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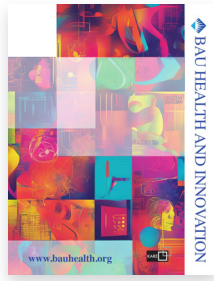

Review

Factors Affecting International Nurse Migration: A Systematic Review

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Abstract

This systematic review was planned to systematically examine the factors affecting international nurse migration. The study population consisted of 290 articles accessed by searching the cumulative index to nursing and allied health literature, PubMed, Cochrane, and Scopus databases between January 2019 and April 2024. Articles that were published between specified dates, whose publication language was Turkish or English, whose sample was nurses, and whose full text could be accessed were selected for sampling. The date of access to the data study was May 20, 2024. Three studies included in the study were cross-sectional, three were qualitative, and two were mixed-method. Nurse migration is caused by opportunities abroad, where 23.82% of participants expressed interest; job insecurity and escape from unemployment affect 8.68% of participants; economic factors also play an important role and affect a total of 8.43% of participants; and career advancement expectations affect 6.31% of participants. Findings of the study, which focused only on nursing professionals, shed light on the important factors that drive migration decisions in this demographic group. Main factors are the search for better career opportunities, living standards, and efforts to reduce job insecurity and unemployment. Economic concerns and desire for career advancement also emerged as noteworthy motivations.

Keywords: Brain drain, nurse immigrant, nurse migration, pushing and pulling force.

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Migration can be fundamentally defined as the movement of individuals from one place to another due to economic, social, or political reasons. Brain drain, however, typically entails migrating an educated, skilled, and qualified workforce from their places of origin to destinations offering better working and living conditions. While brain drain represents a significant loss of talent and knowledge for source countries, it can bring about knowledge and innovation for destination countries. Brain drain poses a considerable challenge for source countries, resulting in a depletion of the talent pool and knowledge scarcity. Conversely, it allows destination countries to harness new knowledge and innovation potential.[1] The migration rate has persisted throughout human history, albeit fluctuating at times due to various social factors. It has neither ceased nor disappeared completely, despite occasional increases or decreases influenced by historical events.[2]

The mobility of the workforce and international migration within the healthcare sector predominantly consists of educated nurses. Nurses often seek better working

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conditions and job opportunities, prompting them to move to other countries. In this context, an examination of preferred destination countries reveals that the United States holds a leading position, followed by the United Kingdom and Germany.[3]

Government policies play a significant role in shaping migration processes, so it's important to carefully assess how nurse workforce migration is managed. In this regard, an analysis of the Sustainable Development Goals shows that they seek to implement well-planned and well-managed migration policies, as well as to improve health financing and build up the health workforce in developing countries. In this context, nurse migration can lead to a loss of the healthcare workforce in source countries, negatively impacting the sustainability of health services. Therefore, policies and programs should be developed to mitigate the effects of nurse migration in source countries. This could involve promoting the education and development of the healthcare workforce, improving working conditions, and encouraging nurses to remain in their home countries.[4]

Based on a projection model developed to estimate the demand for doctors and nurses in 2030, taking into account factors such as per capita income, out-of-pocket health expenditures, and population aging, a shortage of approximately 2.5 million nurses is expected in 23 Organisation for Economic Co-operation and Development (OECD) countries.[5]

The phenomenon of international nurse migration has emerged as a significant aspect of the global health service workforce dynamics. Educated nurses often migrate from home to destination countries for better working conditions, labor market opportunities, and professional prospects.[6] This trend profoundly affects both source and destination countries as they grapple with resource and service shortages, ultimately impacting the delivery of health systems and essential services.

Source countries are typically characterized by resource and service inadequacies, and the migration of educated nurses exacerbates these existing challenges, creating gaps in healthcare services and hindering progress toward universal health coverage. Furthermore, the loss of healthcare professionals impedes the sustainability of healthcare services in underdeveloped regions with already limited access to quality care. Therefore, OECD countries have employed various strategies to attract internationally educated nurses for years, including active international recruitment campaigns, bilateral state agreements, favorable immigration regulations, and foreign qualification recognition policies aimed at successful integration.[7]

Government policies and international agreements play a critical role in shaping the dynamics of nurse migration. Efforts to regulate migration flows and address workforce imbalances necessitate a comprehensive understanding of the drivers and outcomes of nurse migration.[8]

Sustainable development goals underscore strengthening health systems and investment in the healthcare workforce to ensure equitable and sustainable provision of healthcare services worldwide.[9]

Given all these considerations, there is an urgent need for research and policy interventions to mitigate the negative impacts of nurse migration on source countries and to ensure ethical recruitment practices and fair distribution of healthcare professionals. By addressing the root causes of nurse migration and promoting collaboration between source and destination countries, it is possible to strengthen global health systems and advance the health and well-being of communities worldwide by harnessing the potential of international nurse migration.

Methods

Objective and Review Questions

The objective of this study is to consolidate the diverse reasons behind international nurse migration and their practical implications into a single document. By synthesizing this information, the study aims to propose actionable solutions to mitigate the adverse effects experienced by source countries. In doing so, it seeks to address a notable gap in the existing literature by providing concrete references to practical implications that can be adopted in the field. As a result of this systematic review, answers to the following three questions were sought;

- What factors influence international nurse migration?
- Do factors influencing international nurse migration vary across countries?
- What kinds of differences in factors affecting international nurse migration exist between countries?

Materials and Methods

Based on document analysis of articles, this systematic review encompasses studies published in national and international literature between January 2019 and April 2024. International literature recommends that systematic reviews (research report writing) adhere to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement: Checklist of items to include when reporting a systematic review or meta-analysis. The researchers utilized the PRISMA statement checklist for their screening process.[10]

Screening Strategy

The literature search was conducted between January 2019 and April 2024. These dates were selected to include literature addressing the impacts of the pandemic that began in 2019. The first step of the research was to develop search terms to identify the critical variables related to the reasons for nurse migration. The keywords included "nursing emigration," "push and pull factors," and "brain drain," and searches were conducted using Boolean operators across PubMed, Scopus, Cumulative Index of Nursing and Allied Health Literature (CINAHL), and Cochrane databases.

To reduce the risk of potential bias in this systematic review, the obtained studies were reviewed at least twice, with titles and abstracts screened by two independent researchers. They evaluated, discussed, and reached a consensus on including studies. Full-text copies of the articles deemed suitable for inclusion were saved. After reassessing the full texts for inclusion criteria, an article selection form was completed, and a methodological quality assessment was conducted.

Selection Criteria and Study Selection

This systematic review formulated the research question within the PICO framework.[11]

Population: nurses, exposure: migration phenomenon, comparison: not mandatory (NONE), outcome: factors influencing migration, design: it has been determined that both qualitative and quantitative studies will be included in the analysis.

Inclusion Criteria

Research design is being qualitative and quantitative (including randomized controlled trials, quasi-experimental studies, and controlled descriptive studies) published in national and international peer-reviewed scientific journals.

- Published in Turkish or English
- Research published within the specified dates
- It was writing an original research article
- A sample consisting of nurses.

Exclusion Criteria

- Reviews
- Book chapters
- Unpublished thesis works
- Unpublished master's and doctoral theses were omitted and referred to as gray literature
- Studies where the sample consisted only of migrants, midwives, or nursing students.

Methodological Quality Assessment

The articles deemed eligible for inclusion were subjected to a Joanna Briggs Institute (JBI) quality appraisal.[12] By the findings, studies achieving ratings of "strong" and "moderate" on the scoring scale were deemed eligible for inclusion in the research.

The evaluation criteria used in the assessment tools are rated on a scale between 1 and 0 points. As the assessment score increases, it is accepted that the quality of the article increases.

The literature search yielded 290 studies (PubMed: 135, Cochrane: 16, CINAHL: 51, and Scopus: 88). These 290 studies were initially screened based on their titles, followed by screening based on their abstracts. Studies that did not meet the inclusion criteria and those that were duplicates were excluded, resulting in 56 studies for detailed examination. After this examination, 48 studies were excluded from the scope of the research for various reasons: not meeting the inclusion criteria (10 studies), receiving a "low" score in quality assessment (12 studies), not focusing on the migration factor in the outcome parameter (8 studies), not having a sample consisting of nurses (5 studies), and focusing on post-migration experiences (13 studies). The sample for the review consisted of eight studies. The PRISMA statement was used to create the research protocol and write the article in Figure 1.

Literature Search Tools

During the literature search, the "Research Article Selection Form" was utilized. This form includes the following fields: evaluating author, author of the article, journal name, date, title, participants, study design, final outcome, and notes (Appendix 1).

Statistical Analysis

Due to the lack of homogeneity in the obtained data, conducting a meta-analysis was not feasible. Instead, the data were presented in tabular form. However, combined calculations of common findings related to specific outcomes were performed as percentages in the studies included in the systematic review.

Ethical Approval

Since the study was conducted using openly accessible databases and search engines, it did not require ethical approval from an ethics committee. Our study was conducted using research and publication ethics.

Study Team

The study team comprises two academics with doctoral and specialization degrees in nursing management and

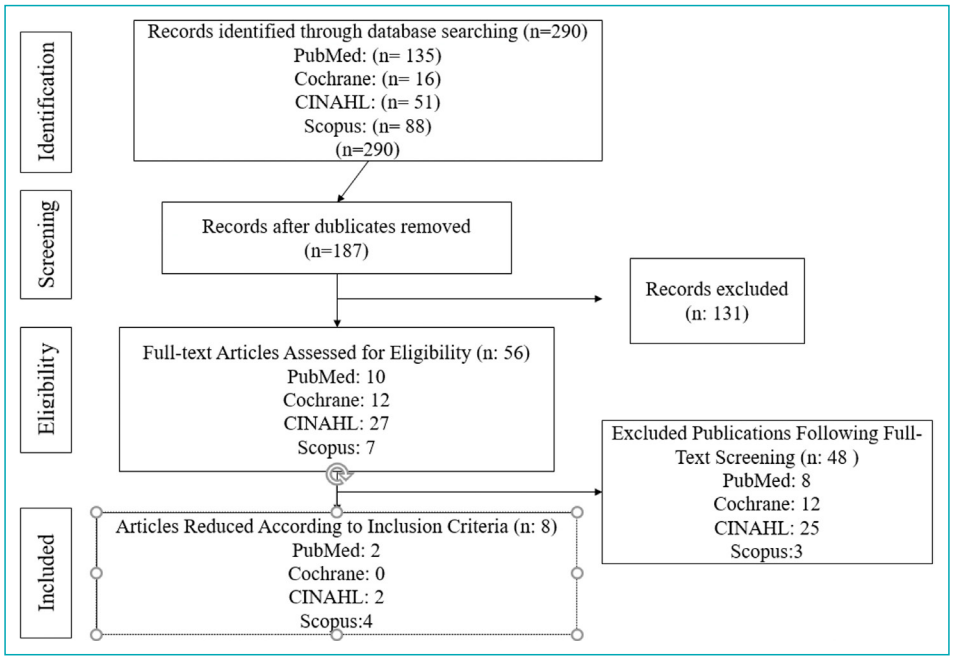

Figure 1. Flow diagram.

principles. The team, comprised of experts in the field, has previously published a report on a similar topic. The roles are divided into a literature search and review team.

Results

Features of the Studies

A comprehensive body of research spanning various regions delves into the multifaceted motivations driving nurses' migration patterns and their implications for source and destination countries' healthcare systems. In Indonesia, sociocultural determinants influencing Indonesian nurses' decisions to remain in their home country were explored.[13] They identified factors such as marital status, educational opportunities, career advancement prospects, and societal perceptions as pivotal considerations. Challenges emerged as significant influencers, including inadequate non-monetary support mechanisms in the workplace, a sense of disconnection, and spouses' overseas employment. In the UK, migration trends among Spanish nurses were examined, highlighting motivations such as escaping job insecurity, seeking professional validation, and pursuing enhanced life stability.[14]

Similarly, the impact of nurses on Nigeria's healthcare system was investigated, emphasizing factors such as career progression prospects, improved working conditions, and educational opportunities as key drivers for migration.[15] Delving into the experiences of Filipino nurses migrating to Norway, Nortvedt et al.[16] suggested that the selection of migration destinations is often influenced by chance and lucrative employment opportunities. Gea-Caballero et al.[17] explored Spanish nurses' migration motivations, revealing the significant roles played by employment uncertainty and aspirations for professional growth. Hashish and Ashour examined brain drain among Egyptian nurses in Spain, highlighting economic factors and workplace conditions as primary determinants.[18] Ulupinar et al.[19] investigated Turkish nurses' attitudes toward brain drain, emphasizing the allure of opportunities abroad and dissatisfaction with local working conditions. Finally, a study in Ghana underscored factors such as rising education costs, suboptimal healthcare systems, and institutional shortcomings as drivers of specialized nurses' migration intentions.[20] These studies provide critical insights into the nuanced interplay of economic, social, and professional factors shaping nurses' migration decisions globally, emphasizing the need for targeted interventions to address underlying issues and retain healthcare talent in source countries. The characteristics of the included studies are presented in Appendix 1.

Methodological Quality Assessment Results

Based on the JBI's evaluation tools, the methodological quality assessment results relied on ten references for observational reporting. Within this framework, three qualitative studies, five cross-sectional studies, and two mixed-method studies were evaluated. The qualitative studies received high scores, averaging 9 points out of

Table 1. Methodological quality table

Author	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	Criteria 6	Criteria 7	Criteria 8	Criteria 9	Criteria 10	Criteria 11	Quality rating
Hamid et al. (2023)[13]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Rodriguez-Arrastia et al. (2021)[14]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	9
Olorunfemi et al. (2020)[15]	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	NA	NA	6
Nortvedt et al. (2020)[16]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Gea-Caballero et al. (2019)[17]	Yes	Yes	No	No	Unc	Unc	No	Unc	Yes	NA	NA	4
Hashish and Ashour (2020)[18]	Yes	Yes	Yes	Unc	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
(Qualitative criteria)												
(Cross-sectional criteria)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA	NA	8
Ulupinar et al. (2024)[19]	Yes	Yes	Yes	Unc	Yes	Yes	Yes	Yes	Yes	Unc	Yes	10
(Qualitative criteria)												
(Cross-sectional criteria)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA	NA	8
Poku et al. (2021)[20]	No	Yes	Yes	Yes	Yes	No	Yes	Yes	NA	NA	NA	6

10 (10, 9, and 10). In contrast, the cross-sectional studies received moderate scores, averaging 5.3 points (6, 4, and 6). Studies utilizing mixed methods were scored based on cross-sectional and qualitative criteria, with an overall score of 20 considered high (18, 18). The methodological evaluation results of the studies are presented in Table 1.

Characteristics of Included Studies for Analysis

This systematic review included eight studies conducted between 2019 and 2024, covering the causes of nurse migration in Turkish and English. It was observed that three of the studies were cross-sectional, three were qualitative, and two utilized mixed methods. These studies collectively involved 2744 nurses and 52 managers, reaching 2796 participants. The distribution of these participants is as follows: 233 participants in the study conducted in Indonesia (52 managers and 181 nurses), 371 nurses in the study conducted in the UK, 270 nurses in the study conducted in Nigeria, 10 Filipino nurses in the study conducted in Norway, 172 nurses in the study conducted in Spain, 360 participants in the study conducted in Egypt (325 cross-sectional and 35 qualitative), 1018 nurses in the study conducted in Turkey, and 225 nurses in the study conducted in Ghana. The distribution of total participants by country is presented in Figure 2.

Implications for Factors Affecting Nurse Migration

Factors influencing nurse migration are diverse and often complex. Regarding motivations, 8.68% of participants (371 participants) preferred to migrate to the UK to escape job insecurity and unemployment, whereas 6.31% (270 participants) opted for Nigeria due to career advancement expectations. Only 0.23% (10 participants) chose Norway to seek better life stability, whereas 4.03% (172 participants) migrated to Spain due to employment insecurity or absence, and an equal percentage for professional development. 8.43% (360 participants) selected Egypt for economic reasons, whereas 23.82% (1018 participants) preferred Turkey for opportunities abroad. Finally, 5.27% (225 participants) chose to migrate from Ghana due to issues within the healthcare system and adverse patient health outcomes. The distribution of factors affecting nurse migration among participants is presented in Table 2.

Combined Distribution of Factors Influencing Nurse Migration

Factors influencing nurse migration were examined based on data obtained from various studies. One of the most significant factors affecting migration was opportunities abroad, accounting for 23.82% of total participants. The second most prevalent factor was escaping job insecurity

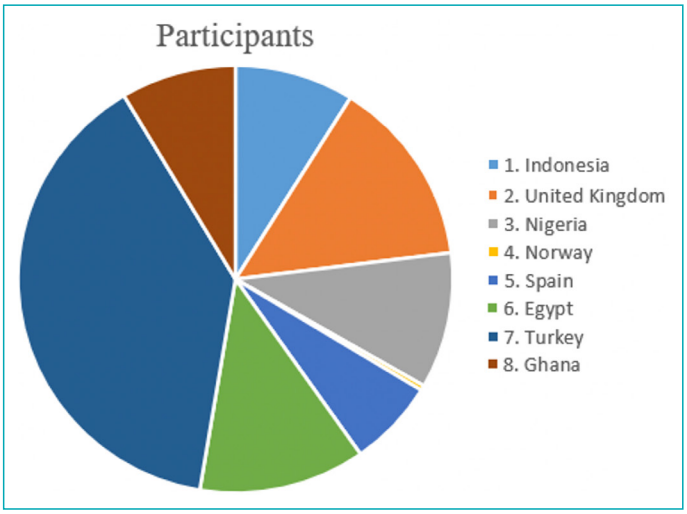

Figure 2. The distribution of total participants by country.

Table 2. Distribution of factors affecting nurse migration among participants

Distribution of factors affecting nurse migration	Participants
Escaping job insecurity and unemployment	371 (United Kingdom)
Career advancement expectations	270 (Nigeria)
Seeking better life stability	10 (Norway)
Employment insecurity or absence	172 (Spain)
Professional development:	172 (Spain)
Economic reasons	360 (Egypt)
Opportunities abroad	1018 (Turkiye)
Healthcare system challenges and adverse patient health outcomes	225 (Ghana)

Table 3. Combined distribution of factors influencing nurse migration

Factors affecting nurse migration	Combined %
Opportunities abroad	23.82 (1018/4271*100)
Escaping job insecurity and unemployment	8.68 (371/4271*100)
Economic reasons	8.43 (360/4271*100)
Expectation of career advancement	6.31 (270/4271*100)
Healthcare system and adverse health outcomes	5.27 (225/4271*100)
Lack of employment or insecure employment	4.03 (172/4271*100)
Professional development	4.03 (172/4271*100)
Pursuit of a better life stability	0.23 (10/4271*100)

and unemployment, affecting 8.68% of participants. Economic reasons were also a significant factor influencing migration decisions, affecting 8.43% of total participants. Career advancement expectations were another factor, influencing 6.31% of those considering migration. Healthcare system challenges and adverse patient health outcomes also had an impact, affecting 5.27% of participants. Other factors included employment insecurity or absence and professional development, both at 4.03%. Seeking better life stability was one of the least influential factors, affecting only 0.23% of participants. The combined distribution of factors influencing nurse migration is presented in Table 3.

Solution Suggestions Regarding Nurse Migration

According to the results of these studies, when we rank the recommendations regarding the factors influencing nurse migration by the number of studies, we reach the following findings:

In the study conducted in Turkey, the prominent recommendation is to support nurses who prefer migration due to opportunities abroad and to make structural improvements in the healthcare systems. In the study in the UK, it is recommended that support programs and guidance services be provided for nurses who prefer migration due to job insecurity and unemployment. In the research in Egypt, structural improvements in healthcare systems and increasing job satisfaction are recommended for nurses who choose to migrate for economic reasons. In Nigeria's study, providing professional development opportunities and international cooperation is essential for nurses who prefer migration due to career advancement expectations. In the research conducted in Spain, structural improvements in healthcare systems and the development of internationally standardized policies are recommended for nurses who prefer migration due to employment lack or precarious employment and professional development reasons. In the study in Norway, support programs and guidance services are recommended for nurses who prefer migration in search of better life stability. Finally, the recommendations highlighted in Indonesia, Ghana, and other studies can generally be summarized as structural improvements in healthcare systems, support programs, and international cooperation.

Discussion

Nurse migration is a global issue, requiring international cooperation and coordination to find solutions. This study examines factors influencing nurse migration by consolidating data from research conducted in different countries and discusses potential solutions.

In recent years, nurse migration has become a significant issue in many countries, leading to a shortage of nurses in source countries.[21] Research indicates various factors influence nurse migration in different countries, including active recruitment, post-graduation education, and financial gains. However, each factor appears to affect nurse migration to varying degrees. International nurse integration experiences support this study, showing differences based on source country experiences and the work environment they enter. Immigrant nurses' integration experiences vary depending on various factors such as cultural awareness, exposure to discrimination, English language and communication skills, social and professional support networks, social integration, and personal characteristics.[22] This review concludes that factors such as family unity and social image affect nurses in Indonesia, while economic reasons play a significant role in Egypt. In addition, in Nigeria, career advancement expectations and in Norway, the pursuit of a better quality of life and stability also influence migration decisions.

Economic factors such as low salaries and poor working conditions play a significant role in the international migration of nurses. Particularly in countries such as India, nurses in the private sector face low wages, which increases the tendency for international migration. India is one of the countries where economic reasons drive international nurse migration. The primary reasons for migration are notably low salaries and poorer working conditions, especially in the private sector. Given the competition among private hospitals, nurses often receive meager salaries. In January 2016, the Indian Supreme Court directed the central government to establish a committee to investigate the living conditions and salary structure of nurses in private hospitals.[23]

The respect and perception of the nursing profession also influence migration decisions. This study concludes that increasing job satisfaction is essential to reducing the desire of valuable healthcare personnel to leave their countries. Research conducted among nurses working in public hospitals in Tehran examined the relationship between job satisfaction and the desire to migrate, which was revealed through participant surveys, generally having high levels of migration desire and moderate levels of job satisfaction. The research identified a significant negative correlation between job satisfaction and the desire to migrate.[24]

In countries such as the Philippines, job dissatisfaction and lack of social support encourage international migration, leading to a shortage of experienced nurses in healthcare systems. Over the past decade, the Philippines has experienced significant nurse migration due to increasing demand for nurses in countries such as the Middle East, the United States, and the United Kingdom. Concerns influencing this migration include low salaries, lack of social support, high patient-nurse ratios, and limited opportunities for professional development.[25] This situation contributes to the loss of experienced nurses and increases workload in healthcare facilities, adversely affecting the quality of healthcare services. Another study addressing the deficiencies and current state of the global nursing workforce emphasizes the need to address the nursing shortage and focus on evidence-based policies and resource allocation at the national level.[26]

In a study investigating the prevalence of migration intentions among doctors, nurses, assistants, and medical students in Lithuania, it was found that 12% of nurses had decided to migrate within the next 2 years. Statistical analyses of survey data revealed that migration decisions were associated with sociodemographic factors, financial status, teamwork environment in the hospital, and perceived social value.[27] These findings provide an essential perspective for understanding migration tendencies among healthcare professionals and students and responding to threats affecting healthcare systems in source countries. They support the findings of this systematic review.

Another factor is career development and educational opportunities. In some countries, nurses may face limited career advancement and specialization opportunities, leading to increased international migration tendencies. Conversely, investments made in the nursing profession in various countries to improve the quality of healthcare services can reduce migration.

The increasing demand for nursing in the United States has significantly increased nursing registration and graduation in the Philippines. However, this surge has also expanded the supply of nursing programs, lowering nurses' quality. For every migrant nurse, nine more licenses are issued, and new graduate nurses have transitioned from other diploma types, contributing to the accumulation of human capital in the Philippines.[28]

Improving career opportunities and working conditions for nurses could be a significant step in reducing migration. A study providing a conceptual analysis to understand and define nurse retention identified four critical attributes of retaining nurses: Motivation, intention, and individual decision-making; strategy and intervention; geographical context; and job commitment. In addition, it elucidates the impacts of nurse retention on the healthcare system and individual nurses, emphasizing that international recruitment and retention of the nursing workforce are important priorities.[29]

Various solutions can be proposed to reduce nurse migration. First, each country must develop policies and programs tailored to its conditions.

Strengths and Limitations

This systematic review examines the factors affecting international nurse migration comprehensively and rigorously, offering detailed insights into the primary motivations behind nurses' migration decisions. Analyzing 290 studies employing different methodological approaches enriches the findings and provides a more comprehensive understanding. Reviewing data from various countries reflects the global dimensions of nurse migration and allows for comparing country-specific situations. Identifying the impact of economic factors, job security, and career progression on migration provides concrete data for policymakers and healthcare management.

The study is limited to articles published in Turkish and English, which may exclude studies in other languages, potentially omitting significant data. Restricting the analysis to publications between 2019 and 2024 might not fully reflect important research conducted earlier or changes in migration trends over time. Including only articles with full-text access might exclude significant findings due to access limitations. In addition, the focus solely on nurses means the results do not reflect the migration experiences of other healthcare professionals, limiting the generalizability of the findings.

Conclusion

There are various factors influencing nurses' migration decisions. Particularly, career opportunities abroad, job insecurity, economic reasons, expectations for career advancement, and issues related to the healthcare system play a decisive role in nurses' migration decisions. Various measures can be taken to reduce nurse migration. First, each country should improve the living conditions of migrant nurses, increase job security, and strengthen the healthcare system according to its conditions. Salaries should be offered reasonably, and economic stability should be ensured. In addition, healthcare systems should be restructured to address poor working conditions and inadequate healthcare infrastructure.

It is essential not only to provide career advancement and personal development opportunities for migrant nurses but also to strengthen their integration into society and social support systems. Moreover, ensuring a stable political environment and establishing justice are crucial. These recommendations can help address various factors related to nurse migration and contribute to resolving the issues at hand.

Disclosures

Online Appendix Files: https://jag.journalagent.com/bauhi/abs_files/BAUH-30075/BAUH-30075_(2)_BAUH-30075-Appendix_files.pdf

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References

1. Kanbir O. Göç ve ekonomik gelişme. Ekon Isletme Siyaset Uluslar Iliskiler Derg 2022;8(2):349–65. [In Turkish]
2. Karakaya H. Türkiye'de göç ve etkileri. Firat Univ Uluslar Iktisadi Idari Bilimler Derg 2020;4(2):93–130. [In Turkish]
3. OECD. Health workforce policies in OECD countries: right jobs, right skills, right places. OECD Health Policy Stud 2016.
4. United Nations. Sustainable development goals. New York (NY): United Nations; 2015.
5. Scheffler RM, Arnold DR. Projecting shortages and surpluses of doctors and nurses in the OECD: what looms ahead. Health Econ Policy Law 2019;14(2):274–90.
6. Walton-Roberts M. Intermediaries and transnational regimes of skill: nursing skills and competencies in the context of international migration. J Ethn Migr Stud 2021;47(10):2323–40.
7. Yeates N. The globalization of nurse migration: policy issues and responses. Int Labour Rev 2010;149(4):423–40.
8. Khetrapal S, Bhatia R. Impact of COVID-19 pandemic on health system and Sustainable Development Goal 3. Indian J Med Res 2020;151(5):395–9.
9. United Nations. Transforming our world: the 2030 agenda for sustainable development. 2015.
10. Moher D, Liberati A, Tetzlaff J, Altman DG; PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. Ann Intern Med 2009;151(4):264–9.
11. Richardson WS, Wilson MC, Nishikawa J, Hayward RS. The well-built clinical question: a key to evidence-based decisions. ACP J Club 1995;123(3):A12–3.
12. Tufanaru C, Munn Z, Aromataris E, Campbell J, Hopp L. Systematic reviews of effectiveness. Joanna Briggs Institute reviewer's manual. 2017.

13. Hamid AYS, Permatasari H, Hargiana G, Rahmadiyah DC, Putri AF. Sociocultural factors influencing Indonesian nurses to stay working in Indonesia: a qualitative study. Int Nurs Rev 2024;71(1):69–76.
14. Rodriguez-Arrastia M, Ropero-Padilla C, Fernandez-Sola C, Portillo MC. Nursing emigration in the United Kingdom: a qualitative exploration of the Spanish nursing community. Nurs Open 2021;8(2):675–87.
15. Olorunfemi O, Agbo DI, Olorunfemi OM, Okupapat EO. Impact of the emigration of nurses on health care delivery system in selected hospitals, Benin-City, Edo State, Nigeria. J Integr Nurs 2020;2(3):110–15.
16. Nortvedt L, Lohne V, Dahl K. A courageous journey: experiences of migrant Philippine nurses in Norway. J Clin Nurs 2020;29(3–4):468–79.
17. Gea-Caballero V, Castro-Sanchez E, Diaz-Herrera MA, Sarabia-Cobo C, Juárez-Vela R, Zabaleta-Del Olmo E. Motivations, beliefs, and expectations of Spanish nurses planning migration for economic reasons: a cross-sectional, web-based survey. J Nurs Scholarsh 2019;51(2):178–86.
18. Hashish EA, Ashour HM. Determinants and mitigating factors of the brain drain among Egyptian nurses: a mixed-methods study. J Res Nurs 2020;25(8):699–719.
19. Ulupinar S, Sen Y, Eycan O. Nurses' attitudes toward brain drain and the associated factors. Am J Nurs 2024;124(3):22–32.
20. Poku CA, Abebrese AK, Dwumfour CK, Okraku A, Acquah D, Bam V. Draining the specialized nursing brains, the emigration paradigm of Ghana: a cross-sectional study. Nurs Open 2023;10(6):4022–32.
21. Tamata AT, Mohammadnezhad M. A systematic review study on the factors affecting shortage of nursing workforce in the hospitals. Nurs Open 2023;10(3):1247–57.
22. Davda LS, Gallagher JE, Radford DR. 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;16:1–13.
23. Oda H, Tsujita Y, Irudaya Rajan S. An analysis of factors influencing the international migration of Indian nurses. J Int Migr Integr 2018;19(3):607–24.
24. Kamali M, Zandi KN, Ilkhani M, Shakeri N, Rohani C. The relationship between job satisfaction and desire to emigrate among the nurses of public hospitals in Tehran. 2020.
25. Labrague LJ, Gloe D, McEnroe DM, Tsaras K, Colet PC. Factors influencing turnover intention among registered nurses in Samar Philippines. Appl Nurs Res 2018;39:200–6.
26. Drennan VM, Ross F. Global nurse shortages: the facts, the impact and action for change. Br Med Bull 2019;130(1):25–37.
27. Goštautaitė B, Bučiūnienė I, Milašauskienė Ž, Bareikis K, Bertašiūtė E, Mikelionienė G. Migration intentions of Lithuanian physicians, nurses, residents and medical students. Health Policy 2018;122(10):1126–31.
28. Abarcar P, Theoharides C. Medical worker migration and origin-country human capital: evidence from US visa policy. Rev Econ Stat 2024;106(1):20–35.
29. Efendi F, Kurniati A, Bushy A, Gunawan J. Concept analysis of nurse retention. Nurs Health Sci 2019;21(4):422–7.