THE OPPORTUNITIES OF HEALTH TOURISM IN HUNGARY IN ADDRESSING THE HEALTH CHALLENGES OF AN AGING SOCIETY

Gabriella HELMECZI[1], Magdolna LÁCZAY[1]
[1]University of Debrecen, Faculty of Health Sciences, Nyíregyháza, Hungary
helmeczi.gabriella@etk.unideb.hu
laczay.magdolna@etk.unideb.hu

Abstract*: With an ageing population, the prevalence of musculoskeletal disorders is also rising significantly. This trend increases the burden on the health system and emphasizes the importance of health promotion and active ageing, for example through health tourism. The aim of my research is to explore the impact of Hungary's ageing population and the increasing prevalence of musculoskeletal disorders on labour market participation and economic sustainability. The focus of the survey is the prevalence of musculoskeletal complaints. In my research I work with secondary data, which is reliable, collected from official sources. The analysis is based on reports from general practitioners and the Central Statistical Office, which provide detailed insights into the evolution of the number of patients with musculoskeletal complaints, data from spas. The data clearly show that prevention programs and therapeutic opportunities (e.g. thermal baths) can be of particular importance for the middle-aged and older age groups, who are the most affected.*

Keywords: *health, activity, labour force activity, ageing society, health tourism*

1. Introduction

An ageing population is increasingly challenging health and social systems worldwide (Boros, 2017). This demographic change is particularly significant in Hungary, where the proportion of older people is steadily increasing while the population is decreasing. Chronic diseases associated with ageing, particularly musculoskeletal problems, not only reduce individual quality of life, but also threaten labour market participation and economic sustainability.

The value of tourism has been incorporated into studies on active ageing and the public health implications of the physical and mental health impacts of tourism on older people are recognized as an important issue (Qiao et al, 2022) .

In terms of our theme, I would like to highlight the importance of health tourism within the tourism sector. In Hungary, the concept of health tourism became more widely known in the context of the first Széchenyi Plan (2000-2001), in the context of the Tourism Development Program. Health tourism is a tourism product in which the attraction is to maintain and improve the health of the individual and to create a sense of well-being. Health tourism is therefore playing an increasing role in health promotion (wellness), disease prevention (prevention), treatment (therapy), aftercare (rehabilitation) and physical conditioning (fitness). (Michalkó, 2016).

The aim of this study is to examine Hungarian demographic conditions, with particular reference to changes in the age distribution of the population, the health

status of the Hungarian population and the health challenges and opportunities for spa services.

2. The challenges of an ageing society and the role of active ageing

Semsei (2013) argues that a society is sustainable if its structure is close to the optimal pyramidal structure. In contrast, the shift in age structure towards older age groups is one of the most important demographic and economic challenges of our time, affecting health, social and economic systems worldwide (Lampek, 2023).

In May 2011, the United Nations published its World Population Prospects: the 2010 Revision, with an accompanying country-by-country database. According to their estimated data, the proportion of the population aged 65 and over as a percentage of the total population has increased significantly in all countries of the world in recent decades (WHO, 2012; UNITED NATIONS, 2022). Their results show that Hungary's population has been declining since the 1980s, with the projected population falling from 10 million in 2010 to 9.2 million in 2050, while the proportion of people aged 65 and over will rise from 16% in 2011 to over 25% in 2050 (Földházi, 2011).

Based on data from the Country Economy[1] Table 1 shows the age distribution and life expectancy at birth of the Hungarian population for a given year. The data show that life expectancy is increasing in parallel with population ageing, placing an increasing burden on health and social systems.

Table 1: Age distribution of the Hungarian population and life expectancy at birth every two years from 1999 to 2021

Hungary - Population pyramid				Hungary - Life expectancy at birth			
Date	0-14 years%	15-64 years %	> 64 years %	Date	Life expectancy - Women	Life expectancy - Men	Expected lifetime
2021	14,49%	65,08%	20,43%	2021	77,6	70,7	74
2019	14,47%	65,76%	19,77%	2019	79,7	73	76,5
2017	14,50%	66,66%	18,84%	2017	79.30	72,5	76.00
2015	14,48%	67,33%	18,19%	2015	79.00	72.30	75,7
2013	14,42%	68,09%	17,50%	2013	okt.79	72.20	75,8
2011	14,50%	68,62%	16,87%	2011	78,7	71.20	75
2009	14,75%	68,64%	16,61%	2009	78.40	70.30	74,4
2007	15,02%	68,81%	16,17%	2007	77,8	69.40	73,6
2005	15,42%	68,80%	15,79%	2005	77.20	68,7	73.00
2003	15,88%	68,63%	15,49%	2003	76,7	68.40	72,6
2001	16,32%	68,43%	15,25%	2001	76,7	68.20	72,5
1999	16,92%	68,10%	14,98%	1999	75,6	66,7	71

Source: https://countryeconomy.com/demography/life-expectancy/hungary

[1] It provides comprehensive economic and sociodemographic data on different countries and regions.

With ageing, the concept of active ageing has also received increasing attention. In 2002, the World Health Organization (WHO) defined active ageing as "the process of optimizing opportunities in health, participation and safety to improve the quality of life of older people." *(WHO, 2002:12;* Raffael and Trásy*, 2023).* This approach emphasizes not only the individual well-being of older people, but also its social and economic impact. Active ageing depends on a number of factors called determinants. These factors affect the health of people of all ages. These factors include: Health and social services; Behavioral determinants; Personal determinants; Physical environment; Social determinants; Economic determinants *(WHO, 2002:19).*

An international organization, Help Age International, has compiled a complex index called the Global Age Watch Index, which provides an internationally comparable measure of the quality of life and well-being of older people. The index summarizes four dimensions: financial security, health, opportunities for older people to participate in society, and the enabling environment for social participation. According to the 2015 results, Hungary is ranked 39th out of 96 countries surveyed, but only 57th in the health status dimension. (www1; Boros 2017)

The concept of activity, which can be examined from different angles, plays a key role in understanding the economic impact of ageing. In addition to mental and social activity, the relevance of physical and workplace activity is particularly important for economic sustainability. Regular physical activity improves health and increases the number of years spent in good health, which has social and economic benefits (Makai, 2019).

3. Health challenges facing society and the role of chronic diseases

Ageing poses a number of challenges at both individual and societal levels, especially when it is associated with poor health (Boros, 2017).

The health status of older people in our country is associated with worse health indicators for the adult population as a whole. Both mortality and morbidity indicators and the burden of disease show that while there has been a noticeable improvement in some diseases, we are lagging behind compared to some developed countries. Life expectancy at birth is increasing steadily in Hungary, with small fluctuations, but the health indicators of the population are still unfavorable (Raffael and Trásy*, 2023)*. According to the Organization for Economic Co-operation and Development, healthy people are more likely to be employed, have good jobs and retire later, while people with health problems or disabilities are more likely to lose their jobs and find it difficult to find new ones. Countries should therefore strive to improve the skills and employability of people facing health challenges at all ages.

The health of the population is influenced by several factors. According to the WHO, health determinants are the set of personal, social, economic and environmental factors that influence the expected healthy life expectancy of individuals and populations. The determinants of health are multiple and interrelated (Vitrai - Borenszki-Gutási, 2022). The growing range of diseases is a problem for the whole of society. Lifestyle, habits, harmful addictions, etc. play a major role in

their development, so prevention is very important, not only as a health issue but also as a social issue.

As society ages, the prevalence of chronic diseases, particularly musculoskeletal diseases, is increasing. These health problems not only negatively affect individual quality of life, but also increase the burden on the health system. The rates of common musculoskeletal disorders among the Hungarian population are examined below. EU Regulation (EC) No 1338/2008 requires a health survey of the population aged 15 and over every five years, based on a questionnaire. This is called the European Population Health Surveys. The health of the Hungarian population and the conditions influencing it are examined at regular intervals and published by the HCSO in its own publications. The data on the Hungarian situation are very thought-provoking, given the diversity of the most common diseases and the proportion of the most common types of disease leading to death (Table 2.).

The results show that musculoskeletal disorders are among the most common health problems, with a significantly higher prevalence than other diseases, accounting for about a third of all diseases among the Hungarian population (35,75%).

Table 2: Most common diseases and their rates in the Hungarian population

Most common diseases in the Hungarian population and their rates	
Category	**Prevalence [%]**
Hypertension	30,9
Problems with your back or spine	19,8
Arthritis, wear and tear of joint cartilage	15,2
Allergies	14,6
High cholesterol, high blood fat, high triglycerides	12,9
Rheumatoid arthritis, chronic arthritis	10,3
Diabetes	8,8
Neck pain or other chronic cervical spine problems	8,4
Irregular heartbeat, arrhythmia, atrial fibrillation	8,3
Osteoporosis	5,6
Mental illness, behavioral disorder	5,5
Other chronic illness	5,1
Asthma	4,7
Severe headache, e.g. migraine	4,4
Chronic bronchitis, bronchitis, emphysema	3,8
Coronary heart disease, angina	3,6
Other heart disease	3,3
Incontinence, urinary incontinence	2,8
Stomach or duodenal ulcers	2,7
Chronic kidney disease	2,4
Heart attack or its chronic sequelae	2,2
Stroke or its chronic sequelae	2
Malignant tumors	1,8
Liver cirrhosis, cirrhosis of the liver	0,5

Source: https://www.ksh.hu/elef/kiadvanyok.html

Illnesses can have a significant impact on individuals' ability to work, including absenteeism and reduced work efficiency (Péntek at al, 2020).

In addition to absenteeism[2] due to health problems, absenteeism is also a situation where a person who is ill at work but is unable to work as effectively as usual because of their health condition presenteeism[3]. (Péntek et al, 2020). Research on the relevance of this topic is constantly expanding (Ruhle et al., 2020; Lohaus, & Habermann, 2021). The number of sick days (Figure 1) is an important indicator of both the health situation and labour market trends[4]. In Hungary, the data show significant changes between 2000 and 2023. In the early 2000s, especially until 2003, the number of sick leave days increased, reaching 45.2 million days. However, from 2004 onwards, there was a significant decrease, which lasted until 2013. In 2013, the number of days of sick leave fell to just 19.8 million, the lowest level in two decades. From 2014 onwards, there was a slight increase in the number of days of sick leave, but 2020 marked a new turning point due to the impact of the COVID-19 pandemic. The number of days of sick leave increased to 29 million, reflecting the impact of the health crisis, the risk of infection and quarantine rules. High levels were observed in the following years, 2021 and 2022, but the figure for 2023 (25.2 million days) shows a slight decrease.

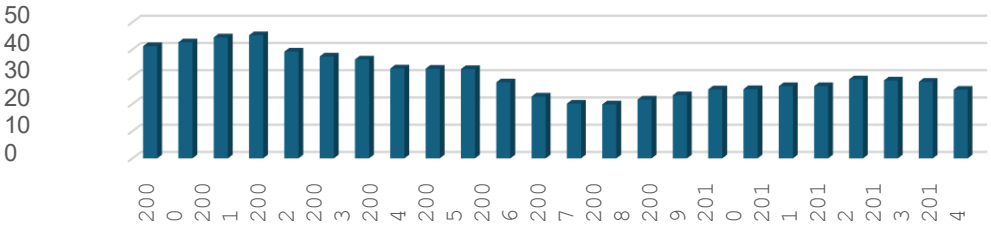

Figure 1: Number of days of sick leave, million
Source: https://www.ksh.hu/stadat_files/szo/hu/szo0030.html

4. The challenges of musculoskeletal diseases

Musculoskeletal disorders have a major impact on working capacity, not only for the individual but also for the country's workforce as a whole. They affect productivity and labour market participation of the masses of Hungarian workers. Available evidence suggests that musculoskeletal disorders account for a large proportion of work-related health problems (www2).

After aggregating the different types of musculoskeletal disorders (Table 2) (Figure 2), it is a shocking realization that they account for 35.75% of all diseases.

[2] absence due to illness
[3] working despite illness
[4] A separate influencing factor is the share of employed persons, which is not taken into account here.

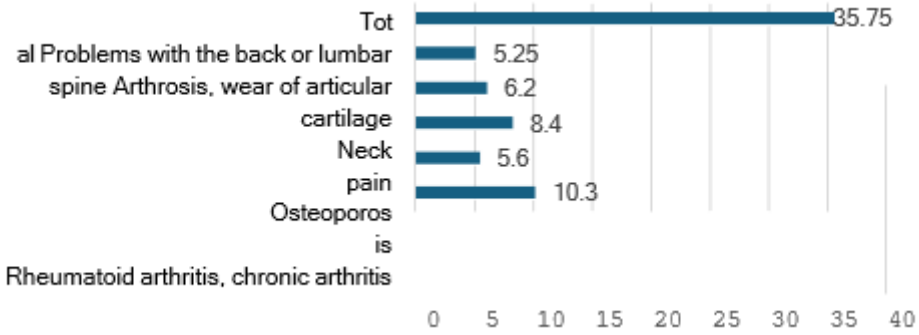

Figure 2: Rates of all musculoskeletal disorders
Source: https://www.ksh.hu/elef/kiadvanyok.html

According to data from the Hungarian Central Statistical Office (2019), chronic illnesses significantly increase the incidence of long-term absenteeism (Table 3), with a 6-7 times difference compared to healthy people. *„Three tenths of the employed population had a health problem that prevented them from working in the 12 months before they were interviewed and so they were absent from work. Those who were on sick leave or on sick leave spent an average of 17.6 days away from work for this reason in a year. Among the chronically ill, more than one and a half times as many were absent from work for health reasons, and the average length of absence from work over 12 months was also nearly two and a half times longer than in the rest of the population surveyed. Compared with the average for chronic patients, 7 percentage points fewer people with hypertension and 3 percentage points more people with musculoskeletal disorders took sick leave, while the former were absent from work for longer and the latter for shorter periods."*

Table 3: Absence from work due to health problem and duration of absence, 2019

	Chronic illness		**High blood pressure**	**Musculoskeletal**
	None	**Have**	**have a disease**	
Percentage of missing %	24	39,1	32,4	41,7
Length of absence, days	10,3	25,2	28,7	23,6
Duration of absence %				
1 - 10 days	79,6	56,2	51	58,6
11 - 14 days	3,8	5,5	5,7	5,1
15 - 60 days	15,1	29	32,9	27,7
61 - 365 days	1,4	9,3	10,4	8,7

Source:
https://www.ksh.hu/docs/hun/xftp/idoszaki/elef/egeszsegi_allapot_2019/index.html

5. Prevalence of musculoskeletal complaints in Hungary based on general practitioner reports

Diseases are classified according to the International Classification of Diseases, which classifies musculoskeletal diseases under codes M00-M99. Patients with these conditions typically first seek help from their GP, where case numbers are recorded every two years based on GP reports. In my research, I analyzed data on the main musculoskeletal conditions of registered patients aged 19 years and over registered with GPs. The analysis covered conditions such as seropositive and other rheumatoid arthritis (M05, M06), juvenile arthritis (M08), gout (M10), deforming spinal deformities (M40-M43), spondylopathies (M45- M49), and bone density and bone structure disorders (osteoporosis) (M80-M85).

Table 4 shows the change in the number of musculoskeletal patients registered with a general practitioner every two years from 1999 to 2023, by age group. For the analysis, I have summarized the number of cases registered for the diseases corresponding to the codes indicated above. The summarization of the data allows a detailed analysis of the prevalence of musculoskeletal diseases and the identification of their trends by age group, time period and demographics. It is important to note that a person can only be included once in a report for a given disease, but several diseases can be registered for a single person.

Table 4: Change in the number of musculoskeletal patients registered with a general practitioner from 1999 to 2023 by age group

	19-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75 years and older	Total Age group
1999	17 948	33 871	87 789	190 438	234 203	257 473	210 582	1 032 304
2005	16 020	37 414	78 497	203 931	279 588	279 172	246 831	1 141 453
2011	35 158	114 173	225 367	356 008	614 340	492 118	424 124	2 261 288
2013	40 681	124 840	261 577	378 369	687 009	585 961	499 329	2 577 766
2015	47 690	140 720	307 774	423 396	751 123	689 598	592 110	2 952 411
2017	48 550	149 729	326 118	450 627	749 953	756 615	653 604	3 135 196
2019	45 692	154 759	319 508	481 849	699 977	826 499	707 772	3 236 056
2021	43 083	158 879	301 645	511 870	629 309	860 798	725 123	3 230 707
2023	39 042	148 155	273 686	512 785	608 565	860 506	762 999	3 205 738

Source: own editing based on HCSO data

Taking all age groups into account, the data show that the number of musculoskeletal patients registered with a GP has increased significantly over the years. In 1999, the total number of cases was 1 032 304, while by 2023 this number had increased to 3 205 738, an increase of more than threefold. Musculoskeletal disorders mainly affect the older age group. The incidence rates have risen sharply over the years for people aged 65-74 and over 75, but the tipping point is already noticeable in the 45-54 age group. Older age groups are more likely to be involved in the health system with musculoskeletal problems, which is linked to an ageing society and the age-related nature of diseases. There is also a gradual increase in middle age, indicating that the incidence of MSDs is not confined to older people, but can occur at younger ages. Younger age groups show a relatively stable

incidence rate, which may suggest that MSDs tend to become more prevalent over time.

This trend increases the burden on the health system and emphasizes the importance of health promotion and active ageing, for example through health tourism. The data clearly show that preventive programs and therapeutic opportunities (e.g. thermal baths) can be of particular importance for the middle-aged and older age groups who are most affected.

6. The importance of health tourism in the prevention and treatment of musculoskeletal diseases

Health tourism is a branch of tourism that focuses on the preservation and improvement of health. One of the most important areas of health tourism is health and wellness tourism, which draws on natural resources such as thermal waters and minerals. These forms of tourism not only play a role in maintaining health, but have also been shown to be effective in treating many diseases (Fábián, 2021).

Balneotherapy, i.e. the therapeutic use of medicinal waters, plays a particularly important role in this context. Numerous studies have demonstrated its effectiveness in treating musculoskeletal problems and there is evidence that spa bathing can relieve chronic pain (Bendere et al, 2014; Maeda et al, 2018).

Karagülle (2017) found that a 2-week spa therapy supplemented with conventional drug therapy resulted in favorable clinical outcomes. Bálint (2017) found that treatment with thermal mineral water significantly improved activity, relieved pain (Bálint et al, 2017).

Hungary's unique natural assets, especially the richness of its thermal waters, provide outstanding opportunities for health tourism. Hungarian spas and thermal waters are not only internationally recognized but also play a key role in the country's economic and social strategy. The decades-long tradition of spas and thermal waters has played a significant role not only in health promotion but also in therapeutic and rehabilitation processes. Hungary's thermal water resources are unique in the world. (Bendere et al, 2014). Given its environmental characteristics, the proper utilization of the Hungarian thermal water resources and the exploitation of its potential could be a major breakthrough. (Czikkely and Ligetvári, 2015).

7. Characteristic data of thermal and spa baths in Hungary, including Szabolcs-Szatmár- Bereg county

The data of the Hungarian Central Statistical Office (Table 5) show that the number of permanently operating baths in Hungary has remained stable over a long period of time, which demonstrates the sustainability of the infrastructure and bathing services. Although a slight decrease is expected around 2020 and 2021, this is most likely due to the global epidemic situation. The data show that the availability of spas, thermal baths and health promotion services in Hungary has been steadily increasing. However, we cannot be satisfied with the development of services offered specifically to patients, with spas offering medical examinations and

treatments showing only a moderate increase until 2019, while they have declined after the Covid epidemic. True, the use of wellness has doubled in a decade.

Table 5: Number of spas and selected services in Hungary from 2010 to 2023

National	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Permanently operating	260	300	390	394	386	386	397	380	371	348	324	322	333	321
Spa	98	105	125	122	130	132	85	103	116	115	104	106	105	100
Thermal Baths	104	110	141	156	154	160	169	155	162	157	136	136	142	137
Medical examination	86	85	107	105	103	115	111	103	105	102	89	86	79	72
Medical treatment	103	108	147	137	138	146	150	137	141	141	126	121	117	114
Health (wellness) services	102	123	272	280	272	277	286	258	264	258	213	212	227	220

Source: https://www.ksh.hu/stadat_files/tur/hu/tur0032.html

In the eastern part of the country, including Szabolcs-Szatmár-Bereg, the proportion of people with health problems is generally higher and the county is one of the most economically disadvantaged areas of the country.

I would like to highlight the spas of Szabolcs-Szatmár-Bereg county, as the county's health tourism offers a wide range of opportunities for those who wish to recover and relax, and the strategic development objective of tourism in this county is to promote its natural resources, its thermal waters and its spa culture. The table shows that several spas offer specialist medical examinations, treatments and health promotion services.

Table 6: Number of spas and some services in Szabolcs-Szatmár-Bereg county from 2010 to 2023

	Baths of a permanent nature	Baths by type Spa	Baths by type Thermal baths	Bath, where medical examination is available	Baths where medical treatment is available	Spa with health (wellness) facilities
2010	8	3	6	2	3	3
2015	18	8	10	6	6	12
2019	14	7	9	6	6	8
2020	14	5	7	3	4	7
2021	13	6	7	3	5	7
2022	15	7	6	2	4	8
2023	14	5	3	2	3	5

Source: https://www.ksh.hu/stadat_files/tur/hu/tur0038.html

Further research is needed to investigate the distribution of people using the services and who are visiting the baths for preventive or rehabilitative purposes. What is the distribution of subsidized and full-price users of treatments? This could provide a new perspective for the development of health tourism services.

The development of health tourism could be a breakthrough not only from a health but also from an economic point of view. The development of spas and the

promotion of health tourism can create jobs and develop settlements, while improving the quality of life of the population.

8. Summary

The prevalence of musculoskeletal disorders and their economic and social impact are an increasingly important problem in the life of an ageing and ageing society in Hungary. The role of health tourism, especially spas and wellness services, is becoming noticeably more important in prevention, therapy and rehabilitation. The research has highlighted the strategic importance of cooperation between the health and tourism sectors for sustainable economic development and improving the quality of life of the population.

I would particularly like to highlight the role of health tourism in Szabolcs-Szatmár-Bereg county, where the exploitation of the potential of health tourism not only strengthens the development of the region, but can also make a positive contribution to addressing the problems of an extremely high number of patients and an ageing society. At the same time, it highlights the need for new research to prove this hypothesis and to develop possible improvements, programs and additional services.

References

1. Bálint GP, Buchanan WW, Adám A, Ratkó I, Poór L, Bálint PV, Somos E, Tefner I, Bender T. (2007) The effect of the thermal mineral water of Nagybaracska on patients with knee joint osteoarthritis--a double blind study. Clin Rheumatol. Jun;26(6):890-DOI: 10.1007/s10067- 006-0420-1.
2. Bender T, Bálint G, Prohászka Z, Géher P, Tefner IK. (2013) Evidence-based hydro- and balneotherapy in Hungary--a systematic review and meta-analysis. Int J Biometeorol. 2014 Apr;58(3):311-23. DOI: 10.1007/s00484-013-0667-6. Epub May 16. PMID: 23677421; PMCID: PMC3955132.
3. Boros, J. (2017) Health in old age. In KSH: Silver Age: ageing and society. 35-50
4. Czikkely M., Ligetvári F. (2015) " How can we become the leading country in the region in water management and water use? Development opportunities, competitiveness by exploiting our environmental assets."
5. ENSZ (2012): World Population Prospects 2022
6. Fábián T. (2022) Handbook on health tourism. Springmed Kft.
7. Földházi, E. (2011) Projected world population projections - the UN's new population projection. Korfa, (2).
8. Imre, S. (2013) Ageing societies: active ageing-intergenerational solidarity. Acta Medicina et Sociologica–Vol, 4, 5.
9. Karagülle M, Kardeş S, Dişçi R, Karagülle MZ (2017). Spa therapy adjunct to pharmacotherapy is beneficial in rheumatoid arthritis: a crossover randomized controlled trial. Int J Biometeorol. 2018 Feb;62(2):195-205. doi: 10.1007/s00484-017-1441-y.

10.Lampek, K. (2023) Active ageing in a Hungarian context. https://pea. lib. pte. hu/handle/pea/44356.
11.Lohaus, D., & Habermann, W. (2021) Understanding the decision-making process between presenteeism and absenteeism. Frontiers in Psychology, 12, 716925.
12.Maeda T, Kudo Y, Horiuchi T, Makino N. (2018) Clinical and anti-aging effect of mud- bathing therapy for patients with fibromyalgia. Mol Cell Biochem. Jul;444(1-2):87-92. doi: 10.1007/s11010-017-3233-4. Epub 2017 Dec 6. PMID: 29214470.
13.Makai A. (2019) The relationship between physical activity and socio-demographic characteristics of the adult population in the light of quantitative studies and a health programme
14.Michalkó G. (2016). Turizmológia. Akadémiai Kiadó. https://doi.org/10.1556/9789630597173.
15.OECD (2021): State of Health in the EU
16.Péntek, M., Beretzky, Z., Brodszky, V., Szabó, J. A., Kovács, L., Kincses, Á., Gulácsi, L. (2020) Health-related work capacity of the Hungarian population. Cross-sectional representative survey. Orvosi Hetilap, 161(36), 1522-1533.
17.Qiao, G., Ding, L., Xiang, K., Prideaux, B., & Xu, J. (2022) Understanding the Value of Tourism to Seniors' Health and Positive Aging. International journal of environmental research and public health, 19(3), 1476. https://doi.org/10.3390/ijerph19031476
18.Raffael M, Trásy L (2023) Active ageing - the social significance of ageing based on statistics.
19. Ruhle, S. A., Breitsohl, H., Aboagye, E., Baba, V., Biron, C., Leal, C. C., et al. (2020) “To work, or not to work, that is the question” — Recent trends and avenues for research on presenteeism. Eur. J. Work Organ. Psychol. 29, 344–363. doi: 10.1080/1359432x.2019.1704734
20. Vitrai, J., Borenszki-Gutási, É. (2022) Review: A Selection from the World Health Organization's Health Promotion Glossary of Terms 2021 (Translation). EGÉSZSÉGFEJLESZTÉS, 63(2), 28-46.
21.21. WHO (2012):
https://www.antsz.hu/felso_menu/rolunk/sajto/archivum/egeszseg_vilagnap.html? uur
22.World Health Organization. (2002). Active ageing: a policy framework. World Health Organization. https://iris.who.int/handle/10665/67215
23.www1:https://countryeconomy.com/demography/global-agewatch- index/hungary?
24.www2:https://izuletibetegsegek.hu/a-mozgasszervi-betegsegek-hatasa-a-magyar-munkaerore/?