### https://doi.org/10.21272/hem.2022.2-07

JEL Classification: 110, 115, 118, 015

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# THE ROLE AND PLACE OF THE HEALTHCARE SYSTEM IN THE FORMATION OF THE NATIONAL BRAND

Abstract. In the view of the snowballing development of digitalization processes and post-industrial society, the service sector is the main element of sustainable economic development, where human capital plays a key role. In the study, the authors noted that the individual and his needs came to the fore. So, it's started to play a more significant role in the methodology of evaluation of national brand indices. However, during a deeper analysis, the question arises whether such techniques consider all aspects of the socio-economic life of the individual or focus on some of its elements. The research on this issue became particularly acute during the global SARS-CoV-2 pandemic, when most of the socially active population was forced to work distance and spent more time at home and when their lives depended heavily on the effectiveness of national health systems. This study tried to determine the correlations between the efficacy of national healthcare systems and indicators used in the national brand indices. The methodology of this study involved classical scientific research methods such as systems analysis, scientific abstraction, synthesis, and statistical analysis. Besides, VOSviewer software has been used to analyze a significant number of scientific publications, which include keywords like healthcare and the national brand. The data for bibliometric analysis were retrieved from the Scopus scientometric database. This bibliographic analysis presents the findings on the research directions in the analyzed scientific literature scope. The obtained results allowed us to determine the chronology and geography of publications. The systematization of theoretical results of research issues of assessing the impact of the national health care system on the international image perception of the country showed that this issue is almost undiscovered in domestic and international scientific studies. At the same time, this problem is increasingly important in the practical sphere. To confirm this hypothesis, the authors provide a practical case on the example of the analysis of the methodology of evaluation of national brands based on the Anholt Ipsos Nation Brands Index (NBI) and Best Countries (by US News & World Report). They were analyzed through the prism of assessing the national healthcare system by the Global Health Security Index.

Keywords: national brand, Best Countries, healthcare, GHS Index, the Nation Brands Index, pandemic, coronavirus.

Introduction. Globalization processes result in the expansion of international relations, contributing to economic development and population mobility growth. In this context, each country aims to slow down population immigration and attract new human resources from other regions. The goals mentioned above could be achieved by forming a positive perception of the country's image (the national brand). Generally, the effectiveness of the national brand is assessed based on economic indicators. However, some rating agencies also pay considerable attention to social factors like quality of life. In the context of the SARS-CoV-2 coronavirus pandemic, there is an urgent need to rethink approaches to assessing national brands. Most governments have imposed severe guarantine restrictions in response om the growing disease inside the country. However, the closing of borders caused a decrease in such industries as transport and

Cite as: Reshetniak, Ya., & Grifo, S. (2022). The Role and Place of the Healthcare System in the Formation of the National Brand. Health Economics and Management Review, 61-68. 2. http://doi.org/10.21272/hem.2022.2-07

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Received: 25 May 2022

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Published: 30 June 2022

tourism. Therefore, the main goal of this work is to investigate how pandemics create correlations between indicators of life quality in national brand indices and national health systems.

Literature Review. A significant number of foreign and domestic scholars address the issue of the national brand evaluation. It stands to mention that Simon Anholt's (1998; 2007) and Ollins (1990) studies are considered to be the founders in this field. Simon Anholt is one of the most well-known practitioners evaluating and forming local and national brands. His ratings of national brands, such as the Good Country (2021) and IPSOS (2021a), are among the most comprehensive since they are based on an assessment of the self-identity and socioeconomic status of the country.

However, most scholars consider national branding as economic and cultural perceptions. In this line, it stands to mention the national brand assessment method by WA (2015). Besides, the position of Bloom Consulting, which forms its own Country Brand Ranking based on economic and digital criteria (2021a, 2021b). Kaneva (2017) considered the national brand formation as a complex system aimed at self-identifying and democratizing society through the prism of stereotypes formed in the international society. Lyulyov et al. (2019) researched the evaluation methodology of national brands.

In the line of the interdisciplinary analysis between the national brand and health care categories, it is appropriate to mention the scientific work by Hall et al. (2020) investigating the impact of epidemiological threats on the tourism sector. The findings showed that the world community was not ready for the SARS-CoV-2 pandemic and that the tourism business was unprepared on a global scale. Ugur and Akbiyik (2020) analyzed more than 100000 comments on tourism forums and found that most travelers immediately canceled their travels at the time of the pandemic. As a result, the tourism and aviation business suffered the most significant losses in the first months. Hamidi et al. (2020) approached the problem of studying pandemic threats in terms of population density on the example of large cities. As a result, they concluded that close socioeconomic linkages between individuals in the town increase the risk of infectious diseases and the burden on the health care system.

Norouzi et al. (2020) analyzed the impact of the SARS-CoV-2 pandemic on oil and electricity consumption in China. The obtained results showed that the traditional sources of the epidemic are riskier, and the oil and refining business suffers the most significant losses. Based on the research results, the authors recommend strengthening renewable energy development and pursuing a policy aimed at the country's digitalization. Huang et al. (2020) analyzed the impact of COVID-19 on small businesses in the USA. They found a 20-30% staffing cut in food and entertainment.

Therefore, the literature analysis allowed identifying the tendency to study the pandemic impact on social and economic development. However, the coronavirus pandemic's impact on national brands' assessment has not been disclosed. Therefore, there is a need for a deeper analysis of the pandemic impact on national brands through the prism of life quality in terms of national health systems.

Methodology and research methods. Assessment of quality of life is a critical factor in understanding the country's socio-economic development. In the context of the spread of the pandemic, it is important to study the correlations between the effectiveness of the national health care system and methods of assessing the national brand. Thus, in this study, the authors, based on the classical empirical approach, analyzed the degree of disclosure of this problem in scientific publications. More than 1,000 articles published in the public domain in the Scopus database on the keywords «national brand» and «public health» were analyzed by the authors. VOSviewer software was used to process a large amount of bibliographic data efficiently.

**Results**. The application of the VOSviewer software to analyze the publications indexed in the Scopus database addressing the national branding and healthcare identified eight major clusters of critical concepts (Figure 1).

The first cluster is formed around the keyword «human». This cluster consists of 33 terms and interacts with all other clusters. Besides, the keywords related to health and the environment play a significant role

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in the cluster. The second cluster is formed around public health, pandemic, and COVID-19. This cluster includes 19 key terms and interacts with all others. In turn, the third cluster consists of 19 key terms. This cluster is built around the «health care policy» concept. In turn, the fourth cluster rests on the concepts of «health» and «national brand». This cluster consists of 13 keywords. The fifth cluster considers «public health service» and «health surway», the sixth cluster – «global health» and «epidemic», and the seventh cluster – «emergency care» and «global health». Finally, the eighth cluster is built around the «Word Health Organization» concept.

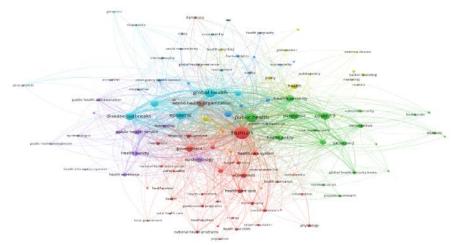


Figure 1. The visualization of the correlation between the terms «health security» and «national brand»

Sources: developed by the authors based on the Scopus data using VOSviewer software.

The geographical analysis of scientific publications published in the Scopus database showed that the most studies were published by the scientists from the United States (408 documents), the United Kingdom (195), China (86), Switzerland (77), and Australia (65) (Fig. 2).

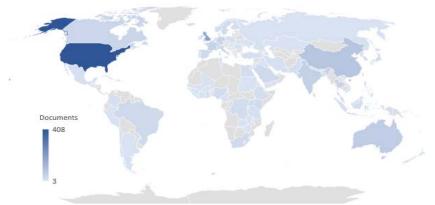


Figure 2. Visualization of publication activity by the countries Sources: developed by the authors based on the Scopus data.

Health Economics and Management Review, 2022, Issue 2 http://armgpublishing.sumdu.edu.ua/journals/hem Figure 3 demonstrates the findings of the chronological analysis of publication activity in the Scopus database. Thus, the obtained results indicate the insufficient research attention to study the state of healthcare and its impact on the national brand in the current SARS-CoV-2 pandemic.

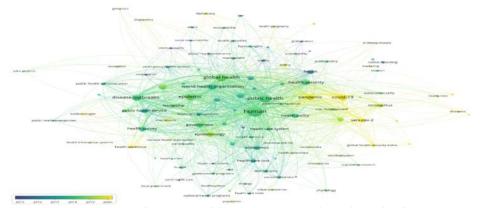


Figure 3. Visualization of publication activity in chronological order Sources: developed by the authors based on the Scopus data using VOSviewer software.

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Figure 4. NBI rating of countries (2021) Sources: developed by the authors basis of (IPSOS, 2021).

The Best Countries ranking was developed by BAV Group and the Wharton School of the University of Pennsylvania by order of US News & World Report (2021). This ranking covers the assessment of the

perception of 78 countries based on a survey of more than 17000 respondents. This rating is based on ten criteria: agility, entrepreneurship, quality of life, movers, social purpose, cultural influence, openness to business, power, adventure, and heritage (Fig. 5).

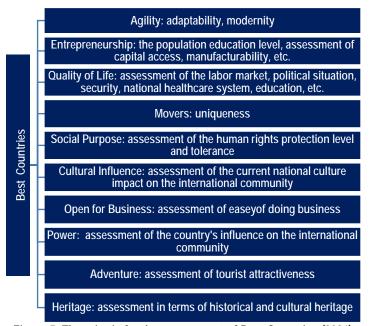


Figure 5. The criteria for the assessment of Best Countries (2021) Sources: developed by the authors on the basis of (US News, 2021).

According to the Best Countries rating, in 2021, the best country was Canada. It ranks first on two of the ten criteria, namely quality of life and social purpose. The top three countries include Japan and Germany. In turn, the USA ranks placed 6th place, the UK – 8th, France –11th; Italy – 16th; Poland – 43rd, and Ukraine – 71st (Table 1). On the other hand, according to the quality of life indicator, including an assessment of the national health care system, the best country is Germany (98.1 points), while the worst is Ukraine (4.2 points).

		Table	1. The co	ountry r	ankin	ig of Bes	st Countr	ies (202	1)		
Rank	Country	Agility Entrepre QualityMovers Social Cultural Open ForPowerAdventureHerita									eHeritage
	-	neurship Of Life PurposeInfluenceBusiness									
1	Canada	3	6	1	46	1	14	3	12	19	33
2	Japan	7	1	13	6	20	5	26	6	28	10
3	Germany	4	2	9	39	11	9	18	4	47	27
6	United States	1	3	20	24	19	3	45	1	31	16
8	United Kingdom	12	4	14	42	14	4	23	5	37	13
11	France	17	14	17	33	15	2	28	7	12	4
16	Italy	19	21	22	20	17	1	30	15	2	2
43	Poland	38	30	25	73	22	45	41	50	45	32
71	Ukraine	54	51	61	67	51	63	75	33	57	63

Sources: developed by the authors on the basis of (U.S. News, 2021).

Health Economics and Management Review, 2022, Issue 2 http://armgpublishing.sumdu.edu.ua/journals/hem The GHS Index is an international rating assessing the healthcare system in different countries. It is used to improve international cooperation against the spreading of infectious diseases and pandemic outbreaks. The analysis of health care systems under the GHS Index rests on six categories: prevention, detection, response, health, standards, and risks (Figure 6). The relevance of this rating was mainly due to the continuing SARS-CoV-2 pandemic. Therefore, the GHS Index was considered in the study.



Sources: developed by the authors on the basis of (GHS Index, 2021).

In 2021, the GHS Index ranked the health status of 195 countries, none of which received an overall score of 80-100. The best score was given to the United States - 75.9. The top 10 countries also include Australia, Oceania, Finland, Canada, Thailand, Slovenia, the United Kingdom, Germany, South Korea and Sweden. Somalia got the worst result - 16.0. The results of the studied countries are presented in Table 2.

Table 2. The country ranking on the GHS Index (2021)										
	Rank	Overall	Prevent	Detect	Respond	Health	Norms	Risk		
United States	1	75.9	79.4	80.1	65.7	75.2	81.9	73.3		
Canada	4	69.8	70.4	70.8	49.2	67.3	79.2	81.8		
United Kingdom	7	67.2	63.5	70.8	64.8	68.3	62.5	73.0		
Germany	8	65.5	49.1	72.4	56.3	56.0	75.0	83.9		
France	14	61.9	59.4	45.7	47.7	70.4	65.3	82.9		
Japan	18	60.5	43.1	71.1	59.5	51.6	66.7	70.9		
Poland	29	55.7	43.5	42.5	53.3	52.7	72.2	70.1		
Italy	41	51.9	47.2	49.7	43.2	40.2	65.3	65.9		
Ukraine	83	38.9	31.4	32.8	26.1	49.1	47.2	46.7		

Sources: developed by the authors based on the report of (GHS Index, 2021).

The above data concluded that economic development doesn't guarantee the quality of life. The example of the assessment of the national health care system showed that Poland (23rd rank in terms of GDP) is significantly ahead of Italy in the GHS Index (8th rank in terms of GDP) in 2021. However, the

analysis of national brand ratings demonstrates a clear correlation between economic indicators and the country's position, which indicates a slight influence of socially-oriented factors.

**Conclusions**. National brand assessment allows understanding the country's internal and external public sentiment. The country's brand indices comprehensively evaluate country perceptions, including living standards and access to social benefits. Thus, the above indicates the relevance of considering them in the context of the SARS-CoV-2 pandemic.

The findings of the bibliographic analysis revealed significant gaps in the study concerning the identification and formation of the relationship between the efficiency of national health systems and the formation of national brand assessment. The foreign and domestic scientific literature still attempts to study the impact of COVID-19 on specific industries.

In practice, the Anholt Ipsos Nation Brands Index and Best Countries index determines the quality of life and healthcare impact on the country's brand. For example, NBI experts, in their analytical note to the rating, explained the significant decline in global perception of the US national brand because of the pandemic. However, they focus more on the economic implications of COVID-19 than on the social sphere, including healthcare. Based on the above, the authors suggest a further in-depth study of the impact of healthcare on the country's image perceptions.

**Funding:** This research was funded by the Ministry of Education and Science of Ukraine, grant number 0122U000778.

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Роль та місце системи охорони здоров'я у формуванні національного бренду

В умовах діджиталізації та постіндустріального суспільства, де основним елементом забезпечення сталого економічного розвитку країн є сфера послуг, людський капітал знову займає ключову роль. Індивід і його потреби виходять на першочергове місце. Цьому фактору приділяється значна роль і при формуванні індексів національних брендів країн. Проте, в ході більш глибокого аналізу постає питання чи враховують такі методики всі аспекти соціально-економічного життя індивіда чи акцентують увагу на якихось окремих його сторонах. Особливо гостро дослідження цього питання постало в контексті світової пандемії викликаної коронавірусом SARS-CoV-2, коли більшість соціально активного населення країн була вимушена працювати дистанційно, проводячи більшість свого часу вдома, та повністю залежати від ефективності роботи національних систем охорони здоров'я. Тож, автори в даній статті проводять спробу визначення кореляційних взаємозв'язків між ефективністю роботи національних систем охорони здоров'я та індикаторами, що використовуються при формуванні індексів національного бренду. У своїй роботі вони керуються класичними методами наукових досліджень таким, як системний аналіз, наукова абстракція, синтез, статистичний аналіз. Для ефективного аналізу значної кількості наукових публікацій за тематикою «охорона здоров'я» та «національний бренд» розміщених в науковометричній базі даних Scopus авторами використовувалось програмне забезпечення VOSviewer. Під час проведення аналізу бібліографічних даних значна роль приділялась формуванню та аналізу кластерів ключових понять, а також визначенню хронології та географії їх застосування. Як один з результатів дослідження, автори приходять до висновку, що проблематика оцінки впливу стану національної системи охорони здоров'я на міжнародне іміджеве сприйняття країни є майже нерозкритою, як у вітчизняних, так і у міжнародних наукових працях. В той же час вони зазначають, що в практичній сфері до цієї проблеми привертається все більше уваги. Для підтвердження даної гіпотези, автори наводять практичний кейс на прикладі аналізу методології оцінки національних брендів на основі яких формується The Anholt Ipsos Nation Brands Index (NBI) та Best Countries (від US News & World Report) та проводять аналіз їх через призму оцінки стану національної системи охорони здоров'я за The Global Health Security Index

Ключові слова: національний бренд, Best Countries, охорона здоров'я, GHS Index, The Nation Brands Index, пандемія, коронавірус.