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MA Marta Pietrzak

Determinants of choosing a workplace by doctors
in Poland

Supervisor: dr hab. Maciej Ławrynowicz prof. UEP
Associate Promoter: dr Przemysław Piasecki

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The most common assumption in economic models is the representation of humans in a situation of choice based on human behaviour, resulting from the nature of *homo oeconomicus*. According to this, people move to places where their needs will be met, in a manner and at a level they determine. In defining occupational mobility, we can assume that it means the willingness to change the place of work, its nature, position or function, the occupation itself and the place of residence in order to obtain employment. We can study occupational migration from different perspectives, and this paper adopts **an economic optic**. The peculiarity of the labour market is that it does not buy labour, but the ability to provide it, which is inextricably linked to the carriers, i.e. people. Work must therefore be treated in terms of its objects as well as its subjects.

In economics itself, there are many theories and concepts involving reflections on the labour market and labour migration. The rationale for applying an economic perspective is also that of investing in an individual in order to provide the public services necessary for the life of every citizen and deferring the rate of return on this outlay over a long-term horizon. Such an assumption is legitimised by **human capital theory**. This is because the theoretical and practical preparation for the provision of medical services is a long-term process and can be treated as an investment. From the author's review of labour market migration concepts, **the push-pull theory** provided the broadest catalogue of pull and push factors from one place to another. And its application to the medical market is all the more justified given the phenomenon of migration (Golinowska, 2015, p. 278). Together, these theories formed the theoretical basis of the dissertation.

In addition, the dissertation presented an overview of labour market theory (i.e. dual market theory, labour, insider-outsider theory), migration (e.g. classical and neoclassical migration theory) and other disciplines (e.g. mobility, social networks). His aim was to select the most pertinent theoretical basis for the dissertation.

The process of meeting health needs in the form of medical services, on the other hand, is closely linked to the incurring of financial, material and personnel expenditures. From the point of view of economics, it is necessary to rationally dispose of limited resources (Suchecka, 2016, p. 110), including human resources, which are necessary to meet health needs. The concepts of economic theory, the models as well as the tools developed by

economists applied to health issues are elements of **health economics** (Philips, 2005, pp. 4-5; Folland et al., 2011, p. 11). It is a strand of research with a solid foundation, combining theories with analytical techniques developed to facilitate decisions that concern resource allocation in health care (Morris et al., 2012, pp. 13-15).

The health sector is a very broad concept and health care is a major part of it. It includes diagnosis and treatment of diseases, preventive measures and management of the health service system (Golinowska, 2015, p. 34). A person is, in a sense, a producer of his or her own health, but cannot buy it on any market. However, it is possible to purchase medical services provided, for example, by doctors (ibid., p. 42). Besides, the medical labour market is a very specific type of market. It does not have the ability to quickly adjust the size of resources to dynamic economic changes (Kwiatkowski, 2003), if only because of the longer training and professional preparation of doctors. One of the characteristic features of this market is the provision of services by medics in several workplaces and their inter-organisational mobility (*Busy as a young doctor...*, 2020).

Considering the sectoral labour market in health care, the author calls it the **medical labour market** in the dissertation. Due to the large differences in the labour markets of the individual medical and paramedical professions, the author's attention is focused on only one - the labour market of **doctors**. The recognition of the medical profession as a medical profession does not raise any questions. In contrast, who can be considered a doctor raises questions depending on the definition adopted. The World Health Organisation (WHO), the Central Statistical Office (CSO) or the Supreme Chamber of Physicians (NIL) use different terminology to define who are doctors and a different methodology to count them. These differences may cause discrepancies in the data published in different sources and therefore in this dissertation the author has adopted the term used by the NIL for further consideration. The fact that the dissertation author cooperated with NIL in the distribution of the research questionnaire is also an argument in favour of this.

In Poland, interest in analyses in the area of health has only emerged with the transformation of the health system (Folland et al., 2011, p. 11) and is only now gaining attention. Physicians' workplace choices are an under-researched area, especially in Poland, and for this reason became the focus of the dissertation.

The author reviewed Polish research in this area. This was followed by global studies that

included articles found in eight databases. Studies meeting the criteria of the occurrence of factors of choice of workplace and sector of work and indicating the reasons for leaving the workplace and sector of work left by doctors were analysed. This resulted in a catalogue of 15 factors important to doctors and formed the basis for a survey proper. These are: level of basic salary, additional financial benefits, opportunity for professional development, opportunity for research, position with considerable autonomy in the conduct of treatment, opportunity to select assistants to perform medical procedures, work in a managerial position, responsibilities/workload offered, opportunities for combining professional and personal life (WLB), influence in setting own working hours, proposed weekly working hours, location of workplace, opinions of other doctors working there, prestige of workplace and safe and hygienic working conditions.

To fill the identified research gap, the author posed **three research questions**. **(P1)**: *What factors are important in the choice of workplace by doctors in Poland?* Exploring these reasons and the specific characteristics of the medical market involved posing another specific question **(P2)**: *How important are the different factors and what differences exist in the indicated factors influencing doctors' choice of workplace?* and **(P3)** *How are the characteristics of doctors and the workplace related to the importance of the factors influencing the choice of workplace?*

The available literature allowed only two hypotheses regarding the effect of factors in the sector in which the workplace was located (only for the public and private sectors, no public-private and no further breakdown by workplace type).

The main objective of this dissertation is to *identify and analyse the role of the different factors taken into account when doctors choose their place of work in Poland.* Among the specific objectives are: identifying and reviewing economic theory and other scientific disciplines useful in analysing the determinants of doctors' choice of workplace (Chapter 1), distinguishing specific elements of the doctors' labour market, particularly in Poland (Chapter 2), creating a catalogue of factors that attract and push doctors to/from their workplace (Chapter 3), identifying characteristic factors that influence the choice and leaving of the workplace by Polish doctors (Chapter 4), creation of a quantitative research methodology to identify the reasons for doctors' choice of workplaces (Chapter 4), analysis of the relationship between factors influencing the choice and leaving of workplaces and sociodemographic and workplace characteristics (Chapter 5), formulation of suggestions and guidelines for actions

taken in the creation of health policy in the country (conclusion).

The analysis of the research results is exploratory in nature, thanks to which it was possible to answer the research questions posed and to verify both research hypotheses.

Thanks to

the application of human capital theory, some of the results obtained are given with a breakdown for doctors with specialisation (G1), without specialisation (G2) and in training (G3).

The study confirmed that the factors identified in global studies also have an **encouraging** effect on doctors in Poland. The location of the workplace proved to be the most important (M = 3.85; D0 = 5, in each study group), especially for non-specialist doctors. Next, the influence on setting one's own working hours (M = 4.07; D0 = 5) was particularly important for specialist doctors. And professional development (M = 3.79; D0 = 4 in each study group) for doctors in training. The amount of remuneration was still found to be important for doctors in Poland in the survey results, especially for specialists (M = 3.78; D0 = 4).

When exploring the relationship between the assessment of factors and sociodemographic indicators, the author found that place of origin, gender, medical family background, age, having children at the time of choosing the workplace and length of service at the workplace were not significant when assessing the reasons for choosing the workplace.

When conducting the factor analysis, one very important finding emerged. The position with considerable autonomy in treatment and the health and safety conditions provided were not part of any push factor due to the very high loadings. Because of this, it was analysed as quite separate factors, while the pull factor was part of the working conditions factor. This may mean that doctors would like to possess autonomy and have health and safety conditions, but not being able to do so at their place of work, they opt out. Instead, when choosing a new place, they opt for one where autonomy and OSH will be ensured, as well as the basic salary or working hours.

Among the **push** factors, it was found that: specialists were pushed out by the level of basic salary; non-specialist doctors by the position with considerable autonomy in treatment; and trainees by the opportunity to conduct research in the workplace. Analysis of the results by sector, by type of workplace and by sociodemographic characteristics was not possible due to the small number of responses. Among the indications of other reasons for leaving the workplace to work in a new one, interpersonal and team conflicts, bullying and lack of

appropriate tools for the job proved to be the most important.

The identification of a group of indifferent factors is usually neglected in the available studies of the reasons for physicians' choice of workplaces and is often overlooked in other studies invoking the application of push-pull theory. Learning about them may be helpful in optimising the inputs to some of the activities and processes involved in preparing a physician's workplace. This is another argument for the originality of the author's solution to the research problem. And for the respondents, the most indifferent factors were the prestige of the workplace, health and safety and the amount of basic salary and the opinions of other doctors.

The prepared **research tool** and data analysis scheme can also be used to study other health professions. This is evidenced by the high value of the Cronbach's alpha index (for pull factors 0.87 and 0.79, for push factors 0.9 and 0.83) (Bedyńska, Cypryańska, 2013, p. 276). This would provide insight into the reasons for inter-organisational migration of nurses, physiotherapists, psychologists, etc.

According to the author, **further surveys** should be conducted systematically to observe changes in doctors' preferences. This could be helpful in preparing workplaces for doctors entering the labour market, as well as helping to learn about the expectations of participants in the medical labour market. It would be worthwhile for the survey to continue to cover all specialties, but according to the author, it could be conducted by the District Medical Chambers to find out local preferences without the additional question of the region in which the doctor works. This could also have an impact on the returnability of the number of surveys and the results obtained.

The study of the reasons for workplace choice among doctors, is motivated by the author's **economic impact of this professional group on the wealth index of the nation**, perceived as the health of the citizens. In addition to this, the **increasing trend of health needs, life expectancy and the sheer average age and population** are further reasons to undertake an identification of the relevant reasons for doctors' choice of workplace

Doctors are actors in a specific labour market, which has been a **worker's market** for many years. A better understanding of the factors relevant to doctors' choice of workplace can also be helpful in **supporting health policy** and the structures that shape workplaces, working practices and relationships in healthcare teams. The identification of the health needs of the population should be followed by a strategy that adapts human resources capable of meeting

those needs. Permanent **globalisation** leading to international migration of health personnel (Frączkiewicz-Wronka and Austen, 2008, pp. 11-28) also prompts observation of the causes of these movements.

One of the most important issues of a well-functioning health care system is the efficient use of medical staff. Ensuring adequate availability of medical staff, based on the needs of the population, is one of the most important challenges of contemporary health policy and depends on many factors. Therefore, the results of the author's study are an important filling of an existing theoretical and empirical gap.

Health needs continue to grow, which is why identifying the factors relevant to their choice is so important from an economist's point of view.

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