EXAMINING FACTORS AFFECTING THE EMIGRATION DECISION OF MEDICAL DOCTORS IN TURKEY USING AHP

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ABSTRACT

In this study, a multi-criteria decision model is proposed to examine the factors affecting the emigration decision of medical doctors in Turkey. Due to the hierarchical structure of the decision model, the Analytic Hierarchy Process (AHP) is selected to model the decision problem and to obtain priorities. This problem has been studied in the literature, but the lack of a comprehensive multi-criteria decision-making model is identified. Based on the assessments of seventy-three participants through a pairwise comparison questionnaire, low remuneration, future anxiety due to the political situation, perceptions regarding the loss of professional reputation, and personal security concerns due to the violence and harassment against doctors are founded as the most important factors pushing people to emigrate.

Keywords: emigration, medical doctors, AHP.

1. Introduction

Migration is the process of people moving to other places for a job and living there temporarily or permanently. The determinants of migration decision change depending on the migration type (i.e. internal or international) and the specialty of the people. For a few years, Turkey has been suffering from the emigration of highly skilled professionals from different disciplines. Among these disciplines, the healthcare industry deserves more attention. The Turkish Medical Association has announced that the number of doctors applying to receive the letter of good standing, a document that allows them to practice abroad, increased from 59 in 2012 to 1405 in 2021, and is expected to be almost 3000 by the end of 2022 (Genc, 2022). To address this issue, this study examines factors affecting the emigration decision of medical doctors in Turkey using the AHP.

2. Literature Review

As the migration of health care staff causes important issues both for the home and destination countries to deal with, a timely, complete, and comparable set of data is required (Diallo, 2004). Yet, no improvements in ensuring the quality of the migration data have been achieved since then. In a report on health workforce migration (*OECD*, 2022), the lack of data, especially for developing countries, is evident. The reason for the lack might be the possible denial of the existence of emigration and avoidance of facing its consequences. However, the problems that these countries face have been addressed in the literature. The recent studies investigating the reasons for doctors' emigration from Romania (Botezat & Moraru, 2020) and the offerings of the destination country that are attracting doctors from Africa, Asia, Eastern and Southeastern Europe (Botezat & Ramos, 2020) are among the ones conducted for addressing the developing countries.

3. Objectives

The purpose of this study is to examine the factors affecting the emigration decision of medical doctors in Turkey.

4. Research Design/Methodology

The decision model was constructed in the form of a hierarchy which consists of 22 factors grouped under seven main factors (Appendix 1). The factors were determined based on a detailed review of academic papers, industry reports, and healthcare statistics and by consulting medical doctors about their opinions. An online questionnaire, including 45 pairwise comparison questions, seven demographic questions in addition to four specific questions to the doctors who have already emigrated, was prepared and distributed to the doctors. The demographic information is given in Appendix 2. The geometric mean was taken to aggregate the assessments of 73 participants.

5. Model Analysis

The priorities of the factors are provided in Appendix 3. Inconsistencies were calculated, and the highest inconsistency ratio was found as 0.57%.

6. Limitations

Only three out of 73 participants have already emigrated. The low number of participants in this category limits the interpretation of the preferences of those who have emigrated.

7. Conclusions

In this study, a decision model consisting of seven main factors and 22 factors was built to examine the main reasons for medical doctors' emigration. The online questionnaire was filled out by 73 doctors graduated from 19 different medical schools. They have specialties in 20 different areas, ranging from family medicine to general surgery. According to the findings, the most important main factor is the political issues while the least important is the working conditions. Low remuneration is the most important factor, which is followed by future anxiety due to the political situation, perceptions regarding the loss of professional reputation, and personal security concerns due to the violence and harassment against doctors. The lowest priorities (distressing relationships with peers or other healthcare staff, lack of research funds, and lack of opportunities to gain experience) might indicate that personal development issues cannot find a higher place among the problems that the doctors have to deal with. The findings may support the policymakers to manage the major issues that are leading to the loss of an increasing number of doctors.

8. Key References

Botezat, A., & Moraru, A. (2020). Brain drain from Romania: What do we know so far about the Romanian medical diaspora? *Eastern J of European Studies*, 11(1). Botezat, A., & Ramos, R. (2020). Physicians' brain drain-a gravity model of migration flows. *Globalization and Health*, 16(1), 1–13.

Diallo, K. (2004). Data on the migration of health-care workers: Sources, uses, and challenges. *Bulletin of the World Health Organization*, *82*(8), 601–607.

Genc, K. (2022). Turkish doctors emigrate amid low pay and rising violence. *The Lancet*, 400(10351), 482–483.

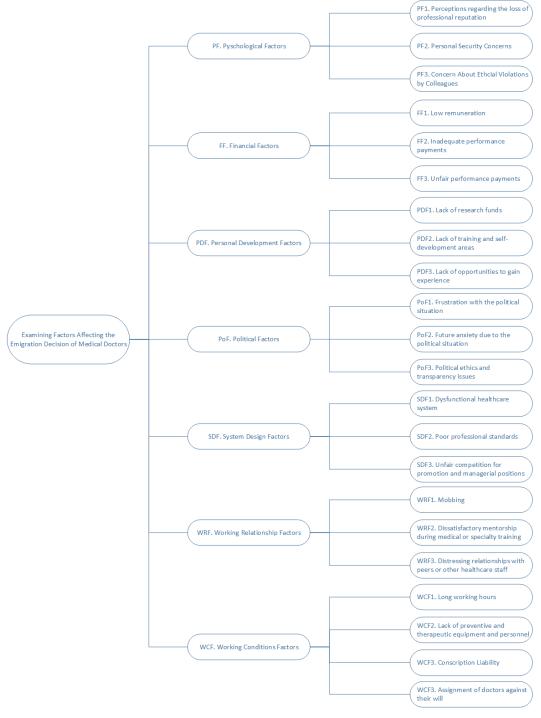
International Symposium on the Analytic Hierarchy Process WEB CONFERENCE DEC. 15 – DEC. 18, 2022

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OECD. (2022). Health Workforce Migration. https://stats.oecd.org/Index.aspx?DataSetCode=HEALTH_WFMI

9. Appendices

Appendix 1. The Decision Hierarchy.



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Category	Frequency	%
Gender		
Female	41	56.16%
Male	32	43.84%
Age		
18-25	3	4.11%
26-33	28	38.36%
34-41	15	20.55%
42-49	4	5.48%
More than 50	23	31.51%
Current Status		
Specialty Trainee	9	12.33%
General Practitioner	33	45.21%
Medical Specialist	31	42.47%
Emigration Intention		
I definitely do not want to study/work abroad.	6	8.22%
I do not want to study/work abroad.	11	15.07%
I definitely want to study/work abroad.	16	21.92%
I want to study/work abroad.	20	27.40%
I haven't decided about studying/working abroad yet.	17	23.29%
I am currently studying/working abroad.	3	4.11%

Appendix 2. Demographic Information.

Appendix 3. Priorities of the Factors.

PoF	20.29%	FF1	12.45%
FF	19.15%	PoF2	10.35%
WCF	17.87%	PF1	7.87%
PF	17.68%	PF2	7.60%
SDF	10.49%	WCF1	7.33%
PDF	7.46%	PoF3	5.80%
WRF	7.07%	SDF1	5.28%
		WCF4	4.95%

	1.0110
PF2	7.60%
WCF1	7.33%
PoF3	5.80%
SDF1	5.28%
WCF4	4.95%
PoF1	4.14%
FF3	3.53%
PDF2	3.50%
WRF1	3.26%
FF2	3.17%
WCF3	3.10%
SDF3	2.63%
SDF2	2.58%
WCF2	2.49%
WRF2	2.37%
PF3	2.21%
PDF3	2.00%
PDF1	1.96%
WRF3	1.44%

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