

# Being Pushed and Pulled to Migration: A Study on Filipino Healthcare Workers

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**Abstract:** Medical migration is a vast field that covers numerous concerns, one of which is the shortage of healthcare workers in source countries. The “push and pull” factors that influence the migration of Filipino healthcare workers can be determined, hence, this research examines how the factors affect the Filipino healthcare workers’ decision to migrate. Moreover, this research aims to help the Philippine healthcare sector in order to further promote protection and retention of local healthcare workers. Hence, providing means to support the well-earned care for the Filipino healthcare workers.

**Keywords:** Filipino healthcare workers, healthcare, healthcare workers, migration, migration decision of healthcare workers, pull factors, push factors.

## 1. Introduction

### A. Background of the Study

Healthcare is a vast industry wherein medical services are being provided to an individual, however, it covers much more than the doctor-patient relationship. The Cambridge English Dictionary defines healthcare as the practice or industry that deals with the provision of medical services. The modern healthcare industry consists of the following sectors: manufacturing drugs and medical equipment, managed healthcare, provision of health care, and healthcare facilities (Investopedia, 2021). The healthcare sector in the Philippines continues to become unstable due to limited number of human resources. It has been argued that job inadequacy, professional growth, lack of support for HCWs health, safety, and well-being, and the rising demand for Filipino HCWs in destination developed countries have been the key problems in the local health sector (HRH2030 Program, 2020). Migration reflects a common understanding of an individual who moves from his home country to another international country for various reasons, whether may be temporary or permanent. This can be applied to a medical concept which can be called as *medical migration*. Medical migration is defined as the movement of a licensed healthcare professional from one country to another to practice medicine, which includes those who travel across borders and those who migrate for a significant period of time to obtain a specialization, as well as those who migrate permanently (Humphries et al., 2017). According to Hagopian, et al. (2005), as cited in Jirovsky, et al. (2015), various countries

of origin encourage doctors to search for further opportunities overseas, hence, the culture of “medical migration.”

Healthcare workers in the Philippines have been known to migrate to other nations and seek opportunities abroad. It was discovered that the dominant source for nurses in Canada, the UK, and the United States was from the Philippines (WHO, 2014). Healthcare workers are faced with push and pull factors that motivate their decision to migrate. These push factors can be observed in the country of origin and the pull factors are detected in the destination country. In other countries, capitalization in the global market demand allows exportation of their workers. Whereas, underdeveloped countries result in decreasing number of skilled workers when they decide to transfer to more developed countries are concerned about “brain-drain” (Bludau, 2021). As mentioned by Andrews et al. (2005), cited by Marcus et al. (2014), it is indeed a prevalent practice to depend on Filipino nurses, and in the USA, the demand for nurses was expected to outpace supply by roughly 30% in 2020. There are numerous grounds as to why healthcare professionals are pulled towards migration. The search for better social, economic, and professional opportunities overseas attracts the human resources for health to migrate (HRH2030 Program, 2020). Healthcare professionals continue to seek opportunities that will provide optimum results. Higher salaries and better working conditions will continue to be the primary attraction for these healthcare workers to favor international opportunities. In reality, an important factor that drives human resources for health to migrate is due to low compensation in the Philippines and comparably higher wages in destination countries. Filipino nurses earn an estimate of 20 times more in the United States of America as compared to in the Philippines (HRH2030 Program, 2020). Benefits, wages, and compensation is the utmost reason why local healthcare workers migrate — to find support for their families back home. Nations that offer a stronger and progressive wage system is a major attraction to Filipino healthcare workers as it would increase the funds they would be able to send back home. Migration can be detrimental to a country, especially when the majority of the labor force chooses to work overseas. There is a significant lack of doctors, nurses, and midwives in 36 countries in sub-Saharan Africa, and there is a global need of approximately 2.3 million of these

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professionals (Gedik, 2012). Supporting Gedik's (2012) idea, Plotnikova (2011), Connell *et al.* (2005), Buchan *et al.* (2008), Buchan *et al.* (2014), Lorenzo (2008), and Andrews and Dziegielewski (2005) discussed that global migration of nurses is evident in conducted studies and the occurrence of health workers migration has become more dynamic, including numerous nations.

### B. Statement of the Problem

The researchers presume that there are various reasons as to why Filipino healthcare workers choose to migrate internationally, especially considering an economically developed country. These factors may include inadequacy of government support, job opportunities, gain of specialization, and better cost of living. During the year 2021, there have been news reports in the country that nurses choose to resign in the home country and migrate. According to Alibudbud (2022), the first two to three weeks of October 2021, it was discovered that approximately 5-10% of nurses that are working in private hospitals have decided to resign and that a hospital director discovered that the number of nursing staff had gone from 200 to 63 over the previous year. This indicates that when the pandemic began, around 40% of nurses in private hospitals had resigned. With this recent controversy of a surge in the migration of healthcare workers during the pandemic, the researchers were influenced to delve into determining whether the push & pull factors affect the decision-making process of Filipino healthcare workers in terms of migration.

#### 1) Research Questions

In order to fully assess the factors that affect the migration decision of Filipino healthcare workers, the researchers formulated questions that would further deepen their understanding:

- What are the factors that influence the decision of Filipino healthcare workers to migrate?
  - How do *Push Factors* affect the migration decision of Filipino Healthcare Workers?
  - What is the level of awareness of the Filipino Healthcare Workers on the strategies or policy efforts made for their protection and retention?
- How do *Pull Factors* affect the migration decision of Filipino Healthcare Workers?

#### 2) Research Aims & Objectives

Local healthcare workers play an important role in the healthcare sector because they provide significant opportunities for development and growth in a sector that is economically integrated. The aims of this study are to investigate the push and pull factors that influenced the migration decision of Filipino healthcare workers and to assess the strategies of the Philippine healthcare sector in terms of retaining and protecting its local healthcare workers.

The objectives of the study are as follows:

- Determine if the *push* factors affect the migration decision of Filipino healthcare workers.
  - Identify if the level of awareness of the Filipino HCWs on the strategies or policies

made towards their protection and retention affect their decision to migrate.

- Determine if the *pull* factors affect the migration decision of Filipino healthcare workers

### C. Scope and Limitations

The extent of this research is focused on the Filipino human resources for health who are currently working overseas and who are in the Philippines that are in the process of migrating. The researchers are committed to the discovery of how the determinants *pushed* Filipino HCWs out of the country of origin and *pulled* them towards the desired destination country. The push and pull factors that were discussed in the study were looked into generally and as a whole, wherein how various push factors collectively "pushed" Filipino HCWs to migrate and similarly, how various pull factors in its entirety "pulled" Filipino HCWs to migrate.

This study does not go beyond what it seeks to explore and does not discuss anything irrelevant or unnecessary to the data analysis such as personal demographic information (e.g. name, contact information, birthdate, age, sex) and family background of research participants. The study is minimized by the sample size, which is targeted to have at least 106 respondents and does not include participants who are not Filipino licensed healthcare professionals.

### D. Significance of the Study

The findings of this study would be a useful tool for the *authorities of the Philippine healthcare sector* to reevaluate and develop their system, as well as find solutions in order to counteract the push and pull factors that drive the HCWs to relocate. This may contribute to improving the safety net of retaining healthcare workers which would significantly amplify the Philippine healthcare industry. Furthermore, the determination of how the factors that influence Filipino HCWs to migrate will shine a light on their importance as they are the building blocks of the industry because without them, the industry will stop running. This study would enlighten the healthcare sector to protect its workers and provide a more effective and efficient treatment towards the them.

This would provide valuable information for *other healthcare industries* on a global scale. It can be used as beneficial means of knowledge about the various reasons for healthcare workers migrating to another country. Allowing them to further assess whether or not their local healthcare industry is in the same situation and formulate solutions to avoid having comparable consequences of their local healthcare workers' migration to their economy.

### E. Definition of Terms

*Brain drain* - movement of highly skilled professionals from one country to another seeking for better working conditions

*Healthcare sector* - consists of any organization integrated in providing healthcare services to the public

*Healthcare workers (HCWs) or Human Resources for Health (HRH)* - consists of doctors, nurses, physicians, medical technologists, surgeons, and among others who provide healthcare services

*International or Overseas* - to or from a foreign country; abroad

*Medical Migration* - movement of any healthcare/medical worker from one country to another

*Migration* - movement of a person from one country to another, whether short-term or indefinitely, with specific reason/s

*Push-Pull Factors* - determined reasons as to why people leave their current place and settle to another; push factors that “push” people out of their country of origin; pull factors that “pull” people towards other countries.

## 2. Review of Related Literature

Migration has become a solution for numerous healthcare workers. The international migration and mobility of health workers is increasing in numbers and further growing in its complexity (WHO, 2017). Various reasons exist as to why these healthcare workers choose to migrate. Human health resource migration has been traditionally seen through push-pull migration, which exhibits a dualistic vision of migration, wherein there is a comparison between two separate systems and is differentiated in terms of opportunities, then is connected by migration (Walton-Roberts, 2014). “Brain drain” is a more common term for physician migration and it is not a new phenomenon. Nevertheless, it presents a problem for both the donor countries and the recipient countries. This is due to the large number of doctors who are migrating or have the intention to migrate, as compared to the past (Mullan F., 2005, as cited in Sheikh *et al.*, 2012).

Among the public and private sectors, nurses have ranked low in salary, which remains to be considered as a major push factor. Inadequate working conditions, the use of outdated healthcare technologies, and scarcity of job opportunities were the main contributing factors prompting HCWs to leave. In the present day, hired nurses have described the pressures that come from the expectations of their families as a factor in their decision. On the other hand, such pull factors were described as the characteristics of the destination countries that attract the nurses away from the country of origin, in this case, the Philippines. Among these pull factors are, higher salaries, better quality of working conditions and technologies, and job vacancies due to a labor shortage (Dimaya *et al.*, 2012).

Push and pull factors affecting the migration of local healthcare workers are sensitive to the healthcare sector of the country of origin. Due to poor quality of the healthcare sector, it has become one of the reasons for local HCWs to leave their home country and puts a limit to access healthcare due to healthcare workforce shortage in the home country (Osigbesan, 2021). With the so-called medical “brain drain”, the Philippine healthcare sector is affected in such instances that there were shutdowns of hospitals and “high nurse turnover,” according to a study of Dimaya *et al.* (2012) acknowledging the fact that the Philippines is also a huge source of nurses overseas. The large number of local HCWs leaving, especially those who are highly trained or skilled, affects the healthcare service delivery and capacity of their country of origin (Gushulak, 2017). There would be a downside for local HCWs who choose to remain as

there could be a significant overwhelmingness of workloads and demotivation due to low salaries, lack of being equipped and limited employment opportunities (Afzal *et al.*, 2012). Health workers from low-income nations generate a loss of investment in training as their resources of skills are transferred and at the same time a loss in the healthcare sector when they leave their national health system (Aluttis *et al.*, 2014). Consequences brought upon migration for resource-poor countries which has included loss in financial and human resources, the weakening of the healthcare system, and failure to provide the necessary interventions for public health (Mackey & Liang, 2012).

The identification of push and pull factors can determine and stimulate migration. The vast difference between the origin and destination countries, and the more it grows, the stronger the stimulation to migrate becomes. People move for diverse reasons, encompassing economic, political, familial, educational, medical, and considerations related to work-life balance. There are no limitations based on ethnicity, gender, age, or educational attainment (Okafor and Chimereze, 2020). Hence, potential migrants have to weigh and evaluate their current career and professional and the economic conditions and aspire for a difference and development in their professional lives. Moreover, healthcare workers must assess their present careers and their expected and desired opportunities and take all these factors into consideration, as these decisions have costs and benefits in both psychological and social aspects (Simon *et al.*, 2015, as cited in, Domagala, 2022). In a study conducted by Humphries *et al.* (2017), the free movement of healthcare workers, such as doctors, has its advantages such as the existence of new opportunities for them to grow and obtain new skills and enhance their careers, hence, the possibility to create a better future for themselves and their family. Medical migration may help enhance and supplement research and further improve practice. The decision to migrate is no simple feat, hence, all factors must be considered when planning to migrate, as it will take a toll on an individual’s life, positively or negatively.

### A. Push and Pull Factors of Migration of Filipino Healthcare Workers

The push and pull factors that affect each healthcare worker differ from each individual. Nevertheless, the living and working conditions of a nation may be the greatest determinant of an individual’s career. The underfunding of the healthcare system and unemployment or underemployment were discovered as push factors of migration, including the concerns for job security in the Philippines, the ability to be a medical practitioner or the prospects that are available for one’s career advancement (Castro-Palaganas *et al.*, 2017). These push factors encourage healthcare workers to relocate to another country. In addition to that, the comparison between the country of origin and the new country will also determine the migration of an individual. Inadequate compensation for healthcare workers has been recognized as one of the primary issues pushing HRH to migrate. On the other hand, the desire to migrate is driven by the expectation of better social, economic,

and professional opportunities overseas in addition to the presence of family members in the country of destination (Castro-Palaganas *et al.*, 2017).

There is a distinction between the country of origin and the destination as it determines the working conditions of the healthcare worker, wherein the nation with better economic conditions and working environment will be the optimal choice for the HCW. The process of migration is primarily due to the workforce shortage in some countries which causes an active recruitment overseas which affects the demand for migration (Afzal *et al.*, 2012).

It has been said that push factors are intrinsic in nature. These are characteristics of the home nation that dissuade medical professionals from staying in the system in which they were trained. Conversely, pull factors are characterized as external since they are the conditions that exist in the destination nation that draw healthcare workers there and provide them a reason to immigrate (Aluttis *et al.*, 2014). When we examine the “push and pull factors” through the perspective of the healthcare executives who decide when and how the physician-system integration will transpire. In physician-system integration, push factors motivate a physician to leave an individual or a group of practice — from the point of origin. Moreover, a migrant physician will take into account and recognize these push factors more accurately, as it is more familiar to them. More often than not, push factors are viewed as a negative factor. Additionally, pull factors attract the physician to relocate and move overseas to a different health system and these factors are viewed as a positive determinant (Nguyen, 2019). The examination and determination of the “push and pull factors” will allow a physician to make a decision, whether to stay in their country of origin or relocate to another. These factors are often opposites of the other, as the push factors are considered as a negative influence and pull factors as positive.

According to Schumann, *et al.* (2019), in addition to the general wealth gap that healthcare workers take into consideration when migrating, the general route of migration is primarily determined by the procedures and requirements involved in the licensing and registration process for foreign healthcare workers in their desired destination country. Furthermore, all the planning and preparation for the migration process is also affected by their potential social network and the community of the migrating healthcare workers. The decision to migrate does not necessarily revolve around finances, although it is one of the primary factors, the migrating healthcare worker must take into account the environment they will be a part of.

In the interviews conducted by Sapkota, *et al.* (2014), Table 1 represents the data gathered from the study. The research had a total of 15 interviewees, among them were 9 nurses and 6 doctors. The age range of the healthcare workers were from 25 years old to 65 years old. These respondents provided their push and pull factors as to why they decided to migrate which is presented in the table below.

Table 1  
Push and Pull Factors of health worker migration

Push Factors	Pull Factors
Economic Issues	Peer Group Influence
Job Security	Education and Cultural Effect
Workplace Security	Technology and Development
General Security	Better Opportunities
Political Issues	Pay and Conditions
Lack of Recognition	Good Living Standard
Lack of Skill Development	Job Security and Satisfaction
Corrupted Attitude and Wrong Culture	Political Environment
Lack of Supportive Family and Social Environment	Secured Future for the Children and Family
Curiosity to Practice Abroad	
Poor Working Environment	
Children's Education	

*Note.* From Nepalese health workers' migration to the United Kingdom: A qualitative study, by Sapkota, *et al.*, 2014.

### 1) Push Factors

It was investigated that the primary determinants of healthcare migration were the social and economic issues in the healthcare system in various countries, specifically, poor planning of the health workforce, low job satisfaction, political and economic instability, discrimination, and corruption, among others. These interconnected push factors from the donor countries and pull factors from the destination country have been observed to mirror each other and have been the drivers for healthcare workers to migrate accordingly (Almansour, *et al.*, 2022). Results have shown that the primary negative push factors were economic conditions, such as the lack of jobs, lack of professional development, and low wages for nurses have been the most prevalent reasons for nurse migration. Furthermore, positive pull factors included career growth and higher wages were the most common reasons for relocation. Moreover, economic factors, individual social issues, in particular, a chance for a better life, better opportunities, and greener pastures in the United Kingdom were also mentioned. Additionally, themes that revolved around remittances and return migration were also identified as factors affecting the decision to migrate (Ford, 2018). In the experiment of Mumbauer, *et al.* (2021) regarding ‘Employment preferences of healthcare workers in South Africa’, various healthcare workers have negative perspectives towards the public healthcare system due to high patient loads, extensive working hours, inadequate resources, and occupational hazards. These reasons have been cited as reasons for migrating, leaving or avoiding employment in the healthcare sector.

According to Lee (1966) as cited by Mlambo & Adetiba (2017), the factors which influence migration are crime, lawless society, famine, poor working conditions, and corruption. It was discovered that low-employment opportunities, low wages, poor work environment in the country of origin, lack of professional development and specialist training especially in advanced medical technologies, and political instability and poor socioeconomic conditions were push factors for healthcare workers to leave their own country (Nair & Webster, 2013). It was revealed that the gap in salary was huge. A registered nurse's income begins at \$6,000 per month in Australia. In comparison to a nurse's income in the Philippines, which

ranges from \$100 to \$180. It was observed that an attempt to close the wage gap is impractical and unrealistic. Migration allows Filipino nurses to be able to send remittances back to their families, which contributes to the economy as well. For the Philippines and other developing countries, remittances remain to be a large source of income (Marcus, et al., 2014). Unless the socioeconomic conditions are improved in the country and health professionals are provided with better incentives and benefits, staying in the Philippines will not be a practical option for the health care workers (Castro-Palaganas et al., 2017). Low wages are believed to be paramount to doctors and nurses in developing countries, hence, the medical migration. This has led to a call for an increase in wages for healthcare workers, especially those in developing countries (Okeke, 2014).

Moreover, due to the COVID-19 pandemic, it has become a push factor to force healthcare workers to migrate due to unfavorable conditions in the Philippines. Robredo et al. (2022) noted that the healthcare sector in the country has been adversely affected by the out-migration of healthcare workers and a rising number of nurse migrations. This phenomenon is attributed to unjust compensation, the non-receipt of benefits and hazard pay, and delays in insurance reimbursements. Consequently, working conditions have become exhausting, as healthcare workers were forced to work extensive hours with minimal and insufficient equipment for protection.

In February 2019, during the administration of President Rodrigo Duterte, the Republic Act No. 11223 or Universal Health Care Bill was enacted for "*An act instituting universal health care for all Filipinos, prescribing reforms in the health care system, and appropriating funds therefor*" (DOH, 2019). Under the General Provisions of the aforementioned Act states "*It is the policy of the State to protect and promote the right to health of all Filipinos and instill health consciousness among them*". The UHC Act was made to achieve its goals of "effectiveness, quality, and affordability", by means as a response to the management of the COVID-19 pandemic and also a recovery approach from the global phenomenon (Bautista et al., 2022). Health care workers are included as *primary care providers* which the Act refers to distinguished health care workers with defined expertise who are certified in primary care by the Department of Health or any health organizations that are licensed by the DOH. This denotes that Filipino health care workers are as well protected by the UHC Act. The Human Resources for Health (HRH) must be recognized for their vital role in all levels of the Philippine health system, which the UHC Act supports in ensuring a sufficient health workforce (Adora et al., 2022). In addition, along with the National Human Resource for Health Master Plan, this is in practice in order to include strategic efforts for the "production, recruitment, retraining, regulation and retention of the health workforce".

In March 26, 1992, the Republic Act No. 7305 or known as The Magna Carta of Public Health Workers was enacted for the public health care workers in the Philippines. Aims of this Act are: "(a) to promote and improve the social and economic well-being of the health workers, their living and working conditions and terms of employment; (b) to develop their skills and

capabilities in order that they will be more responsive and better equipped to deliver health projects and programs; and (c) to encourage those with proper qualifications and excellent abilities to join and remain in government service." This law serves the public health care workforce in order to guarantee their welfare, address their problem by providing salaries and benefits, and enlist provisions on advised working conditions, compensation and benefits (Carpio et al., 2021).

As cited by Corpuz (2021), several reports of different forms of stigma and discrimination towards the frontline healthcare workers (FHW) have been reported on a global scale during the COVID-19 pandemic, mostly occurred towards Asians with "international travel history and FHW". Corpuz mentioned that there are existing local and international laws that the Philippine government must revisit which are the Universal Declaration of Human Rights and the 1987 Philippine Constitution regarding "freedom from discrimination" and "all individuals are entitled to human rights without distinction of any kind, such as race, color, sex, language, religion, political, or other opinion, national or social origin, property, birth or other status" respectively. Moreover, anti-discrimination agreements, along with Article 9 of the Magna Carta for Public Health Workers, have been implemented as strategic responses to the stigmatization and discrimination towards the FHW.

Occupational Health and Safety Standards in the Philippines are likewise implemented, and the healthcare workers are safeguarded by this. As mentioned by Faller et al. (2018), occupational health and safety efforts are deemed as effective ways to avoid and manage related infections in the healthcare setting. Moreover, such efforts enhance the workplace environment even while protecting healthcare workers. As stated by Tangcalagan et al. (2019), there is a generalized law that supports the welfare of the HCWs and a safe working environment. As a further matter, the Republic Act of 11058 or the Occupational Safety and Health Law enacted in 2018 provides the HCWs an assurance of a safe workplace free from hazards that can result in disease, illness or actual injury.

The fundamental emphasis of initiatives designed to tackle HRH vulnerabilities continues to be the production, recruitment, and retention of sustainable HRH (Tejero, et al., 2022). A well thought of plan is crucial by the government and other related organizations for they must regulate the flow of health professionals between the source and destination countries. As discussed by Afzal et al. (2012), a long-term retention strategy must be taken into factors in terms of arrangement between physicians and organization, policy making participation, freedom of professional decisions, personal, and financial. There is a demand for the health care workers' voices to be heard. There are numerous factors that affect the retention of the human resources for health, especially concerning the wages and the expenses that one faces. The policy of wage increase and awareness of the concerns regarding working hours, including overtime hours, part-time hours, and the commute time of the healthcare workers, it is only fitting that wage satisfaction be a strategy in the retention of healthcare workers (Steinmetz et al., 2013).

The presence of international migration of health workers has consequences to the healthcare sector of the Philippines (HRH2030, 2020). Therefore, the development of the Philippine's healthcare system is negatively affected. There are strategies by the government in order to prevent continuous outflow of Philippine health workers, however, still not enough. According to Orange Health Consultants (2021), regardless of the policy efforts done by the government in order to reduce the flow of migrants, it was found in recent years that 13,000 nurses on average leave the country every year. Moreover, OHC noted that there are "bilateral agreements" between the Philippines and destination countries that have challenges of implementation and have proven ineffective in reducing migrants of Filipino HCWs.

*H0<sub>1</sub>: Push Factors do not affect the Filipino Healthcare Workers' decision to migrate*

## 2) Pull Factors

According to Leonardia, et al., (2012), the literature on the mobility of health workers propose that there is an interaction of the "push and pull" factors which impacts the decision-making process of an individual to stay or to relocate from a workplace. Pull factors attract health workers to urban work environments or overseas, in another country. These pull factors may include career advancements, educational excellence and opportunities, higher financial rewards, and better living conditions — as compared to the country of origin.

The population group composed of the 'young, well-educated, and healthy individuals' are most likely to pursue additional educational and economic improvements which contribute to reasons why these individuals are "pulled" to move and relocate (Zubaran, 2012). In a critical review of Hajian, et al. (2020), the ambition to study and work abroad — in a developed healthcare system, were considered as the most significant pull factors which influenced healthcare workers' decision to migrate to the United Kingdom. Moreover, the enhancement of skills and knowledge, increase in finances, and better working conditions were also considered as major foreign pull factors. The pull factors were divided into two groups of "attractiveness of working and living abroad through exchange of information" and "vivid improvements in workplace, economic, social setting, and family factors". It was observed that opportunities that arise from migration affect the decision-making process of healthcare workers. It allows them to grab the chance to further supplement their education and their work experience. Additionally, these healthcare workers are pulled to migrate to grow professionally in their career in the healthcare industry.

Job opportunities, possibility for one's professional advancement, personal development, professional recognition, professional work environment, sensitive employment policies, stable socio-political environments, quality of life improvement, attractive salaries, and social and retirement benefits are just some of the pull factors that attract nurses to move to their desired destination country (Li et al., 2014). Furthermore, an increase in the form of remittances being sent back home, increase in educational and research collaborations are considered advantages for physician migration, which is

evidence of "brain-gain" (Hossain et al., 2016). Source countries of local HCWs can receive benefits in the form of remittances, noted as "from economic capital flow" (Mackey & Liang, 2012). Primary pull factors include the developed countries' attempt to recruit, provide higher compensation, and better working environment in the destination country (Buchan et al., 2003, as cited in, Prescott et al., 2014).

*H0<sub>2</sub>: Pull Factors do not affect the Filipino Healthcare Workers' decision to migrate*

## B. Theoretical Framework

As discussed by Niu (2022), studies and literature that discusses population migration are backed up by the research on the mechanism of population migration made in the 1880s by Ravenstein, a British geographer. According to Ravenstein, characteristics and factors exist in influencing the migration of the population and he believed that individuals migrate in order to improve their economic conditions. Furthermore, Van Hear et al. (2017), expounded that Ravenstein's theory mainly discussed the combination of factors that push people to leave their homeland and are attracted towards favorable circumstances to their preferred destination. The research conducted by Ravenstein is considered as the origin of the theory of distance influence. The push-pull theory is widely used in order to determine the factors influencing migration (Haijan et al., 2020). As discussed by Zanabazar et al. (2021), the push factors "push" people to move away from their home country, and the pull factors are the factors that attract people to move to other places due to positive characteristics of the destination locations.

Everett Lee's Theory of Migration is a more comprehensive push-pull theory and in order to determine the factors affecting migration decision and process, this theory was conceptualized into four categories:

1. Push factors associated with the country of origin;
2. Pull factors associated with the country of destination;
3. Intervening obstacles; and
4. Personal factors

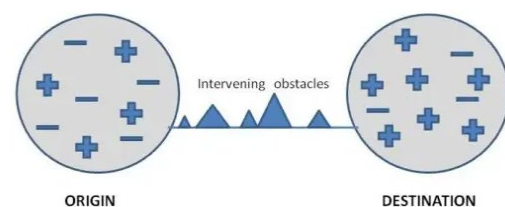


Fig. 1. Everett Lee's Push-Pull theory

*Note.* From Faridi, R. "Migration Theories: Lee's Push Pull Theory." Rashid's Blog: An Educational Portal, 5 April, 2018, <https://rashidfaridi.com/2018/04/05/migration-theories-lees-push-pull-theory/>

The push factor identifies the factors that influence an individual to move away from the country of origin, hence, pushing them out of the country. On the other hand, the pull factor determines the factors that attract an individual into moving to their desired destination country, therefore, pulling them into the country. Wae-esor (2022) discussed that the



intervening obstacles are commonly considered as distance and transportation, which these factors must be resolved before the actual migration process occurs. Additionally, the personal factors are regarded as the individual's personal understanding of these factors affecting the actual occurrence of migration.

The push and pull factors are both present in these two theories and regarded as the main factors of migrants' decision to leave the homeland and relocate to a different geographical area (Wae-esor, 2022). Regardless of the two theories being combined, the researchers will focus on the push and pull factors, as seen in Lee's Theory of Migration, the two aspects are still the main factors being looked into. In the health worker migration perspective, Lee's Theory of Migration presumes that a physician's decision to migrate is strongly influenced by the positive and negative factors that are associated with the country of origin, destination country, professional conditions, and personal circumstances and reasoning (Nguyen, et al., 2019). Hence, two theories that the researchers will be guided by are the Push and Pull Theory proposed by Ravenstein (1876) and the Theory of Migration proposed by Lee (1966).

### C. Synthesis

The push and pull factors should influence and determine the migration of Filipino healthcare workers. A substantial collective identification of the two categorized factors positively affects the migration decision of Filipino HCWs.

### D. Research Simulacrum

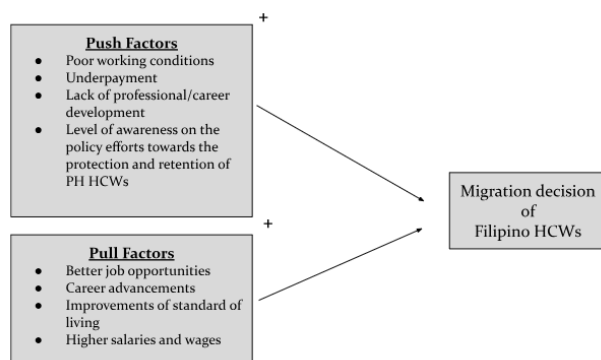


Fig. 2. Research conceptual framework

This research conceptual framework represents the main idea of the study and the variables being studied. This represents that the push and pull factors influence the migration decision of Filipino healthcare workers. The push and pull factors are the independent variables and the migration decision of Filipino HCWs is the dependent variable. The researchers are aided by this conceptual framework in order to thoroughly discover whether these factors are realistic and, in a way, may understand how the Filipino HCWs are being treated in the healthcare sector.

## 3. Research Method

### A. Research Design

The researchers conducted a quantitative research design, particularly correlational research which is a non-experimental

type of research. According to Bhat (2023), a correlational research design aims to establish a relationship between two variables that are nearly connected with no manipulation of the independent variable. Moreover, a correlational research design uses statistical analysis in order to determine the relationship between variables.

The research design that was implemented explored the push and pull factors that affected the decision-making process of Filipino healthcare workers in terms of migration. In this study, the researchers assessed the impact of the push and pull factors which served as the independent variables. On the other hand, the dependent variable is the migration decision of Filipino healthcare workers.

### B. Sampling Technique

A purposive sample was used as the sampling strategy, and the researchers purposely selected Filipino healthcare workers who are both actively working overseas and in the process of migrating as research participants from an unknown population. This technique aided the researchers in achieving the study's objectives.

### C. Research Instrument and Data Gathering Procedure

The researchers utilized a structured online questionnaire through the use of Google Forms. The online questionnaire consists of series of questions which has been divided into themes, in terms of data privacy consent, demographic profile, push factors of migration, pull factors of migration, and awareness on the current policy efforts of the Philippine health care sector towards protecting and retaining HCWs. A Likert scale with four points was employed, with a numerical representation where 4 denoted Strongly Agree, 3 denoted Agree, 2 denoted Disagree, and 1 denoted Strongly Disagree.

The online survey remained unbiased and ensured no coercion or force to participate in the study. In addition to that, there was no discrimination involved and tampering with any data. The researchers ensured that it is free from any biases, avoided conflict of interest, and promoted consensual participation in this survey.

The duration of the study was approximately 3 months which included 1-2 months for data collection and 2-3 weeks for data analysis. Moreover, the duration of the survey itself was around 10-15 minutes for the participants to accomplish.

Primary data was the key source of the researchers' data collection. Online questionnaire was utilized as a form of data gathering for respondents of Filipino HCWs. The information gathered served as primary data in proving the claims and objectives of this study. Furthermore, in order to provide a more comprehensive result and answer to the hypotheses, data gathering of primary data was implemented. Furthermore, the targeted respondents are Filipino healthcare workers who are currently working and residing overseas and those who are still in the process of migrating which provided accurate data for the study. These are the targeted respondents as they will be able to provide reasons as to why they decided to migrate and the "push and pull" factors they took into consideration when making their decision. Additionally, the targeted respondents were able

to provide their level of awareness on the existing strategies for the Philippine healthcare sector towards the protection and retention of Filipino HCWs.

Since there were no available data to estimate the population of Migrant Filipino Healthcare Workers, the determined population of migrant healthcare workers for this study is unknown. Smith (2013) provided an equation in order to determine the necessary sample size for an unknown population: Necessary sample size =  $\frac{z^2 \cdot \sigma \cdot (1-\sigma)}{MoE^2}$ , whereas  $z$  is the Z-score,  $\sigma$  is the standard deviation, and  $MoE$  is the margin of error. The confidence level that will be used is 90% with a Z-score of 1.645. The standard deviation that will be used is 0.5, as it is the safest decision to ensure that the sample size will be sufficient. The margin of error that will be used is 0.05 as it is the standard confidence interval to reach the minimum sample size. Therefore, as seen below is the calculated sample size required for this study:

$$\begin{aligned} \text{Necessary sample size} &= z^2 \times \sigma \times (1 - \sigma) / MoE^2 \\ &= (1.645)^2 \times (0.5) \times (1-0.5)/(0.08)^2 \\ &= 105.7041 \\ &= 106 \end{aligned} \tag{1}$$

D. Data Analysis

The data gathered from the respondents underwent evaluation by organizing responses according to their similarities and based on the theme of the objectives. The data was categorized and sorted out using a spreadsheet program either Google Sheets or MS Excel. The determined factors of each push and pull factors category in the survey as seen in the appendix were averaged to align with the objectives and regression model of this study.

Thereafter, the data underwent analysis using a statistical software, SPSS. Binary logistic regression is the statistical analysis that was used to test the binary outcome of the dependent variable of this study which has a 0 & 1 type of data. Specifically, 1 = Migrant Filipino HCWs and 0 = Filipino HCWs that are in the process of migration. This regression allowed the researchers to assess and determine the answers for the hypotheses. Moreover, it allowed the researchers to examine the data which then was analyzed and interpreted, in order to provide an accurate resolution for the objectives of the study. Goodness-of-fit statistics and regression were the focal data analysis tools used.

$$\ln\left(\frac{\pi}{1-\pi}\right) = \alpha + \beta_1 \text{PSFs} + \beta_2 \text{PLFs} \tag{2}$$

Where:

$$\ln\left(\frac{\pi}{1-\pi}\right) = \text{Migration of Filipino HCWs}$$

$\pi$  = probability of the event

$\alpha$  = constant

$\beta_1$  PSFs = Push Factors

$\beta_2$  PLFs = Pull Factors

The binary logistic regression equation seen above represents

the relationship between the dependent variable, *Migration of Filipino HCWs*, and the independent variables, *Push Factors* and *Pull Factors* — with the respective beta coefficient, that the researchers have observed from the previous studies conducted.

4. Results and Discussion

This section provides the presentation of statistical results based from the online structured survey results with 130 research participants in this study.

A. Results

1) Goodness-of-fit statistics

Table 2  
Omnibus tests of model coefficients

		Chi-square	df	Sig.
Step 1	Step	5.160	2	.076
	Block	5.160	2	.076
	Model	5.160	2	.076

Table 2 shows that there is a significant improvement in fit as compared to the null model. The significance value is less than 0.10, therefore, the model is showing a good fit.

Table 3  
Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	9.587	8	.295

Table 3 is also a test of model fit, which should be greater than 0.10 to support the Omnibus Test being significant. The calculated significance value of .295 exceeds the alpha level of 0.10. Consequently, no distinction exists between the observed and predicted model.

Table 4  
Contingency table for Hosmer and Lemeshow test

Step		Status of FHCW [Choice] = In the process of migration		Status of FHCW [Choice] = Migrant Filipino HCWs		Total
		Observed	Expected	Observed	Expected	
		1	3	3.656	10	
2	5	3.342	8	9.658	13	
3	6	3.111	7	9.889	13	
4	3	2.920	10	10.080	13	
5	1	2.628	12	10.372	13	
6	2	2.244	11	10.756	13	
7	2	2.143	11	10.857	13	
8	0	1.993	13	11.007	13	
9	1	1.558	12	11.442	13	
10	1	.406	12	12.594	13	

We can see in Table 4 that the observed and expected values are almost the same for both the status of Filipino HCWs. This indicates that the model appropriately aligns with the dataset, suggesting a lack of disparity between the observed and anticipated models, as their values are nearly equal.

2) Extensive analysis on regression output

Table 5 displays the Pseudo R-squared values, encompassing both the Cox & Snell and Nagelkerke R-squares. The Nagelkerke R-Square, commonly employed and an adjusted version of the Cox & Snell scales the statistic to span the



complete range from 0 to 1. In this context, it can be asserted that the independent variables in the model account for a 6.3 percent variation in the dependent variable.

Table 5  
Model summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	119.203 <sup>a</sup>	.039	.063

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Table 6  
Classification table

Observed	Status of FHCW [Choice]	Predicted		Percentage Correct
		Status of FHCW [Choice] In the process of migration	Migrant Filipino HCWs	
Step 1	In the process of migration	0	24	.0
	Migrant Filipino HCWs	0	106	100.0
Overall Percentage				81.5

a. The cut value is .500

The Classification table shows how well the model predicts the correct category, the independent variables predicting the dependent variable in this study. We can see here that there are 24 predicted ‘in the process of migration’ and 106 predicted ‘Migrant Filipino HCWs’. The model presents good sensitivity in which among the respondents are migrant Filipino healthcare workers and determined 81.5 percent of cases overall (percentage accuracy in classification), hence, if we always predict that a respondent is a migrant Filipino healthcare worker.

Table 7  
Variables in the equation

Step 1 <sup>a</sup>	Push Factors	B	S.E.	Wald	df	Sig.	Exp(B)	90% C.I. for EXP(B)	
								Lower	Upper
	Push Factors	-7.277	7.569	.924	1	.336	.001	.000	176.510
	Pull Factors	14.850	8.026	3.423	1	.064	2814117.662	5.197	1.524E+12
	Constant	-28.363	24.593	1.330	1	.249	.000		

a. Variable(s) entered on step 1: Push Factors, Pull Factors.

$$\text{Migration decision of Filipino HCWs} = -28.363 - 7.277\text{PSFs} + 14.850\text{PLFs} \quad (3)$$

*Regression Model*

Table 7 and eq. 3 above show the relationship between the independent variables (predictors) and the dependent variable (outcome) of this study. Based on the β (beta) coefficient of -7.277, Push Factors negatively affect the migration decision of the Filipino healthcare workers. Additionally, resulting in a 14.850 β coefficient, Pull Factors positively affect the migration decision of Filipino healthcare workers. Lastly, the constant resulted in a β coefficient of -28.363, therefore, it has a negative relationship with the dependent variable.

Moreover, the Pull Factors are considered to be significant after resulting in a significance level of 0.064 which is less than alpha 0.10. This shows that Filipino HCWs’ decision to migrate is significantly affected by the Pull Factors of their destination country. On the other hand, Push Factors are not considered to be significant after having a significance level of 0.336.

*B. Discussion*

Given the results of the β coefficients, the researchers discovered that Push Factors negatively affect the migration

decision of the Filipino HCWs, hence, it does not push them to migrate. In line with the results of the significance level of the Push Factors, it is determined as insignificant to the migration decision of Filipino HCWs, hence, they are not being pushed out of the country. On the other hand, the Pull factors positively affect the migration decision of the Filipino HCWs, therefore, they are pulled to migrate to another country. In line with the results of the significance level of the Pull Factors, it is determined as significant, therefore, the Filipino HCWs are being pulled to migrate to another country.

Taking into account the results, the researchers have determined that Filipino HCWs do not migrate because they are being pushed out of the country, rather, they decide to migrate because they are being pulled or attracted by another country. This contradicts the initial assumption that both push and pull factors affect the migration decision of Filipino HCWs. Aluttis et al. (2014) and Castro-Palaganas et al. (2017) discussed push factors that exist in the country of origin which influence the reason of healthcare workers to leave the country where they were initially trained. Based on the findings of the data gathered, the researchers saw a different result because the independent variable, *Push Factors*, resulted in a negative and insignificant relationship with the dependent variable, *Migration decision of Filipino HCWs*. As discussed by Hajian, et al. (2020), healthcare workers are more inclined to migrate due to the pull factors such as gaining knowledge, increase in finances, and better working conditions. These factors have attracted and pulled HCWs to migrate to countries that provide a better environment for them.

The following Pull factors have been discovered to be significant in the migration decision of Filipino HCWs: Higher wages, better working conditions, better benefits, career development, better standard of living, higher remittance return, job opportunities, and job security. The researchers have discovered that these factors have pulled Filipino HCWs to migrate. It was shown that Filipino HCWs are inclined to migrate because of better situations and environment overseas. They are not being “pushed” out of the country, rather the better working and living conditions “pull” them to migrate.

Moving forward, Filipino HCWs who are still in the Philippines and in the process of migrating provided their reasons as to why they only chose to migrate now. Individuals are seeking to migrate for various reasons, primarily driven by financial considerations and better opportunities. Others mention the dissatisfaction with the treatment and compensation of healthcare workers in their home country, emphasizing the poor conditions and lack of progress and development. Some discuss their desire for career growth, higher income, and improved quality of life. The process of migration involves overcoming challenges such as financial constraints, complex requirements, and the impact of retrogression. Experience is a key factor, with some choosing to gain expertise locally before pursuing international opportunities. Family reasons, dissatisfaction with the current job or government, and a pursuit of personal and professional development are recurring themes among those contemplating migration.

## 5. Summary, Conclusion, and Recommendations

The study's objectives and research questions culminate in this chapter. The conclusions offered here are based on the research findings and are supplemented by practical recommendations and proposals for future research endeavors.

### A. Summary

The primary purpose of this study is to determine how the push and pull factors affect the migration decision of Filipino HCWs that are currently working overseas and in the process of migration, whether the push factors that exist in the Philippines influenced them to relocate or the pull factors that exist in other countries that attracted them to leave their home.

The salient findings of this study are as follows:

1. *Push Factors* negatively affect the migration decision of Filipino healthcare workers with a  $\beta$  coefficient of -7.277 and a significance level of 0.336 revealed that push factors are not significant to the migration decision of Filipino HCWs.
  - 1.1. The level of awareness of Filipino healthcare workers on the strategies/policy efforts towards their protection and retention considered under push factors negatively affects the migration decision of Filipino healthcare workers.
2. *Pull Factors* positively affect the migration decision of Filipino healthcare workers with a  $\beta$  coefficient of 14.850 and a significance level of 0.064 revealed that pull factors are significant to the migration decision of Filipino HCWs.

### B. Conclusion

Since the regression performed a negative correlation and insignificant value of the push factors, the researchers concluded that null hypothesis 1 is accepted. Hence, push factors do not affect the migration decision of Filipino HCWs. This implies that Filipino healthcare workers favor the prospects of a successful career, better working circumstances, and higher living standards in other countries rather than being primarily concerned with the negative factors that deter them from remaining or working in the Philippines. Another implication would be that no matter how high the salaries and how good the benefits of the Filipino HCWs are in the Philippines, they are more likely to choose to work abroad due to negative economic conditions affecting their financial stability and environment whether in the workplace or community.

By testing the impact of the push and pull factors, this study has only established one significance. Pull factors are the only one significant to the impact of Filipino HCWs' migration decision. The strength of this finding shows that the pull factors in other countries attract them the most, such as for better salaries and wages, benefits, career opportunities and development, working and living conditions, remittances, and job security. With a positive correlation and significant value of the pull factors, the researchers concluded that null hypothesis 2 is rejected. Hence, pull factors affect the migration decision

of Filipino HCWs.

### C. Recommendations

This study revealed how the compelling reasons to leave and alluring reasons to go affect Filipino healthcare workers' decision to migrate. Thus, the following recommendations are hereby presented:

#### 1) Government

The conclusions drawn from this research revealed that the current policies have no significance in retaining Filipino HCWs in the country. Therefore, the government must improve the current regulations to protect its HCWs. The researchers also recommend that current regulations must be properly implemented in order to improve its effectiveness in retaining HCWs in the country. It is also crucial to create a better space for Filipino HCWs in the country and provide them with the necessary room for development.

#### 2) Healthcare Institutions

The researchers recommend that healthcare institutions should create a space to protect the Filipino HCWs. It was discovered in this study that Filipino HCWs are more prone to migrate because the situation in the destination country pulls them to move. The researchers recommend appropriately compensating and providing suitable benefits to the healthcare workers. Additionally, integrating plans where Filipino HCWs can grow and further develop their skills and knowledge is a must to create and foster a continuous learning environment. Boosting the morale and recognizing the hard work of HCWs can motivate them and build confidence to further hone their skills. Filipino HCWs are attracted and pulled to a much more desirable situation in other countries, therefore, healthcare institutions in the Philippines must attempt to institute better working conditions here in the country to promote retention of Filipino HCWs.

#### 3) Future Researchers

The researchers recommend that any researcher who will cover this study in the future, to cover a larger scope of respondents. Having a wider range of participants can create more accurate results as to why Filipino HCWs migrate. Disseminating surveys to a much larger scope of countries will also aid in discovering the different factors of migration across different nations. Determining a specific population size is also recommended in order to create a more accurate and realistic sample size and data. Moreover, creating and making time to conduct this research is essential as it is time consuming to reach out to Filipino HCWs overseas. Covering more professions will aid in discovering more push and pull factors that affect a nurse may be different from that of a neurosurgeon.

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