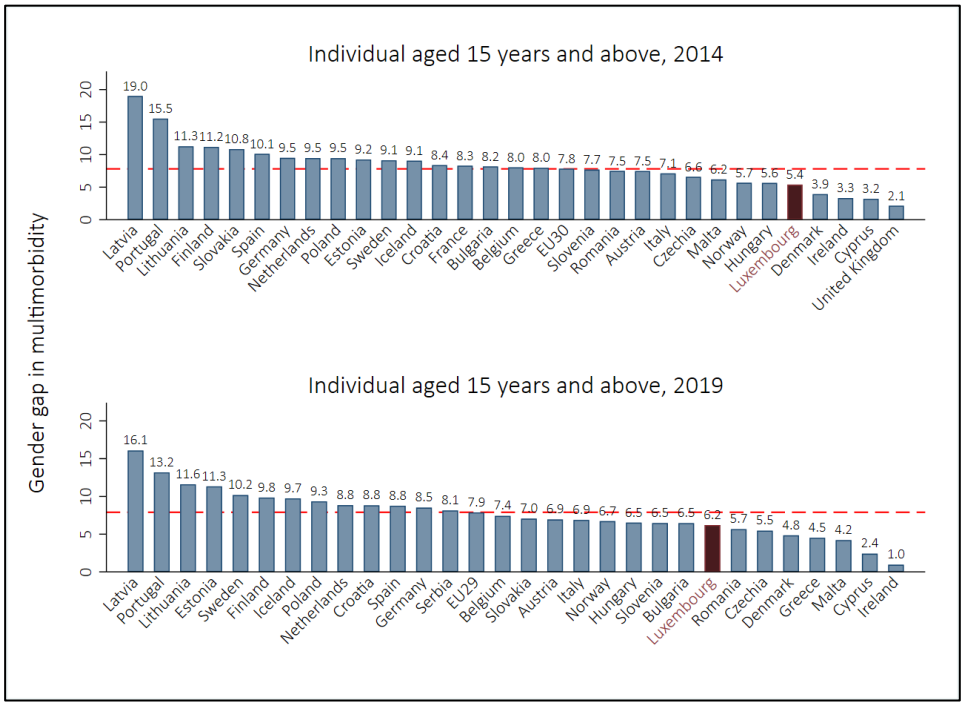
Table 1: Prevalence of multimorbidity, EHIS, 2014 and 2019

Year	Gender	Luxembourg (%)	EU Average (%)	Minimum (%)	Maximum (%)
2014	Women	39.1	34.8	Ireland (18.8)	Portugal (47.9)
	Men	33.7	27.0	Romania (12.8)	Germany (41.9)
2019	Women	38.1	35.4	Ireland (12.1)	Finland (51.6)
	Men	31.9	27.5	Ireland (11.2)	Croatia (44.4)

Source: *European Health Interview Survey (EHIS), Eurostat.*

In 2014, the gender gap in multimorbidity in Luxembourg was +5.4 PP, and in 2019, it increased to +6.2 PP, indicating that women experience higher rates of two or more chronic conditions than men in Luxembourg (**Figure 5**). When compared to other EU countries, Luxembourg's gender gap in multimorbidity remained lower than the EU average, the leading gender-equal countries, and Germany (**Appendix Table 1**).

Figure 5: Gender gap in prevalence of multimorbidity across EU countries, EHIS, 2014 and 2019



Note: The vertical bar represented the average gender gap value (women−men) for each country, while the red dashed line indicated the EU average. Countries with bars touching or crossing the red dashed line had a gender gap in health equal to or exceeding the EU average. Conversely, bars below the red dashed line indicated countries with a gender gap in health below the EU average. **Source**: *European Health Interview Survey (EHIS), Eurostat.*

Women had a higher prevalence of multimorbidity compared to men, both in the EU average and in Luxembourg. Luxembourg presented a lower gender gap in multimorbidity compared to the EU average.

While focusing on the relative change in the gender gap from 2014 to 2019, results suggested that for Luxembourg, the gender gap increased by almost 16%, which was comparatively higher than the EU30 average (Table 2).

Table 2: Relative change in gender gap for multimorbidity, EHIS, 2014 and 2019

Country	Gender gap 2014, PP	Gender gap 2019, PP	Change by 2019, PP	Relative change since 2014, %
Belgium	8.1	7.4	-0.7	8.6
Denmark	3.7	4.8	1.1	29.7
EU30	7.8	7.9	0.1	1.2
France	8.1	N/A	N/A	N/A
Germany	9.0	8.5	-0.5	5.5
Luxembourg	5.3	6.2	0.9	16.0
Netherlands	9.3	8.8	-0.5	5.3
Spain	10.2	8.8	-1.4	13.7
Sweden	9.0	10.2	1.2	13.3

Note: The relative change in gender gap in health outcome (in percentage) = (gender gap value in 2019- gender gap value in 2014) / gender gap value in 2014*100. PP: Percentage points, %: percentages. **Source:** *European Health Interview Survey (EHIS), Eurostat.*

Accidents and injuries

In 2014, the EU averages in accidents and injuries for men (9.3%) were higher than for women (8.3%) (Table 3). Luxembourg surpassed the EU average for both genders. In 2014, Czechia exhibited the highest rates for both genders, whereas Romania and Bulgaria recorded the lowest rates. In 2019, the EU average for both genders experienced a slight decline, whereas Luxembourg witnessed an increase in rates for women and a decrease for men. Austria and Finland recorded the highest rates for women and men, respectively, whereas Romania and Bulgaria exhibited the lowest prevalence.

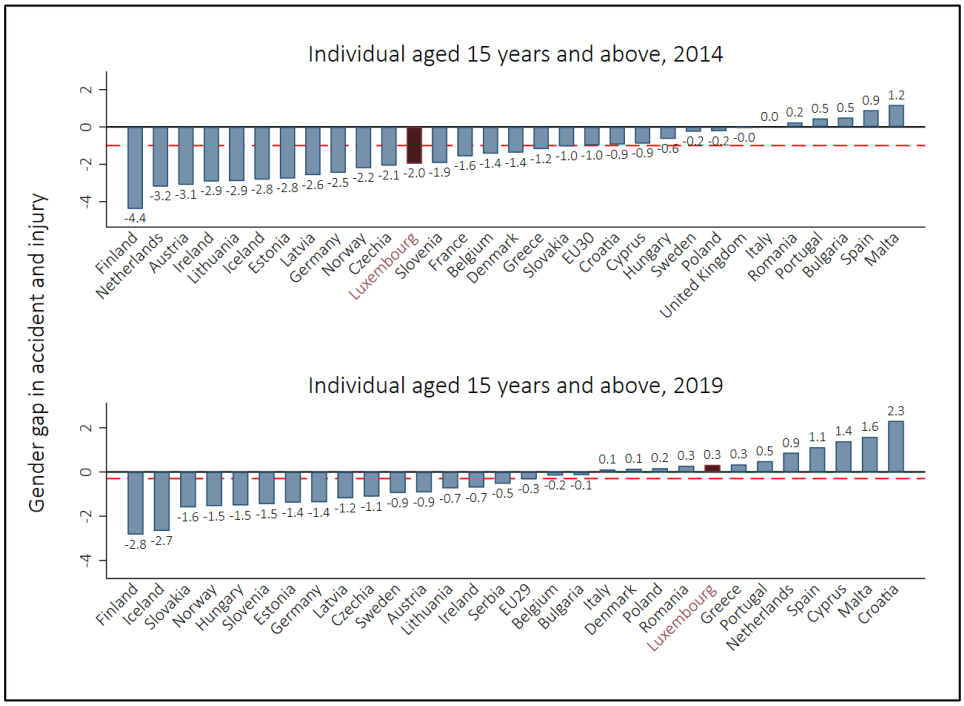
Table 3: Prevalence of accident and injuries, EHIS, 2014 and 2019

Year	Gender	Luxembourg (%)	EU Average (%)	Minimum (%)	Maximum (%)
2014	Women	11.4	8.3	Romania (2.3)	Czechia (15.6)
	Men	13.4	9.3	Bulgaria (1.8)	Czechia (17.7)
2019	Women	12.1	7.9	Romania (3.1)	Austria (12.6)
	Men	11.7	8.2	Bulgaria (2.5)	Finland (14.3)

Source: *European Health Interview Survey (EHIS), Eurostat.*

Estimates in 2014 indicated a gender gap of -2.0 PP in Luxembourg, which was higher than the EU average and other top gender-equal countries such as Sweden, Spain, Belgium, France, and Denmark (**Figure 6**). However, in 2019, this gender gap was reduced to +0.3 PP, indicating a lower gender gap in accident and injury rates in Luxembourg and a shift in the pattern as women reported more accidents and injuries than men (**Appendix Table 2**).

Figure 6: Gender gap in prevalence of accidents and injuries across EU countries, EHIS, 2014 and 2019



Note: The vertical bar represented the average gender gap value (women−men) for each EU country, while the red dashed line indicated the EU average. Countries with bars touching or crossing the red dashed line had a gender gap in health equal to or exceeding the EU average. Conversely, bars below the red dashed line indicated countries with a gender gap in health below the EU average. **Source**: *European Health Interview Survey (EHIS), Eurostat.*

In 2014, men in Luxembourg had more accidents and injuries than women, but the gender gap narrowed in 2019 as the prevalence increased among women.

Results indicated that the gender gap in accidents and injuries in Luxembourg increased by nearly 116% from 2014 to 2019, which is almost twice the relative change in the gender gap observed across the EU30 during the same period (Table 4). This substantial shift in the gender gap was primarily due to a reversal in reporting trends: in 2014, more men than women reported accidents and injuries, whereas by 2019, more women reported accidents and injuries than men.

Table 4: Relative change in gender gap for accidents and injuries, EHIS, 2014 and 2019

Country	Gender gap 2014, PP	Gender gap 2019, PP	Change by 2019, PP	Relative change since 2014, %
Belgium	-1.4	-0.2	1.2	88.8
Denmark	-1.3	0.1	1.5	110.1
EU30	-0.9	-0.3	0.6	66.3
France	-1.5	N/A	N/A	N/A
Germany	-2.4	-1.3	1.1	44.3
Luxembourg	-1.9	0.3	2.2	116.2
Netherlands	-3.1	0.8	4.1	127.3
Spain	0.8	1.1	0.2	25.8
Sweden	-0.2	-0.9	-0.7	280.0

Note: The relative change in gender gap in health outcome (in percentage) = (gender gap value in 2019- gender gap value in 2014) / gender gap value in 2014*100. PP: Percentage points, %: Percentages. **Source:** *European Health Interview Survey (EHIS), Eurostat.*

Severe pain experience

In 2014 and 2019, women reported higher rates of severe pain than men did, both in the EU average and in Luxembourg (Table 5). Among women, Portugal exhibited the highest prevalence of severe pain in 2014 and 2019, whereas the lowest prevalence was observed in Ireland in 2014 and in Bulgaria in 2019. The highest prevalence rates for men were observed in Portugal (2014) and Estonia (2019), while the lowest rates were recorded in Ireland (2014) and Malta (2019). Luxembourg's prevalence rates for men were similar to the EU average.

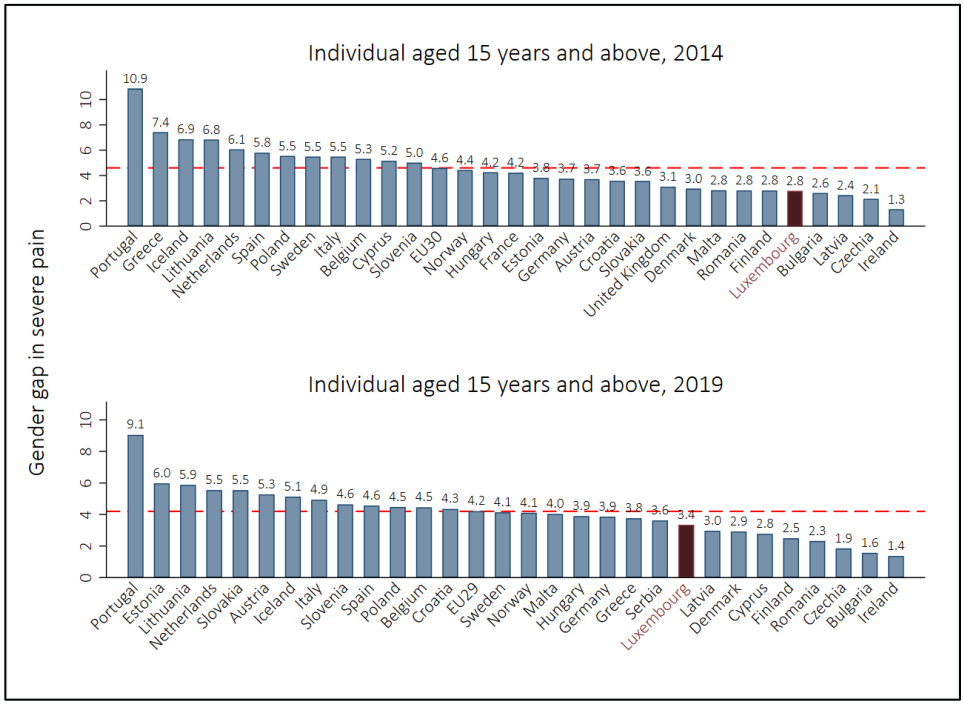
Table 5: Prevalence of severe pain, EHIS, 2014 and 2019

Year	Gender	Luxembourg (%)	EU Average (%)	Minimum (%)	Maximum (%)
2014	Women	9.4	11.0	Ireland (4.6)	Portugal (20.4)
	Men	6.7	6.4	Ireland (3.2)	Portugal (9.5)
2019	Women	10.2	10.7	Bulgaria (4.5)	Portugal (18.6)
	Men	6.8	6.5	Malta (2.8)	Estonia (10.3)

Source: *European Health Interview Survey (EHIS), Eurostat.*

In 2014 and 2019, women in Luxembourg experienced severe pain more than men did (**Figure 7**). The gender gap in severe pain in 2014 was +2.8 PP, which has further widened in 2019 (+3.4 PP). However, compared to other gender-equal countries, such as the Netherlands, Sweden, France, Spain, and neighbouring Germany, the gender gap in severe pain in Luxembourg was still lower (**Appendix Table 3**).

Figure 7: Gender gap in prevalence of severe pain across EU countries, EHIS, 2014 and 2019



Note: The vertical bar represented the average gender gap value (women−men) for each EU country, while the red dashed line indicated the EU average. Countries with bars touching or crossing the red dashed line had a gender gap in health equal to or exceeding the EU average. Conversely, bars below the red dashed line indicated countries with a gender gap in health below the EU average. **Source**: *European Health Interview Survey (EHIS), Eurostat.*

In 2014 and 2019, women reported higher rates of severe pain than men did. The gender gap in severe pain in Luxembourg was smaller than the EU average.

The relative change in the gender gap in severe pain from 2014 to 2019 in Luxembourg increased by nearly 20%. EU30's relative change in the gender gap was reduced by 8% over the same period (Table 6).

Table 6: Relative change in gender gap for severe pain, EHIS, 2014 and 2019

Country	Gender gap 2014, PP	Gender gap 2019, PP	Change by 2019, PP	Relative change since 2014, %
Belgium	5.3	4.4	-0.8	16.2
Denmark	2.9	2.8	-0.1	1.4
EU30	4.6	4.2	-0.3	8.5
France	4.2	N/A	N/A	N/A
Germany	3.7	3.8	0.1	3.2
Luxembourg	2.7	3.3	0.5	20.5
Netherlands	6.1	5.5	-0.5	8.4
Spain	5.8	4.5	-1.2	21.2
Sweden	5.4	4.1	-1.4	24.6

Note: The relative change in gender gap in health outcome (in percentage) = (gender gap value in 2019- gender gap value in 2014) / gender gap value in 2014*100. PP: Percentage points, %: Percentages. **Source:** *European Health Interview Survey (EHIS), Eurostat.*

Mental health domain:

Depressive symptoms

Women exhibited a greater prevalence of depressive symptoms compared to men, both at the EU average level and in Luxembourg (Table 7). Among the countries for which information was available for analysis[d], in 2014, Portugal exhibited the highest prevalence among women, whereas Hungary displayed the highest prevalence among men. The lowest prevalence rates were recorded in Ireland for women and Slovakia for men. In 2019, Sweden exhibited the highest rates for both genders. The lowest prevalence rates were recorded in Serbia for both women and men. In 2014 and 2019, Luxembourg's rates of depressive symptoms for both genders surpassed the EU average.

[d] The data shared by EUROSTAT did not include information on mental health for the following countries in EHIS 2 Belgium, Spain, and the Netherlands and EHIS 3: Spain and France.

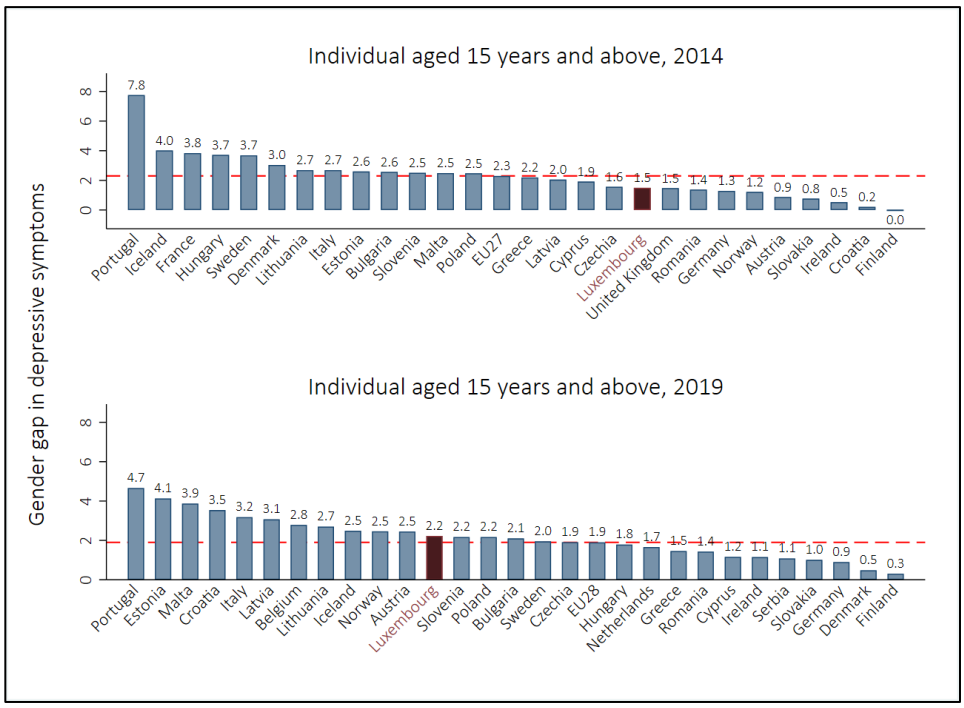
Table 7: Prevalence of depressive symptoms, EHIS, 2014 and 2019

Year	Gender	Luxembourg (%)	EU Average (%)	Minimum (%)	Maximum (%)
2014	Women	9.1	7.8	Ireland (5.1)	Portugal (13.7)
	Men	7.6	5.5	Slovakia (3.0)	Hungary (8.3)
2019	Women	9.5	7.2	Serbia (2.5)	Sweden (11.5)
	Men	7.2	5.3	Serbia (1.5)	Sweden (9.6)

Source: *European Health Interview Survey (EHIS), Eurostat.*

More women than men reported having depressive symptoms in 2014 and 2019 (**Figure 8**). In 2014, the gender gap in depressive symptoms in Luxembourg was smaller compared to other top gender-equal EU countries like Sweden, Denmark, and France.

Figure 8: Gender gap in depressive symptoms across EU countries, EHIS, 2014 and 2019



Note: The vertical bar represented the average gender gap value (women−men) for each EU country, while the red dashed line indicated the EU average. Countries with bars touching or crossing the red dashed line had a gender gap in health equal to or exceeding the EU average. Conversely, bars below the red dashed line indicated countries with a gender gap in health below the EU average. **Source**: *European Health Interview Survey (EHIS), Eurostat.*

More women than men reported having depressive symptoms in 2014 and 2019. The gender gap in depressive symptoms for Luxembourg was lower than the EU average in 2014 but higher in 2019.

The gender gap in depressive symptoms for Luxembourg was +1.5 PP in 2014, which was lower than that of France (+3.8 PP), Sweden (+3.7 PP), and Denmark (+3.0 PP). However, in 2019, this gap slightly increased to (+2.2 PP) for Luxembourg, making it marginally above the EU average and higher than in other leading gender-equal countries such as Sweden (+2.0 PP), the Netherlands (+1.7 PP), Denmark (+0.5 PP), and Germany (+0.90 PP) (Appendix Table 4). The analysis of the relative change of the gender gap in depressive symptoms between 2014 and 2019 showed a nearly 46% increase in Luxembourg. The EU27 experienced a 17% decrease in the relative gender gap during the same timeframe (Table 8).

Table 8: Relative change in gender gap for depressive symptoms, EHIS, 2014 and 2019

Country	Gender gap 2014, PP	Gender gap 2019, PP	Change by 2019, PP	Relative change since 2014, %
Belgium	8.1	2.8	N/A	N/A
Denmark	3.7	0.5	-2.5	83.3
EU27	2.3	1.9	-0.4	17.3
France	8.1	N/A	N/A	N/A
Germany	9.0	0.9	-0.4	30.7
Luxembourg	1.5	2.2	0.7	46.6
Netherlands	9.3	1.7	N/A	N/A
Spain	10.2	2.0	-1.7	45.9
Sweden	9.0	2.8	N/A	N/A

Note: The relative change in gender gap in health outcome (in percentage) = (gender gap value in 2019- gender gap value in 2014) / gender gap value in 2014*100. PP: Percentage points, %: Percentages. **Source:** *European Health Interview Survey (EHIS), Eurostat.*

Healthcare use domain:

Unmet need for health care due to financial barriers, long waiting lists or distance/transportation problems

Women reported higher rates of unmet healthcare needs compared to men, both at the EU average and in Luxembourg (Table 9). In 2014, Latvia exhibited the highest prevalence among women, whereas Ireland recorded the highest prevalence among men. In 2019, Portugal exhibited the highest rates for women, while both Portugal and Luxembourg demonstrated the highest prevalence for men. Cyprus exhibited the lowest prevalence for both genders in both years analysed. Luxembourg's rates exceeded the EU average, highlighting considerable unmet healthcare needs in the country relative to other regions.

Table 9: Prevalence of unmet needs for healthcare, EHIS, 2014 and 2019

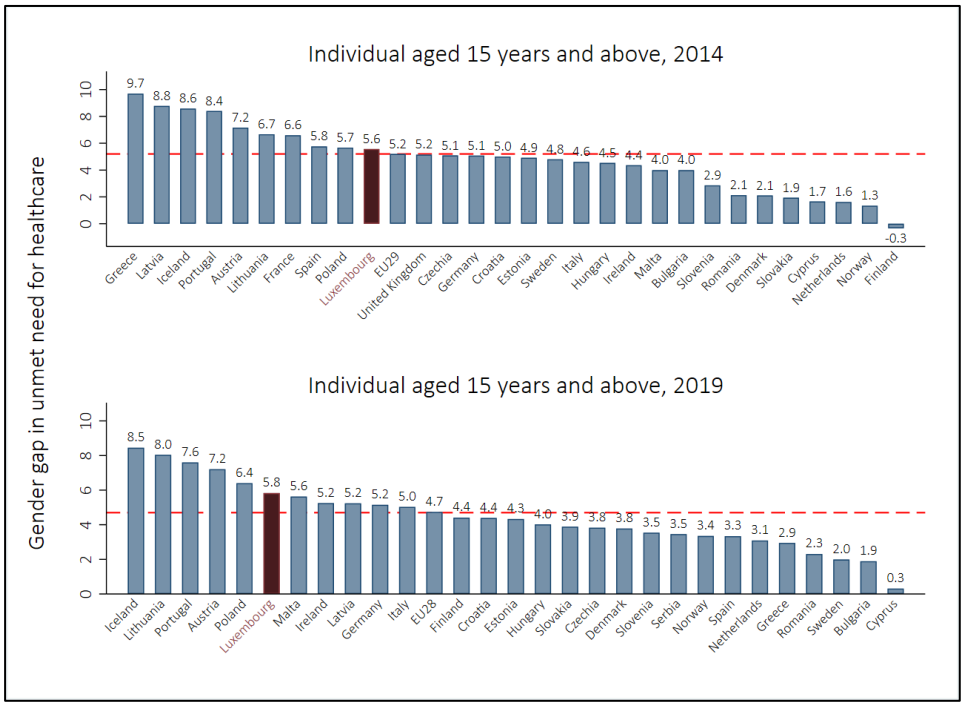
Year	Gender	Luxembourg (%)	EU Average (%)	Minimum (%)	Maximum (%)
2014	Women	40.1	28.8	Cyprus (10.1)	Latvia (45.4)
	Men	34.5	23.6	Cyprus (8.4)	Ireland (38.3)
2019	Women	41.6	26.7	Cyprus (5.9)	Portugal (43.3)
	Men	35.8	22.0	Cyprus (5.6)	Portugal and Luxembourg (35.8)

Source: *European Health Interview Survey (EHIS), Eurostat.*

The gender gap in unmet needs in Luxembourg was positive in both waves, indicating that women consistently experienced greater unmet needs than men did (Figure 9).[e] These values were also above the EU average. Furthermore, the gender gap in Luxembourg was higher than in other top gender-equal countries. For instance, in 2014, the gender gap value was +5.6 PP for Luxembourg, compared to the Netherlands (+1.6 PP), Denmark (+2.1 PP), and Sweden (+4.8 PP). A similar pattern was observed in 2019 (Appendix Table 5).

[e]No value for unmet need for health was accessible for Belgium; therefore, Belgium was excluded from the analysis.

Figure 9: Gender gap in unmet need for health care across EU countries, EHIS, 2014 and 2019



Note: The vertical bar represented the average gender gap value (women−men) for each EU country, while the red dashed line indicated the EU average. Countries with bars touching or crossing the red dashed line had a gender gap in health equal to or exceeding the EU average. Conversely, bars below the red dashed line indicated countries with a gender gap in health below the EU average. Source: *European Health Interview Survey (EHIS), Eurostat.*

In both waves, women had higher unmet health needs than men in Luxembourg, and the gender gap was above the EU average.

Between 2014 and 2019, gender gap in unmet need for health care in Luxembourg grew by nearly 3.5%, whereas the EU27 saw a 9.0% decline in the relative gender gap over the same period (Table 10).

Table 10: Relative change in gender gap for unmet need for health care, EHIS, 2014 and 2019

Country	Gender gap 2014, PP	Gender gap 2019, PP	Change by 2019, PP	Relative change since 2014, %
Belgium	N/A	N/A	N/A	N/A
Denmark	2.1	3.8	1.7	80.9
EU29	5.2	4.7	-0.5	9.6
France	6.6	N/A	N/A	N/A
Germany	5.1	5.2	0.1	1.9
Luxembourg	5.6	5.8	0.2	3.5
Netherlands	1.6	3.1	1.5	93.7
Spain	5.8	3.3	-2.5	43.1
Sweden	4.8	2.0	-2.8	58.3

Note: The relative change in gender gap in health outcome (in percentage) = (gender gap value in 2019- gender gap value in 2014) / gender gap value in 2014*100. PP: Percentage points, %: Percentages. **Source:** *European Health Interview Survey (EHIS), Eurostat.*

4.2. *Gender health gap across socio-economic and demographic factors in Luxembourg in 2014 and 2019*

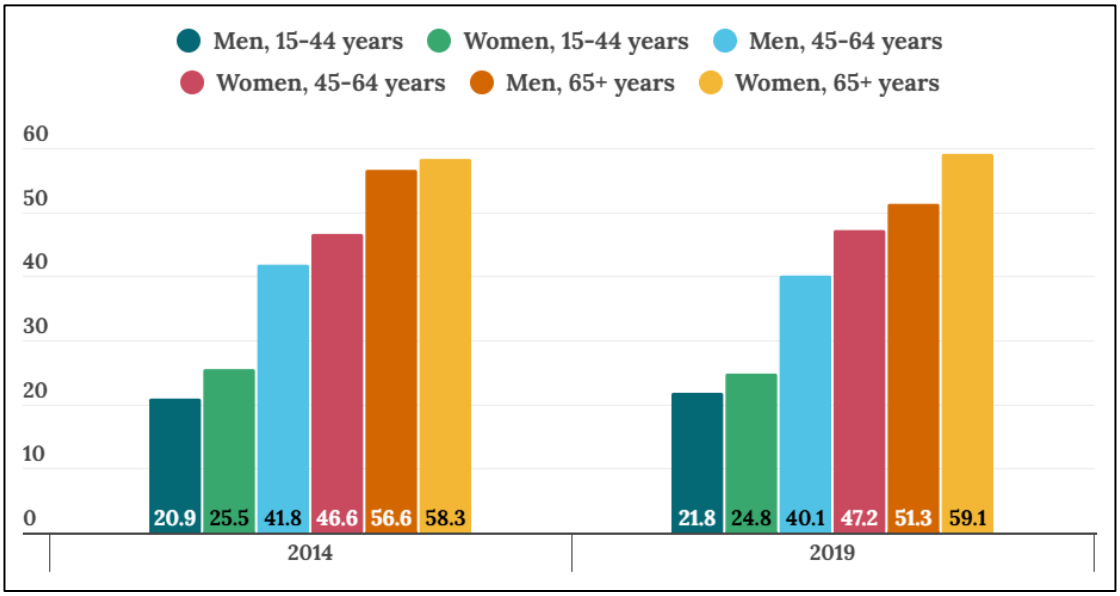
This section focuses on describing the age-adjusted prevalence of health outcomes among men and women across the categories of socioeconomic and demographic factors, including age, educational level, immigration status, marital status, and level of social support in Luxembourg in 2014 and 2019. In addition, we also presented the categories within which a statistically significant gender gap was observed in Luxembourg in the same period.

Physical health domain:

Multimorbidity

- *Gender and age:* In 2014, younger men (aged 15–44 years) had a multimorbidity prevalence of 20.9%, followed by younger women at 25.5% (**Figure 10**). Among those aged 65 years and above, the prevalence was 56.6% for men and 58.3% for women. In 2019, across other age groups and genders, there were only slight changes in prevalence compared to 2014. However, in 2019, the prevalence among men 65 and above was 51.3%, which was lower than in 2014.

Figure 10: Prevalence of multimorbidity across age groups in Luxembourg, EHIS, 2014, 2019



Note: Prevalence was age-adjusted. Sampling weights were applied. **Source:** *European Health Interview Survey (EHIS), Eurostat.*

- *Gender and education:* In 2014, low-educated women had the highest prevalence of multimorbidity (44.8%), followed by low-educated men (42.7%) (Table 11). This pattern persisted in 2019, with low-educated women reaching 46.7%, and low-educated men at 44.1%. Highly educated men had the lowest prevalence in both years (21.8% in 2014, increasing to 24.9% in 2019) while, the most notable rise was observed among high-educated women (29.1% in 2014, to 32.6% in 2019). The social gradient—higher multimorbidity with lower education—remained stable across genders in 2014 and 2019.
- *Gender and immigration status:* In 2014, the highest prevalence of mutimorbidity was observed among native-born women (39.2%) followed by women born in other EU countries (36.4%), while the lowest was among non-EU born men (25.1%) (Table 11). In 2019, women born in other EU countries reached the highest prevalence (39.2%), followed by native-born women (37.5%). In contrast, men across all migration backgrounds showed lower prevalence rates in both years. Although some increases were observed—for example, among non-EU born men (from 25.1% to 26.1%) and men born in other EU countries (from 31.1% to 32.2%)—these changes were modest.

- *Gender and marital status:* In 2014, widowed women had a prevalence of 55.7%, which rose sharply to 61.3% in 2019. Widowed men also had high rates (52.9% in 2014, 49.0% in 2019), though the pattern declined from 2014 to 2019 in Luxembourg (Table 11). Divorced individuals showed declined prevalence rates, with divorced women at 49.5% in 2014 and 45.7% in 2019, and divorced men at 43.4% in 2014, declined slightly to 39.6% in 2019. In contrast, never married individuals had the lowest prevalence across both years, mainly among men (21.2% in 2014, 21.5% in 2019). Never married women showed an increase from 25.0% to 28.1%. Married individuals had moderate levels of multimorbidity, with women showing slightly higher rates than men in both years (Appendix Table 6).

Table 11: Prevalence of multimorbidity by socioeconomic and demographic characteristics, Luxembourg, EHIS, 2014 and 2019

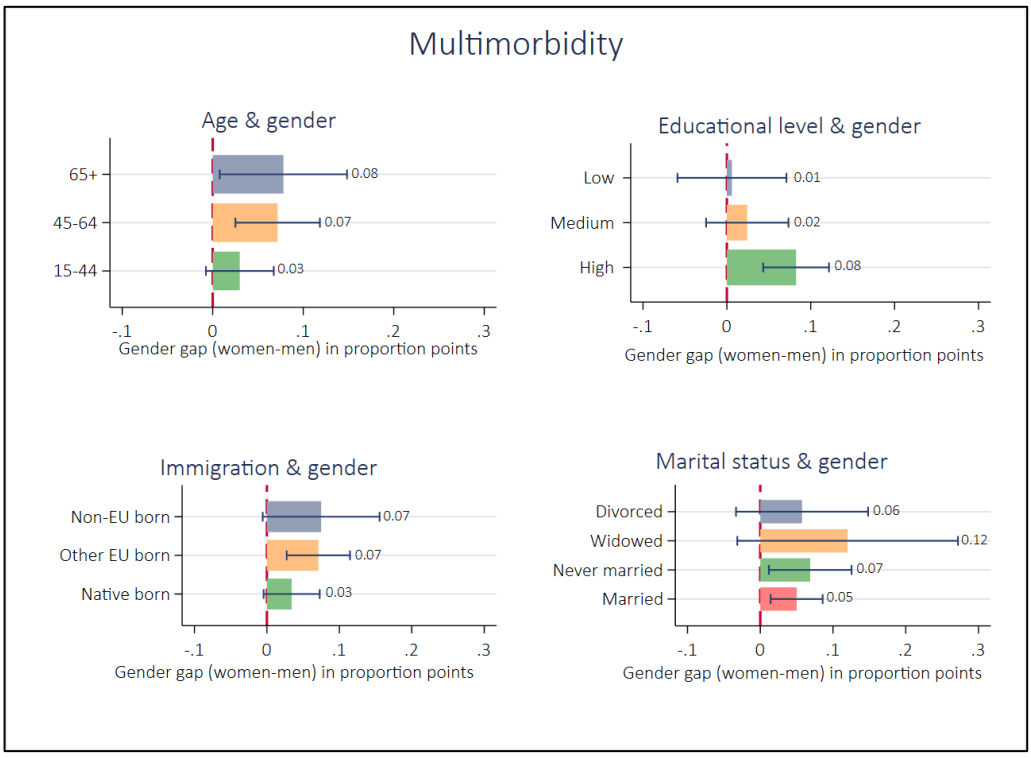
Socioeconomic and demographic characteristics	2014 (n=4,004)		2019 (n=4,504)	
	Women, % (n=2,164)	Men, % (n=1,840)	Women, % (n=2,428)	Men, % (n=2,076)
Educational level				
High	29.1	21.8	32.6	24.9
Medium	39.8	37.9	38.3	35.5
Low	44.8	42.7	46.7	44.1
Country of birth				
Native-born	39.2	35.8	37.5	33.9
Born in other EU	36.4	31.1	39.2	32.2
Born in non-EU	32.7	25.1	33.6	26.1
Marital status				
Married	41.5	38.1	40.7	36.2
Never married	25.0	21.2	28.1	21.5
Widowed	55.7	52.9	61.3	49.0
Divorced	49.5	43.4	45.7	39.6

Note: Prevalence was age-adjusted. Sampling weights were applied. %: Percentage; n: Number of participants.
Source: *European Health Interview Survey (EHIS), Eurostat*.

- *Gender gap across socioeconomic and demographic factors:* Figure 11 shows the socioeconomic and demographic categories in which a statistically significant gender gap in multimorbidity was observed in Luxembourg in 2019. Women aged 45–64 and 65 and over had, on average, higher multimorbidity than men in the same age groups. Although a gender

gap was also observed among younger age groups, it was not statistically significant. After adjusting for age, women in the high education group showed higher multimorbidity than high-educated men did.—a pattern not seen in the middle and low education groups. Among immigrants, women born in other EU countries had significantly higher multimorbidity than their men counterparts. Although the gender gap among non-EU-born immigrants was not statistically significant, non-EU-born women still showed higher multimorbidity compared to non-EU immigrant men. Focusing on marital status, the gender gap in multimorbidity adjusted by age was statistically significant only among never-married and married groups.

Figure 11: Gender gap in multimorbidity across socioeconomic and demographic categories, Luxembourg, EHIS, 2019

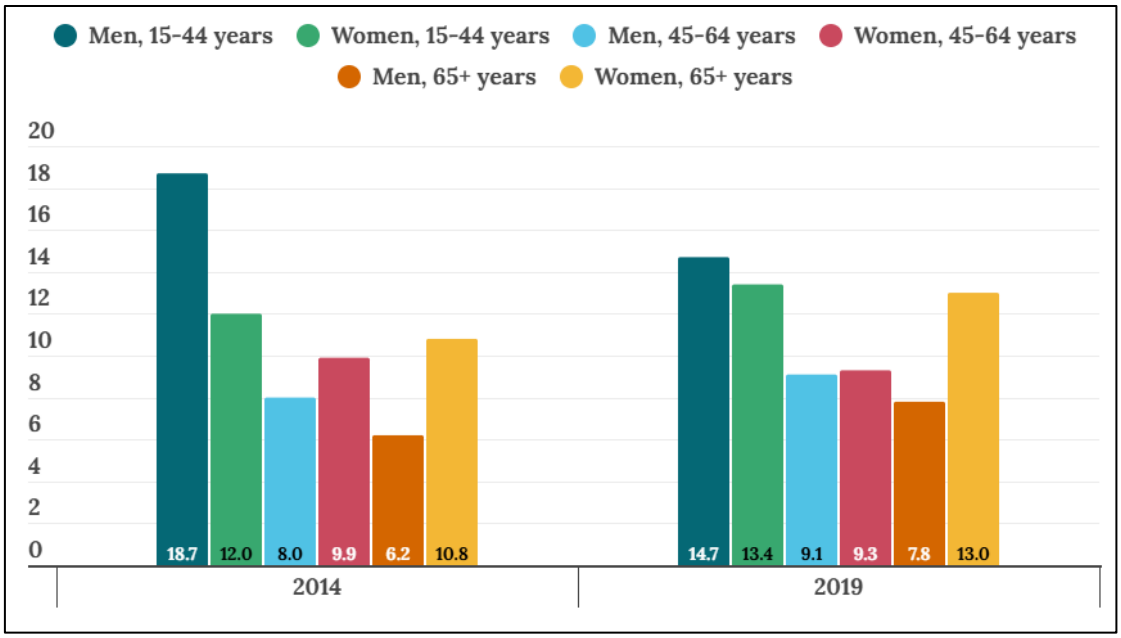


Note: Bars represent the difference in health outcomes between women and men. Estimated through age-adjusted logistic model analysis. A red dashed line at '0' indicates no gender gap in the mean health outcome. Bars extending to the right of the line indicate that women experienced higher proportion points than men did, whereas bars extending to the left suggest that men experienced higher proportion points than women. Confidence intervals, represented by arrows on each bar, indicate the range within which the gender gap is likely to fall. If a confidence interval touches or crosses the red dashed line, it implies there is no statistically significant gap in health outcomes between women and men. **Source:** *European Health Interview Survey (EHIS), Eurostat.*

Accidents and injuries

- *Gender and age:* Among women, the prevalence of accidents and injuries increased in the youngest (15–44) and oldest (65+) age groups between 2014 and 2019 (Figure 12). Women aged 65 and over saw a rise from 10.8% to 13%. Men in the same age group saw an increase from 6.2% to 7.8%. Youngest men (15–44) had the highest prevalence, although it dropped from 18.7% to 14.7% (Appendix table 7).

Figure 12: Prevalence of accidents and injuries across age groups in Luxembourg, EHIS, 2014, 2019



Note: Prevalence was age-adjusted. Sampling weights were applied. Source: *European Health Interview Survey (EHIS), Eurostat.*

- *Gender and education:* Accidents and injures rates among highly educated women increased from 9.3% in 2014 to 11.5% in 2019 (Table 12). For those with medium education, the prevalence declined from 12.7% to 11.3%. However, women with low education experienced an increase from 12.3% to 15.5%. In contrast, men with high education saw a decrease from 12.7% to 10.7%. Men with with low education experienced a small increase from 13.4% to 13.9%. These figures show a growing educational gap among women and a slight narrowing among men, suggesting that low education is becoming a more critical risk factor for women than men.

- *Gender and immigration status:* In 2014, native-born women had an accidents and injuries prevalence of 12.4%, which increased to 13.1% in 2019 (Table 12). Women born in other EU countries saw a slight decrease from 11.1% to 10.8%. However, non-EU-born women saw a dramatic increase in prevalence from 4.6% in 2014 to 11.1% in 2019. Among men, native-born individuals saw a small decline from 13.9% to 12.9%, and EU-born men decreased from 11.8% to 10.4%. Non-EU-born men remained almost the same, going from 11.4% to 11.2%.
- *Gender and marital status:* In 2014, married women had a prevalence of 8.9%, which increased slightly to 9.3% in 2019 (Table 12). Married men saw a small decrease from 10.07% to 8.6%. Never-married women experienced a reduction from 16.0% in 2014 to 15.4% in 2019, while never-married men decreased from 19.7% to 16.9%. Widowed women showed a steep rise from 12.3% to 16.5%, making them the group with the highest increase among women. In contrast, widowed men saw their prevalence drop significantly from 9.0% to just 5.9%. Divorced women had a slight decline from 14.3% to 13.7%, whereas divorced men saw an increase from 10.4% to 13.1%.

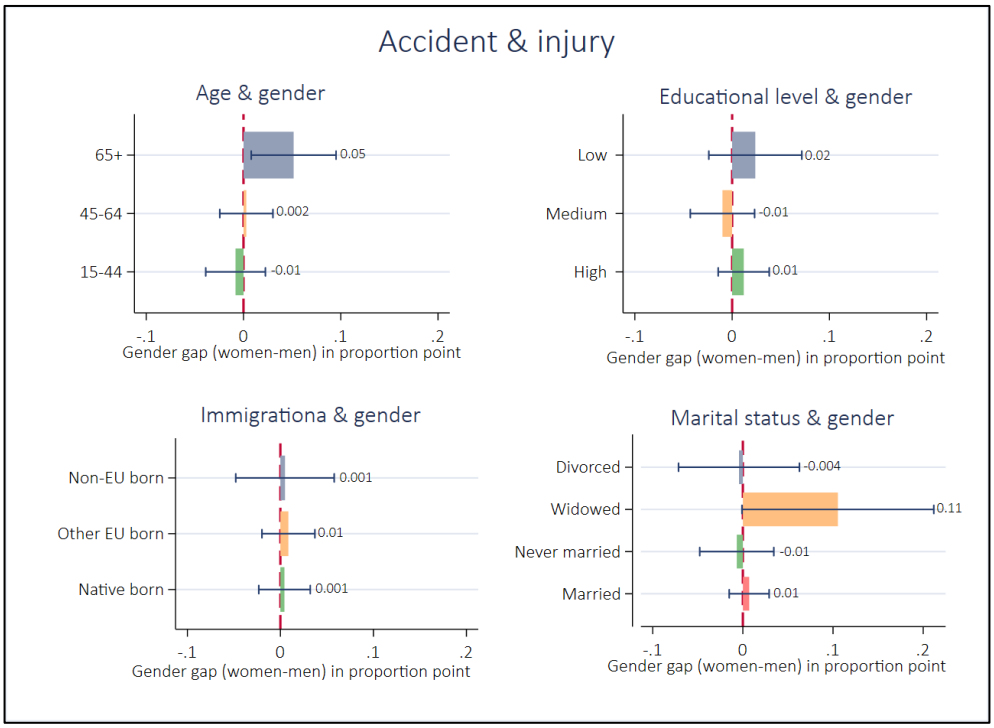
Table 12: Prevalence of accidents and injuries by socioeconomic and demographic characteristics, Luxembourg, EHIS, 2014 and 2019

Socioeconomic and demographic characteristics	2014 (n=4,004)		2019 (n=4,504)	
	Women, % (n=2,164)	Men, % (n=1,840)	Women, % (n=2,428)	Men, % (n=2,076)
Educational level				
High	9.3	12.7	11.5	10.7
Medium	12.7	13.5	11.3	12.1
Low	12.3	13.4	15.5	13.9
Country of birth				
Native-born	12.4	13.9	13.1	12.9
Born in other EU	11.1	11.8	10.8	10.4
Born in non-EU	4.6	11.4	11.1	11.2
Marital status				
Married	8.9	10.0	9.3	8.6
Never married	16.0	19.7	15.4	16.9
Widowed	12.3	9.0	16.5	5.9
Divorced	14.3	10.4	13.7	13.1

Note: Prevalence was age-adjusted. Sampling weights were applied. %: Percentage; n: Number of participants.
Source: *European Health Interview Survey (EHIS), Eurostat*.

- *Gender gap across socioeconomic and demographic factors:* Figure 13 illustrated the gender gap in accidents and injuries by categories of socioeconomic and demographic factors in Luxembourg in 2019. Gender gap values were age-adjusted. Findings indicate that among individuals aged 65 years and older, there was a significant gender gap, with women experiencing more accidents and injuries than men. In contrast, the age-adjusted gender gap analysis across categories of education or migration did not reveal any statistically significant difference. While results shown that widowed women had a higher prevalence than widowed men did—this difference was not statistically significant.

Figure 13: Gender gaps in accident and injury by categories of socioeconomic and demographic factors, Luxembourg, 2019

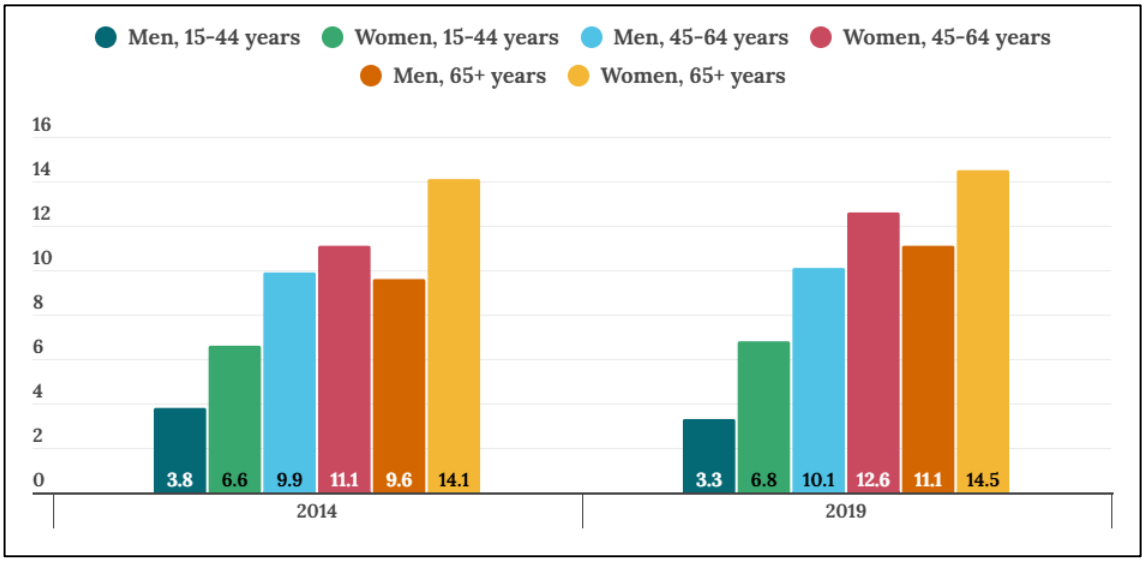


Note: Bars represent the difference in health outcomes between women and men. Estimated through age-adjusted logistic model analysis. A red dashed line at '0' indicates no gender gap in the mean health outcome. Bars extending to the right of the line indicate that women experienced proportion points higher health problems than men, whereas bars extending to the left suggest that men experienced proportion points higher health problems than women. Confidence intervals, represented by arrows on each bar, indicate the range within which the gender gap is likely to fall. If a confidence interval touches or crosses the red dashed line, it implies there is no statistically significant gap in health outcomes between women and men.
Source: *European Health Interview Survey (EHIS), Eurostat.*

Severe pain

- *Gender and age:* Among the 15–44 age group, pain remained relatively low but stable, with women experiencing nearly double the prevalence of men in both years (Figure 14). In the 45–64 group, pain increased among women, rising from 11.1% to 12.6%, while among men increased from 9.9% to 10.1%. The highest prevalence of severe pain was observed in women aged 65+ in both 2014 and 2019 (Appendix table 8).

Figure 14: Prevalence of severe pain across age groups in Luxembourg, EHIS, 2014, 2019



Note: Prevalence was age-adjusted. Sampling weights were applied. Source: *European Health Interview Survey (EHIS), Eurostat.*

- *Gender and education:* In terms of educational level (Table 13), severe pain increased with lower education, and women consistently reported higher rates than men within each educational group. In 2014, low-educated women had the highest prevalence at 13.3%, which rose to 17.6% by 2019—almost triple the rate of highly educated women (5.9%) and over four times that of highly educated men (4.1%). Middle-educated women also saw an increase from 9.8% to 11.2%, while middle-educated men remained much lower at 8.2% in 2019.
- *Gender and immigration status:* In 2014 and 2019, across all migration categories, women experienced more severe pain than men, with a notable increase in 2019 among women born in other EU countries (from 8.5% to 10.8%) (Table 13).
- *Gender and marital status:* In both 2014 and 2019, married women reported higher prevalence of severe pain than married men, rising slightly from 9.5% to 10.2% (Table 13). The highest severe pain prevalence was observed among divorced and widowed women: divorced women jumped from 14.5% to 15.6%, and widowed women from 13.2% to 17.0%. In comparison, divorced men (5.9% to 10.5%) also experienced significant increases but remained below women rates.

- *Gender and social support:* Women with low social support experienced the highest prevalence of severe pain, increasing from 14.4% in 2014 to 18.3% in 2019, while men with low social support also reported increased prevalence of severe pain from 9.8% to 10.8% (Table 13). Among those with intermediate social support, women consistently reported high severe pain rates than men. Those with strong social support showed the lowest severe pain prevalence, yet even here, gender differences persisted: women with strong social support reported 7.4% in 2014 and 6.7% in 2019, compared to 5.3% and 5.5% among men. Overall, these results underscore the protective effect of social support against severe pain experience, particularly for women, whose severe pain rates raised steeply with diminishing social support.

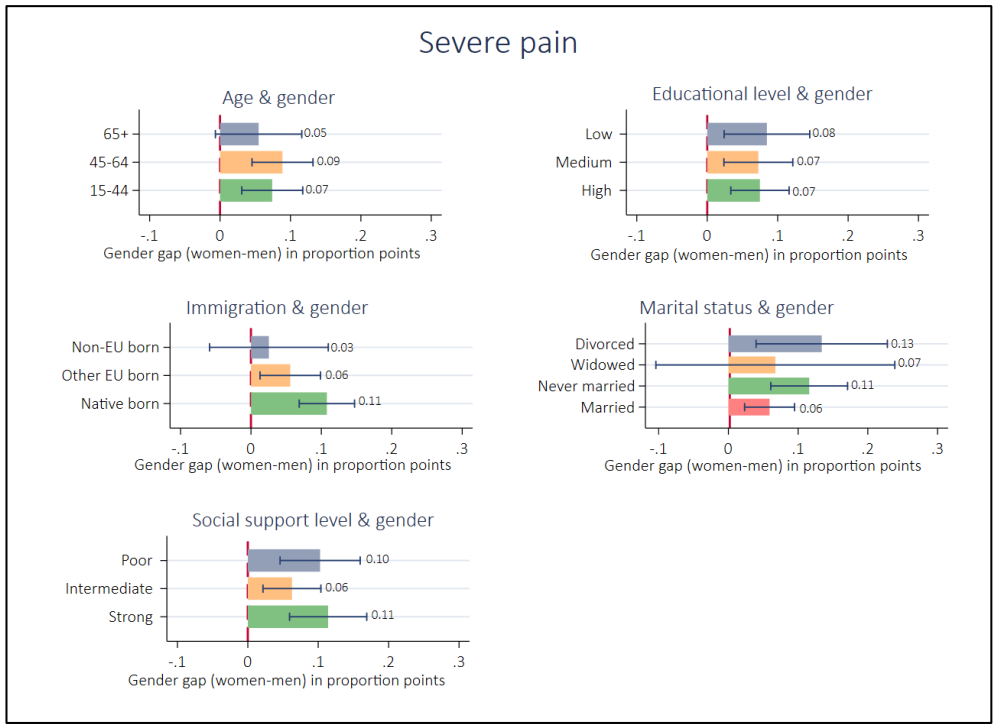
Table 13: Prevalence of severe pain by socioeconomic and demographic characteristics, Luxembourg, EHIS, 2014 and 2019

Socioeconomic and demographic characteristics	2014 (n=4,004)		2019 (n=4,504)	
	Women, % (n=2,164)	Men, % (n=1,840)	Women, % (n=2,428)	Men, % (n=2,076)
Educational level				
High	4.9	2.9	5.9	4.1
Medium	9.8	7.2	11.2	8.2
Low	13.3	11.3	17.6	11.6
Country of birth				
Native-born	9.6	6.6	9.7	6.8
Born in other EU	8.6	6.3	10.8	7.8
Born in non-EU	9.5	8.5	8.9	3.8
Marital status				
Married	9.5	8.0	10.2	7.9
Never married	6.2	4.1	6.8	3.9
Widowed	13.2	10.4	17.0	8.6
Divorced	14.5	5.9	15.6	10.5
Social support level				
Strong	7.4	5.3	6.7	5.5
Intermediate	8.2	6.2	7.9	6.2
Poor	14.4	9.8	18.3	10.8

Note: Prevalence was age-adjusted. Sampling weights were applied. %: Percentage; n: Number of participants.
Source: *European Health Interview Survey (EHIS), Eurostat*.

- *Gender gap across socioeconomic and demographic factors:* Figure 15 illustrates the categories of gender gap in severe pain experience in Luxembourg in 2019. Results indicate that the 45-64 years age group showed the largest gender gap, followed by the 15-44 years age group, with women reporting more severe pain than men. The gender gap was highest among individuals with low education, where women experienced more severe pain than men. Luxembourgish-born women experienced more severe pain than Luxembourgish-born men A similar pattern was observed among divorced and never-married individuals. Upon the age adjustments, there was no specific gradient in the gender gap in severe pain experience based on the level of social support in Luxembourg in 2019.

Figure 15: Gender gaps in severe pain experience by categories of socioeconomic and demographic factors, Luxembourg, 2019.



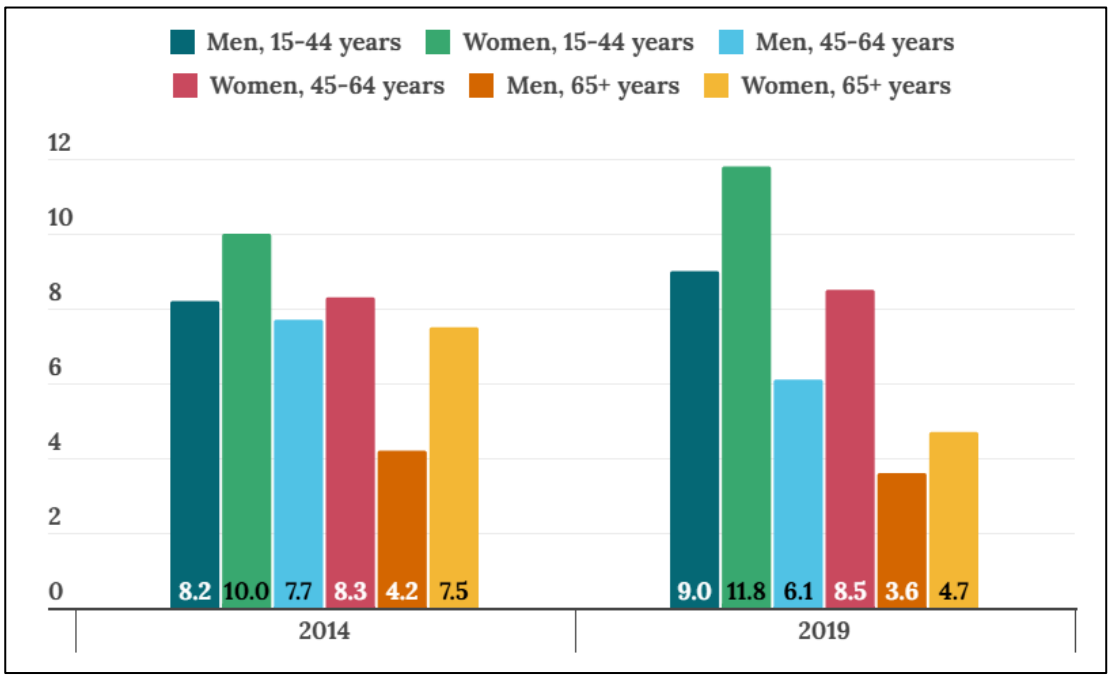
Note: Bars represent the difference in health outcomes between women and men. A red dashed line at '0' indicates no gender gap in the mean health outcome. Bars extending to the right of the line indicate that women experienced higher health problems than men, whereas bars extending to the left suggest that men experienced higher health problems than women. Confidence intervals, represented by arrows on each bar, indicate the range within which the gender gap is likely to fall. If a confidence interval touches or crosses the red dashed line, it implies there is no statistically significant gap in health outcomes between women and men. **Source:** *European Health Interview Survey (EHIS), Eurostat.*

Mental health domain:

Depressive symptoms

- *Gender and age:* In 2014, women aged 15–44 had a prevalence of depressive symptoms of 10.0%, which increased to 11.8% by 2019 (Figure 16). Men in this age group also saw a rise, but more modest, from 8.2% to 9.0%. Among those aged 45–64, women's rates stayed stable at around 8.0%, while men's prevalence declined from 7.7% to 6.1%. For the 65+ group, women's rates drop slightly from 7.5% to 4.7%, while men saw a small decrease from 4.2% to 3.6%.

Figure 16: Prevalence of depressive symptoms across age groups in Luxembourg, EHIS, 2014, 2019



Note: Prevalence was age-adjusted. Sampling weights were applied. **Source:** *European Health Interview Survey (EHIS), Eurostat*

- *Gender and education:* Educational disparities in depressive symptoms grew significantly among women. Women with low education had a sharp increase from 9.4% in 2014 to 16.1% in 2019—an almost 70% rise (Table 14). Women with medium education also saw an increase, from 10.6% to 11.3%. Conversely, women with high education experienced a slight decline from 6.9% to 5.8%. Among men, the pattern was different: men with low education experienced a substantial drop from 9.9% to 7.7%. Men with medium education saw an

increase from 7.5% to 9.5%, while those with high education increased slightly from 5.1% to 5.6%.

- *Gender and immigration status:* In 2014, native-born women had a depressive symptom's prevalence of 8.6%, which increased modestly to 9.2% by 2019 (Table 14). For women born in other EU countries, the rate dropped from 10.1% to 8.5%, while for non-EU born women, it spiked dramatically from 8.5% to 14.1%. Men showed smaller variations: native-born and EU-born men stayed stable across both years, and non-EU born men rose slightly from 8.5% to 7.7%. This suggests that migration status, particularly for women from non-EU countries, became a stronger determinant of mental health disparities over time.
- *Gender and marital status:* Among women, depressive symptoms increased across marital groups except for the widowed, who decreased from 9.5% in 2014 to 2.7% in 2019 and divorced women from 10.6% to 5.9%, showing mixed trends. Married women rose from 6.9% to 8.1%, never-married women from 13.2% to 13.9% (Table 14). For men, the never-married had the highest increase—from 9.1% to 10.7%. Married men remained relatively stable (5.9% to 5.6%), while divorced men saw a drop from 12.1% to 4.2%, and widowed men increased from 3.6% to 8.7%. Widowed women improved significantly (9.5% in 2014 to 2.7% in 2019), while widowed men experienced a deterioration (3.6% in 2014 to 8.7% in 2019). This reflects a complex interaction between marital status, gender, and mental health.
- *Gender and social support:* In 2014, women with strong social support had a prevalence of depressive symptoms of 3.2%, rising to 5.4% by 2019 (Table 14). Those with intermediate social support increased from 6.2% to 7.3%. However, women with poor social support had an alarming high prevalence of depressive symptoms in both 2014 (20.5%) and 2019 (19.7%). Among men, those with strong social support increased from 2.9% to 4.1%, intermediate social support reduced from 6.2% to 5.9%, and poor social support reduced from 17.3% to 13.3% (Appendix table 9).

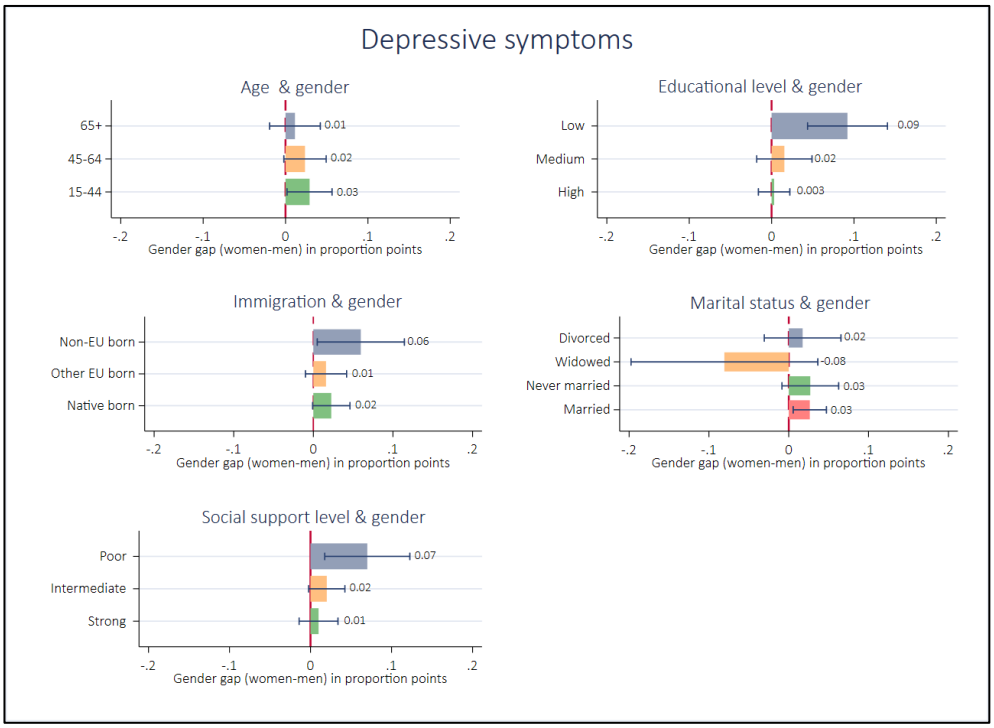
Table 14: Prevalence of depressive symptoms by socioeconomic and demographic characteristics, Luxembourg, EHIS, 2014 and 2019

Socioeconomic and demographic characteristics	2014 (n=3,629)		2019 (n=4,109)	
	Women, % (n= 1,972)	Men, % (n=1,657)	Women, % (n=2,207)	Men, % (n=1,902)
Educational level				
High	6.9	5.1	5.8	5.6
Medium	10.6	7.5	11.3	9.5
Low	9.4	9.9	16.1	7.7
Country of birth				
Native-born	8.6	7.6	9.2	7.9
Born in other EU	10.1	6.7	8.5	6.5
Born in non-EU	8.9	8.5	14.1	7.7
Marital status				
Married	6.9	5.9	8.1	5.6
Never married	13.2	9.1	13.9	10.7
Widowed	9.5	3.6	2.7	8.7
Divorced	9.4	12.1	5.9	4.2
Perceived social support				
Strong	3.2	2.9	5.4	4.1
Intermediate	8.8	6.2	7.3	5.9
Poor	20.5	17.3	19.7	13.3

Note: Prevalence was age-adjusted. Sampling weights were applied. %: Percentage; n: Number of participants.
Source: *European Health Interview Survey (EHIS), Eurostat*.

- *Gender gap across socioeconomic and demographic factors:* Figure 17 presents the gender gap in depressive symptoms across categories of socio-economic and demographic factors in Luxembourg in 2019. The results indicate that the gender gap in depressive symptoms was statistically significant among younger age groups, with young women experiencing higher rates of such problems compared to young men. A similar pattern was observed among individuals with low educational levels, where women reported more depressive symptoms than men. Non-EU-born immigrant women were the only group with statistically significant higher rates of depressive symptoms compared to non-EU-born immigrant men. A significant gender gap was observed among married individuals, with more women suffering from depressive symptoms than married men. Additionally, among individuals with low social support, the gender gap was statistically wider, with more women experiencing depressive symptoms than their counterpart men in 2019.

Figure 17: Gender gap in depressive symptoms by categories of socioeconomic and demographic factors, Luxembourg, 2019.



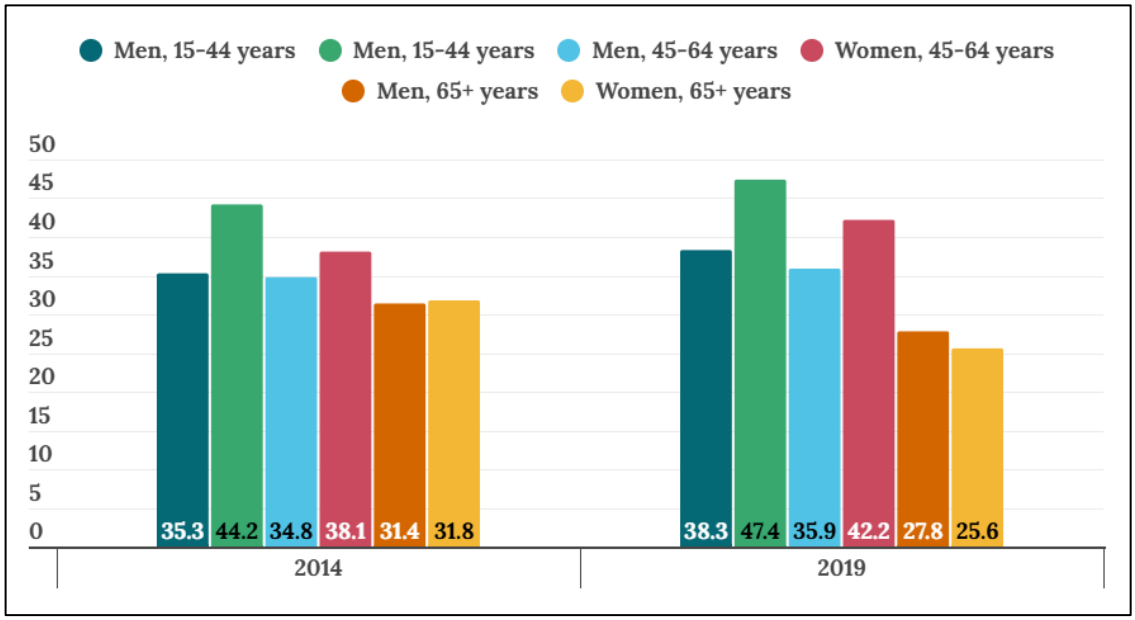
Note: Bars represents the difference in health outcomes between women and men. Estimated through age-adjusted logistic model analysis. A red dashed line at '0' indicates no gender gap in the mean health outcome. Bars extending to the right of the line indicate that women experienced higher health problems than men, whereas bars extending to the left suggest that men experienced higher health problems than women. Confidence intervals, represented by arrows on each bar, indicate the range within which the gender gap is likely to fall. If a confidence interval touches or crosses the red dashed line, it implies there is no statistically significant gap in health outcomes between women and men. **Source:** *European Health Interview Survey (EHIS), Eurostat.*

Healthcare use domain:

Unmet need for health care due to financial barriers, long waiting lists, or distance/transportation problems.

- *Gender and age:* In 2014, unmet healthcare needs were highest among women aged 15–44 at 44.2%, rising to 47.3% in 2019 **(Figure 18).** Men in this age group also saw an increase from 35.2% to 38.2%. For those aged 45–64, women's prevalence increased from 38.1% in 2014 to 42.2% in 2019, while men also rose from 34.8% to 35.9%. Among those aged 65+, women dropped from 31.8% to 25.5%, and men decreased from 31.4% to 27.8%.

Figure 18: Prevalence of depressive symptoms across age groups in Luxembourg, EHIS, 2014, 2019



Note: Prevalence was age-adjusted. Sampling weights were applied. **Source:** *European Health Interview Survey (EHIS), Eurostat*

- *Gender and education:* In 2014, 41.4% of women with high education had unmet needs, increasing to 45.8% by 2019 (**Table 15**). Among women with medium education, rates remained stable, while those with low education had a rise from 33.4% (2014) to 38.5% (2019). Among men, rates were generally lower but also showed variation: for high-educated men, unmet needs rose from 36.3% to 37.5%, for medium-educated men they increased from 33.2% to 37.3%, and for those with low education, the rate dropped from 30.6% to 28.3%.
- *Gender and immigration status*: In 2014, native-born women reported 39.2% of unmet needs for health care, slightly decreasing to 38.8% in 2019. EU-born women increased from 38.9% to 42.1%, while non-EU born women saw the highest unmet need for healthcare in both 2014 and 2019 (**Table 15**). For native-born men, unmet needs for health care decreased from 36.0% in 2014 to 33.2% in 2019, EU-born men increased from 30.1% to 35.8%, and non-EU born men jumped from 38.7% to 46.3%. The most vulnerable group across gender and time was non-EU women, highlighting growing inequality tied to gender and migration status.

- *Gender and marital status:* Among women, never-married individuals had the highest unmet healthcare needs in both 2014 and 2019—rising from 42.5% in 2014 to 47.7% in 2019 (Table 15). Divorced women also saw an increase from 42.1% to 43.8%. Married women reported an increase from 35.6% to 39.1%. Among men, never-married men had high levels at 37.7% in 2014, falling to 34.0% in 2019. Divorced men had the highest rate in 2019 at 42.1%.
- *Gender and social support:* In 2014, half of women with low social support reported unmet need for healthcare, which rose to 54.2% in 2019 (Table 15). Women with intermediate social support increased from 40.1% to 41.8%, and those with strong social support went from 34.3% to 33.7%. Among men, for the low social support group, unmet need for healthcare dropped from 47.2% to 44.7%, intermediate social support rose from 33.8% to 37.7%, and strong social support fell from 26.6% to 24.1% (Appendix table 10).

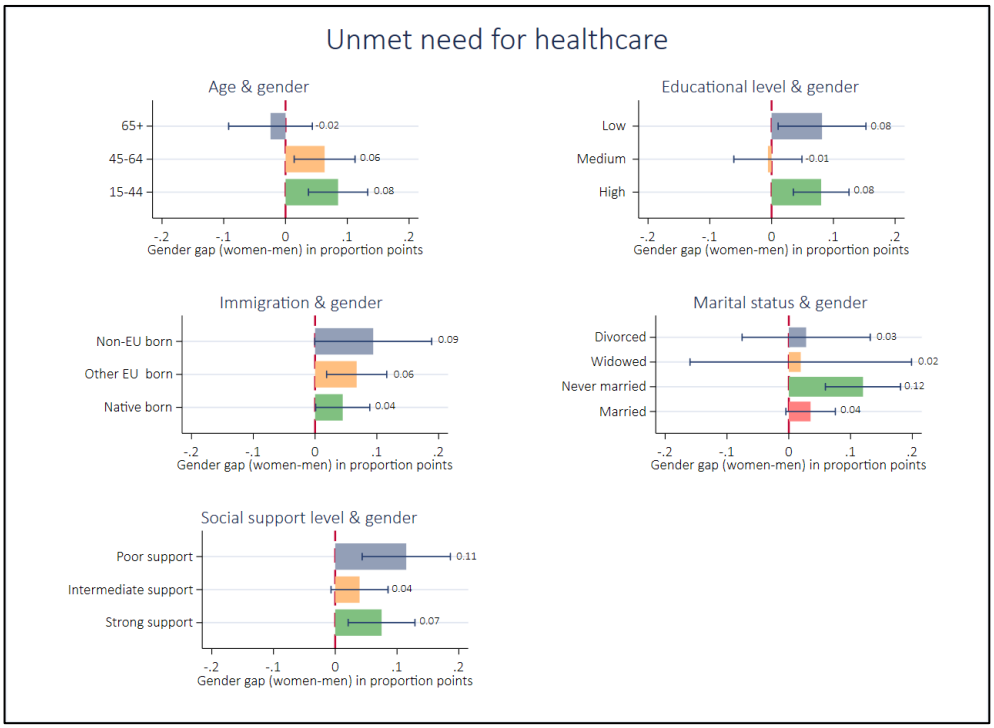
Table 15: Prevalence of unmet need for healthcare by socioeconomic and demographic characteristics, Luxembourg, EHIS, 2014 and 2019

Socioeconomic and demographic characteristics	2014 (n=3,271)		2019 (n=3,846)	
	Women, % (n=1,781)	Men, % (n=1,490)	Women, % (n=2,097)	Men, % (n=1,749)
Educational level				
High	41.4	36.3	45.8	37.5
Medium	38.1	33.2	37.9	37.3
Low	33.4	30.6	38.5	28.3
Country of birth				
Native-born	39.2	36.0	38.8	33.2
Born in other EU	38.9	30.1	42.1	35.8
Born in non-EU	53.7	38.7	53.5	46.3
Marital status				
Married	38.6	33.1	39.1	35.8
Never married	42.5	37.7	47.7	34.0
Widowed	32.6	28.2	32.5	30.8
Divorced	42.1	37.6	43.8	42.1
Perceived social support				
Strong	34.3	26.6	33.7	24.1
Intermediate	40.1	33.8	41.8	37.7
Poor	50.6	47.2	54.2	44.7

Note: Prevalence was age-adjusted. Sampling weights were applied. %: Percentage; n: Number of samples.
Source: *European Health Interview Survey (EHIS), Eurostat.*

- *Gender gap across socioeconomic and demographic factors:* Figure 19 shows that the gender gap was significantly highest among the 15–44 age group, with women experiencing a greater unmet need for healthcare than men. Significant gender gaps in unmet healthcare needs were observed among high- and low-educated individuals, where women experienced more unmet needs than men. There was a clear gender gap for unmet healthcare needs among immigrants, with women born in other EU countries and non-EU countries showing significantly higher unmet healthcare needs than men in the same immigrant groups. Results indicate no significant gender gap in unmet need for healthcare use among individuals born in Luxembourg. Among marital status groups, the gender gap was only significant in the "never married" category, where women faced a greater unmet need compared to men. However, there was no consistent pattern of unmet healthcare needs based on the level of social support. In both low and high-social-support groups, women had more unmet healthcare needs than men.

Figure 19: Gender gap in unmet healthcare needs by categories of socioeconomic and demographic factors in Luxembourg in 2019.



Note: Bars represents the difference in health outcomes between women and men. Estimated through age-adjusted logistic model analysis. A red dashed line at '0' indicates no gender gap in the mean health outcome. Bars extending to the right of the line indicate that women experienced higher health problems than men, whereas bars extending to the left suggest that men experienced higher health problems than women. Confidence intervals, represented by arrows on each bar, indicate the range within which the gender gap is likely to fall. If a confidence interval touches or crosses the red dashed line, it implies there is no statistically significant gap in health outcomes between women and men. Source: *European Health Interview Survey (EHIS), Eurostat.*

4.3. *Intersection of gender with socioeconomic and demographic factors in health in Luxembourg, 2019*

This section focused on providing evidence on the likelihood of multimorbidity, depressive symptoms and unmet healthcare needs by socioeconomic and demographic categories of men and women in Luxembourg in 2019 (Appendix Table 11-16). We did not included here results from accidents and injuries, and experience of severe pain because in the age group-specific analysis, we did not find a significant gender gap.

We analysed gender variation in health by age groups. Results in this section were presented as odds ratios (OR), which indicated how more or less likely a health condition or healthcare barrier was in one group compared to the reference group. An OR greater than 1 indicated a higher likelihood, less than 1 indicated a lower likelihood, and 1 suggested no difference between the groups.

Physical health domain

Multimorbidity

To understand the highest gender gap in multimorbidity observed among older adults (65 +), we analysed differences between women and men in this age group across socioeconomic categories (Table 16). The largest disparities were observed among those with poor social support: women in this group were 2.16 times more likely to have multimorbidity compared to men. Women living alone were 1.85 times more likely to have multimorbidity compared to men of the same age in similar living conditions.

Table 16: Odds ratios of multimorbidity among men and women aged over 65 years with poor social support and living in single-person household in Luxembourg, EHIS, 2019

	Odds ratio	95% confidence interval	
Poor social support (n=137)			
Men with poor social support	*Reference*		
Women with poor social support	2.16***	2.02	2.33
Single-person household (n=185)			
Men living in single person household	*Reference*		
Women living in single person	1.85***	1.02	3.35

Note: Logistic regression analyses. Results were presented using odds ratios (OR), which indicated how many times more or less likely multimorbidity was in one group compared to the reference. An OR greater than 1 indicated higher likelihood, less than 1 indicated lower likelihood, and 1 suggested no difference between the groups. Sampling weights were applied. **Source:** *European Health Interview Survey (EHIS), Eurostat.*

Mental health domain

Depressive symptoms

In the previous section, we found the highest gender gap in depressive symptoms among the youngest age group (15 to 44 years old) with an important increase in the prevalence of depressive

symptoms between 2014 and 2019. Within this age group, women were 1.38 times more likely to experience depressive symptoms than men.

As the 15 to 44 age range is quite broad and mental health issues can differ across age groups, we first conducted an analysis of the 15 to 44 age group and then we focused on those aged 15 to 24, to assess whether the gender gap in depressive symptoms was higher among younger individuals (Table 17). Results shown that the largest differences were observed among those with low education: women aged 15 to 44 were 3.08 times more likely to experience depressive symptoms compared to men. This association was even stronger in the 15 to 24 age group, where women with low education were 6.62 times more likely to experience depressive symptoms compared to men. Women in the 15 to 24 age group and born in other EU country were also 4.89 times more likely to experience depressive symptoms than men of the same age born in other EU.

Table 17: Odds ratios of depressive symptoms among men and women aged 15-44 and 15-24 years with low education and born in other EU country in Luxembourg, EHIS, 2019

	Odds ratio	95% confidence interval	
15-44			
Low educational level (n=272)			
Men with low educational level	*Reference*		
Women with low educational level	3.80***	3.57	4.06
15-24			
Low educational level (n=168)			
Men with low educational level	*Reference*		
Women with low educational level	6.62***	6.05	7.24
Born in other EU country (n=97)			
Men born in other EU country	*Reference*		
Women born in other EU country	4.89*	4.37	5.47
25-34			
Low educational level (n=39)			
Men with low educational level	*Reference*		
Women with low educational level	1.28***	1.12	1.46
35-44			
Low educational level (n=65)			
Men with low educational level	*Reference*		
Women with low educational level	5.2***	4.29	6.50

Note: Logistic regression analyses. Results were presented using odds ratios (OR), which indicated how many times more or less likely depressive symptoms were in one group compared to the reference. An OR greater than 1 indicated higher likelihood, less than 1 indicated lower likelihood, and 1 suggested no difference between the groups. Sampling weights were applied.
Source: *European Health Interview Survey (EHIS), Eurostat.*

Healthcare use domain

Unmet need for health care due to financial barriers, long waiting lists, or distance/transportation problems

In the previous section, we found the highest gender gap in unmet healthcare needs in the younger age group. Findings indicated that young women aged 15 to 44 years were 1.42 times more likely to have unmet healthcare needs compare to 15 to 44 years old men.

We further examined the unmet need for healthcare by different socioeconomic and demographic groups among individuals aged 15 to 44 to explore gender variations (Table 18).

Table 18: Odds ratios of unmet need for healthcare among men and women aged 15-44 years with low education, living in a single person household and with poor social support in Luxembourg, EHIS, 2019

	Odds ratio	95% confidence interval	
Due to waiting time			
Low educational level (n=209)			
Men with low educational level	*Reference*		
Women with low educational level	1.78***	1.70	1.78
Single-person household (n=199)			
Men living in single person household	*Reference*		
Women living in single person	2.38***	2.27	2.51
Due to distance			
High educational level (n=853)			
Men with high educational level	*Reference*		
Women with high educational level	1.71***	1.65	1.77
Poor social support(n=288)			
Men with poor social support	*Reference*		
Women *with poor social support*	1.82***	1.75	1.95

Note: Logistic regression analyses. Results were presented using odds ratios (OR), which indicated how many times more or less likely a healthcare need was in one group compared to the reference. An OR greater than 1 indicated higher likelihood, less than 1 indicated lower likelihood, and 1 suggested no difference between the groups. Sampling weights were applied.
Source: *European Health Interview Survey (EHIS), Eurostat.*

We did not find any gender differences in unmet healthcare needs due to affordability or financial reasons among the 15–44 age group in Luxembourg. However, younger women with low educational level or those living in single-person households were more likely to experience unmet healthcare needs due to longer waiting times for appointments compared to their men

counterparts. In contrast, highly educated women or women with poor social support were more likely to report unmet healthcare needs due to distance than men of the same age.

5. Conclusion

This report provides an overview of gender differences in health in Luxembourg and other EU countries for 2014 and 2019, using information from the European Health Interview Survey. It describes how health outcomes between men and women vary across socioeconomic and demographic factors. To understand the highest gender gaps in multimorbidity, depressive symptoms, and unmet needs, the report also analyses differences between women and men by age group and across socioeconomic status.

Findings reveal an imbalanced situation, with women often reporting worse health outcomes and more barriers to care than men. It also provides evidence on how age interacts with other socioeconomic factors to increase gender inequalities in health. In particular, older women with poor social support or those living alone are particularly vulnerable to chronic conditions, while younger women, especially those with lower education or from migrant backgrounds, are more likely to report depressive symptoms and face difficulties accessing healthcare. Addressing these gender gaps in health requires not only age-sensitive but also socially targeted policies that account for the cumulative effects of education, immigration status, living conditions, and social support.

This report also emphasizes the need for more gender-sensitive studies that address differences in health outcomes. It calls for the inclusion of non-binary and gender-diverse individuals in large-scale health surveys, as current data remain limited to binary gender classifications. The report further encourages prioritising gender-transformative research focusing on harmful gender roles and power imbalances, aiming to inform policies that promote health equity across all gender identities.

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Annexes

Appendix table 1: Gender wise prevalence and gap in multimorbidity (individual aged 15+ years) in EU countries, EHIS,

2014				2019			
Country	Wome	Men	Gender gap	Country	Wome	Men	Gender gap
Latvia	47.47	28.4	+19.00	Latvia	46.7	30.62	+16.08
Portugal	47.93	32.4	+15.53	Portugal	50.65	37.47	+13.18
Lithuania	34.58	23.3	+11.27	Lithuania	37.74	26.14	+11.60
Finland	47.33	36.1	+11.19	Estonia	32.06	20.73	+11.33
Slovakia	33.96	23.1	+10.85	Sweden	35.71	25.54	+10.17
Spain	33.65	23.5	+10.12	Finland	51.66	41.81	+9.85
Germany	51.43	41.9	+9.50	Iceland	45.34	35.61	+9.73
Netherlands	29.42	19.9	+9.47	Poland	36.64	27.30	+9.34
Poland	36.59	27.1	+9.45	Netherlands	30.81	21.97	+8.84
Estonia	28.97	19.7	+9.25	Croatia	53.28	44.47	+8.81
Sweden	32.56	23.4	+9.12	Spain	29.36	20.59	+8.77
Iceland	38.03	28.9	+9.06	Germany	48.11	39.60	+8.51
Croatia	37.83	29.4	+8.38	Serbia	31.67	23.53	+8.14
France	37.18	28.8	+8.29	**EU29**	35.45	27.57	+7.88
Bulgaria	28.02	19.8	+8.18	Belgium	35.34	27.92	+7.42
Belgium	30.28	22.2	+8.04	Slovakia	32.44	25.39	+7.05
Greece	27.69	19.7	+7.97	Austria	37.59	30.65	+6.94
EU30	34.87	27.0	+7.84	Italy	32.35	25.46	+6.89
Slovenia	42.63	34.9	+7.69	Norway	29.30	22.58	+6.72
Romania	20.39	12.8	+7.50	Hungary	40.38	33.85	+6.53
Austria	35.52	28.0	+7.47	Slovenia	39.52	33.05	+6.47
Italy	33	25.8	+7.12	Bulgaria	25.83	19.37	+6.46
Czechia	31.64	25.0	+6.59	**Luxembourg**	38.17	31.96	+6.21
Malta	26.16	19.9	+6.18	Romania	15.26	9.60	+5.66
Norway	24.28	18.6	+5.67	Czechia	31.31	25.85	+5.46
Hungary	38.79	33.1	+5.64	Denmark	29.28	24.44	+4.84
Luxembourg	39.15	33.7	+5.39	Greece	21.44	16.92	+4.52
Denmark	28.01	24.0	+3.93	Malta	17.15	12.94	+4.21
Ireland	18.88	15.5	+3.32	Cyprus	22.63	20.22	+2.41
Cyprus	19.01	15.8	+3.21	Ireland	12.15	11.20	+0.95
United Kingdom	22.21	20.0	+2.14				

Note: Sampling weights were applied. A positive value indicates a higher prevalence among women than men while a negative value denotes a higher prevalence among men than women.
Source: The European health interview survey (EHIS)

Appendix table 2: Gender wise prevalence and gap in accident and injury (individual aged 15+years) in EU countries,

2014				2019			
Country	Women	Men	Gender gap	Country	Women	Men	Gender gap
Malta	9.87	8.70	+1.17	Croatia	6.91	4.60	+2.31
Spain	9.01	8.12	+0.89	Malta	7.75	6.17	+1.58
Bulgaria	2.39	1.89	+0.50	Cyprus	6.11	4.72	+1.39
Portugal	5.83	5.38	+0.45	Spain	6.61	5.49	+1.12
Romania	2.33	2.09	+0.24	Netherlands	7.50	6.63	+0.87
Italy	6.91	6.91	0	Portugal	4.89	4.40	+0.49
United Kingdom	7.45	7.49	-0.04	Greece	4.40	4.06	+0.34
Poland	3.95	4.18	-0.23	**Luxembourg**	12.1	11.7	+0.32
Sweden	8.18	8.43	-0.25	Romania	3.12	2.84	+0.28
Hungary	10.25	10.8	-0.64	Poland	3.98	3.81	+0.17
Cyprus	3.96	4.85	-0.89	Denmark	7.50	7.36	+0.14
Croatia	4.21	5.15	-0.94	Italy	6.70	6.59	+0.11
EU30	8.39	9.37	-0.98	Bulgaria	2.42	2.56	-0.14
Slovakia	6.88	7.92	-1.04	Belgium	9.77	9.93	-0.16
Greece	5.5	6.69	-1.19	**EU29**	7.90	8.23	-0.33
Denmark	6.76	8.14	-1.38	Serbia	4.63	5.16	-0.53
Belgium	7.17	8.60	-1.43	Ireland	5.61	6.31	-0.70
France	8.02	9.59	-1.57	Lithuania	7.55	8.29	-0.74
Slovenia	12.12	14.0	-1.93	Austria	12.66	13.5	-0.92
Luxembourg	11.48	13.4	-1.97	Sweden	8.74	9.69	-0.95
Czechia	15.63	17.7	-2.07	Czechia	12.15	13.2	-1.11
Norway	6.56	8.76	-2.20	Latvia	5.68	6.87	-1.19
Germany	13.93	16.3	-2.46	Germany	12.56	13.9	-1.37
Latvia	6.49	9.07	-2.58	Estonia	10.92	12.3	-1.39
Estonia	6.47	9.23	-2.76	Slovenia	9.26	10.7	-1.45
Iceland	10.39	13.2	-2.82	Hungary	9.45	10.9	-1.51
Lithuania	5.73	8.63	-2.90	Norway	8.09	9.63	-1.54
Ireland	6.70	9.62	-2.92	Slovakia	6.74	8.34	-1.60
Austria	9.35	12.4	-3.10	Iceland	10.12	12.7	-2.67
Netherlands	13.70	16.8	-3.19	Finland	11.56	14.3	-2.83
Finland	10.38	14.7	-4.39				

Note: Sampling weights were applied. A positive value indicates a higher prevalence among women than men while a negative value denotes a higher prevalence among men than women.
Source: The European health interview survey (EHIS)

Appendix table 3: Gender wise prevalence and gap in severe pain (individual aged 15+ years), EHIS, 2014 and 2019

2014				2019			
Country	Women	Men	Gender gap	Country	Women	Men	Gender gap
Portugal	20.46	9.59	+10.87	Portugal	18.60	9.55	+9.05
Greece	12.82	5.40	+7.42	Estonia	16.30	10.3	+5.98
Iceland	14.23	7.37	+6.86	Lithuania	12.20	6.32	+5.88
Lithuania	12.44	5.60	+6.84	Netherlands	13.70	8.15	+5.55
Netherlands	13.64	7.58	+6.06	Slovakia	12.51	6.97	+5.54
Spain	10.93	5.13	+5.80	Austria	15.44	10.1	+5.28
Poland	14.16	8.62	+5.54	Iceland	14.76	9.63	+5.13
Italy	12.05	6.56	+5.49	Italy	11.43	6.5	+4.93
Sweden	11.64	6.15	+5.49	Slovenia	11.38	6.74	+4.64
Belgium	13.13	7.82	+5.31	Spain	8.14	3.57	+4.57
Cyprus	11.94	6.78	+5.16	Poland	10.04	5.56	+4.48
Slovenia	12.00	6.99	+5.01	Belgium	11.82	7.37	+4.45
EU30	11.03	6.43	+4.60	Croatia	12.00	7.65	+4.35
Norway	10.97	6.54	+4.43	**EU29**	10.72	6.51	+4.21
Hungary	10.95	6.70	+4.25	Sweden	10.37	6.23	+4.14
France	10.26	6.04	+4.22	Norway	11.06	6.95	+4.11
Estonia	12.6	8.79	+3.81	Malta	6.84	2.81	+4.03
Germany	10.55	6.81	+3.74	Hungary	9.95	6.05	+3.90
Austria	10.98	7.27	+3.71	Germany	13.13	9.27	+3.86
Croatia	9.35	5.77	+3.58	Greece	8.18	4.42	+3.76
Slovakia	11.32	7.76	+3.56	Serbia	7.01	3.39	+3.62
United Kingdom	9.97	6.86	+3.11	**Luxembourg**	10.17	6.82	+3.35
Denmark	9.27	6.31	+2.96	Latvia	6.54	3.57	+2.97
Malta	7.74	4.91	+2.83	Denmark	9.55	6.63	+2.92
Romania	6.55	3.73	+2.82	Cyprus	8.47	5.7	+2.77
Finland	9.92	7.11	+2.81	Finland	8.83	6.34	+2.49
Luxembourg	9.49	6.71	+2.78	Romania	5.61	3.29	+2.32
Bulgaria	6.39	3.78	+2.61	Czechia	5.37	3.52	+1.85
Latvia	5.71	3.27	+2.44	Bulgaria	4.56	2.99	+1.57
Czechia	5.79	3.64	+2.15	Ireland	7.70	6.33	+1.37
Ireland	4.60	3.27	+1.33				

Note: Sampling weights were applied. A positive value indicates a higher prevalence among women than men while a negative value denotes a higher prevalence among men than women.
Source: The European health interview survey (EHIS)

Appendix table 4: Gender wise prevalence and gap in depressive symptoms (individual aged 15+ years), EHIS, 2014 and

2014				2019			
Country	Women	Men	Gender gap	Country	Women	Men	Gender gap
Portugal	13.71	5.96	+7.75	Portugal	10.56	5.9	+4.66
Iceland	10.81	6.79	+4.02	Estonia	10.03	5.9	+4.13
France	9.10	5.26	+3.84	Malta	10.72	6.85	+3.87
Hungary	12.08	8.36	+3.72	Croatia	9.74	6.20	+3.54
Sweden	11.20	7.51	+3.69	Italy	6.47	3.29	+3.18
Denmark	7.99	4.95	+3.04	Latvia	7.04	3.97	+3.07
Lithuania	5.12	2.43	+2.69	Belgium	9.33	6.54	+2.79
Italy	6.77	4.08	+2.69	Lithuania	6.67	3.97	+2.70
Estonia	8.05	5.45	+2.60	Iceland	8.8	6.31	+2.49
Bulgaria	9.09	6.52	+2.57	Norway	7.43	4.97	+2.46
Slovenia	6.62	4.11	+2.51	Austria	7.15	4.70	+2.45
Malta	6.87	4.38	+2.49	**Luxembourg**	9.47	7.24	+2.23
Poland	6.29	3.81	+2.48	Slovenia	8.47	6.30	+2.17
EU27	7.88	5.58	+2.30	Poland	5.21	3.04	+2.17
Greece	5.39	3.19	+2.20	Bulgaria	5.36	3.26	+2.10
Latvia	5.60	3.55	+2.05	Sweden	11.55	9.60	+1.95
Cyprus	5.48	3.56	+1.92	Czechia	5.03	3.12	+1.91
Czechia	3.94	2.37	+1.57	**EU28**	7.26	5.36	+1.90
Luxembourg	9.05	7.55	+1.50	Hungary	6.22	4.43	+1.79
United Kingdom	8.89	7.41	+1.48	Netherlands	8.97	7.31	+1.66
Romania	5.44	4.06	+1.38	Greece	3.25	1.79	+1.46
Germany	9.00	7.71	+1.29	Romania	4.97	3.54	+1.43
Norway	7.03	5.81	+1.22	Cyprus	2.95	1.79	+1.16
Austria	5.38	4.50	+0.88	Ireland	5.41	4.26	+1.15
Slovakia	3.79	3.02	+0.77	Serbia	2.56	1.48	+1.08
Ireland	5.09	4.56	+0.53	Slovakia	3.63	2.62	+1.01
Croatia	3.69	3.48	+0.21	Germany	9.55	8.65	+0.90
Finland	5.12	5.16	-0.04	Denmark	8.68	8.20	+0.48
				Finland	6.25	5.94	+0.31

Note: Sampling weights were applied. A positive value indicates a higher prevalence among women than men while a negative value denotes a higher prevalence among men than women.
Source: The European health interview survey (EHIS)

Appendix table 5: Gender wise prevalence and gap in unmet need for healthcare (individual aged 15+ years), EHIS,

2014				2019			
Country	Women	Men	Gender gap	Country	Women	Men	Gender gap
Greece	34.68	25.00	+9.69	Iceland	36.34	27.89	+8.45
Latvia	45.43	36.70	+8.78	Lithuania	29.61	21.60	+8.04
Iceland	37.92	29.30	+8.58	Portugal	43.37	35.80	+7.60
Portugal	43.62	35.20	+8.40	Austria	28.44	21.20	+7.21
Austria	20.32	13.20	+7.16	Poland	33.42	27.00	+6.40
Lithuania	20.37	13.70	+6.67	**Luxembourg**	41.65	35.80	+5.83
France	34.16	27.60	+6.59	Malta	24.27	18.60	+5.63
Spain	28.49	22.70	+5.76	Ireland	25.25	20.00	+5.25
Poland	34.84	29.20	+5.67	Latvia	39.06	33.80	+5.24
Luxembourg	40.08	34.50	+5.57	Germany	29.39	24.20	+5.15
EU29	28.78	23.60	+5.20	Italy	28.31	23.30	+5.03
United Kingdom	22.71	17.60	+5.15	**EU28**	26.76	22.00	+4.74
Czechia	19.76	14.70	+5.09	Finland	38.38	33.97	+4.41
Germany	32.8	27.70	+5.08	Croatia	34.81	30.42	+4.39
Croatia	26.69	21.70	+5.00	Estonia	39.1	34.77	+4.33
Estonia	41.03	36.10	+4.92	Hungary	24.4	20.02	+4.02
Sweden	24.67	19.90	+4.80	Slovakia	12.67	8.78	+3.89
Italy	33.01	28.40	+4.61	Czechia	19.68	16.30	+3.83
Hungary	24.58	20.10	+4.53	Denmark	34.87	31.10	+3.78
Ireland	42.61	38.30	+4.36	Slovenia	29.69	26.20	+3.54
Bulgaria	19.13	15.10	+3.99	Serbia	24.52	21.10	+3.46
Malta	24.93	20.90	+3.99	Norway	13.42	10.10	+3.35
Slovenia	27.46	24.60	+2.86	Spain	21.07	17.70	+3.34
Romania	16.6	14.50	+2.13	Netherlands	16.86	13.80	+3.09
Denmark	30.8	28.70	+2.11	Greece	21.08	18.10	+2.95
Slovakia	12.29	10.40	+1.94	Romania	15.21	12.90	+2.31
Cyprus	10.11	8.45	+1.66	Sweden	32.79	30.80	+1.99
Netherlands	13.13	11.50	+1.62	Bulgaria	16.69	14.80	+1.89
Norway	10.23	8.89	+1.34	Cyprus	5.99	5.68	+0.31
Finland	30.1	30.40	-0.34				

Note: Sampling weights were applied. A positive value indicates a higher prevalence among women than men while a negative value denotes a higher prevalence among men than women.
Source: The European health interview survey (EHIS)

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Appendix table 6: Prevalence and gap of multimorbidity by sample characteristics, Luxembourg, EHIS, 2014 and 2019

Socioeconomic and demographic characteristics	2014				2019			
	Total (n=4,004)	Women (n=2,164)	Men (n=1,840)	Gap (Men vs women)	Total (n=4,504)	Women (n=2,428)	Men (n=2,076)	Gap (Men vs women)
Age groups								
15-44	22.90	25.38	20.48	+4.90	22.57	24.43	20.77	+3.66
45-64	43.93	46.52	41.48	+5.04	43.53	47.21	40.07	+7.14
65+	57.65	58.33	56.77	+1.56	55.65	59.19	51.37	+7.82
Educational level								
High	25.30	27.48	23.12	+4.36	28.85	32.24	25.58	+6.66
Medium	38.53	39.63	37.52	+2.11	37.12	39.26	35.00	+4.26
Low	44.39	48.79	39.07	+9.72	45.63	49.00	42.00	+7.00
Country of birth								
Native-born	37.59	39.77	35.33	+4.44	35.79	38.03	33.45	+4.58
Born in other EU	33.84	36.99	30.64	+6.35	35.69	39.66	31.87	+7.79
Born in non-EU	28.29	32.16	25.05	+7.11	29.62	33.64	26.08	+7.56
Marital status								
Married[#]	39.58	40.93	38.26	+2.67	38.35	40.11	36.69	+3.42
Never married	22.50	24.58	20.73	+3.85	24.28	27.84	21.05	+6.79
Widowed	55.07	56.6	48.24	+8.36	57.35	60.78	48.21	+12.57
Divorced	47.00	49.37	44.12	+5.25	42.46	45.84	38.11	+7.73

Note: Sampling weights were applied. [#]Married includes in a registered partnership. A positive value indicates a higher prevalence among women than men while a negative value denotes a higher prevalence among men than women. Source: The European health interview survey (EHIS)

Appendix table 7: Prevalence and gap of accident and injury by sample characteristics, Luxembourg, EHIS, 2014 and 2019

Socioeconomic and demographic characteristics	2014				2019			
	Total (n=4,004)	Women (n=2,164)	Men (n=1,84	Gap (Men vs women)	Total (n=4,504)	Women (n=2,428)	Men (n=2,076)	Gap (Men vs women)
Age groups								
15-44	15.87	12.95	18.73	-5.78	14.09	13.46	14.7	-1.24
45-64	9.00	9.99	8.06	+1.93	9.25	9.39	9.12	+0.27
65+	8.81	10.84	6.22	+4.62	10.71	13.05	7.89	+5.16
Educational level								
High	11.16	10.26	12.07	-1.81	11.06	11.36	10.76	+0.62
Medium	13.13	13.10	13.16	-0.06	11.64	11.36	11.91	-0.55
Low	12.83	11.24	14.76	-3.52	14.39	14.77	13.97	+0.81
Country of birth								
Native-born	13.28	12.51	14.07	-1.56	13.08	13.19	12.96	+0.23
Born in other EU	11.47	11.12	11.82	-0.70	10.65	10.86	10.46	+0.40
Born in non-EU	8.35	4.65	11.45	-6.80	11.14	11.09	11.17	-0.08
Marital status								
Married[#]	9.51	8.94	10.07	-1.13	9.15	9.64	8.69	+0.95
Never married	18.01	16.02	19.70	-3.68	16.15	15.29	16.92	-1.63
Widowed	11.72	12.34	9.02	+3.32	13.80	16.83	5.71	+11.13
Divorced	12.57	14.35	10.41	+3.94	14.25	13.73	14.92	-1.19

Note: Sampling weights were applied. [#]Married includes in a registered partnership. A positive value indicates a higher prevalence among women than men while a negative value denotes a higher prevalence among men than women. Source: The European health interview survey (EHIS)

Appendix table 8: Prevalence and gap of severe pain by sample characteristics, Luxembourg, EHIS, 2014 and 2019

Socioeconomic and demographic characteristics	2014				2019			
	Total (n=3,957)	Women (n=2,135)	Men (n=1,822)	Gap (Men vs women)	Total (n=4,457)	Women (n=2,404)	Men (n=2,053)	Gap (Men vs women)
Age groups								
15-44	5.25	6.63	3.89	+2.74	5.09	6.89	3.35	+3.54
45-64	10.34	11.10	9.63	+1.47	11.37	12.68	10.14	+2.54
65+	12.09	14.08	9.61	+4.47	13.01	14.60	11.07	+3.53
Educational level								
High	3.92	4.91	2.93	+1.98	5.09	5.95	4.26	+1.69
Medium	8.39	9.76	7.16	+2.63	9.68	11.22	8.15	+3.07
Low	12.62	14.04	10.9	+3.14	14.33	17.60	10.77	+6.83
Country of birth								
Native-born	8.22	9.74	6.64	+3.10	8.36	9.84	6.87	+3.04
Born in other EU	7.54	8.69	6.37	+2.32	9.36	11.02	7.76	+3.26
Born in non-EU	9.17	10.10	8.42	+1.68	6.18	8.81	3.83	+4.98
Marital status								
Married[#]	8.78	9.51	8.07	+1.44	9.16	10.27	8.11	+2.16
Never married	5.04	6.23	3.95	+2.28	5.11	6.71	3.68	+3.03
Widowed	14.65	15.13	12.61	+2.53	14.23	16.16	8.37	+7.79
Divorced	10.79	14.39	6.58	+7.81	13.57	16.26	10.01	+6.25
Perceived social support								
Strong	6.63	7.72	5.32	+2.40	6.14	7.14	4.99	+2.15
Intermediate	7.36	8.45	6.32	+2.13	7.24	8.21	6.33	+1.88
Poor	12.44	15.54	9.66	+5.88	14.97	19.7	10.46	+9.24

Note: Sampling weights were applied. #Married includes in a registered partnership. A positive value indicates a higher prevalence among women than men while a negative value denotes a higher prevalence among men than women. Source: The European health interview survey (EHIS) negative value denotes a higher prevalence among men than women.
Source: The European health interview survey (EHIS)

Appendix table 9: Prevalence and gap of depressive symptoms by sample characteristics, Luxembourg, EHIS, 2014 and 2019

Socioeconomic and demographic characteristics	2014				2019			
	Total (n=3,629)	Women (n=1,972)	Men (n=1,657)	Gap (Men vs women)	Total (n=4,109)	Women (n=2,207)	Men (n=1,902)	Gap (Men vs women)
Age groups								
15-44	9.13	10.07	8.21	+1.86	10.39	11.8	9.02	+2.78
45-64	8.05	8.34	7.76	+0.58	7.16	8.34	6.07	+2.27
65+	6.08	7.55	4.23	+3.32	4.28	4.79	3.67	+1.12
Educational level								
High	6.05	6.99	5.12	+1.89	5.69	5.80	5.58	+0.22
Medium	9.04	10.68	7.55	+3.13	10.52	11.53	9.52	+2.01
Low	10.02	9.44	10.71	-1.27	11.22	14.43	7.78	+6.73
Country of birth								
Native-born	8.12	8.61	7.61	+1.24	8.44	9.21	7.64	+1.57
Born in other EU	8.45	10.14	6.76	+3.38	7.53	8.56	6.56	+2.00
Born in non-EU	9.03	8.9	9.14	-0.24	10.65	14.1	7.73	+6.37
Marital status								
Married[#]	6.43	6.92	5.95	+0.97	6.83	8.13	5.63	+2.50
Never married	10.71	12.74	8.98	+3.76	12.27	13.99	10.7	+3.29
Widowed	9.58	10.75	3.88	+6.87	5.42	4.21	8.74	-4.53
Divorced	11.44	9.67	13.68	-4.01	5.03	5.69	4.22	+1.47
Perceived social support								
Strong	3.05	3.23	2.83	+0.40	5.21	5.51	4.88	+0.63
Intermediate	7.92	9.25	6.61	+2.64	7.16	8.21	6.16	+2.05
Poor	18.83	20.53	17.28	+3.25	16.41	19.83	13.34	+6.49

Note: Sampling weights were applied. #Married includes in a registered partnership. A positive value indicates a higher prevalence among women than men while a negative value denotes a higher prevalence among men than women.
Source: The European health interview survey (EHIS)

Appendix table 10: Prevalence and gap of unmet need for healthcare by sample characteristics, Luxembourg, EHIS, 2014 and 2019

Socioeconomic and demographic characteristics	2014				2019			
	Total (n=3,271)	Women (n=1,781)	Men (n=1,490)	Gap (Men vs women)	Total (n=3,846)	Women (n=2,097)	Men (n=1,749)	Gap (Men vs women)
Age groups								
15-44	39.92	44.24	35.25	+8.99	57.15	47.39	38.29	+9.10
45-64	36.42	38.14	34.84	+3.31	60.92	42.23	35.99	+6.24
65+	31.64	31.83	31.42	+0.41	73.41	25.57	27.81	-2.24
Educational level								
High	35.81	41.47	29.92	+11.55	41.32	45.56	37.10	+8.56
Medium	38.74	41.8	35.85	+5.95	37.97	38.58	37.33	+1.25
Low	37.33	36.2	38.68	-2.48	33.97	37.3	30.62	+6.68
Country of birth								
Native-born	37.69	39.25	36.03	+3.22	36.18	38.83	33.25	+5.58
Born in other EU	34.62	38.95	30.12	+8.83	38.93	42.18	35.81	+6.37
Born in non-EU	45.53	53.72	38.85	+14.87	49.86	53.48	46.46	+7.02
Marital status								
Married[#]	36.19	39.43	33.04	+6.39	37.60	39.08	36.17	+2.91
Never married	39.68	42.53	36.95	+5.58	40.65	47.71	34.08	+13.71
Widowed	31.38	32.1	28.75	+3.35	31.99	32.57	30.76	+1.74
Divorced	40.47	42.25	38.14	+4.11	43.08	43.82	42.05	+1.77
Perceived social support								
Strong	30.89	34.32	26.68	+7.64	30.15	33.76	25.91	+7.85
Intermediate	37.00	40.18	33.89	+6.29	39.75	41.82	37.74	+4.08
Poor	48.88	50.61	47.28	+3.33	49.39	54.29	44.72	+9.57

Note: Sampling weights were applied. [#]Married includes in a registered partnership. A positive value indicates a higher prevalence among women than men while a negative value denotes a higher prevalence among men than women.
Source: The European health interview survey (EHIS)

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Appendix table 11: Odds ratios of multimorbidity across overlapping socioeconomic and demographic categories of men and women in Luxembourg, EHIS, 2019

	Odds ratio (OR)	95% confidence interval	
Gender and age			
Men aged 15-44	*Reference*		
Men aged 45-64	2.39***	1.93	2.97
Men aged 65+	3.78***	2.92	4.88
Women aged 15-44	✕		
Women aged 45-64	3.21***	2.59	3.97
Women aged 65+	5.19***	3.97	6.78
Gender and educational level			
Men with high	*Reference*		
Men with Medium	1.63***	1.31	2.02
Men with Low	2.24***	1.74	2.89
Women with High	1.51***	1.24	1.83
Women with Medium	1.81***	1.47	2.24
Women with Low	2.30***	1.81	2.92
Gender and immigration status			
Men, native born	*Reference*		
Men born in other EU	✕		
Men born in non-EU	✕		
Women, native born	✕		
Women born in other EU	1.27*	1.05	1.54
Women born in non-EU	✕		
Gender and marital status			
Men, married	*Reference*		
Men, never married	✕		
Men, widowed	✕		
Men, divorced	✕		
Women, married	✕		
Women, never married	✕		
Women, widowed	1.58*	1.05	2.36
Women, divorced	1.46**	1.10	1.94

Note: Logistic regression was applied.
Results were presented using odds ratios (OR), which indicated how many times more or less likely a health condition or healthcare use was in one group compared to the reference. An OR greater than 1 indicated higher likelihood, less than 1 indicated lower likelihood, and 1 suggested no difference between the groups.
Source: *European Health Interview Survey (EHIS)*

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Appendix table 12: Odds ratios of accident and injury across overlapping socioeconomic and demographic categories of men and women in Luxembourg, EHIS, 2019

	Odds ratio (OR)	95% confidence	
Gender and age			
Men aged 15-44	*Reference*		
Men aged 45-64	0.61**	0.44	0.82
Men aged 65+	0.52**	0.34	0.78
Women aged 15-44	✕		
Women aged 45-64	0.63**	0.46	0.85
Women aged 65+	✕		
Gender and educational level			
Men with high	*Reference*		
Men with Medium	✕		
Men with Low	✕		
Women with High	✕		
Women with Medium	✕		
Women with Low	1.65**	1.18	2.31
Gender and immigration status			
Men, native born	*Reference*		
Men born in other EU	✕		
Men born in non-EU	✕		
Women, native born	✕		
Women born in other EU	✕		
Women born in non-EU	✕		
Gender and marital status			
Men, married	*Reference*		
Men, never married	1.89***	1.36	2.62
Men, widowed	✕		
Men, divorced	1.67*	1.03	2.69
Women, married	✕		
Women, never married	1.79***	1.31	2.44
Women, widowed	2.27**	1.30	3.93
Women, divorced	1.61*	1.04	2.45

Note: Logistic regression was applied.
Results were presented using odds ratios (OR), which indicated how many times more or less likely a health condition or healthcare use was in one group compared to the reference. An OR greater than 1 indicated higher likelihood, less than 1 indicated lower likelihood, and 1 suggested no difference between the groups.
Source: *European Health Interview Survey (EHIS)*

Appendix table 13: Odds ratios of severe pain experience across overlapping socioeconomic and demographic categories of men and women in Luxembourg, EHIS, 2019

	Odds ratio (OR)	95% confidence interval	
Gender and age			
Men aged 15-44			
Men aged 45-64	1.30**	1.07	1.59
Men aged 65+	1.82***	1.40	2.37
Women aged 15-44	1.38***	1.14	1.66
Women aged 45-64	1.99***	1.61	2.44
Women aged 65+	2.45***	1.84	3.27
Gender and educational level			
Men with high			
Men with Medium	✕		
Men with Low	1.45**	1.12	1.88
Women with High	1.39***	1.16	1.67
Women with Medium	1.64***	1.33	2.01
Women with Low	2.25***	1.74	2.92
Gender and immigration status			
Men, native born			
Men born in other EU	1.37**	1.13	1.67
Men born in non-EU	✕		
Women, native born	1.63***	1.37	1.95
Women born in other EU	1.81***	1.48	2.20
Women born in non-EU	✕		
Gender and marital status			
Men, married			
Men, never married	0.75*	0.60	0.95
Men, widowed	✕		
Men, divorced	0.70*	0.51	0.98
Women, married	1.32**	1.12	1.57
Women, never married	1.27*	1.02	1.58
Women, widowed	✕		
Women, divorced	✕		
Gender and social support level			
Men with strong			
Men with intermediate	1.58***	1.27	1.97
Men with poor	2.24***	1.68	2.98
Women with strong	1.62***	1.29	2.05
Women with intermediate	2.12***	1.70	2.65
Women with poor	4.11***	3.03	5.59

Note: Logistic regression was applied.
Results were presented using odds ratios (OR), which indicated how many times more or less likely a health condition or healthcare use was in one group compared to the reference. An OR greater than 1 indicated higher likelihood, less than 1 indicated lower likelihood, and 1 suggested no difference between the groups.
Source: *European Health Interview Survey (EHIS)*

Appendix table 14: Odds ratios of depressive symptoms across overlapping socioeconomic and demographic categories of men and women in Luxembourg, EHIS, 2019

	Odds ratio (OR)	95% confidence interval	
Gender and age			
Men aged 15-44			
Men aged 45-64	✕		
Men aged 65+	0.41**	0.22	0.75
Women aged 15-44	1.38*	1.01	1.89
Women aged 45-64	✕		
Women aged 65+	0.54*	0.30	0.96
Gender and educational level			
Men with high			
Men with Medium	2.06***	1.36	3.13
Men with Low	1.80*	1.08	2.98
Women with High	✕		
Women with Medium	2.44***	1.66	3.59
Women with Low	4.25***	2.83	6.36
Gender and immigration status			
Men, native born			
Men born in other EU	✕		
Men born in non-EU	✕		
Women, native born	✕		
Women born in other EU	2.05**	1.30	3.23
Women born in non-EU	✕		
Gender and marital status			
Men, married			
Men, never married	1.70*	1.13	2.57
Men, widowed	✕		
Men, divorced	✕		
Women, married	1.51*	1.08	2.09
Women, never married	2.26***	1.57	3.26
Women, widowed	✕		
Women, divorced	✕		
Gender and social support level			
Men with strong			
Men with intermediate	✕		
Men with poor	3.41***	1.96	5.91
Women with strong	✕		
Women with intermediate	1.88*	1.13	3.13
Women with poor	5.81***	3.47	9.72

Note: Logistic regression was applied.
Results were presented using odds ratios (OR), which indicated how many times more or less likely a health condition or healthcare use was in one group compared to the reference. An OR greater than 1 indicated higher likelihood, less than 1 indicated lower likelihood, and 1 suggested no difference between the groups.
Source: *European Health Interview Survey (EHIS)*

Appendix table 15: Odds ratios of Unmet need for health care across overlapping socioeconomic and demographic categories of men and women in Luxembourg, EHIS, 2019

	Odds ratio (OR)	95% confidence interval	
Gender and age			
Men aged 15-44			
Men aged 45-64	✕		
Men aged 65+	0.62***	0.47	0.82
Women aged 15-44	1.42***	1.16	1.73
Women aged 45-64	✕		
Women aged 65+	0.54***	0.40	0.73
Gender and educational level			
Men with high			
Men with Medium	✕		
Men with Low	✕		
Women with High	1.41***	1.16	1.70
Women with Medium	✕		
Women with Low	✕		
Gender and immigration status			
Men, native born			
Men born in other EU	✕		
Men born in non-EU	1.43*	1.04	1.97
Women, native born	1.22*	1.00	1.47
Women born in other EU	1.37**	1.12	1.68
Women born in non-EU	2.10***	1.55	2.84
Gender and marital status			
Men, married			
Men, never married	✕		
Men, widowed	✕		
Men, divorced	✕		
Women, married	✕		
Women, never married	1.39**	1.11	1.73
Women, widowed	✕		
Women, divorced	1.51**	1.12	2.03
Gender and social support level			
Men with strong			
Men with intermediate	1.74***	1.34	2.25
Men with poor	2.15***	1.59	2.91
Women with strong	1.44**	1.10	1.89
Women with intermediate	2.05***	1.60	2.64
Women with poor	3.44***	2.57	4.61

Note: Logistic regression was applied.
Results were presented using odds ratios (OR), which indicated how many times more or less likely a health condition or healthcare use was in one group compared to the reference. An OR greater than 1 indicated higher likelihood, less than 1 indicated lower likelihood, and 1 suggested no difference between the groups.
Source: *European Health Interview Survey (EHIS)*