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Labour migration of doctors and nurses and the impact on the quality of health care in Eastern European countries: The case of Poland

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Abstract
The purpose of this commentary article is to explain the causes and effects of the economic migration of health care workers from Poland to Western countries, and to analyse the impact of the migration of doctors and nurses on the functioning of the public health system. We use data from the National Central Statistical Office, our own preliminary research, social surveys and the Watch Health Care database. Domestic data are analysed and compared with trends in Western Europe as described in Eurostat and Organisation for Economic Co-operation and Development reports. The decreasing number of active physicians remaining in the health care system results in long waits for specialist appointments. The demand for doctors from Central and Eastern Europe will continue to grow. Consequently, there will be a further outflow of medical staff from Poland and other countries in the region and the current problems with access to health care will continue.

JEL Codes: I00, I11, J61

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Introduction: Opening of labour markets, professional mobility of doctors and the depletion of staff in local health care

The accession of Eastern European countries to the European Union (EU) in 2004 allowed employees from the former Eastern Bloc countries to take up legal employment in Western Europe. This caused mass emigration from former communist countries to the EU core countries (Andrijasevic and Sacchetto, 2016; Arnholtz and Hansen, 2013; Shubin and Dickey, 2013). A particularly large outflow of employees was observed from the Polish labour market. It is estimated that between 2 million and 3 million employees have left Poland over the last decade, which is confirmed by survey data showing that on average, every tenth household has a migrant worker (their number ranges from 7% to 13% of respondents depending on the year) (Public Opinion Research Centre (CBOS), 2016a, 2016b). As the population in Poland is estimated at 38 million (including about 30 million adults), this amounts to about 3 million migrants. In the first period after the systemic transformation in Poland (the 1990s), the migration of Poles was circular (migrant workers repeatedly moved between their home and host countries) according to the slogan 'I make money there; I live here' (Grabowska-Lusińska, 2012: 46). After the accession of Poland to the EU, the diversity of labour migrants increased. While circular migration continued to exist, many migrants were interested in permanent relocation in a host country. This included people of various professions – not only employees with low qualifications but also construction workers (Bobek et al., 2018), doctors and nurses. European Commission (2018) data show that it is doctors and nurses who often migrate for work within the EU. The direction of these migrations is usually the same – from the east to the west of the continent. This intensifying phenomenon causes a number of changes in the public health care system. Consequently, access to the diminishing and ageing staff of health workers in Poland becomes even more difficult for patients.

The purpose of this article is to explain the causes and effects of economic migration of health care workers from Poland to Western countries and to analyse the impact of the migration of doctors and nurses on the quality of patient health care and the functioning of the public health system.

Materials and methods

The article uses data from social surveys assessing the quality of health care, empirical material collected during in-depth interviews with young doctors in the late 2018, analysis of international (OECD (Organisation for Economic Co-operation and Development), European Commission and Eurostat) data and national documents (the Central Statistical Office (GUS), the Polish Chamber of Physicians and Dentists and the Supreme Chamber of Nurses and Midwives) defining health policy in Poland. The study is also based on the

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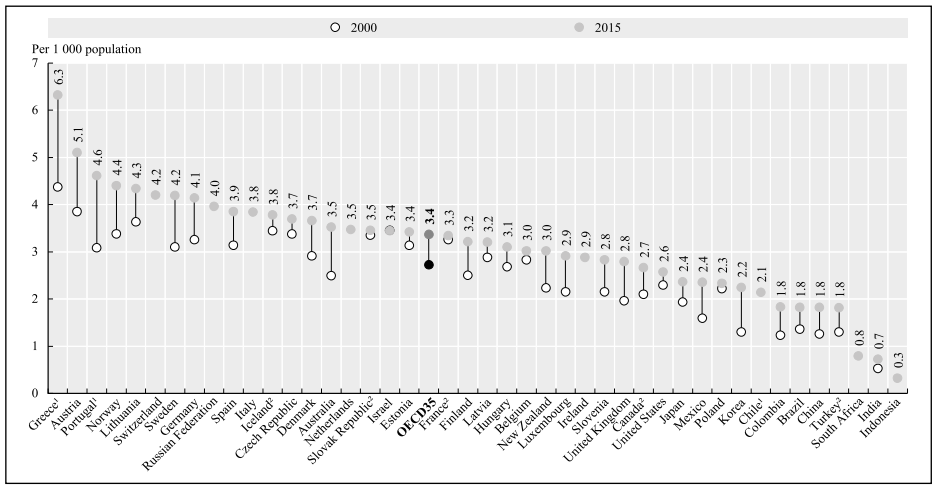

Figure 1. Practising doctors per 1000 population, 2000 and 2015 (or nearest year).
Source: OECD (2017).

data of the Watch Health Care Foundation (WHC), which regularly measures availability and patients' waiting times to see specialist doctors in Poland.

The social context of health care in Poland

Health spending in Poland calculated as a percentage of gross domestic product (GDP) is among the lowest in the EU. In the entire EU, in 2016, the average amounted to 7.1% of GDP, and in Poland, it was 4.6%. Only Cyprus (2.6%), Latvia (3.7%) and Romania (4.0%) had lower health expenditures (Eurostat, 2018b). Low health expenditure goes hand in hand with a low percentage of doctors per 1000 inhabitants – it is only 2.3 in Poland with an average of 3.4 in 35 OECD (2017) countries (Figure 1). Moreover, the percentage of nurses per 1000 inhabitants is 5.2 with an EU average of 8.4. In 2016, there were fewer nurses only in Cyprus (5.0), Latvia (4.8), Bulgaria (4.4) and Greece (3.2) (OECD, 2016).

Another problem is the increasing age of medical personnel and this trend applies to both doctors and nurses. In 2016, the largest number of nurses (98,300) qualified to perform their professions were aged between 45 and 54 years. The least numerous group were nurses aged under 35 years – in 2016, there were only 26,000 of a total number of approximately 288,000 nurses. Ageing of nursing staff is a constant trend. In 2016, more than 6000 nurses joined the category of the oldest nurses (over 65 years). A similar situation occurred in the 55–64 years age group, in which the number of nurses increased by more than 2000 (GUS, 2017: 71).

Equally dramatic trends are observed among doctors. Assuming that specialist doctors will stop practising at the age of 70, the Supreme Medical Chamber (SMC) tried to calculate the number of specialists in the coming decades assuming that new specialists will arrive at a constant, current level. With these assumptions, the number of all medical

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specialists in Poland will decrease by 3% over a period of 10 years and by 9% over the next 20 years (Krajewski, 2015).

The challenge is to encourage the right number of people to study medicine to ensure the future replacement of medical staff. However, even a significantly increased number of medical students will not necessarily reverse the current negative trends with many graduates leaving the country in search of better jobs. Young people including young doctors, students in their final years of medical studies and young nurses declare the greatest readiness to migrate (Solecka, 2017: 93).

Causes of migration of doctors and nurses

Higher earnings offered in Western European countries are the main reason for employee emigration from Poland in all professional and social categories (Żuk and Żuk, 2018b). However, working conditions are equally important for those planning to leave the country. This is especially true for young doctors and nurses.

In Poland, graduates do not formally become doctors after completing their medical studies. They first must complete a one-year internship after graduation. In reality, doctors are those who have completed postgraduate specialisations, which take another couple of years (even a dozen years in some specialties, such as anaesthesiology) (Solecka, 2017). Doctors during postgraduate specialisation are called residents – they receive the lowest salaries and are burdened with the largest number of tasks. They play the role of 'slaves' in the public health care system. They are the first to take shifts in hospital emergency departments on weekends and holidays or in after-hours medical centres. There are around 20,000 of them in Poland, which is approximately 16% of all doctors (Solska, 2017). In autumn 2017, residents in Poland went on strike demanding an increase in state health spending to 6.8% and an increase in wages. The government ignored their protest. In response, in December 2017, numerous residents terminated their opt-out clauses which allowed employers to violate labour law and employees to forgo their limit of 48 hours a week. In fact, residents refused to do overtime. As a result, many hospital departments had medical staff shortages, and their activities had to be temporarily suspended. This event showed a huge problem with human resources in the Polish health care system. The medical personnel think about economic emigration due to this structural context of medical education and the functioning of young doctors in the health care system. As one of the young doctors after specialisation claimed,

> Every doctor wants to complete specialisation as soon as possible. As medical studies last six years and are followed by one-year internship, and specialisation can take up from five to eight years, professional independence can sometimes be achieved at the age of 35 and more. People want to make up for these years and earn money, and those who are most determined think about working abroad.

In addition to the financial aspect, there are other reasons for economic migration. A person during specialisation said,

> If the system treats doctors in training like a cheap labour force, and people during specialisations are used to fill staff shortages, they become angry and want to cut themselves off from the rules

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> of this system. However, some people – particularly those more ambitious – leave the country not only for financial reasons. Some of them want to gain more experience in the West and hope that their position will be stronger when they return to the country.

The problem of emigration does not affect only doctors, but also nurses. In July 2018, nurses in many Polish hospitals began to take medical leave and organise strikes. Like residents, they protested against bad working conditions and low salaries.

Low earnings, staff shortages and the obligation to perform tasks unrelated to their profession are the most serious disincentives to becoming or continuing to work as nurses. Poor working conditions of nurses are associated with insufficient staffing in wards, an excess of duties related to keeping records, failure to comply with health and safety regulations by employers and the lack of appropriate equipment enabling efficient care of patients (Instytut Zdrowia i Demokracji, 2017).

Moreover, the lack of satisfactory earnings pushes most nurses to take additional jobs – usually in home care, public or private clinics and other hospitals. In these additional jobs, nurses are offered casual rather than permanent employment contracts. This allows hospitals to reduce the costs of employing nurses (Kubisa, 2014: 125).

All these factors make nurses emigrate for work not only to other EU countries but also to other professions. This trend is the strongest in the youngest age groups and, above all, among graduates of the first-cycle studies (Instytut Zdrowia i Demokracji, 2017).

It is difficult to give an exact number of nurses who have left Poland for Western European countries. One of the indicators is the number of recognitions of professional qualifications for nurses and midwives in the EU. After Poland's accession to the EU, district councils of nurses and midwives had, by 2016, issued 19,953 documents allowing nurses to work in the EU – on average, this amounts to approximately 1500 people per year (Naczelna Izba Pielęgniarek i Położnych, 2017b: 37). These data indicate that there is a lot of interest in pursuing the profession outside the country.

There are also no precise data about the scale of labour migration among doctors, but the size of the phenomenon can also be determined based on the number of certificates issued to physicians applying for recognition of professional qualifications in other EU countries. Table 1 shows the number of such documents issued to selected medical specialists. According to data for 2016, over 10,000 such documents were issued. Among the countries most often chosen by Polish doctors are Great Britain, Switzerland, Scandinavian countries and Germany (Wysocka, 2015).

It is interesting to note that among all medical specialists in Poland, anaesthesiologists most often go abroad. Does this mean that Western labour markets have the greatest demand for this specialisation? This seems to be directly related to the structural and financial situation of anaesthesiologists. As one of the anaesthesiologists employed in an oncology hospital explains,

> Another problem is that anaesthesiologists, unlike other medical specialists, cannot earn extra money. Almost every surgeon, endocrinologist or urologist works in a public hospital and also has his own private office where he or she receives patients on a commercial basis once or twice a week. Some doctors also work in private hospitals. We do not have such opportunities. Anaesthesiologists have been recently given the opportunity to work in private centres, but the working conditions there completely discourage me.

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Table 1. Number of certificates issued to selected medical specialists from Poland applying for recognition of professional qualifications in other EU countries.

Medical specialty	Number of practicing physicians	Number of physicians who have received certificates	Percentage of physicians applying for certificates
Anaesthesiology and intensive therapy	5310	902	16.99
Chest surgery	260	46	17.69
Cosmetic surgery	211	36	17.06
Maxillofacial surgery	100	7	7.00
Haematology	450	26	5.78
Emergency medicine	956	90	9.41
Medical microbiology	81	7	8.64
Neurosurgery	537	49	9.12
Orthopaedics and traumatology of the musculoskeletal system	3350	327	9.76
Pathology	574	75	13.07
Obstetrics and gynaecology	6287	478	7.60
Radiology and diagnostic imaging	2832	300	10.59
Urology	1282	107	8.35

Based on unpublished data obtained from the Polish Chamber of Physicians and Dentists, September 2016 (source: http://www.nil.org.pl/__data/assets/pdf_file/0016/109240/Zestawienie-nr-06a.pdf).

Therefore, anaesthesiologists are the most frustrated group of doctors. The situation is best illustrated by the following statement: 'Actually, I do not know what keeps me here. These are probably only my loans and debts to pay off. In comparison with the possibilities offered in the West, the financial conditions are really hopeless here'.

Another interviewee draws attention to the possible model of living 'between two countries':

> Many of my friends – anaesthesiologists work in the United Kingdom or in Germany. And they earn completely different money there. I thought about it too, but I think I'm too tied to my friends and this country. Although in the case of Germany, especially when you live in western Poland, you can work and earn four or five days a week there, and spend the rest of the week here.

This kind of circular emigration is typical for young doctors. After some time, they decide to settle in the country of employment or return to their home country.

The effects of migration of health personnel and the neoliberalisation of health care on patients in Poland

The decreasing number of active physicians remaining in the health care system results in long waits for specialist appointments. According to data from 2017, the longest waiting times were for endocrinologists (10.3 months); angiologists (7.7 months);

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neurosurgeons (5.9 months); hepatologists (5.6 months); plastic surgeons (5.4 months); children's cardiologists (5.1 months); immunologists (4.8 months); specialists in infectious diseases (4.6 months); urologists (4.5 months); vascular surgeons (4.2 months); nephrologists (3.9 months); cardiologists (3.2 months); child neurologists (3.1 months); and diabetologists (3 months) (WHC, 2017).

Difficulty in access to doctors was obviously caused not only by their migration but also by the commercialisation and 'quiet' privatisation of the health sector. Structural transformations initiated in Poland in the 1990s and the privatisation of the public sector affected workplaces (Żuk, 2017a), pension system (Żuk and Żuk, 2017a), and health centres. Between 1995 and 2005, there was a clear decrease in the number of public health care centres and a rapid development of the private health care sector – the privatisation of health care was consistently followed by the underfunding of public health care (Hardy, 2009: chapter 6). Generally, the transformation of the health care system may be a symbol of neoliberalism in Poland (Watson, 2011). This process influenced the behaviour of patients. By 2005, most patients were treated only in public health centres (almost 50%). In later years, those who simultaneously used the services of both public health care and private medical assistance prevailed (about 40%) (Table 2) (Cybulska, 2016). As the public system became 'clogged' and less efficient, people began to adopt individual strategies of searching for health care solutions. Instead of waiting several months to see a specialist, patients made appointments with private physicians. Only poor people were forced to use public health care for economic reasons (retirees, the elderly and those with lower education prevailed in this group).

Discussion and recommendations

According to European Commission data, by 2020, about 60,000 physicians will reach retirement age and as many will retire annually in Western Europe (Eurostat, 2018a). This means that the demand for doctors from Central and Eastern Europe will continue to grow. Consequently, there will be a further outflow of medical staff from Poland and other countries in the region and the current problems with access to health care will continue.

Differences between Western and Eastern European countries in levels of health care provision and access to doctors mean that health is another element differentiating countries belonging to the core of the global health system from the semiperiphery societies. According to Wallerstein's (2004) concept, core countries determine the dominant models of the economy, as well as trends in technology, science and culture. The role of semiperiphery countries is to provide cheap natural resources, cheap labour force and open up their markets to products manufactured in core countries. This Wallerstein's scheme can be helpful in describing the relations between core countries and semi-periphery societies in the area of public health. On the one hand, well-educated doctors and nurses migrate to core countries to supply local health care systems. On the other hand, Western pharmaceutical companies take advantage of problems in the health care systems in Eastern European countries and flood their markets with their products. At the same time, core countries have technological advantages in medicine and in this way gain financial benefits and use them to attract the best specialists to their health care

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Table 2. Changes in the use of health care services between 2002 and 2016 in Poland (percentage of population using).

Subjects	2002 September	2003 November	2004 September	2005 November	2009 March	2010 February	2012 February	2014 June	2016 June
Not using health care services	20	15	19	17	14	16	18	13	16
Using public health care services	46	47	48	47	36	39	36	39	37
Using both public and private health care services	27	32	28	29	43	37	40	41	40
Using only private health care services	7	6	5	7	7	8	6	7	7

Source: CBOS (2016b).

structures. Although the education and preparation of this medical staff for the profession is funded by semi-periphery societies, the qualified medical staff provide their services in core countries. This consolidates the system of double inequalities in health care provision for patients from core and semi-periphery countries in relation to financial and technological aspects, medical staff and access to specialist health care. This ultimately translates into differences in the effectiveness of treatment in particular types of societies. At the individual level, this is manifested by differences in life expectancy between core and semi-periphery countries.

Labour emigration of medical personnel additionally weakens the health care system of the semi-periphery countries leading to medical, economic and also cultural consequences. The simultaneous economic crisis and weak public health services give rise to conspiracy theories about health care and health. In Poland, this is manifested by the growing anti-vaccine movement (Żuk et al., 2019), which, in the absence of trust in the health care system, undermines official health services and medical knowledge. This is, of course, part of a wider phenomenon that manifests itself in a populist cultural and political narrative and does not constitute a rational response to the crisis (Żuk and Żuk, 2018a). Quite the contrary, it is the product of both the political and economic crisis and the lack of trust in the health care system.

The most important change – above all, a marked increase in state spending on health care and the treatment of citizens – requires political decisions. This may cause an increase in earnings and better working conditions of doctors and constitute an incentive to stay in the country. Moreover, a coordinated and planned long-term education system for health care professionals must be created. At present, there is no such mechanism in Poland (Domagała and Klich, 2018).

In the case of nurses (Naczelna Izba Pielęgniarek i Położnych, 2017a) and physicians, it is necessary to implement a rational policy in the area of education and determine the number of students specialising in particular medical specialities. This will make it possible to overcome staff shortages in particularly scarce medical specialities.

The aim of changes in social policies in Eastern European countries must be to adjust the indicators of the number of doctors and nurses per 1000 inhabitants to those in Western European societies. This is particularly important in those regions that suffer severely from the lack of specialist physicians. Satisfying the housing needs of medical staff, particularly young doctors, working in areas where the shortcomings in the public health system are the greatest may be an incentive for them.

Under the conditions of globalisation, however, the total outflow of doctors from local labour markets cannot be stopped, as is the case with the development of 'health tourism' among patients who can afford it. Hence, it is important that the process of labour migration is subject to certain regulations and does not take place in an impulsive and chaotic manner, increasing the inequalities in access to health care services. Although such regulations do not solve structural problems, they can mitigate the crisis related to the outflow of medical staff (Ford and Kawashima, 2016). As John Connell (2010) writes,

> Attrition and migration rates have both increased … accompanying the widespread downsizing (or stabilising) of public service numbers in both developed and developing countries: the

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> widespread retreat of the welfare state or, more simply, the retreat of the state. Privatisation of health care, sometimes linked to externally imposed restructuring, has increased inequity and created parallels to international migration with internal migration into the urbanised private sector. (p. 202)

For this reason, the problem of migration of doctors cannot be effectively solved locally – this issue should be approached globally.

Globalisation, brain drain and global inequality

The outflow of well-educated employees does not only occur in Eastern Europe, but it is a permanent element of the global economy under the conditions of global capitalism and one of the main driving forces of migration (Docquier and Rapoport, 2012). The basic questions arising in this context concern the causes and effects of the labour migration of doctors. Although local conditions may vary, the dependency remains similar: the worse the economic development conditions and the lower wages in periphery and semi-periphery countries, the greater the scale of labour migration to core countries. For example, it has been shown that in the case of physician migration from sub-Saharan Africa to the United Kingdom and the United States, 'one percentage point decline in GDP per capita increases physician migration in the next period by between 3.4 and 3.6 percent' (Okeke, 2013). Such analyses have not been conducted in Eastern European countries but it can be assumed that the general logic is similar. This process intensifies particularly under the conditions of the multidimensional crisis of capitalism (Chowdhury and Żuk, 2018) not only in the region of Eastern Europe but also in other countries, such as Greece, where the 2010 crisis triggered an avalanche of physician migration (Ifanti et al., 2014). While there are voices indicating that the emigration of workers from poor to rich countries may have some positive impact on the countries of origin (e.g. transfer of knowledge, increased innovation, development of local science), the dominant conclusion is that 'the localization effect outweighs the diaspora effect: Poor countries are better off if their highly skilled workers stay home' (Agrawal et al., 2011).

In the 1990s and during the neoliberal transformation in Eastern European countries, the leftist language and any leftist policy were pushed to the margin of the public space (Żuk, 2017b), and the market newspeak became popular in the public circulation. Therefore, it was easy to replace the term 'brain drain' with 'professional mobility' and 'brain circulation', particularly in the context of open borders and greater freedom of travel. This made it possible to mask the obvious fact that 'mobility is very asymmetrical, to the detriment of less developed countries, which lose not only much-needed human resources, but also considerable investments in education and fiscal income' (Marchal and Kegels, 2003). Today, however, the importance of human resources for the functioning of health systems is widely acknowledged. Regardless of differences in strategies for dealing with this problem, it must be clearly stated that health care is not only a technological or medical challenge but today, more than ever, it is an element of political economy and a transnational issue that requires global solutions (Pang et al., 2002).

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Conclusion: Health as a transnational problem

In times of globalisation, public health, like ecological problems and the economic crisis, is becoming a transnational issue that transcends the borders of nation-states. If the migration of doctors and health personnel is an increasingly massive phenomenon, it can be assumed (although it is difficult to estimate the scale of the phenomenon) that the migration of patients and people seeking better health care is becoming a fact. This happens for political and ideological reasons (e.g. due to the ban on abortion and obstacles to prenatal testing in Poland (Żuk and Żuk, 2017b), many women go abroad for private treatment), and due to differences in the quality of services provided and access to more technologically advanced medical procedures in individual countries. Although labour migration alone can improve the financial situation and health of migrant families in poor countries (Atake, 2018), the outflow of medical staff reinforces problems in the health care systems of migrants' home countries. Therefore, when looking for effective and future-proof solutions in the health care system, it is worth thinking faster and more intensively about public health as an issue that can only be effectively managed at a level of supranational strategy. In the political dimension, the EU is this experimental space. Further European integration cannot ignore the problem of health care (De Ruijter, 2016). Differences in resources, the offerings in health systems and, above all, in the financial potential and remuneration of medical staff in Western and Eastern Europe will have to be resolved and fully regulated by European law (Vasev, 2017). Although this challenge has been already noticed, it still requires intensive action in the area of integration of EU health policy (Böhm and Landwehr, 2014). This, however, requires stopping the nationalist-populist upsurge in EU countries and rejecting neoliberal dogmas and replacing them with a bold search for a more egalitarian and at the same time transnational model of Europe (cf. Guérot, 2016). This cannot be done without changing the political philosophy and the EU's economic and political framework.

Otherwise, the EU periphery countries will continue to export their medical personnel to the EU core countries even more intensely and in an unplanned and chaotic way. This trend can only permanently limit access to decent health care in Eastern European countries.

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