

The impact of COVID-19 pandemic on the quality of life

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Abstract

Research background: The paper deals with the quality of life and the impact of the pandemic COVID-19 on people's lives in Slovakia and in selected region. The concept of quality of life and dimensions of quality of life, which are necessary for its evaluation are mentioned, too. It also describes the current state of the issue in Slovakia and abroad on the basis of the selected indicators, where individual countries of the world are compared.

Purpose of the article: There are mentioned approaches to quality of life assessment and to conduct a survey of quality of life in a selected region which deals with the development of the quality of life. The paper deals with the analysis of the current state of the problem in Slovakia and abroad. Various definitions of the term quality of life through several authors and views.

Methods: Indices in a global and national level for assessment of selected aspects of objective and subjective quality of life in terms of pandemics COVID-19 are mentioned. In order to assess the impact of a pandemic related to COVID-19 on satisfaction of citizens with several aspects of their lives in selected region is analyzed on the basis of an e-survey.

Findings & Value added: The result of the article is a comparison of individual indicators of the subjective quality of life in selected EU member states and the Slovak Republic. A survey of the satisfaction of the inhabitants of selected region with selected areas of quality of their lives connected with the COVID-19 pandemic is carried out in order to monitor and evaluate the quality of life at the level of local governments.

Keywords: *quality of life; indicators and dimensions of quality of life; objective approaches to quality of life assessment*

JEL Classification: *I31; H75; I15*

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1. Introduction

The outbreak of SARS-CoV-2 infection, described as COVID-19, has spread in early 2020 to almost all countries, adversely affecting the world economy. The COVID-19 pandemic has affected strongly the quality of life almost all areas of citizen's lives. The pandemic has also quickly become a socio-economic crisis. (Ahrendt et al., 2018) During COVID-19 pandemics countries took very strict restrictions such as vacation for schools, working from home, quarantine for regions with high number of cases, and most importantly, lockdown to slow down the COVID 19 outbreak. The lockdown has both environmental and economic impact on countries. (Atalan, 2020) The COVID-19 pandemic and its global impact affect all spheres of life in modern society, and for the first time in recent history, we are facing such a global problem. (Svabova et al., 2021)

The quality of life dramatically changed in terms of economic, social, health and environmental conditions. Many institutions have tried to comprehensively assess the quality of life from various points of view. The most well-known indicators include the Human Development Index (HDI) and the Quality of Life Index (QoLI). Quality of life indices include the Happy Planet Index (HPI), the Gender Development Index (GDI), the Consumer Price Index (CPI), and the Better Life Index (BLI) and many others, as Fitting index. (Elias, 2010) The objective dimension of quality of is defined as the sum of economic, social, health and environmental conditions that affect an individual's life. Evaluation of objective quality of life can be seen as the extent to which an individual takes advantage of the opportunities of his life. (Holkova and Veselkova, 2019). Among the basic living conditions, we can include the average wage, availability of services, education possibilities, etc. (Binda et al., 2017)

The decisive approach in assessing the quality of life is the economic approach. The most prevalent objective concept of well-being refers to the material welfare of a person or society and is usually measured by GDP per capita. (Kwarcinski and Ulman, 2020). Subjective quality of life is about well-being, overall satisfaction, satisfaction with individual areas of life, individual aspects of life, how an individual perceives his position in society, what he has defined goals, interests and expectations will be reflected in the resulting satisfaction with life. This means that factors from different areas of human life must be used for a more comprehensive measurement of subjective quality of life. (Hermanova, 2012; Andrasko, 2013) Pacione (2003) argues that in addition to dividing quality of life indicators into subjective and objective. The first way is to use theoretical knowledge to select a set of factors or to create a set of factors based on asking people which aspects most affect their quality of life.

According to Felce and Perry (1995) the factors that most influence people's quality of life includes relationships, financial condition, health of themselves and their families, work and social life. Thus, subjective indicators show a greater share of variability in the perception of quality of life than objective ones. Research has also shown a link between subjective and objective variables.

I also agreed with the above-mentioned authors that there is a connection between subjective and objective variables. The hybrid approach conceptualizes happiness as the subjective well-being measured independently from objective aspects of well-being. Multidimensionality refers only to these objective aspects, which consist of a person's quality of life. The hybrid version of well-being (HWB) is an attempt to overcome the weaknesses of both subjective and objective approaches to well-being. Hybrid well-being is measured by the Fitting Index (FI). The value of the FI depends on the probability of transition within the compared levels of wellbeing assessment as well as the magnitude of these transitions (differences in well-being evaluations). The value of the FI depends on how many people feel less happy or happier than indicated by their objective circumstances, and how significant is this disparity. (Kwarcinski & Ulman, 2020)

2. Materials and Methods

2.1 Quality of life in the Slovak Republic

The most know international index concerning the quality of life is the Human development index (HDI). In 2019, the Slovak Republic ranked 39th among 189 countries in the world with a value of 0.860 and is one of the countries with a high level of human development. The Czech Republic took 27th place and Poland 35th. Hungary placed 40th. (HDIR, 2021) While in the years 1990 - 2000 the difference between the HDI of the Slovak Republic and the European average increased, after joining the EU it is gradually approaching. (HDI, 2019) Life expectancy increased by 6.3 years, average school attendance increased by 1.9 years and expected years of school attendance increased by 2.9 years. In the years 1990 - 2019, the value of HDI of the Slovak Republic increased from 0.741 to 0.860, reached the value 0.850 in 2015, which represents an increase of 16.1%. (HDR, 2020) The Czech Republic since 1995 ranked higher than our country (Figure 1).

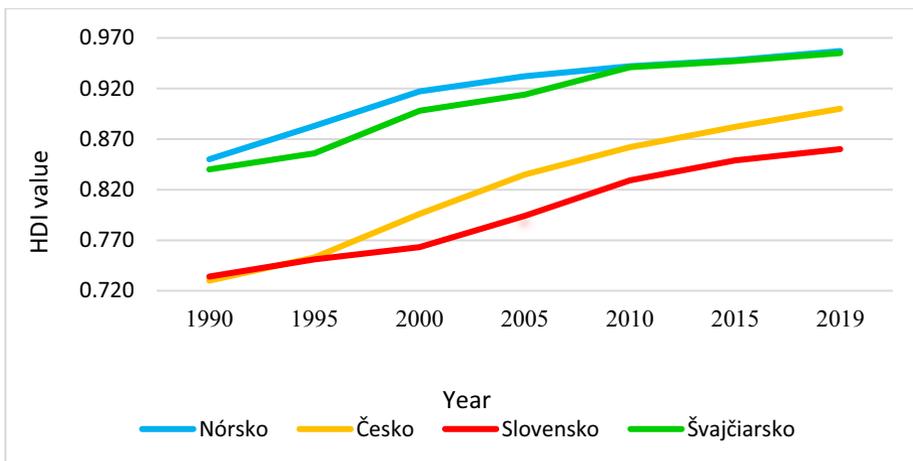


Figure 1. Comparison of the development of HDI of the Slovak Republic with selected countries in the years 1990 – 2019

Source: Own processing

In comparison with selected countries with stable political and economic environment such as Switzerland, our country has higher unemployment and lower income. In other factors, our country lags significantly behind, especially in the school system and in research and development.

Concerning the quality of life in Slovakia according to the OECD regularly compiles the quality of life rankings of the countries that are associated in this organization (OECD, 2020). The OECD uses the "Better Life Index" to measure and observe quality of life. In terms of quality of life, the issue of work is measured. In Slovakia, approximately 66% of the working population (aged 15-64) had paid employment. This value is slightly lower than the OECD average value (68%). The Slovak Republic ranks among the EU countries with the highest levels of unemployment, with young people and women being most at risk. (OECD, 2020). Since March 2020, when the first measures came into force, the registered unemployment rate has been rising. The highest inflow of new jobseekers occurred in April 2020 (Svabova

et al., 2020). The study results indicate an increase in the unemployment rate in Slovakia during 2020 by 2–3% compared to the trend of its development, which would have occurred without a pandemic. (Svabova et al., 2021).

An average salary in Slovakia is about € 20,158 per year, which is less than the OECD average of € 35,832. Another indicator is life expectancy. Many OECD countries have seen an increase in life expectancy due to improved living conditions, improved medical care and public health interventions. In Slovakia, life expectancy at birth is approximately 77 years, which is three years less than the OECD average (80 years). Concerning overall life satisfaction Slovak citizens rated it on a scale from 0 to 10 on average 6.2, which is slightly less than the OECD. (OECD, 2020)

2.2 Effects of the COVID-19 pandemic on selected areas

COVID-19 has affected all levels of the education system, from preschool to tertiary education. (Nicola et al., 2021) In the effort to stop the spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), most countries closed schools. 1.3 billion of students in 195 countries were affected by school closures in educational institutions in mid-April 2020. These closures are likely to have a negative impact on student learning and well-being, especially for students from disadvantaged backgrounds. (Vlachos et al., 2021)

COVID-19 has had an impact not only on social mobility but also psychological effects to capture the economic and social effects of the coronavirus pandemic, a large-scale online survey across the European Union in April 2020 when most countries were locked, following the second survey in July, when many countries began to relax their restrictions and third in Spring 2021 including topics, such as employment status, work-life balance, health, quality of work, etc. (Mahrosh and Mustafa, 2021) According to The European Quality of Life Surveys (EQLS) mental well-being has reached its lowest level across all age groups since the onset of the pandemic in Spring 2020, those who have lost their job and especially among young people. almost two-thirds of people (64%) in the youngest age group (18–34 years) are at risk of depression. (Ahrendt et al., 2021)

The most employees still expressed a preference to combine working from home and from the employer's premises. Respondents in a survey who lost their job (of those who were employed before the pandemic) significantly increased in almost all EU countries except of f.e. Scandinavian countries, Netherlands. (Ahrendt et al., 2020) Respondents were concerned that they might lose their jobs, above all in the youngest age group (18 - 34 years), also people with primary or secondary education. Women were also more likely to be unemployed during the COVID-19 pandemic. (Mahrosh and Mustafa, 2021) The healthcare professionals reported that they were more often emotionally depleted, confirming their high exposure to difficult situations during a pandemic. (Nica et al., 2020) The pandemic also affected work-life balance, especially for women with children under 12, with women having reduced working hours and percentages in the survey show that women lost their jobs faster than men. The coronavirus disease 2019 (COVID-19) pandemic has posed a significant challenge to national health systems in terms of preparedness and response. Indicators, such as Global Health Security (GHS) Index provide an overall view of national health system resilience. The countries are ranked between 0 and 100. The countries with a score of 66.7 and above are categorised as 'most prepared'(yellow), 33.4–66.6 as 'more prepared' (orange) and 0–33.3 as 'least prepared (red). Slovakia belongs to the more prepared countries as other countries of central Europe. The mean overall GHSI score is 40.2 out of 100. (Wang et al., 2020)

2.3 Methodology

The survey was focused on assessment of the quality of life through economic and social indicators in Zilina self-governing region. The respondents assessed the quality of life from an economic, social and subjective point of view through a questionnaire survey.

The subjective view of the quality of life was represented by the issues that affect the quality of life of citizens and the expression of overall satisfaction with the quality of their lives and domains such as, health care institutions satisfaction with the civic amenities in the surroundings, environmental conditions, transport accessibility, housing opportunities and employment. For these general questions the Likert scale was used: "very dissatisfied", "rather dissatisfied", "I can't judge", "rather satisfied", "very satisfied".

The calculation of satisfaction indices was carried out, too. The objective indicator of quality of life was represented by the amount of gross monthly income. An e-survey was carried out in the month of March 2021 via electronic questionnaires. The questionnaires were filled in by 330 respondents in by 49% women and representing 51% men. The respondents came from 4 districts of the Orava region of Zilina self-governing region with 138499 citizens. The sample was structured according to the gender, education and social status regarding the social status of the respondents, all statuses were included in the survey. The educational status among respondents was basic education (10%), secondary education (70%) and university education (20%). 18 closed questions and 3 open questions were posed.

3 Results

The Orava region belongs to the Zilina self-governing region. As a result of the COVID-19 pandemic, the unemployment rate has risen, which means that the number of unemployed people has increased.

The main goal of the survey was to analyze the quality of life of the citizens in the Orava region. We focused on the most important and primary areas and most of them are involved in the specific objectives of PHSR ŽSK. The main areas included the environment, health and social care, education and transport infrastructure, and the labour market.

In connection with the epidemiological situation that affects the quality of life, the impact on the mental health of respondents and students' attitude to the prefer distance education. The survey was focused on working people, or even those who lost their jobs during pandemic. Our aim was to notice the changes brought about by the pandemic, the increased level of job insecurity, the teleworking, the financial situation or the change in work-life balance.

Within the research, the satisfaction with transport accessibility and quality of transport infrastructure in a lower level in 50% of respondents.

Based on the evaluation of the quality of life survey results, we can point out that the inhabitants of Orava are satisfied with the environment, with transport accessibility and infrastructure, with education and social services. There is a difficulty in employment in the labour market in the Orava region, as a result of which the citizens leave the region for work.

The quality of life of citizens in the Orava region is also affected by health care, which, according to the respondents, is not the level they would expect. The lack of ambulatory doctors or not enough nurses was the aspect that the respondents assessed negatively. Respondents positively assessed e-health functionalities, such as e-receipt, e-ordering, etc. electronic consultation in terms of the pandemic, meanwhile it was carried out to a lower extent by older citizens, who still do not have access to the Internet.

Despite the fact that the pandemic affects us all, we have to count with the most vulnerable groups. The survey confirmed that up to 75% of respondents feel mentally exhausted during a pandemic, which were mostly women. At most young people lacked social contact and society, expressed signs of depression, anxiety and also felt exhausted.

From the educational point of view students missed the contact with the environment and preferred hybrid learning.

During the pandemic more than half of the respondents felt an increase in the level of job insecurity, some respondents lost their jobs and their financial situation deteriorated.

The Orava region offer low employee rewards. According to the survey, 12% of working respondents earned less than € 700, which were women. Over € 1,000, mostly men earned, which we can say that work is not valued the same, there are still differences in the evaluation of men and women.

The pandemic affected work-life balance in 28.3% respondents, mostly in women. Respondents also had to adapt to the work situation, which meant that employees had to take compulsory leave or work overtime, had to work in non-standard hours, remotely or had to apply for pandemic substitution fees. The salary changed in 40% of the respondents.

60% of respondents mainly in the automotive industry were at risk of uncertainty of job. 40% of respondents who worked mainly in the field of engineering and education did not feel the increased degree of job insecurity. Uncertainty about job loss was felt mainly by women.

Almost half of the respondents were dissatisfied with their employment in the region 50%. The results confirmed that it is difficult to find a job in the labour market in the Orava region.

According to 30.8% of respondents the work environment did not change during the pandemic. The 13.4% respondents worked less hours or work overtime 13.5%. 10% of respondents took compulsory leave, 8.5% of respondents lost their jobs. There were also workers which workers who worked in non-standard hours, or worked in neighboring countries (8.1%). 6.5% of respondents worked remotely from their homes.

The respondents who lost their jobs worked mainly in the area of tourism, gastronomy and hospitality (31.6%) and in the automotive industry (26.3%).

From the information obtained from the research, we can conclude that gender differences still persist, where women are more likely to lose their jobs, have higher levels of job insecurity, higher imbalances between private and professional life.

The respondents to € 700 were earned mainly by women in the field of trade, and in the field of tourism, gastronomy, and hospitality. Respondents in the field of engineering, construction earned about € 1,500. According to the answers, only 31% of respondents earned this salary over € 1,000.

4 Discussion

The COVID-19 pandemic changed society and the economy substantially. The pandemic had effects on all parts of socio-economic life. The GDP collapsed around the globe transport logistics ground to a halt, there were shortages because of bottlenecks in storage and transportation. Significant numbers of employees have been laid off or furloughed. The adverse economic consequences of new forms or types of these diseases can be severe given the high degree of interdependence in economic activity in modern economies. (Heinrich, 2021)

The crisis caused by his disease also has a negative impact on the economic Performance of individual countries around the world. We can rank the Slovak Republic among the most affected countries in the context of the economic downturn. The Covid-19 pandemic is a major reason behind the rising unemployment. This is also the case in Slovakia. Since March 2020, when the first measures came into force, the registered unemployment rate has been rising. The highest inflow of new jobseekers occurred in April 2020. (Svabova et al., 2020).

Unemployment at the end of 2019 was 5%, an increase of over 2.5% compared to the unemployment rate at the end of 2020, which was 7.57%. The lowest unemployment rate in

the Bratislava Region was 4.71%, and in Žilina self-governing region 6.53 %. The increase in the unemployment rate is relatively high and we can attribute it to the current pandemic

According to the studies the development of entrepreneurial, psychological and social skills of students, thus encompassing the emotional dimension and critical thinking are of big importance in terms of their future acting on labour market. (Belas et al., 2017)

Educated people contribute to the economic well-being of the country, and also have a higher chance of finding work and earnings. (Stofkova et al., 2014)

There is also a bigger difference in life satisfaction between people with basic and secondary education and those with tertiary education. In Slovakia is the difference 1,5 (with 6,4 by the lower educated people and 7,9 in people with tertiary education). (OECD, 2020) Community and economic impacts are perceived as significant by the population, whereas the impact on mobility and local transportation is perceived as negative (González Damián and Macías Ramírez, 2020).

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The average gross monthly wage within all regions of Slovakia in 2019 is the highest average gross monthly wage reached by the population in the Bratislava region with 1641 €, the Zilina region with the average gross monthly wage of 1174 €.

The results of the survey showed that young people continued to feel excluded from society and continue to be exposed to depression and tension. (Eurofound, 2020) A pandemic poses a serious threat to public health worldwide. Therefore, a coordinated global response to the preparation of healthcare systems is needed to meet this unprecedented challenge. Proper human resource management can increase the productivity and quality of nursing care.

While the level of life satisfaction was low in April 2020, the quality of life of respondents increased in July 2020. The countries with the highest quality of life, namely Switzerland, Denmark and Finland, were the most satisfied. On the contrary, dissatisfaction has manifested itself in many countries of the European Union, including Slovakia. Satisfaction was rated on a scale from 1 to 10, where 1 means very dissatisfied and 10 means very satisfied. (Ahrendt et al., 2021)

The lower the value of the FI, the higher hybrid well-being, thus according to this measure the order of the countries is as follows: Germany (0.146), France (0.154), Poland (0.171), Hungary (0.180), the Slovak Republic (0.186), the Czech Republic (0.190), and Bulgaria (0.217). (Kwarcinski and Ulman, 2020).

The pandemic brought a notable psychological distress, and mental health burden during the COVID-19 outbreak. At present, it is extremely important that people around the world take steps to develop safe and effective preventive measures. (Sampson, 2020)

Additionally due to pandemic, there exists a wider disparity amongst populations with a higher income and lower income. (Nicola et al., 2020)

It is clear from the data that in the years 2017-2019 the average life expectancy of men (75.62 years), as well as women (81.92 years) at birth reached the highest value in the Bratislava region. (OECD) The difference is 7,67 years in average life expectancy is the highest in Žilina region, in men 73.5 and in women 81,2.

According to the OECD research from 2019 is the reconciliation of work and private life About 4% of Slovaks spend many hours in their work, which is a smaller percentage than the OECD average (11%). that Slovaks did not spend too many hours at work. This situation changed dramatically with the onset of the pandemic Covid-19. Research shows that spending a lot of time at work can disrupt and endanger their health, as well as increase stress.

Existing inequalities are widening because of the disproportionate impact of the pandemic on vulnerable groups. The findings show that difficulties in making ends meet increased significantly among those already in a precarious situation. Citizens' satisfaction with crisis support measures has declined dramatically, with only 12% now feeling support measures are fair, down from 22% in summer 2020. Over a quarter of people living in Europe indicate a hesitancy toward the COVID-19 vaccine, with men revealing themselves more hesitant (29%) than women (25%).

Based on the survey of quality of life assessment in the Orava region of Zilina self-governing region, the individual areas on which the survey was focused were evaluated regarding assessment of life satisfaction concerning areas such as employment possibilities, available services, health-care institutions or civic amenities, etc (see also (Stefko et al., 2019; Stefko et al., 2020). The areas with which the respondents were dissatisfied was insufficient transport infrastructure, etc.

In the evaluation scale in which the respondents evaluated the areas that affect the quality of their lives at most were the most important values health and income. It is necessary to pay close attention to these issues, as well as on tourism (Damian & Ramirez, 2020). Quality of life is the result of the action of objective and subjective conditions. Areas, such as the labour market, the development of science and technology, lifestyle of citizens, provided health-care are factors that have a huge impact on the quality of our lives.

We would suggest creating more jobs that are missing in individual districts. We would recommend that the conditions for increasing the quality of life be ensured by ensuring the correct implementation of the existing but also future goals of regional plans, as well as the re-balance and re-energise of the economy is needed.

5. Summary

The overall satisfaction of respondents with the quality of life in Orava region was satisfying. The most important values of quality of life according to the respondents was health, which was placed in the first place, followed by income.

Based on the survey of quality of life assessment in the Zilina self-governing region, several domains focused on the subjective assessment of quality of life were evaluated regarding various spheres of lives of citizens. The areas where the citizens were satisfied, involved the environment, education and social services and functionalities of e-health (e-receipt, e-ordering, etc.)

The areas where the respondents were less satisfied belonged the transport infrastructure and accessibility, availability of health-care, as well as the situation on the labour market and the rising unemployment was recorded by the majority of the region's population. A significant decrease in mental well-being was confirmed in 30% across all age groups, especially in young respondents due to distance learning and lack of contact with their schoolmates as well as teachers was confirmed in our e-survey, too. In terms of research, respondents have confirmed to have lost their jobs 8,5% during pandemic of Covid-19 and changed way of work (working shortened hours, working remotely or working overtime). The work-life balance was noticed in respondents as well, mostly in women with families. The satisfaction with salary was not satisfying, 40% the income changed, in 28% the income decreased and in 12% of respondents the income increased.

The situation in earning less than the average income in the Žilina self-governing region causes outflow of the working force out of the region, during the pandemic the respondents felt this situation even worse. The Quality of life assessment was carried out via structured questionnaire and calculation of overall indices for satisfaction and dissatisfaction were carried out, too. The purpose of evaluation of the quality of life is to constantly monitor and improve the quality of life at the level of regions or local governments.

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