BRAIN DRAIN OF HEALTH CARE PROFESSIONALS – CAN WE MANAGE THE PROCESS?

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ABSTRACT
The phenomenon of labor migration has grown a lot lately, due to globalization, economic differences between countries and transfer of information. At European level, Romania is one of the most affected countries by the brain drain phenomenon. Other countries, such as Portugal, are facing a "mixed" phenomenon, with Portuguese people leaving the country and foreign people coming to Portugal. Our goal was to understand the causes and how they can be managed its economic and social effects.

KEYWORDS: *brain drain, education, health care, labor migration, workforce mobility*

JEL CLASSIFICATION: *E24, F16, F66, F25, J61.*

1. INTRODUCTION

Different opportunities in different countries and especially a different economic level between them led to an increase in the labor migration phenomenon, with high social and economic impact. Brain drain assumes even more, as people migrating do possess technical skills and knowledge. By writing this paper, we would like to stress the importance of enhancing international cooperation and personnel management, in order to deal with the global crisis of staff shortage in the health sector.

2. BRAIN DRAIN PHENOMENON – CAUSES AND EFFECTS

According to Free Merriam-Webster Dictionary, brain drain phenomenon or simply brain drain is an expression used to describe the situation in which “many educated or professional people leave a particular place or profession and move to another one that gives them better pay or living conditions”. If we analyze the phenomenon of brain drain geographically, we can observe two main flows:

- Flow from east to west, from Asia to the Middle East, from Asia to Europe and North America and North-Eastern Africa, from Europe to North America.
- Flow from south to north, from Africa to Europe and North America, from South America to North America.

These geographical trends are due to different level of economic development, west and north having more developed economies. People with higher education in developed countries in Europe (i.e. UK, Germany, Switzerland, and France) have emigrated to Canada, Australia and the USA, due

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to difficulties in job training and for higher income prospects. For example, in Germany, in 2005 about 150,000 people have left the country due to economic problems.
Highly qualified people from countries in Eastern Europe emigrate in huge numbers to UK, France, Germany, Canada, USA, Spain, and Italy. An example is Poland, a country from which about 1 million young highly-educated people migrated to Western European countries after their accession to the European Union.
In Table 1 we can see the proportion of immigrants expressed in percentage ratio of immigrants to the population. As expected, it may be noted that developing countries have the lowest number of immigrants, while the developed one have the largest ones. The country with the highest percentage of immigrants is Switzerland – in 2010 this country had 22% immigrants out of the total population. From the analyzed countries, the ones with the fewest immigrants are Mexico and Poland.

Table 1. Immigrants in OECD countries

OECD Country	Indicator	2008	2009	2010
Austria	Hundreds of thousands people	870.7	895.1	927.6
	% of total population	10.4	10.7	11.1
Belgium	Hundreds of thousands people	1 013.3	1 057.7	1 119.3
	% of total population	9.5	9.8	10.2
Czech Republic	Hundreds of thousands people	437.6	432.5	424.3
	% of total population	4.2	4.1	4.0
Denmark	Hundreds of thousands people	320.2	329.9	346.0
	% of total population	5.8	6.0	6.2
Estonia	Hundreds of thousands people	223.6	219.2	..
	% of total population	16.7	16.4	..
Finland	Hundreds of thousands people	143.3	155.7	168.0
	% of total population	2.7	2.9	3.1
France	Hundreds of thousands people	3 731.2	..	3 769.0
	% of total population	6.0	..	6.0
Germany	Hundreds of thousands people	6 727.6	6 694.8	6 753.6
	% of total population	8.2	8.2	8.3
Greece	Hundreds of thousands people	733.6	839.7	810.0
	% of total population	6.5	7.4	7.1
Hungary	Hundreds of thousands people	184.4	197.8	209.2
	% of total population	1.8	2.0	2.1
Island	Hundreds of thousands people	24.4	21.7	21.1
	% of total population	7.6	6.8	6.6
Italy	Hundreds of thousands people	3 891.3	4 235.1	4 570.3
	% of total population	6.6	7.1	7.6
Japan	Hundreds of thousands people	2 215.9	2 184.7	2 132.9
	% of total population	1.7	1.7	1.7
Luxembourg	Hundreds of thousands people	215.5	216.3	221.4
	% of total population	44.5	43.8	44.1
Mexico	Hundreds of thousands people	..	262.7	..
	% of total population	..	0.2	..
Netherlands	Hundreds of thousands people	719.5	735.2	760.4
	% of total population	4.4	4.4	4.6
Norway	Hundreds of thousands people	303.0	333.9	369.2
	% of total population	6.4	6.9	7.6

OECD Country	Indicator	2008	2009	2010
Poland	Hundreds of thousands people	60.4	49.6	..
	% of total population	0.2	0.1	..
Portugal	Hundreds of thousands people	443.1	457.3	448.1
	% of total population	4.2	4.3	4.2
Slovakia	Hundreds of thousands people	52.5	62.9	68.0
	% of total population	1.0	1.2	1.3
Slovenia	Hundreds of thousands people	70.7	82.3	82.7
	% of total population	3.5	4.0	4.0
Spain	Hundreds of thousands people	5 648.7	5 747.7	5 730.7
	% of total population	12.4	12.5	12.4
Sweden	Hundreds of thousands people	555.4	595.1	633.3
	% of total population	6.0	6.4	6.8
Switzerland	Hundreds of thousands people	1 638.9	1 680.2	1 720.4
	% of total population	21.4	21.7	22.1
United States	Hundreds of thousands people	22 213.9	21 274.3	21 581.3
	% of total population	7.3	6.9	7.0
United Kingdom	Hundreds of thousands people	4 186.0	4 348.0	4 524.0
	% of total population	6.9	7.1	7.4

Source: OECD (2012); No data was available for Canada and Russia

Workforce mobility is a real fact of our times, among both managers and workers (Popescu, 2013). As a result of higher-income economies and better policies, member countries of the Organization for Economic Cooperation and Development (OECD) continue to attract skilled immigrants and international students. In 2011 and 2012, seven OECD countries did change their system of attracting internationally certified students on their labor markets. Women with more qualifications were often forgotten in studies of international migration, although their number is huge, especially in education and health (Dumont, Martin and Spielvogel, 2007; Ramos, 2010).

Emigration of citizens of the countries most affected by the crisis, especially those of southern Europe accelerated, as evidenced by the 45% increase in their number between 2009 and 2011 (OECD, 2013). In recent years the situation of immigrants in the labor market got even worse. More and more countries have become more restrictive in terms of employment, this way trying to protect themselves against rising unemployment of their own citizens. Many countries have established the scoring system for selecting highly qualified candidates among immigrants. There has also been an increase in the interest in attracting investors and entrepreneurs.

OECD studies show the extent of international migration of health personnel (doctors and nurses) in the last decade in most countries belonging to the OECD (OECD , 2007). UK remains the second largest host country of foreign trained doctors, after the United States. Migration of nurses has also increased in most OECD countries since 2000. It has intensified in recent years in Portugal. Romania is affected a lot by the process of brain drain.

Migration can help in the short term to meet medical staff shortages, but it is not a credible long-term solution. OECD reports provide information on the causes and consequences of international mobility of doctors and nurses (OECD, 2007; OECD, 2008). Around the year 2000, an average of 11 % of nurses and 18% of doctors working in OECD countries were born abroad. Several OECD countries have reported a shortage of medical staff, and the option to recruit foreign professionals became attractive, at least in the short term. Since then, many OECD countries have made efforts to train more doctors and nurses.

In many developing countries, the first argument of emigration is the opportunity to find a better job abroad. Employment contracts represent an important factor, but other factors count as well, such as

the ability to provide a better and safer future for children. These observations arise from reports made by the OECD on the impact of migration of health care professionals.
Part of international migration takes place between OECD countries, although the most important source of immigrants is the developing countries. In 2000, the number of Philippines and Indian nurses accounted for most of the healthcare immigrant professionals in the OECD area. So far, less than 40% of doctors and 30% of immigrant nurses in OECD countries immigrants came from another OECD country (2007), the second and third places being UK and Germany. Countries where the expatriation rate of physicians is greater than 50% are small island states in the Caribbean and Pacific, and African countries such as Mozambique , Angola, etc. (Ozden and Schiff, 2006).

3. PORTUGAL, BOTH IMPORTER AND EXPORTER OF MEDICAL STAFF

Ribeiro et al. (2013) studied the consequences of emigration of Portuguese professionals in the medical sector (doctors, nurses, dentists, pharmacists) and immigration of foreigners in Portugal, signaling the impact on access to health services.
Portugal is both importer (in early 1990) and exporter of health services. As the statistics show, the economic crisis has slowed the flow of foreigners in Portugal. Approximately 20% of the certified Portuguese professionals emigrate (Docquier and Marfouk, 2006). In both cases looking for the best working conditions and opportunities for professional development leads health professionals to leave their country of origin. This is verified by other studies. For instance, Paulino (2003) analysed the situation of Spanish coming in Portugal, while Ramos (2007, 2008) analysed the situation of Brazilians and Eastern Europeans in Portugal. Entering medical staff in Portugal was also found in the statistics provided by the Central Administration of the Health System (ACSS, 2010).
Portuguese emigration of health professionals is also driven by the difficulty of finding jobs for young graduates - nurses, dentists and technicians, low wages in the public and private sectors, workload, inadequate remuneration and poor career prospects.
Portugal has to invest in IT systems to monitor the evolution and dynamics of human resources in the health sector.
Nurses’ unemployment is very high in Portugal (a study conducted in 2011 showed an unemployment rate of 20%). In the case of doctors, it can be observed that their income has decreased, despite of overtime, and it is not possible to have a career progression due to lack of competition.
A study conducted in 2001 showed that there had been already a shortage of family doctors in Portugal. The largest number of foreign doctors in Portugal was achieved in 2004 with 4490 foreign doctors and nurses, 50 % from Spain. Then Portugal recruited Cuban doctors.
Doctors, nurses, dentists and other healthcare staff chose to leave to the Northern countries, UK, Dubai, United Arab Emirates, where they can have a lot higher incomes.
Most of those leaving Portugal continue to prefer to stay in Europe, although they could go to other countries speaking the same language as Brazil or Angola.

4. BRAIN DRAIN PHENOMENON IN ROMANIA

Eastern European countries, former communist, are affected by a continuous loss of intelligence in various fields (science, business, etc.), because many of their citizens emigrate to industrialized countries. One of the countries most affected by the phenomenon of brain drain from Eastern Europe is Romania.
According to OECD sources, USA and Canada were the main destinations for Romanian specialists. Turkey and Romania are ranked first in the extended Europe as countries of origin for higher education emigrants. Along with Turkey, Belgium, Spain, Greece, Ireland, Italy, Luxembourg, Czech Republic and Sweden, Romania is one of the top 10 countries of origin of migrants with high level of education. Romania is also on the first place in terms of migration of

people with higher education to Austria and Hungary. There are also many Romanian immigrants with higher education in France, Germany and UK. Beyond the exacerbated problem of low fertility, Romanian intellectuals'migration is detrimental because this way Romania loses the investment in human capital.
An area highly affected by the brain drain phenomenon is the health services in Romania. With an expatriation rate of 13.9 % in 2007, Romania ranks 18 as a source country for professionals in OECD countries.
The alarmingly-high increase of migration of medical personnel at European level in the context of globalization arouse the interest of specialists in different fields, worried about the consequences of the brain drain phenomenon in the health care sector at national and European level (García-Pérez, Amaya and Otero, 2007). The problem is clearly big, as in this field there is a big shortage of workforce. According to the World Health Organization (WHO) there was a deficit of 4 million health professionals in 2006, and the most affected countries are the developing ones (WHO, 2006).
The main causes of the exodus of health professionals are low salaries and poor conditions of Romanian medical system. Migration of health professionals has a higher impact on society than migration of other professionals, because it leads to an increased number of patients / medical doctor or nurse, resulting in a decrease in the time allocated for patient. Thus, it promotes increased treatment costs and development of medical tourism.

5. ENHANCING INTERNATIONAL COOPERATION AND PERSONNEL MANAGEMENT – TWO RELEVANT WAYS OF DEALING WITH THE GLOBAL CRISIS OF STAFF SHORTAGE IN THE HEALTH SECTOR

Improving international cooperation is really needed in order to deal with staff shortage in the health sector and to establish co- development (Taran, Ivakhnyuk, Ramos , Tanner, 2009). In 2006, the World Health Organization (WHO) estimated more than 4.3 million workers as staff shortage in the healthcare sector worldwide.
According to WHO estimates, the need for healthcare workers in developing countries exceeds by far the migration of professionals from these countries to OECD countries.
Human resources worldwide crisis in the health sector is dependent on the migration problem. Migration contributes to serious problems and the weakening of health systems that are already fragile anyway. These countries should strive to keep their staff and to encourage health staff in rural and remote areas. Working conditions and personnel management have to be improved, and there is a need for investment in the best equipment, professional development prospects and staff retention policies.
WHO should be encouraged to develop a system and a code of good practice of the international recruitment of health personnel. The key answer to the situation lies in strengthening international cooperation, since in recent years there have been developed a number of systems of this kind. A system is required to discourage direct recruitment of healthcare professionals from developing countries in the more developed ones, as these professionals are indispensable in their country of origin. For example, UK has limited its active recruitment of staff from more than 150 developing countries (United Kingdom Department of Health, 2011).
Cooperation on migration management can also take the form of bilateral or multilateral agreements between countries and health institutions. These partnerships between countries of origin and countries of destination establish a certain level of cooperation between two or more countries to share equitably the benefits that migration can bring and to limit the negative effects for each part.
In order to enhance international compatibility for migration of health personnel it is essential to develop these policies and systems based on the facts and the observed data.
Discrimination against immigrants and their children on the labour market and generally in society can have a negative impact on social cohesion and major negative effects on the willingness to invest in education, the host country risking important economic losses.

The most visible effect of discrimination is that of employment, but career and salary are also affected (Ramos, 2010; OECD 2013). Most OECD countries have taken measures to combat discrimination, although the scale and scope of these measures vary considerably. For instance, several OECD countries have adopted anonymous curriculum vitae.

6. CONCLUSIONS AND FUTURE RESEARCH

Brain drain phenomenon is an issue that has to be dealt with caution. It is impossible to stop it, since it is clear that people will always be attracted by a higher income and many of them would make the sacrifice to leave their country in order to gain more. Of course, this means a big disadvantage for the country of origin, first because it is a lost investment in education, and second because there is an increase shortage on the labour market (the health care sector is the best example from this point of view, due to its implications). However, once identified the causes that lead to migration of health professionals, this migration can be slowed, not only through national decision taken by the Ministry of Health, but also through managerial decisions at medical institutions' level aimed at improving the conditions and working environment, and making health professionals feel appreciated.
Of course, the research should be continued. We are interested in expanding our research by constructing a questionnaire to be applied in a series of European countries in order to identify the main motivational factors that should be taken into account by the medical institutions' managers, with the final goal of diminishing the problems led by the brain drain phenomenon.

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