Push and Pull Factors for Migration of Nurses in Developing Countries-A Systematic Review

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Abstract

The occurrence of migration has been in existence since the beginning of time and is fueled by economic, political, personal and social factors. The aim of this paper is to examine the scholarly articles that exist on the push and pull factors of migration of nurses in developing countries. A systematic review was conducted in Prospero, and the research studies were selected from Google Scholar, PubMed and EBSCO databases. Fifteen (15) studies were analyzed to determine the pull and push factors of the migration of nurses in developing countries. Majority of studies indicate that migration is a multifaceted issue, and no one factor influences one's decision to migrate. Ultimately persons are driven by the desire for more educational opportunities for themselves and their children, better working conditions, better pay and overall, a higher standard of living. Migration is still a crucial issue in most developing countries, it is imperative that solutions to mitigate this problem be implemented with urgency. Thus, rectifying this issue is enormous, however the review of salaries to meet the global recession and price gouging in many developing countries can provide some relief to this emerging situation.

Keywords: Developing Countries, Migration, Nurses, Pull and Push Factors.

Introduction

"International recruitment of nurses has become issues of global concern in the past decade. Nurses have always embraced the opportunity to move across national borders in search of better pay, career advancements, better working conditions and quality of life. The importance of building national self-sufficiency to manage domestic issues of supply and demand, in rich and poor countries alike, is crucial [1]. Without taking migration into account, the Caribbean cannot be understood. The region's various nations, which include large and small islands as well as mainland South American and Central American countries (Belize and Suriname, respectfully), were themselves formed by the significant global migration waves, which began with European colonization in the sixteenth century and continued with widespread forced migration of African slaves to support and develop the colonial plantation economies [2]. The significance of migration continued even after the Haitian Revolution of 1804 initiated the near century long fall and eventual abolition of the slave trade and the slave-labor based model of production throughout the Caribbean. On the contrary, for individuals seeking employment and better chances, migration became a way of life [2]. According to Ferguson (2003) "more than 100,000 people throughout the Caribbean departed for Panama in the first decade of the 20th Century to construct the Panama Canal. People from the Caribbean began traveling in huge numbers in the 20th century "even before

independence reached most of the region's territories, in search of work, a better life and to escape from small constricting island societies" [3]. Many people from the smaller, less developed island in the region were drawn to work in the refineries in the US Virgin Islands, Aruba, the Dutch Antilles and Trinidad and Tobago during the 1970's gasoline boom. During the same time, other migrants were drawn to the Bahamas by the burgeoning tourism business. Others, mostly from the English-speaking Caribbean, started to migrate to the United States and United Kingdom as this nation started focusing recruitment efforts on industries like nursing that were facing a labor shortage at home. As a result, the Caribbean region is intricately linked to the global economy of labor surplus and labor demands. However, like labor migration, political developments have also resulted in sizable diasporas. For example, the 1959 Cuban Revolution drove many Cubans to immigrate to the United States, and the 1970's Suriname independence and internal conflict drove many Surinamese to the Netherlands [4].

Migration is subjective and is influenced by push and pull factors [5]. Push factors identified include economic factors such as unsatisfactory remuneration, institutional factors include lack of proper work facilities and equipment [6], professional factors like lack of career development options and political factors e.g. socio-political instability [6]. The study of the push and pull variables that create emigration motivations is arguably the most well-known way to explain migration. It is a helpful technique to produce a basic explanation, even though it might be challenging to determine which variables are more important than others. It is critical to keep in mind the conditional variables of migration. The tendency to move is also influenced by perception rather than "observable" push and pull forces. For instance, current emigration trends exacerbate domestic system distrust, which in turn sparks a wave of new migration. "The tendency for the migration

of skilled personnel is highest at times when there is a lack of confidence in the economic or social stability of their country" [7]. Push and pull variables are therefore not always objective based on perception [7].

The purpose of this systematic review is to highlight both the advantages and disadvantages of the push and pull forces behind migration in emerging nations and to assess what data exists on this topic and identify any gaps that may exist. The research questions that will be addressed are what are the push and pull factors of migration in developing countries? What are the possible consequences of this phenomenon in developing countries? This analysis included studies from Nepal, India, Saudi Arabia, the United States of America, Sub- Saharan Africa, Egypt, Turkey, Kuwait, Italy and Taiwan to highlight some of the challenges that migration poses to the health systems of developing nations.

Method

Finding the advantages and disadvantages of the push and pull forces behind migration in developing nations is the goal of this research. With the goal of keeping competent Registered Nurses in developing nations and stopping brain drain.

A preliminary search was performed in PubMed, EBSCO Host and Google Scholar to identify pertinent articles. Titles of articles and abstract were used to formulate a comprehensive search strategy with guidance from the librarian. Key search terms included "migration", "push factors", "pull factors", "Registered Nurses" and "developing countries". Furthermore, a second comprehensive search was performed across CINAHL, PUBMED, EBSCO host and Google Scholar Key search terms included "migration patterns", "brain drain", "nursing experiences", "migration motivators", "cultural influences", "coping mechanisms", "job satisfaction" and "migration trends" (Table 1). The reference of all utilized study was additionally screened for

additional relevant articles. It was determined to only include literature published within the last ten (10) years because it allows one to acquire a clearer picture of patterns of migration. Two categories of research were considered in the review: qualitative and quantitative. The study's characteristics were determined by the population, the push and pull forces that contribute to migration, the author, the year of publication, the country in which the research was conducted, the title of the study, methodology, major findings, conclusion and recommendation. The data was examined, demonstrating the various approaches (qualitative and quantitative). (See Table 3).

Table 1. Search Strategy Adopted for this Review

Migration of nurses	Push and pull factors
Brain drain, Poor patient care, Unsafe patient to staff ratio, Lack of specialization, Deterioration in the National Health system and burn out	*Higher salaries, better working conditions, Political instability, Internal conflict, Career prospect, Presence of social security program, Advance equipment and machines, better opportunities for children, Formality and Security*

Results

Through the systematic evaluation of literature, a total of 4780 were discovered. 4500 papers were eliminated from analysis because of the nature of the research study, the year of publication and inability to access the original study. Certain studies were of mixed nature and did not explicitly address the migration of nurses in developed nations. Fifteen (15) articles were included in this study, nine (9) quantitative and six (6) qualitative. The results of the study are organized in table 3: by the type of study, author, year, country, sample size, aim, methodology and results.
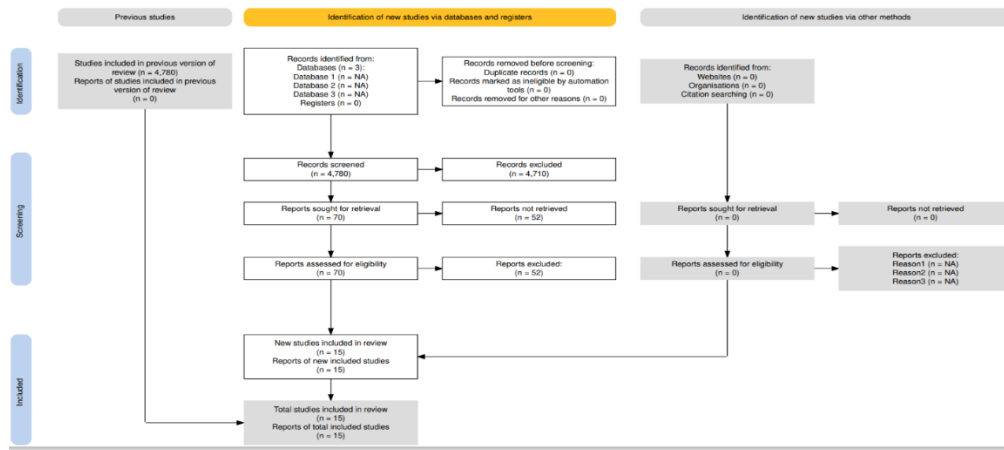
Figure 1. PRISMA Flow chart

Table 2. Inclusion and Exclusion Criteria of the Articles used in Review

Criteria	Inclusion criteria	Exclusion criteria
Year of publication	January 2013 – 2023	Articles published before 2013
Publication type	Primary studies	Abstract, Review, Discussions
Language	Articles written in English	Articles not written in English
Country of publication	Articles centered on developing countries	Articles centered on developed countries
Type of Study Design	Qualitative and quantitative studies	Experimental studies

Table 3. Summary of Articles which showed the Push and Pull Factors of Migration of Nurses in Developing Countries

Author, Year, Country	Title of the study	Methodology	Major findings (Push and Pull factors)	Conclusion / Recommendation
Qualitative studies				
Almansour et al. (2023) Saudi Arabia	Migration of Nurses and Doctors: pull factors to work in Saudi Arabia	83 Nurses and Doctors, Saudi Arabian hospitals. 10 focus groups, 83 participants which were placed in groups of 6- 10 based on their practice background. Participants were selected purposively. Data transcribed using pseudonyms and codes same was supported by Maxqda 2020 software.	Themes that emerged from the analysis were rewards, job entry requirements, Religion, recommendation of family and friends and changing the work environment. It was determined that migration is becoming more common with the main reason being the social and economic problems of healthcare system such as poor planning of healthcare workforce, low job satisfaction, political and economic instability, discrimination and corruption. In addition, reward, job requirements, religion, recommendation of family and friends and changing of work environment were push factors of nurses and doctors seeking employment in Saudi Arabia.	Healthcare managers and prospective employees should proactively plan for the future condition of healthcare.
Likupe (2013) Sub Sahara Africa	The skills and brain drain what nurses say	30 Nurses Sub -Saharan Africa Interviews and focus group discussions. Purposive sampling technique was adopted	Themes that emerged from the analysis were poor renumeration, lack of professional development, poor health care and systems, language and education similarities and easy availability of jobs and visas. Data shows that nurses' reasons for migrating are multifaceted and rooted in both global principles and historical ties.	Nurses prefer to remain in their home countries and contribute to the development of healthcare.
Connor (2016) United States	Cultural influences on coping strategies of Filipino immigrant nurses	20 Filipino nurses. Cross sectional design using semi structured interviews. Qualitative data management	The themes that emerged exhibited similar copy behavior and strategies and were categorized as (a) familial (b) intracultural (c) fate and faith based(d) forbearance and contentment (e)affirming the	To retain nurses, occupational health research must keep emphasizing the impact of culture and

		software was used for data analysis.	nursing profession and proving themselves and (f) escape and avoidance.	adaptation on stress and coping practices.
Efendi et al (2020) Kuwait	The lived experiences of Indonesia nurses living in Kuwait	21 Indonesian nurses working in Kuwait. A phenomenological design using semi-structured interview was adopted. The results of the transcription were then analyzed using NVivo® software version 11.	Five themes were identified (1) Escalating career prospect (2) Immersing in the local culture (3) Added value for Muslims (4) Language barrier (5) and dealing with homesickness. The advantages include financial gains, a job as a professional nurse and civil servant and the added value of their spiritual life as Muslims.	It is essential to prepare Indonesian nurses with a customized curriculum on linguistic and cultural concerns.
Stievano et al. (2017) Italy	Indian nurses in Italy: a qualitative study of their political and social integration	20 Indian Nurses. A descriptive qualitative study using semi structured interviews. Data was content analyzed using an inductive method.	The findings were categorized into four themes: (1) aspects of professional integration and working experience, (2) intra- and interprofessional relationships and perceptions of the IPASVI Regulatory Board, (3) initial nursing education and continuous professional development and (4) perceptions of social integration. Indian nurses migrate due to increase their economic and social privileges and to break free from preconceived notion about the stigma attached to their profession.	It is difficult to understand nurses out-migration and consequently have a better and safer collaborative teamwork in the host countries.
Nursalam et al (2020), Taiwan	The lived experiences of Indonesian nurses who worked as care workers in Taiwan	16 Indonesian Nurses, Taiwan. To elicit and describe the lived Phenomenological research using semi structured interview. Interviews were transcribed, and the work of Van Manen was used to analyze the data.	Four main themes were identified (1) motives for working abroad (2) feeling of being trapped (3) experiencing a difficult journey (4) and the feeling of being supported. They migrate due to the country's low-income level and opportunity for improved living	It is necessary to implement better work policies to improve the situation for both nations.
Quantitative Studies				

Baral & Sapkota (2015) Nepal	Factors influencing migration amongst Nepalese nurses	A Cross-sectional design was adopted. 67 Nurses working and studying in the United Kingdom, United States of America, Australia and Canada. A self-administered questionnaire was used, and data was analyzed using the Statistical Package for Social Science (SPSS) Version 16.	There was evidence of support that personal factors, better working conditions and environment, educational opportunities and better renumeration are factors for increasing migration. In addition, it was inferred that personal ambition such as, lack of training and educational prospects in Nepal were also the main driving force behind nurses' relocation.	Lack of modern facilities merely is not only the motivating factor for migration among Nepalese nurses, age and personal ambition also play a role in migration.
Oncu et al (2021) Turkey	Nursing students' attitude towards brain drain in Turkey	A cross-sectional design was adopted. 617 students, Turkey, A Descriptive form and attitudinal scales for brain drain was used. Data analyzed using multiple regression and decision tree analysis.	The main push – pull factors were the socio-political factors and working conditions. Nurses exhibited favorable attitudes and tendencies toward brain drain as well as factors related to age, gender, class, working status, income status, parental educational status, prior international experience, recent family members' international travels, knowledge of international nursing working conditions and a desire to work overseas after graduation were related to migration.	During the pre-graduation education process, the students should be oriented to health policies, and the importance of service to their country, improvements for nurses' wage and personal rights and career planning and postgraduate education might reduce the brain drain.
Kadel & Bhandari (2018) Nepal	Factors intended to brain drain among nurses working in private hospitals of Biratnagar, Nepal	A cross-sectional study was conducted. 99 Registered Nurses, Nepal A self-administered semi structured questionnaire.	The most important push factor was lack of career advancement (92.9%), low salary (90.9%), poor working environment (71.7%), On the other hand the most significant pull factor was better career development (87.9%), high salary (86.9%), better work environment (81.8%) and better education (77.8%). Additionally (96%) of nurses were not satisfied with their salary.	Career development opportunities, salary and working environment should be improved.

Alshareef et al. (2020), Saudi Arabia	Identifying factor Influencing Saudi Arabian Nurses' Turnover	A cross-sectional survey design among 502 nurses, Hospital in Saudi Arabia. Structural equation modelling was used to examine the relationships between the study variables. Confirmatory factor analysis was used to create and validate measurement models for variables.	Filipino nurses are more likely to leave their current position as compared to Malaysian, Pakistani, Indian or local Saudi nurses. Many cited discriminations as a factor for them considering leaving. They were of the view that national salary remuneration for nurses should be based on competency and delivery of care. Discrimination, social support from immediate supervisors, organizational commitment and autonomy were all indicators of anticipated turnover.	The primary cause of turnover in Saudi Arabia were unfair and unequal pay for nurses of various nationalities. Hence, polices to decrease the turnover can be initiated.
An et al. (2014), United States of America	Factors Affecting Job Satisfaction of Immigrant Korean Nurses	A descriptive cross-sectional study among 105 Korean Nurses using five-item job satisfaction index questionnaires.	There were highly significant correlations between job satisfaction and life satisfaction. Most of the nurses were female (98%), ranging in age from 27 to 70 years with a mean age of 52.3 years (SD- 10.7). In the regression model, life satisfaction, self-esteem, and perceived stress predicted job satisfaction (F = 5.127, p < .001) and explained 44.5% of the variance of job satisfaction.	U.S. nurses need to gain insight into factors influencing job satisfaction in Korean nurses to promote retention and quality care.
Walton-Roberts et al (2017) India	Causes, consequences, and policy responses to the migration of health workers: key findings from India	A mixed method was used in 1736 health workers. Surveys and interviews were employed in this study. Surveys were analyzed Descriptively and logistic regression model.	When compared to nurses, general practitioners and specialist physicians were less likely to report having applied for foreign residence, a foreign work permit, or a foreign license to practice. Gender and profession were strong predictors of having taken concrete steps to migrate. Approximately 42% of nurses considered migration compared to 24% of dentists and 32% of doctors.	The shortages of skilled health workers in India must be examined in relation to domestic policies on training, recruitment, and retention rather than viewed as a direct consequence of the international migration of health workers.
Basiony & Ahmed (2023) Egypt	The study aimed at evaluating nurses' intent to migrate in selected hospitals	Correlational research design. 323 Nurses from selected hospitals at Beni-Suef	More than two thirds of nurses (69.7%) had intent to migrate with the highest percentage of them (45%) had high likelihood to migrate.	The intention of nurses to move cause a serious issue endangering the Egyptian

			The highest percentages of studied nurses (35.3%, 21.4% and 17.7%) intend to migrate to Kingdom of Saudi Arabia (KSA), Kuwait and Germany, respectively. Findings significant positive correlation between overall push and pull factors revealed statistically (r-0.86, p<0.001).	healthcare system. Creating a supportive work atmosphere, providing the required equipment and tools, raising nurses' pay and benefits to a level that ensures better living conditions and social welfare and improving their financial situation.
at Beni-Suef governorate: pushing and pulling factors		governorate. Data was collected via self-administered questionnaires.		
Thapa & Shrestha (2017) Nepal	Factors Influencing Brain Drain among Nepalese Nurses	228 Nepalese nurses A descriptive cross-sectional study. Self-administered questionnaire was used	The majority (72.8%) had ranked very important push factors were personal ambition followed by low salary (62.3%) and political conflict (64.0%). Majority of nurses (86.0%) working in Nepal had ranked very important push factors were lack of job and career opportunity followed by low salary (80.7%) and lack of satisfactory working environment (70.2%)	The underlying causes of migration need to be adequately addressed, which further leads for a better chance for nurses to retain in their own country.
Phillip et al (2020) India	A Study on Contributing Factors of Nurses Migration to Overseas among the Staff Nurses Working in Selected Hospital at Mangalore	103 staff Nurses A descriptive cross sectional quantitative study Checklist on contributing factors of nurse's migration was used	Majority (95.14%) of them said that less salary in India is the major contributing factor for migration. The second reason given by the subjects was better employment opportunities (92.23%). The third most reason indicated by the subject was the opportunity to improve professional skills and practice abroad (92.21%)	It was concluded that variety of contributing factors which influences the nurses for migration.

Most research found that social, cultural, economic, and environmental issues influence nurses' inclination to relocate. Ten focus groups were used to gather information from 83 doctors and nurses for a study conducted by [4]. According to this study, there is a growing trend of migration, which can be attributed to social and economic issues in the healthcare industry, such as inadequate Labor planning, low job satisfaction, and unstable political and economic environments. Similarly, 30 nurses were interviewed for a different study on the skills and brain drain of nurses conducted in Sahara Africa. The findings showed that there was inadequate health care, no professional development, and widespread underpayment. Even if the nurses desired to stay in their native country, they don't really have much control regarding leaving [7]. Additionally, A qualitative investigation was conducted in the United States of America, concentrating on the cultural impacts on the coping mechanisms employed by Filipino immigrant nurses. It was shown in this study that similar coping behaviors and methods were displayed, and that stress management, coping mechanisms, and the impact on one's culture should all be given special attention [8]. The results of this study were reinforced by [12], who established the importance of coping mechanisms in nurses' transitions, and by [8], who addressed potential cultural concerns associated with migration.

Considerations influencing migration among Nepalese nurses" emphasized that the main causes of migration are personal considerations, such as aspirations for better working conditions and environments, educational chances, and better compensation, as well as a lack of training and educational prospects [5]. An attitudinal scale was used to gather data from 1410 Turkish students in a study carried out in Turkey by [6]. The study's participants mean attitude scale for brain drain total score was 53.88±11.03, suggesting that they had a positive attitude toward the phenomenon.

In a study done in Nepal by Kadel & Bhandari [9], 99 registered nurses participated. According to this study, a few significant push factors included low pay (90.9%), a terrible working environment (71.7%), and a lack of career advancement (92.9%). However, higher pay (86.9%), better work atmosphere (81.8%), better education (77.8%), and greater career growth (87.9%) were the most important pull factors. Furthermore, 96% of nurses expressed dissatisfaction with their pay. 502 nurses took part in a study that was carried out in Saudi Arabia. According to this study, Filipino nurses have a higher turnover rate than Malaysian, Pakistani, Indian, or Saudi local nurses. Numerous people mentioned prejudice as a reason they thought about leaving. They believed that nurses should be paid a national salary that is determined by their level of expertise and caregiving. Indicators of expected turnover included discrimination, social support from the immediate supervisor, organizational commitment, and autonomy [10]. A study conducted in the United States of America to gather data from 105 nurses using questionnaires. The results revealed that there were substantial relationships between self-esteem ($r = .381$, $p < .001$), work satisfaction and life satisfaction ($r = .476$, $p < .001$), self-efficacy ($r = .342$, $p < .001$), and perceived organizational support ($r = .281$, $p < .001$). There was a negative correlation between perceived stress and job satisfaction ($r = -.328$, $p < .001$) [11].

In an Indian study, information was gathered from 1736 healthcare professionals. According to research findings, 42% of nurses thought of moving, compared to 24% of dentists and 32% of physicians. Questionnaires were administered to 228 Nepalese nurses as part of a quantitative study [17]. The results showed that personal ambition was considered as an especially important push factor by 72.8% of respondents, followed by poor wage (62.3%) and political strife (64.0%). Lack of employment and career opportunities was identified as a major push factor by most nurses

(86.0%) employed in Nepal, followed by low pay (80.7%) and an unsatisfactory working environment (70.2%). Likewise, 103 Staff Nurses in India were given questionnaires as part of a study. According to data, most of them (95.14%) claimed that one of the main reasons for migration is India's lower salaries. Better job opportunities were cited by the subjects as their second justification (92.23%). The ability to advance professional expertise and practice overseas was cited by the respondent as the third most key factor (92.21%) [17].

Discussion

The extent of the papers in this systematic review found comparable push and pull factors in emerging countries. Most migration studies up to 1960s used the push-pull model, which identified demographic, environmental and economic factors that were "assumed to push people into destination places and pull them out of places of origin" [20]. Push factors which are internal in nature are those that exist in the country of origin of the health worker and lead them to depart from the healthcare system in which they were trained. Pull factors are external as well since they characterize the conditions in the country of destination that encourage health workers to immigrate. The possibility to create a profession, stability, peace and greater income were identified as the primary benefits in a Saudi Arabian survey. Furthermore, the attractive salary package was the primary draw for migrant professionals, including nurses, to work in Saudia Arabia. Every participant stated that their home country's salary was not comparable to those in Saudi Arabia. Saudi Arabia had salaries that were up to four times higher than those in the US. According to the migrant nurses and doctors, they paid for their kids' schooling and college expenses in addition to buying houses back home [4]. Furthermore, free yearly flights to their home countries, housing allowances or accommodations, travel reimbursements and family contracts that cover children under the age of 18 are commonly given to migrant healthcare workers. Four individuals emphasized these themes by relating how important the reward was to their family situation at home [4]. Expectations for a high income and a better quality of life were shown to be the primary drivers of nurses migrating to other countries in another survey done in New Delhi [21]. Prakash et al. [22] conducted another study in which they found that low salaries, job insecurity, and poor educational quality were the main causes of brain drain among Nepalese nurses. Another study by Nguyen et al [23] found that nursing students thought to migrate primarily due to financial considerations.

On the other hand, according to Li. Etal [24]., "low compensation, few opportunities for advancement in one's career, little opportunities for education and hazardous or unstable working conditions" are examples of push factors. High nurse- to- patient ratios, drug shortages, a lack of supplies and equipment, extremely poor working conditions in the country of origin and epidemics of HIV/AIDS and other serious illnesses are some more push factors that can make work stressful in developing nations [18]. The low wage level and potential for better living in Taiwan attract Indonesian nurses who are interested in working there. Nonetheless, the study's participants felt under pressure, confronted, and disappointed when presented with the unmet expectations of working as caregivers without a clear career path. Furthermore, one of the biggest barriers to performing their jobs was found to be the necessity of speaking in a foreign language. To make things better for both countries, better policies must be put into place [14]. According to the research, Indian nurses working in Italy must immigrate to take advantage of opportunities to improve their economic and social status and to dispel stereotypes about the stigma associated with their profession—which is especially true for women [13].

The literature offers some insights into migration patterns and trends, experiences after migration, and approaches to managing migration and its effects, as well as the fallout for migration to countries of origin. There are several gaps in the knowledge on the migration of Caribbean nurses, which present opportunities for further study these includes "comprehensive, detailed studies on migratory movements, legislation, policy, and other issues," which are still poorly understood on many Caribbean islands [2]. Male participation in nursing is growing, but more slowly in Caribbean nations, where women still make up the majority of nurses. Most of the migration-related literature on Caribbean nurses exclusively discusses the viewpoint of women. In a gendered approach, the experiences of male nurses would be acknowledged and given a voice, after which gender comparisons could be established. Again, data that is representative of all nurses would be beneficial for plans, whether they are implemented at the regional, national, or organizational level.

Conclusion

In developing nations, migration is still a major problem. Therefore, it is imperative that a plan of action be put in place to reduce the problem. There has been and will continue to be a nursing exodus, but catastrophe could ensue if decision-makers and nurse supervisors fail to take proactive measures to address this issue. Recent research findings and the ongoing trend of international nurse migration have consequences for policy makers and nurse managers at all levels. The examined literature has demonstrated that, as nurses' social and occupational situations have changed over time, so have their reasons for migrating. Political, professional and socioeconomic variables have all been important motivators. Therefore, to address the issues that arise because of nurse migration, policy makers and nurse managers who are involved in both the ends of the process must comprehend the factors that may have led

to nurse migration. Within the constraints of the resources at hand, advocacy for the development and safeguarding of nurses is also necessary. The results also imply that many sources' nations should investigate the factors that lead nurses to seek employment opportunities in other (developed) nations. Furthermore, nurse managers in the nations of origin must take the initiative to lobby legislators and health administrators on matters of nursing staff retention, backed by administrations dedicated to employing less expensive tactics, such as pushing for nurses' recognition and encouraging possibilities for skill development inside their institutions, nation and be dedicated to addressing the push factors noted by nurses. In conclusion, by negotiating for better pay, better working conditions, more opportunities, better patient to staff ratio and more specialized equipment, this problem can be made less worse and the migration issue less severe.

Limitations

Only articles published in low and middle incomes countries were used. Therefore, the likelihood exist that I may have missed vital studies done on the push and pull factors of migration in developed countries. Only articles that were published under 10 years and were in English was utilized.

Acknowledgement

Conflict of Interest

There is no conflict of interest.

References

[1]. International Council of Nurses., 2006, The global nursing shortage. Priority areas for intervention. ICN: Geneva.

[2]. International Organization for Migration (IOM)., 2017, Migration in the Caribbean: Current Trends, Opportunities and Challenges. Working Paper 1. San Jose, Costa Rica: *International Organization for Migration (IOM)*.

[3]. Ferguson, Cepal, Faridi, R., 2018, Migration Theories: Lee's Push Pull Theory. Available online: https://rashidfaridi.com/2018/04/05/migration-theories-lees-push-pull-theory/ (Accessed on 13 February 2021).

[4]. Almansour, H., Aldossary, A., Holmes, S. *et al., 2023,* Migration of nurses and doctors: pull factors to work in Saudi Arabia. *Hum Resour Health*, 21 (25). https://doi.org/10.1186/s12960-023-00809-5

[5]. Baral, R., & Sapkota, S., 2015, Factors influencing migration of Nepalese Nurses. *Journal of Chitwa Medical College* 5(12): 25-29 http://jcmc.com.np/jcmc/index.php/jcmc/article/view/920

[6]. Oncu, E., Vayisoglu, S. K., Karadag, G., Alacam, B., Gov, P., Tosun, A. S., Orak, S., Catiker, A., 2021, Intention to migrate among the next generation of Turkish nurses and drivers of migration. *Journal of Nursing Management* https://doi.org/10.1111/jonm.13187

[7]. Lupike, G., 2013, The skills and brain drain what nurses say. Journal of Nursing Management. https://doi.org/10.1111/j.1365-2702.2012.04242.x

[8]. Connor, J. B., 2006, Cultural influences on coping strategies of Filipino immigrant nurses *Workplace Health Saf.* 2016 May;64(5):195-201. Doi: 10.1177/2165079916630553. Epub 2016 Mar 29. PMID: 27026273

[9]. Kadel, M., Bhandari, M., 2018, Factors intended to brain drain among nurses working at private hospitals on Biratnager, Nepal. A multidisciplinary Journal of Science, technology and Mathematics http://nepjol.info/index.php/BIBECHANA

[10]. Alshareef, A.G., Wraith, D., Dingle, K., Mays, J., 2020, Identifying the factors infuencing Saudi Arabian Nurses' turnover. *J Nurs Manag*; 28(5):1030–40.

[11]. An, J-Y., Cha, S., Moon, H., Ruggiero, J.S., Jang, H., 2016, Factors Affecting Job Satisfaction of Immigrant Korean Nurses. *Journal of Transcultural Nursing*; 27(2):126-135. Doi:10.1177/1043659614539175

[12]. Efendi, F., Dwi Wahyuni, S., Indarwati, R., Hadisuyatmana, S., Kurniati, A., Usin, Z. A., 2020, The lived experience of Indonesian nurses in Kuwait: A phenomenological study. *Kontakt*;22(4):235–42.

[13]. Stievano, A., Olsen, D., Tolentino Diaz, Y., Sabatino, L., Rocco, G. (2017). Indian nurses in Italy: A qualitative study of their professional and social integration. *J Clin Nurs.* 26(23–24):4234–45.

[14]. Nursalam, N., Chen, C. M., Efendi, F., Has, E. M., Hidayati, L., Hadisuyatmana, S., 2020, The lived experiences of Indonesian nurses who worked as care workers in Taiwan. *J Nurs Res.;* 28(2):e78. https://doi.org/10.1097/jnr.0000000000000355

[15]. Walton-Roberts, M., Runnels, V., Rajan, S.I. *et al.* Causes, consequences, and policy responses to the migration of health workers: key findings from India. *Hum Resour Health* 15, 28 (2017). https://doi.org/10.1186/s12960-017-0199-y

[16]. Basiony, M., & Ahmed, R. M., 2023, Intent to Migrate among Nurses in Selected Hospitals at Beni-Suef Governorate: Pushing and Pulling Factors. Assiut Scientific Nursing Journal Vol; 11 (37): 165 – 174 http://asnj.journals.ekb.eg

[17]. Thapa, B., & Shrestha, B., 2017, Factors influencing brain drain among Nepalese nurses. *Kathmandu Univ Med J* 2017;57(1):35-9.

[18]. Dywili, S., Bonner A, O'Brien L. Why do nurses migrate? A review of recent literature. *J Nurs Manag*. 2013; 21: 51120. 14.

[19]. Oosthuizen, M.J. An analysis of the factors contributing to the emigration of South Africa nurses. *PhD Dissertation*, *University of South Africa, Pretoria*, 2005, 177.

[20]. Castles, S., de Haas, H. & Miller, M. J., 2014. The Age of Migration. 5th ed. Basingstoke, Hampshire: *MacMillan Publishers Ltd.*

[21]. Khadria, B., 2004, "Migration of Highly Skilled Indians: Case Studies of IT and the Health professionals", OECD Science, Technology and Industry Working papers.

2004/6. paris, *Cedex, France*: *OECD publications*.

[22]. Prakash, S., Yadav, p. & Yadav, K. 2018, Perspectives of developing nursing education in Nepal. *Nurse Care Open Access J.*;5(4):214-20.

[23]. Nguyen, L., Ropers, S., Nderitu, E., Zuyderduin, A., Luboga, S., & Hagopian, A., 2008, Intent to migrate among nursing students in uganda: measures of the brain drain in the next generation of health professionals. *Human Resources for Health*. 2;6(1):5.

[24]. Li, H., Nie, W. & Li, J., 2014. The benefits and caveats of international nurses. *International Journal of Nursing Sciences* I, pp. 314-317.