Bulletin of the *Transilvania* University of Braşov
Series V: Economic Sciences • Vol. 14(63) No. 1 – 2021
https://doi.org/10.31926/but.es.2021.14.63.1.6

HEALTH IN EUROPE

Sanda CONSTANTIN[1]

Abstract: *The paper present some aspects about health in Europe taking into consideration the new pandemic context. Some indicators linked with the topic were chosen. The indicators refer to life expectancy at birth, healthy life expectancy at birth and hospital beds per hundred thousand inhabitants as health facility. The information was analysed with statistical indicators. The result shows that the first two analysed indicators have increased in the past years, year by year, except for the last one, which showed a decreasing tendency at the European Union level.*

Key words: *hospital beds, life expectancy, health facility.*

1. Introduction

The medical system all over the world has faced huge problems due to the sanitary crisis generated by COVID. In many countries, the system has almost collapsed and required strong measures from the authorities. Even the most developed countries have faced a lack of medical equipment, as well as of human resources in hospitals and especially in intensive care.

According to the European Commission, the number of deaths in the European Union started to rise in spring 2020 due to COVID – 19 in comparison with the average mortality of the previous year. Between March and December 2020 in comparison with the same period from the last four years, 580000 more deaths occurred in the EU with a peak in April 2020 (+25.1%). Also, the second wave of this pandemic situation has lead to an excess mortality in the last month from 2020 with a peak in December 2020 (+30%).

2. Methodology

Official information was used from the EUROSTAT database, the European Union statistical book "Ageing Europe – looking at the lives of older people in the EU", as well as from the Eurostat regional yearbook – 2020 edition.

Statistical methods like time series were used in order to analyse the situation of the main aspects connected with the health field.

[1] *Transilvania* University of Braşov, sanda.constantin@unitbv.ro, ORCID ID: 0000-0001-5258-0164

3. Results

An important statistical indicator referring to the health field is life expectancy at birth.

At the European Union-27 countries level, during the last eight years, this indicator's evolution is presented in Figure 1.

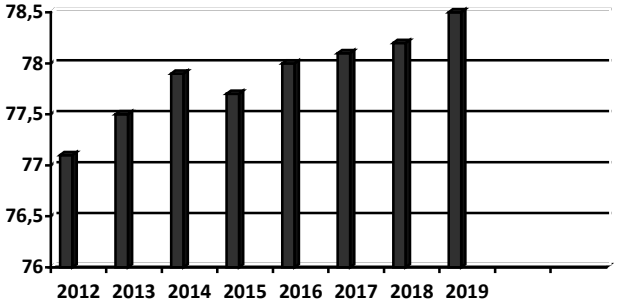

Fig. 1. *EU: Life expectancy at birth*

Data source: https://ec.europa.eu/eurostat/databrowser/view/tps00208/default/table?lang=en

In the European Union-27 countries, during the entire analysed period 2012-2019, the indicator "life expectancy at birth" increased every year from 77.1 years in 2012 to 78.5 years in 2019. The lowest levels were registered in Bulgaria and Lithuania with 71.6 years, Romania, 77.9 years, Hungary 73.1 years, Slovakia 74.3 years and Estonia with 74.5 years. The highest levels were registered in the Netherlands with 80.6 years, Spain 81.1 years, Malta 81.2 years, Sweden and Italy with 81.4 years and the highest level in Iceland with 81.4 years in 2019.The highest increase was in 2013 in comparison with the previous year 2012, by 0.4 years followed by 2015 in comparison with 2014, an increase of 0.3 years. For the entire period, in 2019, the life expectancy at birth increased by 1.4 years in comparison with the base year 2012. On the average, each year the life expectancy at birth increased by 0.2 years meaning an annual increase of 0.26%.

In Romania, in the same period, the evolution of the indicator is presented in Figure 2:

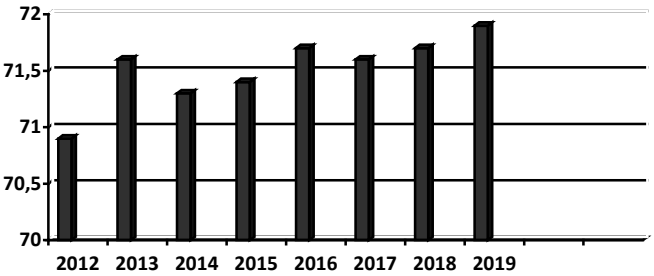

Fig. 2. *Romania: Life expectancy at birth*

In Romania, in the same period, the life expectancy at birth indicator had almost the same evolution like in the European Union. The indicator increased almost every year from 70.9 years in 2012 to 71.9 years in 2019.

The highest increase was in 2013 in comparison with the previous year 2012, by 0.7 years, followed by 2016 in comparison with 2015, with an increase of 0.3 years. On the average, every year, the life expectancy at birth increased by 0.14 years, meaning 0.2%.

The analysis of this indicator must be correlated with another one, healthy life years at birth.

The evolution of this indicator at the European Union-27 countries level during the last eight years is presented in Figure 3.

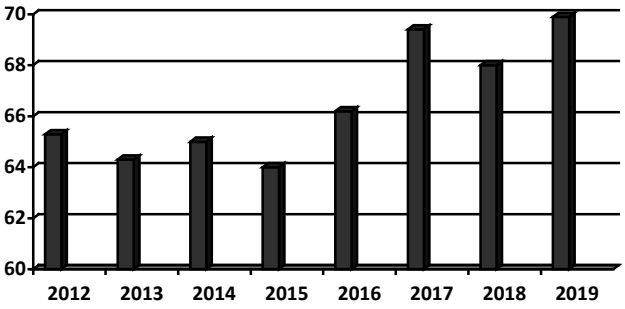

Fig. 3. *EU: Healthy life years at birth*

Data source: https://ec.europa.eu/eurostat/databrowser/view/tps00150/default/table?lang=en

In the European Union, the number of healthy years at birth fluctuated during the analysed period 2012-2019. The number of years decreased in the first three years under consideration and then an improvement of this indicator can be observed in comparison with 2012.

The highest decrease was in 2015 in comparison with 2012 by 1.3 years, meaning 2% less. In 2019, the number of healthy years at birth increased by 4.6 years, meaning 7.04%, in comparison with the first year of our analysis.

From one year to another the highest increase was in 2017 in comparison with the previous year 2016 by 3.2 years, meaning 4.83% more.

On the average, the number of healthy years at birth increased every year by 0.66 years (0.98%).

The lowest level of healthy years at birth is in Latvia (53.1 years), Estonia (55.8 years), Slovakia (56.2 years) and Finland (56.4 years).

The highest levels are in Sweden (73.3 years), Malta (73.2 years), Spain (69.9 years), Ireland (69.6 years), Germany and Bulgaria with 66.3 years.

In Romania, in the same period, the evolution of the indicator healthy life years at birth is presented in Figure 4:

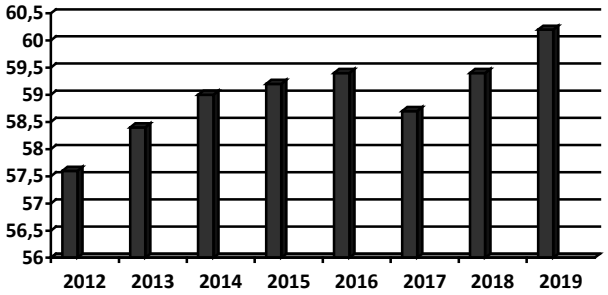

Fig. 4. *Romania: Healthy life years at birth*

In Romania the indicator healthy life years at birth is situated at lower ages in comparison with the EU level, 8-9 years less. During the analysed period, the healthy life years at birth increased from 57.6 years in 2012 to 60.2 years in 2019, meaning an increase of 2.6 years, meaning 4.5% more.

From one year to another, the number of healthy years at birth increased almost constantly, except for 2017 in comparison with 2016, when we can observe a decrease of 0.7 years, meaning 1.18% less.

On the average, the number of healthy years at birth increased each year by 0.37 years, meaning 0.63% more.

Another important indicator regarding the health field is "hospital beds". The indicator is calculated per hundred thousand inhabitants and refers to the health facility – available beds in hospitals.

The evolution of this indicator at the European Union-27 countries level during the last nine years is presented in Figure 5.

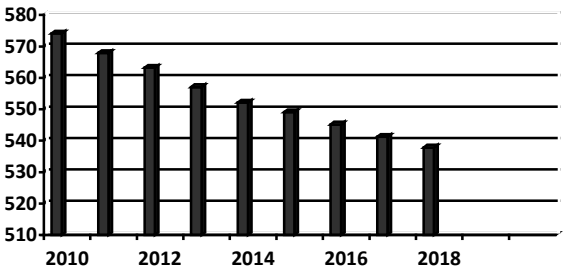

Fig. 5. *EU: Hospital beds (per hundred thousand inhabitants)*
Data source: https://ec.europa.eu/eurostat/databrowser/view/tps00046/default/table?lang=en

In the European Union, the number of available beds in hospitals decreased every year from 574.17 beds per hundred thousand inhabitants in 2010 to 537.84 hospital beds per hundred thousand inhabitants in 2018, meaning 36.3 beds less (a decrease of 3.32%).

The highest decrease was registered in 2013 in comparison with the previous year 2012, by 6.17 hospital beds, meaning 1.1% less, followed by 2012 in comparison with 2011 with a decrease of 4.66 available hospital beds, by 0.82% less.

On the average, at the European Union level, and considering the number of available hospitals per hundred thousand inhabitants, every year saw a decrease of 4.34 beds, meaning 0.81% less.

The highest number was found in Austria with 727.16 hospital beds per hundred thousand inhabitants, Hungary with 701.29, Poland 653.69 hospital beds, the Czech Republic 661.82, and Bulgaria with 756.91 hospital beds.

The lowest levels are in Denmark with 242.97 available beds in hospitals per hundred thousand inhabitants, Spain with 297.15, Sweden with 213.79 and Ireland with 297.39. In Romania, in the same period, the evolution of the indicator is presented in Figure 6:

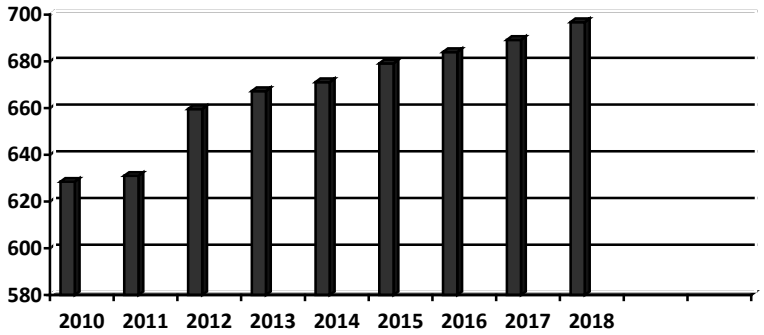

Fig. 6. *Romania: Hospital beds (per hundred thousand inhabitants)*

In Romania the number of hospital beds per hundred thousand inhabitants increased on the entire analysed period from 628.49 beds in 2010 to 696.83 beds in 2018, meaning a total increase of 10.87%.

The highest increase was in 2012 in comparison with the previous year 2011, by 28.57 hospital beds, which means by 4.53% more.

On the average, the number of hospital beds per hundred thousand inhabitants increased by 8.54 beds every year, which represents 1.3% more every year.

4. Conclusions

As it can be observed, the situation regarding the first analysed indicator, “life expectancy at birth”, is good in the European Union, as well as in Romania.

Regarding the second analysed indicator, “healthy life expectancy at birth”, the situation is satisfactory, with small fluctuations at the European Union level. Still, in Romania, the healthy life expectancy at birth is almost nine years lower in comparison with the European Union average level.

The problems appear for the third analysed indicator, “hospital beds per hundred

thousand inhabitants", which refers to the health facility – available beds in hospitals. At the European Union level, the indicator decreased every year, meaning that even the basic equipment for special situations is scarce.

The decrease of hospital beds might be connected to the increase of healthy life expectancy at birth, but no one has imagined the possibility of such an unexpected pandemic situation.

Only a small part of those hospital beds are available for intensive care. It can be one of the explanations for the hard situation all over the world regarding the possibility of proper treatment in hospital for all the infected people.

References

https://ec.europa.eu/eurostat/databrowser/view/tps00150/default/table?lang=en, accessed at 21.03.2021

https://ec.europa.eu/eurostat/databrowser/view/tps00046/default/table?lang=en, accessed at 15.03.2021

https://ec.europa.eu/eurostat/databrowser/view/tps00208/default/table?lang=en, accessed at 17.03.2021

https://ec.europa.eu/eurostat/documents/3217494/11478057/KS-02-20-655-EN-N.pdf/9b09606c-d4e8-4c33-63d2-3b20d5c19c91, accessed at 17.03.2021

https://ec.europa.eu/eurostat/en/web/products-eurostat-news/-/ddn-20210312-2, accessed at 16.03.2021

https://ec.europa.eu/eurostat/documents/3217494/5728733/CH_03_2011-EN.PDF.pdf/ab5df803-d8d4-4714-babb-0da150c747da?t=1414775997000, accessed at 03.03.2021