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MEDICAL TOURISM AND HEALTH WORKER MIGRATION IN DEVELOPING COUNTRIES

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Abstract: Medical tourism is a growing economic sector with a \$272.70 billion market. In the last ten years, especially after the Pandemic, the health tourism market has increased for Estland with tourists from developed countries. Germans, French people, citizens from the US, and the UK are interested in medical services after the border with low-cost medical care, high technologies, and specialized health workers. This study analyzes factors pushing health migrants to travel abroad: working conditions, salary revenue, poor life conditions, lower education system, and desire to have opportunities to gain better experience, and specialization. This study shows the migration source countries, international agreements, and mutual arrangements that manage this phenomenon.

The research methodology is a literature review. The study's goal is to analyze the situation of migration health workers from Romania and the Republic of Moldova and to respond to questions: how this phenomenon affects the public healthcare sector, what is their desire, and is this a national or international problem? The globalization era is an opportunity for health workers to choose quickly actual job requirements, obtain a higher work position, and receive professional reviews and skills evaluation. Artificial intelligence, Virtual reality, and the Metaverse are the instruments proposed to resolve this phenomenon by the government. The migration of healthcare workers is not just an economic strategy for authorities. World Health Organization proposes a reform for Romania and the Republic of Moldova according to educational and social instruments. Today this phenomenon is influenced by refugees from Ukraine.

Keywords: medical tourism, migration healthcare, health worker migration

JEL Classification: JEL Codes I11, I12, I18, L83

Introduction

The rise in medical tourism will likely stimulate the expansion and updating of healthcare facilities in developing countries. The market expansion in emerging countries is anticipated to be significantly fueled by the high healthcare costs in wealthy nations. Medical travelers can get specialized care, such as complex surgeries, special therapies for persistent illnesses, and other focused procedures. Increasing concerns regarding the cost of medical services, an aging population, a surge in diseases linked to a sedentary lifestyle, as well as elements like rising medical tourism and public education about health issues can significantly lessen illness loads.

People receive prompt and effective care. Cross-border medical tourism is being encouraged by more and more poor nations as a means of improving their economies. In Southeast and South Asia, countries such as India, Thailand, Malaysia, and luxurious Singapore are preferred for medical procedures and well-being treatments. Thailand is one of the preferred destinations for

medical examinations, cosmetic procedures, and dental treatments, with a growing emphasis on health and well-being due to the combination of high-quality care and cost-effective service costs. While other regional engines like Singapore and South Korea attract many of the same visitors with high-quality medical services, medical travelers also value Thailand's inexpensive hotels, culture, and shopping, and are dedicated to servicing the tourism industry for their particular attraction. As competition grows, it will be crucial to continue the Tourism Association of Thailand's campaigns and start visa extension programs to draw more tourists from worldwide.

For decades, there was a discussion over the migration of medical professionals from East Europe to Central or West Europe. Regardless of all of the competing considerations, the migration of health workers has a negative influence on the healthcare national system in the former, the phenomenon named "brain drain". The movement of health professionals "Brain Drain" describes the movement of doctors and other healthcare workers in search of better pay, a better standard of life, access to cutting-edge technology, and more comfortable governance structures in various parts of the world. Internal brain drain is one type of brain drain, but most typically, the term relates to abroad or global migration, frequently from insufficiently developed to high economic, social, and politically developed nations. Any country's strength largely depends on how much it produces, and this situation speaks about the well-being of the population. Healthcare workers are choosing developer countries for a new experience and to transfer their knowledge to a national country. departing their home nations has an impact on their home countries' short- and long-term viability.

The "Year of the Nurse and Midwife" has been proclaimed by the World Health Organization (WHO) for 2020 (Peters, A., Palomo, R., Pittet, D., 2020), for their implication during the COVID-19 period. The quality of relationships between health workers and patients, and patient care is strongly influenced by the travel of health workers (HCWs), which causes a deficit of workers between nurses, doctors, and midwives globally. Because it draws attention to a staffing crisis in the healthcare system, this phenomenon needs to be treated internationally.

The connection between the level of care provided and the number of individuals on a caregiver's caseload has been examined in numerous research. According to data from a study in the United States, a higher workload for nurses is related to lower patient satisfaction, worse outcomes, and a rise in nosocomial infections. A 2016 WHO research announced a global deficit of HCWs, it has outlined steps to support a rise in health professional training. If successfully implemented, this method should gradually reduce the total amount of missing midwives and nurses. Considering the WHO's projections for 2030, it, makes the issue much more fatal. The most wanted travel locations for doctors are the USA, Germany, and UK, France, Sweden, and Switzerland. (Adovor, E., Czaika, M., Docquier, F., Moullan, Y., n.d.)

Immigration laws designed to draw in highly qualified individuals affect the progress of the medical brain drain. In the long run, a destination country's collaborative stock of doctor migrants rises by 65%, 124%, or 132% when it offers immigrants a path to permanent residency, sets up a points-based system, or all three. The long-run stock is also increased by 54% and 28%, respectively, provided dyadic visa restrictions are lifted and foreign diplomas are accepted. The most effective approaches for luring doctors seem to be the introduction of a points-based system and the simplicity of gaining a permanent residence in the destination country. (Adovor, E., Czaika, M., Docquier, F., Moullan, Y., n.d.)

Determinants factors of health worker migration

For better pay, secure employment, better living conditions, and a better life, healthcare professionals in poor nations must leave their home nations because of the low wages and intolerable living and working conditions there. Because of this, skilled workers have been departing the areas where they are most needed for numerous years, making already weak health systems even more susceptible. (Chimenea, A., Qi, B., 2015)

Many of those in the medical field who continue to work in the public health system are under more stress, have heavier workloads, and lack motivation due to their low pay, insufficient equipment and guidance, and the absence of many candidates for progress in their professional lives. A recent increase in the labor market is the globalization and migration of medical professionals, which is influenced by factors including education levels, working circumstances, and pay rates between nations. To control the health worker migration, in 2010, it was adopted the WHO Global Code of Practice on the International Recruitment of Health Personnel by the World Health Assembly. The Code shows the detrimental effects of health workers moving abroad and encourages workforce sustainability. The reporting on the application of the Code enables a better understanding of trends in the mobility of health workers and identifies serious issues that call for response. (WHO, 2023)

Conditions associated with the migration process could leave migrants more vulnerable to adverse health consequences. This is especially true for individuals who move in looking for low-skilled work or who are displaced due to emergencies or armed conflict. The impacts on migrants' health can be affected by a variety of factors and are subject to change always something to increase their life conditions. The health of migration is impacted by policies about the economy and society(Figure 1), fairness and human rights concerns, development ambitions, and societal norms.

Immigration of healthcare workers is an invariable effect of globalization. The database for international medical personnel is incomplete. Numerous variables affect migration, some of which may be regularly addressed, which could aid policymakers in developing strategies for attracting and maintaining medical personnel within the countries of their country of origin. The main driver determining the decision to migrate is financial motive. Competitive pay cannot be introduced. In addition to non-financial incentives, realistic prospects include more educational programs and support training, possibilities for schooling, etc. (Stilwell, B., Diallo, K., Vujicic, M., Adams, O., Dal, M., 2004)

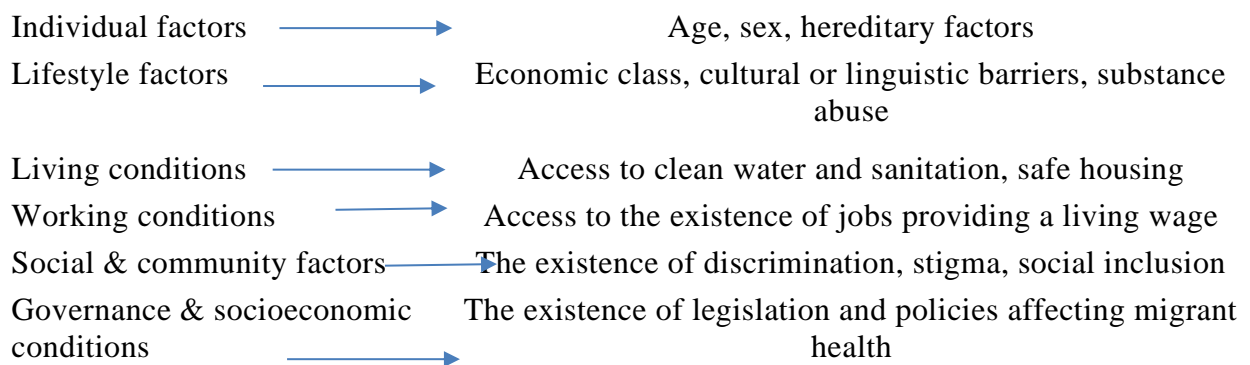


Figure 1. Migration and the social determinants of health.

Source: CDSH Report 2008:43. Available at <https://www.migrationdataportal.org/zh-hans/themes/migration-und-gesundhei>

Reglementation of health worker migration

A complicated and expanding topic is the international migration and mobility of health professionals. Fundamental labor market pressures linked to many factors, such as education, job conditions, and compensation between countries, are what are driving the movement. The COVID-19 epidemic has expedited the movement of healthcare professionals, WHO offers support for control and following the migration of international health workers in better conditions. The most important document in this context is the WHO Global Code of Practice on the Global Recruiting of Health Personnel. This Code determines those 64 nations to insert its applicability into their domestic legislation about foreign policy, or improve bilateral agreements within interested countries. At the 73rd World Health Assembly, a Member State-led assessment of the WHO Global Code's Relevance and Performance was discussed. (WHO, 2023)

The evaluation emphasizes the requirement for Code implementation through targeted support and safeguards to make sure that Member States' work on Universal Health Coverage and Health Emergencies serves to encourage rather than jeopardize similar achievements in other countries. WHO, ILO, and OECD have implemented the International Platform on Health Worker Mobility to improve discussion, understanding, and collaboration.

Several obstacles, such as trouble accessing healthcare services and maintaining continuity of care for significant medical disorders, are faced by migrant healthcare workers. Compared to their non-migrant colleagues, they are also more susceptible to workplace accidents, injuries, and health issues. One of the biggest issues facing migrant and refugee health workers is tuberculosis and mental health concerns. Poor access to treatment and necessary medications for migrants and refugees is caused by a lack of agreed priorities amongst partners and stakeholders. Public health has multiple unsolved problems as a result of a huge increase in both willing and forced migration. Therefore, addressing health issues impacting migrants and refugees requires an international activation of partners, trade unions, and stakeholders. The M8 Alliance members (this institution works on a wide range of problems, especially the health of migrants and refugees) established an annual International Event based on Migrants' and Refugees' Health, to address these problems for all implicated states, emigrations, and immigrations. (Bempong, .E., Stealth, D., Seybold, J., 2019)

IOM interacts with governmental, intergovernmental, and non-governmental partners to resolve migration problems and to create a better manner for this phenomenon and is the top intergovernmental institution in the field of migration. (IOM, 2023)

IOM thinks that properly managed health worker migration can be crucial for overall development and for enhancing health systems in both importing and exporting nations. This demands collaboration between numerous sectors, including the health, working programs, and working conditions, and economic-financial departments of national governments; stakeholders in international recruitment; health professional associations; and research professionals. (IOM, 2023)

Overview of destinations for immigration

Many are leaving nations where their expertise is desperately required by the health systems due to large pay incentives and visa fast-tracks. Canada is one of many wealthy countries that have a growing interest in recruiting medical professionals from nations with limited resources to restore a healthcare workforce after a pandemic period. In a pandemic, hiring from underdeveloped countries with deficient health systems has raised new ethical considerations as a result of the necessity of high-income nations; countries as Germany and Finland, who had not earlier recruited medical workers from overseas. According to Sinead Carbery, head of the international recruiting business O'Grady Peyton International, some 1,000 health workers are coming to the United States from countries in Africa, the Philippines, and the Caribbean each month. Despite the United States typically importing nurses from abroad, based on the number of nurses, the demand from American hospitals is at the highest point in thirty years. An estimated 10,000 nurses from other countries with employment offers in the United States are on waiting lists for visa requirements at American authorities abroad. Patient care has suffered due to a higher need for a health workforce in both developed and developing nations. European countries and North America simplified procedures for accepting foreign credentials and developed dedicated immigration fast tracks for medical workers.

To fill staff gaps, in 2020, the UK created a "health and care visa" program, that promotes and targets foreign doctors and nurses. Benefits of the program include expedited processing and lower visa spending. The language standards for residency are being decreased in Canada, and the process of approving foreign-trained nurses' certifications has been sped up. Japan grants temporary aged-care employees a route to residency. Foreign-trained healthcare workers are now accepted for assistant physician roles in Germany. Each member of the World Health Organization, agreed to the Global Code of Practice on the International Recruitment of Health Personnel, in part in response to the migration of health workers from AIDS-stricken nations of sub-Saharan Africa. African universities and social authorities expressed their dissatisfaction with the doctors and nurses who graduated in this country, who were receiving government support for their higher learning but were being attracted away to the USA and Britain earlier than they had finished their revenue training that their homelands could never hope to equal. The code accepts that people have the right to leave their homes, but it encourages richer nations to fill vacancies accorded the existing agreements and helped by the Ministry of Health in the origin country. The major problem of health workers' migrations is the pressure placed on the public health care system in emigration countries. (Afzal, S., Masroor, I., Shafqat, G., 2012)

The "learn and return" program, in which healthcare workers come home after gaining new abilities, is also meant to be accessible to destination different countries. On paper, Zambia has more nurses than it needs. Before the pandemic, there was a growth in the migration of physicians, frequently from low-income to high-income states; according to Dr. Giorgio Cometto, a W.H.O. expert on health workforce issues, this movement had increased by 60% in the ten years before 2016. (Nolen, 2022)

The "red list" of nations on which the United Kingdom won't hire for its National Health Service includes those with shaky health systems. However, some healthcare professionals get past this by first entering Britain before being hired by, for instance, a company that places staff in private nursing homes. Upon arriving in Britain, they are choosing NHS jobs to be paid better.

Romania and Republic of Moldova: emigrants health worker countries

The emigration of doctors and nurses from the Republic of Moldova is an increasing problem for authorities and WHO. Today this phenomenon is part of the Ministry of Health System Strategy, to ensure sustainability for national hospitals and to improve staff retention, especially in rural environments. (WHO, 2019) This strategy is monitored every year by the WHO and according to the Education Department of the Nicolae Testimiteanu State University for Medicine and Pharmacy, it is offering professional programs of education and specialization for doctors and pharmacists. They have implemented workshops with international partners' support to improve international technology and techniques in national medical system and educational programs. (WHO, 2019; WHO, 2014) A major strengthening of the state is a low budget accorded to staff migration. As a non-EU state, the Republic of Moldova is an emigrant country of health workers into Italy, Germany, and Spain as citizens of Romania, according to legal work forms in EU countries. The major determinant factor for migration is financial gains, a few of them consider that it is an opportunity to work with new technology and with specialized partners as an educational investment. (Europe, 2014) Younger migrants saw migration as an opportunity for a high rank of life conditions for themselves and their families, sometimes it meant unique revenue for their existence. Before migration, Moldovans were interested in learning a language, recognizing diplomas, and additional services accorded to migrant health workers as special courses for integration. Compared to other health professionals, doctors have more successful careers, but they also meet numerous obstacles to laborious, costly, and administrative diploma recognition procedures.

Physicians and nurses make up almost all of Romania's health professional deficit. (Rohova, 2011) The irregular geographic distribution of the medical staff in Romania is one of the major issues for human resources management. The territorial distribution of doctors is highly unequal. More health workers are interested in big cities such as Cluj Napoca, Bucharest, Iasi, and Brasov with many opportunities for a better life, continuous education, and a better specialization to obtain increased financial gains.

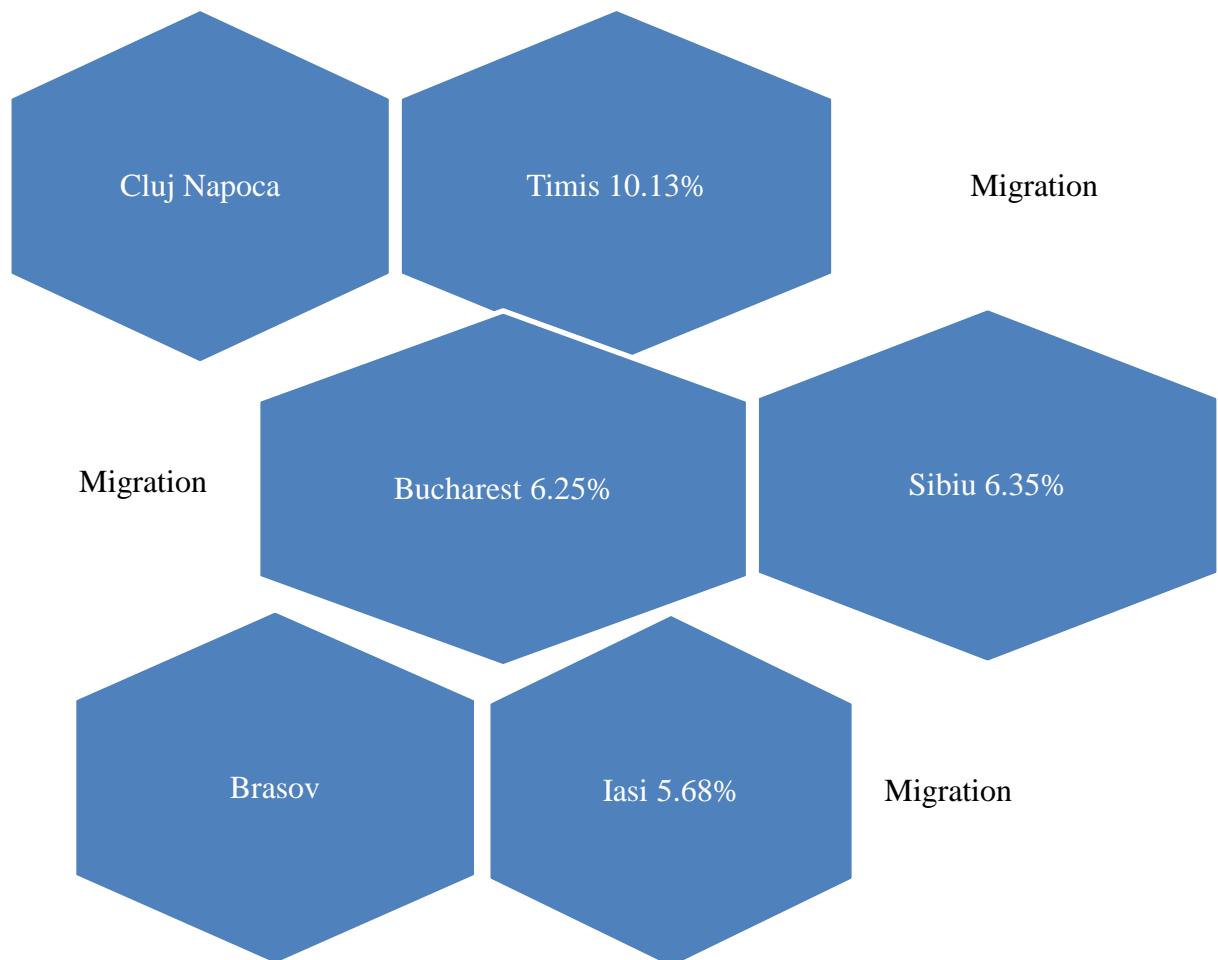


Figure 2. Migration phenomenon of Physicians in 2018

Source: Physicians' migration from Romania. Recent evidence from administrative data

Ordering Certificated Physicians, most of them are in Timis (10.13%), for the same score in cities such as Sibiu (6.35%) Bucharest (6.25%), and Iasi (5.68%) (Apostu, S.A., Roman, M., Vasile, V., 2020). According to a statistical database of NIS (2009), 404,396 people are estimated to have quit Romania between 1990 and 2008, reducing this movement by roughly 10,000 people annually. An estimated 104,835 people moved between 1991 and 2008. (Rohova, 2011) The preferred countries for Romanians are France, Germany, the United Kingdom, Belgium, Italy, and Switzerland (Figure 4). (Rohova, 2016) In terms of potential physician migration, health studies students in 2018 demonstrated a 40% overall inclination to move (Boncea & Voicu, 2019). Only 25% of the students considering migrating as a possibility had defined objectives, though. The survey also reveals that students who are in their later years of education have less of an intention to move. However, Saghin et al. (2017) present a contrasting finding, showing that 85% of undergraduate medical school students plan to emigrate. (Deliu, A., Farcasanu, D., Mihail, L., Mustata, M., Visinescu, I., Voicu, B., 2022)

According to Statista, 2017 year registrates the higher indicators of Romanian emigrants, 242.2 thousand people (Figure 3). During the last three years, this number has decreased, and one of the factors of decreasing is the increase in salary from 2016 to 2018, and after. (Apostu, S.A., Roman, M., Vasile, V., 2020)

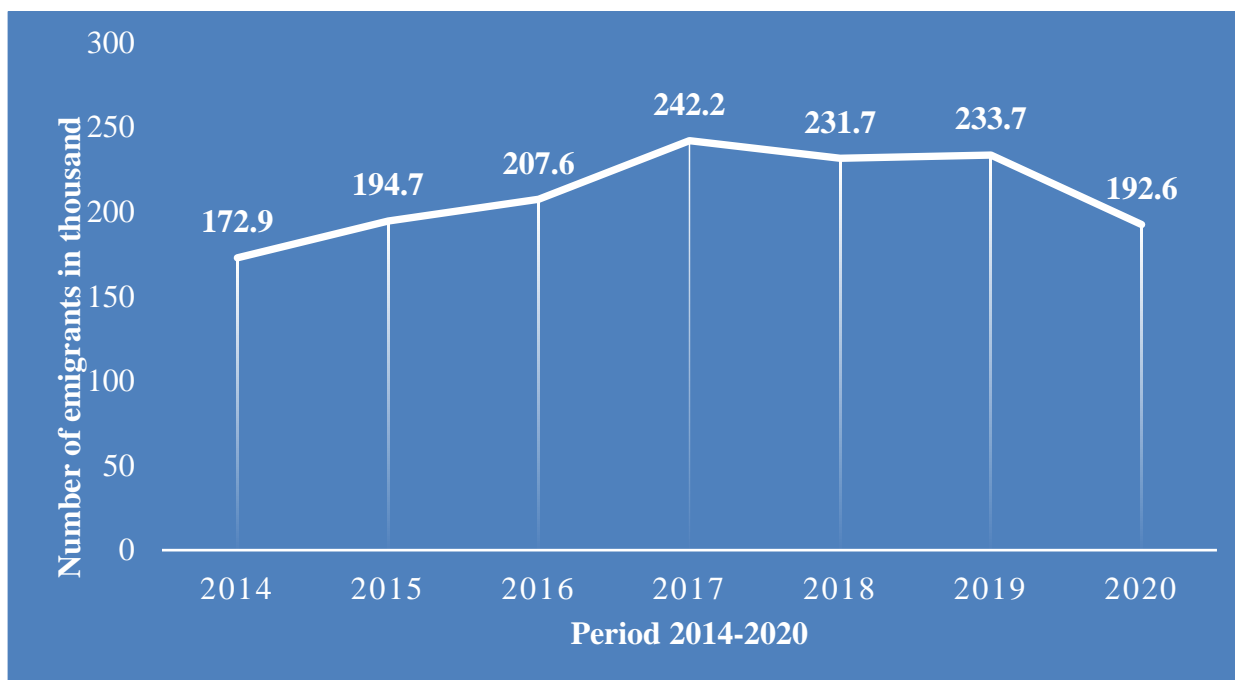


Figure 3. Romanian emigrants during 2014-2020

Source: National Institute of Statistics Romania; 2014-2020. Statista

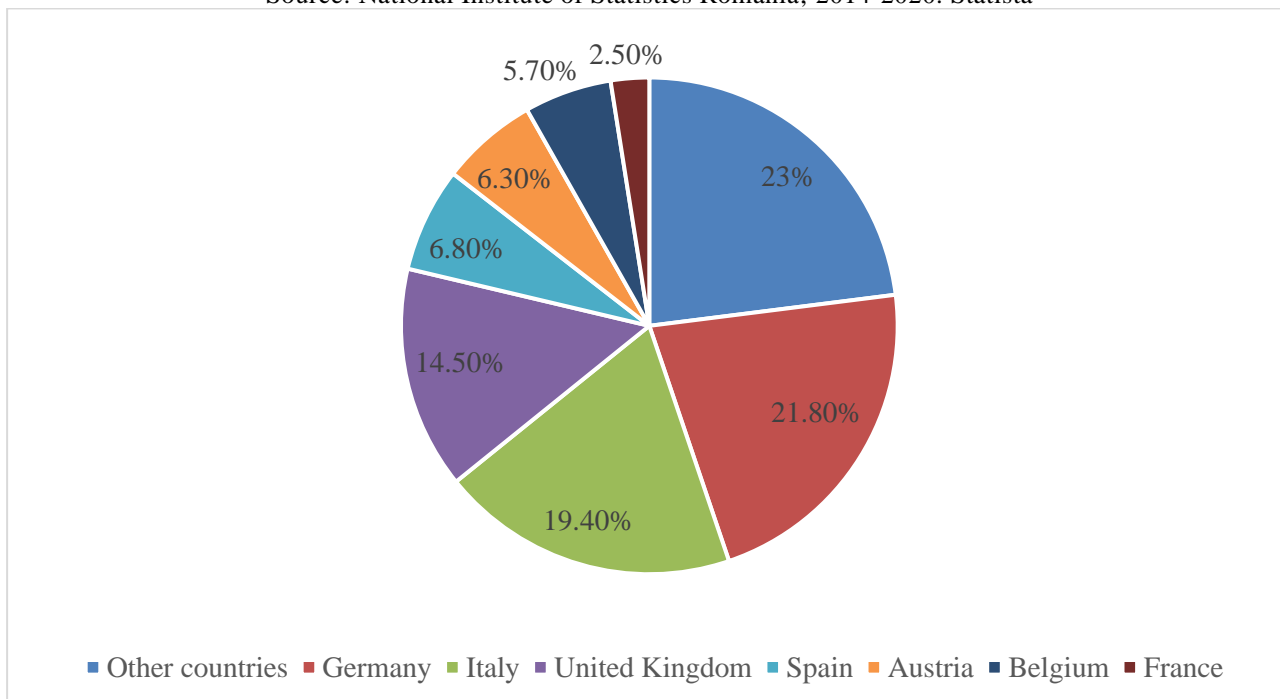


Figure 4. The preferred EU countries by Romanian emigrants

Source: National Institute of Statistics Romania; 2014-2020. Statista

The most determined factors for health worker migration are living and working conditions. This phenomenon was changed after salary augmentation during 2016-2018, in the public health sector, an increase between 70%-172%, the principal beneficiaries were resident doctors. (Botezat, A., Moraru, A., 2020) Before Romania entered the EU in the year 2007, the United States and Canada were the destinations that Romanian doctors most often immigrated to. Unsurprisingly, since 2007, Romanian doctors have continued to transform countries such as France, Germany, the UK, and Belgium into travel destinations. Spain and Italy have also attracted Romanian physicians, albeit to a lesser extent than others, especially between 2006 and 2014, but developments in migration to these countries have fluctuated recently. Starting 2010, we are also seeing a consistent increase number of Romanian doctors migrating to Sweden. (Hervey, 2017)

Health worker's migration trends

Growing of doctoral and nurses offer

While the number of nurses with foreign training reached 20% in the period 2011-2016, over 550 000 health workers, the number of doctors with foreign training grew by 50% between 2006 and 2016 (to reach nearly 500 000 in 2016). Some European nations, including Ireland, France, Switzerland, Norway, and Sweden, have increased the number of doctors with foreign training in the last ten years, in top preferred choices are the US, Germany, and the UK. It's necessary not to forget that some foreign-trained doctors, such as from Norway or Sweden, not less from the United States, are foreigners. This phenomenon is not a "brain drain" under such circumstances, notably given that those affected typically cover every aspect of their higher learning while studying overseas. The states with a rapidly increasing number of doctors and nurses are Mexico, Korea, Germany, Australia, Sweden. and the United Kingdom. For the opposite part some examples are Belgium, France, Poland, and the Slovak Republic, with a slow growth number of health workers, but the number the medical students in these countries is increasing. (OECD, 2019) In several OECD countries, the number of specialized doctors and the number of nurses was growing, in the last ten years, mainly caused by immigration. It is crucial to remember that a lot of these immigrant physicians and nurses could have completed their undergraduate or graduate degrees in their destination country rather than their origin country (because they chose to live belong their family and move when they were young or because they chose to do so). Less than 2% of doctors in the Slovak Republic are immigrants, but in Australia and Luxembourg, it is over 50%. In some countries, the proportion of migrant nurses is negligible such as the Czech Republic and Slovak Republic. In Switzerland, Australia, and Israel it is over 30%. With a few exceptions, more immigrants are doctors than nurses, especially in Luxembourg, Sweden, Switzerland, and Australia. Southern, Central, and Eastern Europe counted less number of health immigrant workers. (OECD, 2019) The OECD Conclusion Reports show that the most preferred destination for health worker immigrants is the USA, followed by the UK, and Germany.

Internationalisation of medical education

A new phenomenon mentioned in literature is the internationalization of health education, described by the migration of students for this type of education from developed countries to developing countries, pushed by financial factors: living cost, the educational cost for degrees, and the educational cost for specialization programs. Since 2007, Romanian medical schools have grown more alluring to overseas medical students since they supply degrees that are recognized

throughout the EU for comparatively affordable tuition and living expenses. Most medical educational institutions presently provide courses in either English or French, making up about 30% of their overall teaching capacity. In Romania, medical education has become more globalized with the lack of a specific national agenda. However, medical schools developed their methods for drawing in foreign students to grow revenue, keep highly qualified academic staff, and develop their infrastructure. (Ungureanu, M., Socha-Dietrich, K., 2019) Romanian students implement a six-year plan of study, with programs offered in Romanian, English, French, and Hungarian. (Muresan, S., Georgescu, A, Azamfirei, M, Marginean, C, David, CM Taylor, 2019) The first option for students is the Bucharest University of Medicine and Pharmacy with 300 programs in English and French in 2018, and the second and third options are Cluj-Napoca and Iasi. One of the options is the private medical university from Arad with half of the students international. In Targu Mures, 35% of educational programs are in English. Brasov, Sibiu, and Galati don't offer English programs for international medical students. The top five countries, in 2018-2019, those students chose Romania for a health degree, are the University of Medicine and Pharmacy in Targu Mures from Germany (202), Italy (75), Sweden (44), Finland (25), Israel (16), at the University of Medicine and Pharmacy Craiova from Israel (131), Greece (43), Italy (28), UK (20), Syrian Arab Republic (17). (Socha, K., Lafortune, G., 2019)

Burnout syndrome

Migration of health workers from Romania is an opportunity to reduce the new phenomenon of “burnout syndrome” (“occupational phenomenon”, WHO 11th revision of its International Classification of Diseases) (Jelinek, 2022). It is a physical symptom that causes a reaction to intense daily stress. In one recent national research (February 2023-March 2023, 8121 respondents/ doctors) made by the Romanian Doctoral College (CMR), more than 30% of respondents consider the migration phenomenon as an opportunity to reduce burnout syndrome and encourage physical and human condition, well-being opportunity to avoid a mal praxis situation about doctors and patients (70% of respondents consider that medical services are premise for malpraxis). (Romania, 2023)

Digital technologies versus migration phenomenon

For the greatest enjoyment of patients and physicians alike, virtual reality began its amazing takeover of the healthcare industry. Virtual reality in medicine offers some fascinating potential. It captured the imaginations of clinical researchers and actual doctors in addition to science fiction readers. Even though virtual reality is still in its infancy, there are more and more strong instances of how VR is improving both the lives of patients and the work of doctors. More than simply casually seeing a surgical procedure from the surgeon's viewpoint is now possible using VR. With the use of technology, doctors may now practice procedures and train future surgeons. Surgeons training workshop with the medical device vendor to receive training on a new device. Typically, there don't exist ways for doctors to continue improving their skills after this initial training. The gap between a surgeon's training and when they conduct a procedure on a patient may be a couple of months, forcing them to review their medical skills "on the fly" in an operating room. Comparing VR training on the Osso VR platform to conventional training methods, participants' total surgical performance increased by 230%. (Blumstein, 2019)

This type of technology can be included in the National Strategy Program to increase high-potential work conditions and work resources for doctors and avoid migration.

Metaverse - a digital environment that coexists with the real world. It is anticipated to be the next stage in internet development and offers a wide range of potential uses for both consumers and enterprises. For doctors and healthcare providers, the metaverse could offer new possibilities for patient involvement, care delivery, and research. On the other hand is an opportunity for potential immigrants to know their health conditions, to live in the digital world as in physical condition, and to expect the possibilities for a new future. Hospitals require assistance in standing out from one another. They have to first explain to patients why they should pick them over the numerous alternate options. Patients will have access to all the information they require before choosing a hospital in a world where information about medical care is stored in a blockchain system that is accessible to everyone with an internet connection. Additionally, it allows medical professionals like nurses to get knowledge from others around the nation. (Capati, 2022)

Digital platforms developed by Statistical Institutions and WHO create a beneficial environment for immigrants to know their possibilities, the rights, and to respect legal conditions in an emigration country. On the other hand, through migrant and diaspora people skills, and technologies are transferred from one to another country and it is crucial to transfer know-how in freeways and unlimited ways. This could be done by directly sharing skills, returning money home, generating investments in their home countries, and supporting institutions for industry research and development.

SDG 8 emphasizes the need for technical advancement for economic progress. The so-called "brain drain" of highly educated employees from low- and middle-income nations is the factor that contributes to the global concentration of R&D and technological skills in high-income countries, which is the subject of Goal 9. The unequal allocation of innovation between the global "North" and "South" is targeted by Goal 17, which focuses on global cooperation. (Gelb, S., Krishnan, A., 2018) It focuses on the necessity of counteracting the "brain drain" with "brain gain"—which means that returned emigrants are highly educated with professional skills—and "brain circulation"—the movement of knowledge, technologies, practices, and experiences to home governments by immigrants and diaspora people, in part through temporary returns. (Theoharides, C., Abarcar, P., 2021)

Conclusions

The exodus of healthcare professionals from East European countries to developed countries is a global and significant problem. Romania lost more than 50% of health workers for EU countries who are interested in better working and living conditions for them as specialists and for their families as future education. Emigration is an opportunity for students from medical institutions, and the social programs proposed for them in immigrating countries, are the best choice for another life not just for Romanian students. National authorities are looking to increase this problem by applying regional and local reforms to retain health workers for the public health sector. Systematic efforts and national interest in the reform of the public health sector should activate a strong National Strategy for those countries where this problem affects the life of the nation and protect the patients who need to be served in their country. New investments in digital technologies can reduce the migration phenomenon according to the sustainable policy of WHO and increase the educational score of developed countries. The new globalization era can provide factors and opportunities to reduce stress conditions for health workers and increase the happiest relation between health workers and local or across patients.

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