

THE SOURCE FACTORS IDENTIFICATION OF HEALTH PERSONNEL MIGRATION IN TERMS OF EDUCATION - ISSUES AND FALLOUTS

^aTATIANA MASÁROVÁ, ^bMARCEL KORDOŠ

*Alexander Dubček University in Trenčín, Študentská 2, 911 50
Trenčín, Slovak Republic: ^atatiana.masarova@muni.sk,
^bmarcel.kordos@muni.sk*

This paper was written within the project funded by the Scientific Agency of the Ministry of Education of the Slovak Republic VEGA "Economic Aspects of Emigration of University Graduates in Health Professions in the Context of Sustainability of Staffing of Health Care Institutions in the Slovak Republic" [reg. no. 1/0691/22]

Abstract: the paper deals with the comparison of the attitudes of doctors and nurses towards education, professional development, and career advancement during and after the Coronavirus Disease 2019 (Covid-19) pandemic in hospitals in Slovakia, and to identify sentiments related to emigration. In the study, we employed fundamental statistical techniques, including the calculation of sums and the determination of proportions. It is notable that the perception of education, professional, and career growth among healthcare personnel declined during the pandemic, with a notable 0.8-point difference between the pre- and post-pandemic periods. The primary factors motivating medical professionals to leave the Slovak Republic for another country are typically related to their working conditions and work organization.

Keywords: emigration sentiment, doctors, professional and career development, education and training, nurses.

1 Introduction

The conditions necessary for the proper functioning of a health system can be broadly classified into two categories: those pertaining to the system itself and those pertaining to the personnel who operate within it. The former category includes such factors as financial, material, technical and technological security, access to innovation, and many others. The significance of personnel management in the healthcare sector hinges on the delivery of quality and efficient healthcare services. This is contingent upon the effective and optimal utilization of human resources. Human resources management (HRM) constitutes an essential aspect of organizational governance. Personnel processes are subdivided into two categories: management processes and support processes. The function of management processes is to guarantee that the organization and its employees conduct themselves in an effective and productive manner, thereby ensuring that the established objectives are met. Training is included among the management processes (Grasse, 2008). In 2022, the Ministry of Health introduced three new measures with the objective of enhancing the quality of education provided to health professionals. The measures pertain to alterations in the domains of education and recognition of education. For instance, practical training has commenced in universities and teaching hospitals for undergraduate courses, specialization fields, and certified work activities across all health professions. The mandatory six-month training period for prospective professionals such as psychologists, speech therapists, therapeutic educators, physicists, and laboratory diagnosticians has been eliminated. Non-nationals will be permitted to pursue temporary vocational training in all health professions, provided that their educational qualifications have been duly recognized. A further measure pertains to the recognition of educational qualifications obtained outside the country in question. The third measure pertains to specialization studies and certification training (MoH SR, 2022).

2 Literature Review

In terms of the global shortage of health professionals and the concomitant rise in healthcare demand, it is anticipated that migration trends will intensify (Stokes et al., 2021). The extant literature demonstrates that the decision of physicians and other healthcare professionals to migrate is a complex phenomenon, influenced by a multitude of factors (Milner, Nielsen, Norris, 2021). Migration is influenced by a multitude of macro-level (environmental, social, economic, political) and micro-level (personal characteristics) factors that give rise to cross-border movements (Pinto da Costa, Moreira, Castro-de-Araujo, da

Silva, dos Santos, 2021). The decision to migrate is made by the particular person at a personal level; however, the specific circumstances of migration, including the choice of destination and the timing of the move, appear to be determined by a complex interplay of professional, local, national, and international factors (Davda, Gallagher, Radford, 2018). However, there is a lack of knowledge regarding the factors that influence new graduates' entry into employment at the hospitals where they were trained, as well as their intentions to migrate (Deasy et al., 2021). The primary factors influencing nursing students' decisions to migrate are socio-political factors and working conditions, particularly with regard to salaries at entry, career development, and subsequent salary increases (Öncü et al., 2021). Either way, migration represents a significant aspect of human resource mobility within the health sector, as evidenced by predictions from the World Health Organization (WHO) (Ferreira et al., 2020).

The human resources manager in healthcare institutions is responsible for all activities and tasks related to recruitment, training, motivation, remuneration, and so forth. The regulation of personnel management in the healthcare sector is defined by the provisions set forth in Act No. 576/2004 Coll. on Healthcare, Services Related to the Provision of Healthcare and on Amendments and Additions to Certain Acts, as well as Act No. 578/2004 Coll. on Healthcare Providers, Healthcare Workers, Professional Organizations in Healthcare and on Amendments and Additions to Certain Acts.

With regard to this legislation, its primary focus is on the conditions that employees must meet in order to practice the healthcare profession. Additionally, it regulates aspects such as the training of healthcare staff, which is provided by the human resources department and, therefore, constitutes one of the key responsibilities of the human resources manager. It is incumbent upon HR managers to prioritize training and development. Furthermore, it is evident that HR activities can exert a considerable influence on the phenomenon of labor migration of health workers abroad. Training and development impact a number of key areas, including the incidence of medical errors and the technical proficiency of health workers. The Kirkpatrick scale, which measures investment in training in terms of attitude, knowledge, behavior, and outcomes, is a useful tool for this purpose. In the Industry 4.0 era, digital forms of learning, including online lectures and training, videos and short videos, and digital forms of learning management through online applications (such as Totara) and PM ERP systems (such as Success Factors from SAP), have become a common part of education (Stachová, Blšťáková, Stacho, 2021)úřty (2018) proposes measures to enhance the HRM landscape within the healthcare sector, including a commitment to ongoing education and career development, as well as a work-life balance. A study from Germany concludes that a hospital is not an attractive workplace; however, it can become one if the opportunity for personal development is improved (Udák, Šušňáková, 2018).

Thompson and Kapila (2018) highlight the detrimental impact of inadequate human resources in healthcare on the long-term sustainability of healthcare systems, as evidenced by the findings of Yakubu et al. (2022a). Yakubu et al. (2022b) propose that countries could adopt a unified public value proposition for source and destination countries. This indicates that the migration crisis resulting from the pandemic has not significantly impacted the migration patterns to Slovakia (Přivara, Rievajová, 2021). It is crucial to ascertain the most pivotal and less significant factors influencing the migration intentions of medical personnel.

3 Research Objective and Methodology

The principal objective of this paper is to compare the attitudes of doctors and nurses towards education, professional

development, and career advancement during and after the Coronavirus Disease 2019 (Covid-19) pandemic in hospitals in Slovakia, and to identify sentiments related to emigration. In the study, we employed fundamental statistical techniques, including the calculation of sums and the determination of proportions. Additionally, a Student's t-test was employed in the study. The conditions of education, professional development, and career growth were rated as the least favorable. It is notable that the perception of education, professional, and career growth among healthcare personnel declined during the pandemic, with a notable 0.8-point difference between the pre- and post-pandemic periods. The mean scores for education, professional development, and career growth were higher for the group of health personnel with less than five years of experience. The Student's t-test yielded statistically significant results, indicating a notable discrepancy in the evaluation of educational, professional, and career development conditions as motivating factors for pursuing international opportunities.

4 Findings

Education and training represent one of the key personnel activities with the potential to influence the migration of health personnel. The research employs a quantitative methodology and aims to compare the attitudes of doctors and nurses towards education, professional development, and career advancement during and after the pandemic in Slovak hospitals. Additionally, it seeks to identify sentiments related to emigration. In order to achieve the research objective, a research question was formulated. What personnel activities influence the propensity of doctors and nurses to emigrate abroad for work? In formulating the research question, we drew on the findings of the Slovak Medical Chamber (2020), which indicated that the propensity of doctors and nurses to migrate abroad for work is mainly influenced by remuneration and working conditions. Additionally, Jankelová (2021) asserts that medical personnel are motivated to migrate for more favorable remuneration and working conditions.

In accordance with the methodology proposed by Jaskova (2021), the empirical data is collected from the respondents at the stage of obtaining empirical material. The questionnaire was distributed online via Google Forms. The research population consisted of 119 healthcare workers, including 88 nurses and brothers and 31 doctors. In items pertaining to working conditions, respondents provided their responses using a Likert scale, with the following options: 1 = very satisfied, 2 = rather satisfied, 3 = neither satisfied nor dissatisfied, 4 = rather dissatisfied, and 5 = very dissatisfied. The point method was employed, whereby one point was assigned to the response "very satisfied," two points to the response "rather satisfied," three points to the response "neither satisfied nor dissatisfied," four points to the response "rather dissatisfied," and five points to the response "very dissatisfied." In the study, the fundamental statistical techniques were employed, including the calculation of sums and the determination of proportions. Additionally, the Student's t-test was utilized. The arithmetic mean was employed, with scores ranging from 1 to 5 assigned to each response. A higher average score indicates a higher level of dissatisfaction, while a lower average score indicates a higher level of satisfaction.

Table 1. Satisfaction of healthcare workers with working conditions in the hospital

Working conditions after Covid-19	Average score	Working conditions during Covid-19	Average score	The Difference	Student's t-test
Training, Professional and Career Development	4,1	Training, Professional and Career Development	4,9	+0,8	0,001

Source: own elaboration by the questionnaire survey conducted from 11/2022 till 12/2023

As illustrated in Table 1, training, professional development, and career advancement were among the most poorly rated conditions. In addition to education, professional and career development, the research also focused on remuneration for work, work organization, workload, and other working conditions. In formulating the items, we drew on the findings of Beutner et al. (2022). According to these researchers, the working conditions of doctors and nurses have deteriorated significantly as a result of the pandemic. It is noteworthy that the perception of training, professional, and career development among health professionals declined significantly during the pandemic, with a notable 0.8-point difference between the pre- and post-pandemic periods. The t-test yielded no statistically significant evidence of a difference in satisfaction ratings for the items "education," "professional and career growth" during and after the pandemic.

Table 2. Working conditions as a reason for going abroad (contingency table - length of experience)

Working conditions during Covid-19/Practice	Average score up to 5 years	Average score 6 - 15 years	Average score 16 years and more	Total
Training, professional and career development	4,5	4,2	3,9	4,2

Source: own elaboration by the questionnaire survey conducted from 11/2022 till 12/2023

Table 2 illustrates that the assessment of education, training, and career development exhibits elevated mean scores among the cohort of health professionals with less than five years of experience. The results suggest that opportunities for education, professional development, and career growth abroad are a significant motivating factor for individuals, particularly young doctors and nurses, to pursue international opportunities. This may have a detrimental impact on the population for whom healthcare will be inaccessible due to a lack of personnel supply.

Table 3. Working conditions as a reason for going abroad

Working conditions during Covid-19 with up to 5 years' experience and more than 5 years	Student's t-test
Training, professional and career development	0,001

Source: own elaboration by the questionnaire survey conducted from 11/2022 till 12/2023

Table 3 shows that the Student's t-test yielded statistically significant findings regarding the ratings of conditions as reasons for pursuing international opportunities. Education and professional development with the prospect of career advancement are the primary motivations for pursuing international opportunities, particularly among younger medical professionals with up to five years of experience, such as doctors and nurses.

In order to address the research objective, a research question was formulated. What factors influence the likelihood of doctors and nurses emigrating abroad for work? Our findings indicate that among the working conditions, education and professional development with career advancement are the most influential factors in shaping the emigration sentiment of health professionals (mean score 4.2). The issue of education and professional development with career growth was also identified by respondents as a potential means of addressing emigration propensity. Our findings are consistent with those of Jankelova (2021).

5 Discussion

Generally speaking, a survey was conducted on 80 junior doctors and nurses with the objective of comparing the methods of teaching medical and nursing students in eight common practical procedures. A greater proportion of nurses reported having received formal instruction and being supervised when initially performing a procedure. A total of 42% of doctors surveyed reported feeling inadequately trained to perform a practical procedure safely when doing so for the first time without supervision, compared to only 7% of nurses. The findings of this study corroborate the observation that a significant proportion of medical practitioners receive training in practical procedures through informal channels, in contrast to the approach employed for nursing professionals. Furthermore, the study indicates that a considerable proportion of doctors perceive the training they receive in practical procedures to be inadequate (Mason, Strike, 2003). It is our contention that the training of young doctors and nurses should be conducted on a formal basis. The health sector is characterized by a high level of human resource intensity, which is intrinsic to the nature of the work it performs. The working conditions, remuneration, and other factors that contribute to a lower interest in studying and training for the health professions may also result in a significant number of health professionals departing to work abroad. The lack of opportunities for further training also compels health professionals to seek employment in neighboring countries. To prevent the skilled workforce from emigrating for work abroad, it is necessary to address the underlying issues. Medium-term solutions (up to four years) include a comprehensive revision of specialized training for doctors and a comprehensive revision of nurses' training.

A total of 55 on-the-job training seminars, each comprising three hours of instruction, were conducted. The seminars encompassed a range of activities, including brief lectures, experiential exchanges, group discussions, role-playing exercises, work-related self-experience, and communication training. An effort was made to form interdisciplinary groups, with each group consisting of eight to 14 participants, primarily comprising nurses, doctors, and physiotherapists. The seminars primarily addressed the following topics: "demanding/aggressive patients" (18 seminars), "coping with illness" and "depression" (8 seminars each), "communication" and "compliance/patient motivation" (6 each), and "anxiety" (4). A total of 529 professionals participated in the seminars, with 30% identifying as nurses, 18% as physiotherapists, and 15% as medical doctors. A one-page evaluation questionnaire was completed by each participant. The results indicate that 80% of each professional group expressed satisfaction with the organization and conduct of the seminars. The highest satisfaction rates were found for the following aspects: "interdisciplinarity" and "comprehensiveness" (86% each), "mutual exchange of personal experiences" and "feedback by the group leader." Ninety percent of respondents indicated that they found the program useful for clinical work. Other benefits included improved competence in dealing with patients, greater knowledge about cooperation within the team, improved relations with patients, and improved cooperation within the professional team. There was considerable consensus among the groups with regard to the perceived effectiveness of the program. Nurses, however, found the seminars to be more effective with regard to improved ability to establish contact with patients as well as increased stress tolerance (Muthny, Mariolakou, 2003). It may be reasonably concluded that a well-executed training workshop is beneficial for health personnel, and that well-trained health personnel demonstrate a reduced propensity to migrate.

The migration of nurses has been a global phenomenon, and the integration of overseas-qualified nurses within host countries has given rise to a great deal of debate worldwide. The evidence indicates that the support provided by organizations can vary considerably, and that there is a paucity of information regarding the nature and extent of the organizational support required to facilitate a seamless transition of overseas-qualified nurses into the nursing profession. This exploratory study examined the

organizational support provided to facilitate the transition of overseas-qualified nurses into the nursing workforce in two countries. The various support mechanisms provided to overseas-qualified nurses in different organizations include transition assistance, acculturation support, mentoring programs, and initial settlement assistance. The successful integration of overseas-qualified nurses into a host country is a complex issue. A comprehensive support system for these nurses should be founded upon ethical principles and a collaborative approach, with a clear leadership structure in place. Furthermore, it is imperative that existing staff receive adequate education and support to ensure a smooth transition of overseas-qualified nurses into practice. The insights gained from this study may also be pertinent to the transition of other overseas-qualified health professionals, such as doctors and allied health professionals, in host countries (Ohr, Jeong, Parker, McMillan, 2014). It is our contention that, once health professionals migrate, there must be a range of support mechanisms in place for numerous professions that encompass transition, acculturation, mentoring programs, and initial assistance with settling in.

6 Conclusion

To put it in a nutshell, the findings of the quantitative research indicate that, from the perspective of health personnel, training, professional development, and career advancement have declined during and in the wake of the pandemic. Those with up to five years of experience in the field of health are more likely to consider pursuing opportunities abroad. The area of training, professional, and career development is the focus of this study, and it is this factor that influences the emigration sentiment of doctors and nurses to work abroad. It can be concluded that the Slovak healthcare sector requires measures to enhance the appeal of healthcare professions, establish favorable and motivating working conditions, or implement stabilization instruments to ensure the sustainability of healthcare personnel in Slovakia. The primary objective of personnel management in healthcare is to guarantee an adequate supply of qualified personnel, with the secondary objective being to provide healthcare personnel with suitable working conditions. In conclusion, it can be stated that any changes to the system of training, professional and career development will be futile unless accompanied by modernization of hospitals, improvement of instrumentation and material provision. This issue requires a systematic investigation with a view to identifying systemic solutions at the state level. The objective is to stabilize human resources in the health sector and ensure the long-term sustainability of staffing health facilities in the country, with a view to replicating examples of good practice.

Literature:

1. Beutner, C. et al. 2022 The Impact of COVID-19 Pandemic on Medical Doctors' Work-Family Balance at German University Clinics. [online] [cit. 2024-09-13], Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8871649/>
2. Davda, L.S., Gallagher, J.E. Radford, D.R. Migration motives and integration of international human resources of health in the United Kingdom: systematic review and meta-synthesis of qualitative studies using framework analysis. *Hum Resour Health*, 2018, 16 (27). DOI: 10.1186/s12960-018-0293-9
3. Deasy, C., Loughlin, C. O., Markey, K., Donnell, C. O., Tighe, S. M., Doody, O., Tuohy, D., Hussey, M., Meskell, P. Effective workforce planning: Understanding final-year nursing and midwifery students' intentions to migrate after graduation. *Journal of Nursing Management*, 2021, 29 (2), 220-228. DOI: 10.1111/jonm.13143
4. Ferreira P.L., Raposo V., Tavares A.I. Drivers for emigration among healthcare professionals: Testing an analytical model in a primary healthcare setting. *Health Policy*, 2020, 124 (7), 751-757.
5. Gkioka, V., Petrakos, A., Sarris, M., Goula, A., Nikolados, I., Speis, K. Motivation factors of doctors and nurses in the health services. *Hellenic Medecine*, 2018, 35 (2), 230-240.

6. Grasseová, M. et al. 2008. *Procesní řízení*. Praha: Computer Press, 266 s. ISBN 8025119877
7. Jankelová, N. The Key role of Strategically and People – oriented HRM in Hospitals in Slovakia in the Context of Their Organizational Performance. *Healthcare*, 2021, IX (255), 31-33: DOI: 10.3390/healthcare9030255
8. Jašková, D. 2021: *Metodika spracovania empirických údajov v personálnom manažmente*. Trenčín: TnUAD, 114 s. ISBN 978-80-8075-959-9
9. Lambrou, P., Kontodimopoulos, N., Niakas, D. Motivation and job satisfaction among medical and nursing staff in a Cyprus public general hospital. *Human Resources for Health*, 2010, 8 (26): DOI: 10.1186/1478-4491-8-26
10. Lüthy, A. 2018: *Mitarbeiterorientierte Personalpolitik: Wie Krankenhäuser attraktive Arbeitgeber werden*. In *Debatin*. Medizinisch Wissenschaftliche Verlagsgesellschaft. ISBN978-3-941468-22-1
11. Mason, W.T.M., Strike, P.W. Short Communication - See one, do one, teach one—is this still how it works? A comparison of the medical and nursing professions in the teaching of practical procedures. *Medical teacher*, 2003, 25 (6): DOI: 10.1080/01421590310001605705
12. Ministry of Health of Slovak Republic. 2022 [online] [cit. 2024-08-30], Retrieved from: <https://www.health.gov.sk/Clanok?memorandum-lekari-vlada>
13. Ministry of Health of Slovak Republic. 2023 [online] [cit. 2024-08-29], Retrieved from: <https://www.health.gov.sk/Clanok?zdravotnici-platy-2023>
14. Ministry of Finance of Slovak Republic 2023: [online] [cit. 2024-08-29], Retrieved from: <https://www.mfsr.sk/files/sk/financie/institut-financnej-politiky/strategicke-materialy/program-stability-program-stability-slovenska-roky-2023-2026.pdf>
15. Milner, A., Nielsen, R., Norris, R. Brexit and European doctors' decisions to leave the United Kingdom: a qualitative analysis of free-text questionnaire comments. *BMC Health Services Research*, 2021, 21 (188): DOI: 10.1186/s12913-021-06201-0
16. Muthny, F. A., Mariolakou, A. Feasibility and effectiveness of psychosocial on-the-job training for medical doctors and nurses. *Journal of Psychosomatic Research*, 2003, 55 (2): DOI: 10.1016/S0022-3999(03)00160-0.
17. Ohr, S.O., Jeong, S., Parker, V., Mcmillan, M. Organizational support in the recruitment and transition of overseas-qualified nurses: Lessons learnt from a study tour. *Nursing & Health Sciences*, 2014, 16 (2): 255 – 261. DOI: 10.1111/nhs.12085
18. Öncü, E., Vayisoğlu, S. K., Karadağ, G., Alaçam, B., Göv, P., Tosun, A. S., Orak, N. Ş., Çatiker, A. Intention to migrate among the next generation of Turkish nurses and drivers of migration. *Journal of Nursing Management*, 2021, 29 (3), 487-496. doi.org/10.1111/jonm.13187
19. Pinto Da Costa, M., Moreira, C., Castro-De-Araujo, L.F.S., Da Silva, F.M., Dos Santos, R.A. Migration of Junior Doctors: The Case of Psychiatric Trainees in Portugal. *Acta Medica Portuguesa*, 2021, 34 (7-8), 533 – 540. DOI: 10.20344/amp.12562
20. Prívarová, A., Rievajová, E. Migration governance in Slovakia during the COVID-19 crisis. *Migration Letters*, 2021, 18 (3): 331-338. DOI: 10.33182/ml.v18i3.1469
21. Schumann, M., Maaz, A., Peters, H. Doctors on the move: a qualitative study on the driving factors in a group of Egyptian physicians migrating to Germany. *Global Health*, 2019, 15 (1), 2.
22. Stachová, K., Blšťáková, J., Stacho, Z. *Riadenie ľudí v digitálnej a post-pandemickej dobe*. Bratislava: Wolters Kluwer, 2021. 148 p. ISBN 978-80-7676-239-8
23. Stokes F., Iskander R. Human Rights and Bioethical Considerations of Global Nurse Migration. *Journal of Bioethical Inquiry*, 2021, 18 (3): 429-439
24. Thompson, R., Kapila, M. Healthcare in Conflict Settings: leaving no one behind report of the WISH Healthcare in Conflict Settings. Doha, Qatar: World Innovation Summit for Health. 2018, 59 p.
25. Udák, T., Šušňáková, V. *Manažérske vzdelávanie zdravotníckych pracovníkov v Európe a USA*. Ružomberok: Katolícka univerzita v Ružomberku, 2018.
26. Yakubu, K. et al. Utility of the Right to Health for Addressing Skilled Health Worker Shortage in Low- and Middle-Income Countries. *Int J Health Policy Manag*, 2022a, 11 (11), 2404-2414.
27. Yakubu, K. et al. Governance systems for skilled health worker migration, their public value and competing priorities: an interpretive scoping review. *Glob. Health Action*, 2022b, 15 (1), 2013600.
28. Act No. 576/2004 Coll. on health care, services related to the provision of health care and on amendment and supplementation of certain acts
29. Act No. 578/2004 Coll. on health care providers, health care workers, professional organizations in health care and on amendment and supplementation of certain acts.

Primary Paper Section: A**Secondary Paper Section: AH, AE**