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Research Article

Migration of Filipino Pharmacists to Saudi Arabia: Perceived Factors Associated with Workforce Mobility and Professional Migration

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ABSTRACT

Pharmacist migration reflects interacting economic, professional, labor-mobility, and workforce-demand conditions; evidence describing Filipino pharmacists with Saudi work experience remains limited. Objective: This study examined factors associated with Filipino pharmacists' migration experience in Saudi Arabia and compared assessments between currently and previously employed groups. A descriptive-comparative design was employed. Data were collected from June to September 2026 using purposive and snowball sampling. Fifty Filipino pharmacists participated, with 25 in each group. Twenty statements assessed four dimensions on a five-point Likert scale: economic opportunity, career advancement, global labor mobility, and increasing international demand for healthcare professionals. Descriptive statistics, Cronbach's alpha, and Mann–Whitney U tests were used ($\alpha = .05$). All four dimensions received high levels of agreement among respondents. Economic opportunity received the highest mean ($M = 4.62$, $SD = 0.83$), followed by global labor mobility ($M = 4.52$, $SD = 0.71$), international demand ($M = 4.50$, $SD = 0.73$), and career advancement ($M = 4.47$, $SD = 0.73$). No significant differences emerged between groups. Among currently employed pharmacists, intention to continue working in Saudi Arabia was strongly endorsed ($M = 4.68$, $SD = 0.56$). Migration is associated with interconnected economic, professional, mobility, and international workforce-demand considerations among Filipino pharmacists.

Keywords*: Filipino Pharmacists, Healthcare Workforce, International Migration, Saudi Arabia, Workforce Mobility*

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Introduction

The international migration of healthcare professionals is an important component of global labor mobility, with implications for healthcare delivery, workforce sustainability, and health-system development. Healthcare migration is shaped by interacting social, cultural, historical, structural, and economic conditions rather than by a single factor (Walton-Roberts et al., 2017; Luna, 2025). This broader pattern is reflected in the overseas employment of many Filipino healthcare workers. Among pharmacists, economic conditions, workplace factors, limited opportunities, and social status have been identified as factors associated with migration intentions (Kunnumbrath & Kodali, 2023). At the same time, the slower growth of the pharmacist workforce relative to some comparable health professions raises continuing workforce concerns (Jackson et al., 2021).

International employment opportunities are particularly relevant to healthcare professionals from developing countries. Filipino pharmacists participate in this broader pattern of workforce mobility. The Philippine pharmacy workforce faces increasing pressures associated with healthcare demand, population aging, and more favorable professional opportunities abroad (Salo et al., 2025). Pharmacists contribute to medication management, patient care, and public health services, making their international mobility relevant to the broader healthcare workforce (Faller et al., 2020). Aljadeeah and Borek (2025) found that migrant pharmacists play a multifaceted role, which goes beyond merely dispensing medication. They help by bridging the gaps in healthcare access by providing culturally appropriate services. Challenges and adaptive changes in Philippine community pharmacy practice also highlight the importance of workforce conditions and the sustainability of pharmacy services (Ngo et al., 2025). These conditions highlight the need for greater attention to local pharmacist employment and workforce development.

Healthcare migration is mostly characterized by the interaction of push and pull conditions. Economic disparities, unfavorable working conditions, and limited career opportunities in source countries may encourage migration; higher compensation, improved working environments, and broader professional opportunities in destination countries may attract healthcare workers (Leitão et al., 2024). These conditions make workforce retention and professional sustainability important concerns for health systems (Wong et al., 2021). For low- and middle-income countries, strengthening health systems and workforce development is important in addressing workforce shortages and reducing dependence on migration as a response to inadequate staffing (Eaton et al., 2023). The Philippine government should strengthen domestic employment conditions to encourage pharmacist retention and sustain local healthcare services.

Migration may provide economic and professional opportunities, but sustained outmigration may place additional pressure on the healthcare system of the source country. Abarcar and Theoharides (2021) described migration through a “brain gain” or “induced investment” perspective, suggesting that migration pathways may encourage human-capital investment and professional advancement. Workforce instability, low job satisfaction, and burnout among pharmacists may affect professional sustainability and public safety (Alameddine et al., 2022). Pharmacist migration reflects interconnected economic, professional, labor-mobility, and workforce considerations.

Changes in pharmacy practice and professional responsibilities also provide context for pharmacists’ international mobility. Increasing demand for pharmacist care has been associated with the need for advanced-practice competencies and changes in healthcare delivery (Watanabe, 2019). Pharmacists contribute to medication safety, patient outcomes, and pharmacovigilance (Carandang et al., 2024a), while contemporary pharmacy practice increasingly involves medication management and collaboration with other healthcare professionals (Mariano & Faller, 2026). Pharmacists also contribute to addressing healthcare service gaps and promoting responsible medication use (Cristuta & Cesar, 2024). In the Philippines, Republic Act No. 10918 recognizes pharmacists’ roles in pharmaceutical care, drug information,

prescription counseling, and health promotion, which help preserve patient safety and care.

Healthcare professionals, including pharmacists, often seek employment in developed countries where better opportunities may be available (Lawal et al., 2022). Health-worker migration may generate economic benefits and help address workforce shortages in destination countries, while also contributing to workforce disparities in resource-limited settings (Krasniqi et al., 2023). Workforce conditions, professional development, and labor-market changes remain relevant to pharmacy workforce sustainability (Traulsen & Druedahl, 2018). Rais (2022) further emphasized retention, return-migration opportunities, healthcare-system improvement, and access to quality pharmaceutical care.

Although the broader literature examines healthcare worker and pharmacist migration, limited evidence specifically describes the migration experience of Filipino pharmacists in Saudi Arabia and the factors associated with this movement. The present study examined economic opportunity, career advancement, global labor mobility, and the increasing international demand for healthcare professionals among Filipino pharmacists who currently or previously worked in Saudi Arabia.

Review of Related Literature

The migration of healthcare professionals from low- and middle-income countries has become an important concern in international workforce governance (Dzansi et al., 2024). In the Philippines, overseas employment has long been part of national labor and economic policy. Sale and Sale (2024) traced the development of the country's overseas employment program to concerns about unemployment and economic conditions, followed by legislative measures intended to strengthen migrant worker protection. Filipino healthcare professionals, including pharmacists, have since pursued employment opportunities in different regions of the world. These decisions are associated with several considerations, including higher salaries, improved working conditions, professional development, further training, and quality of life (Sweileh, 2024). For pharmacists, overseas employment may represent both an economic decision and an opportunity to pursue professional advancement while supporting their families.

The retention of pharmacists in the Philippine healthcare workforce is closely linked to domestic employment conditions. The Code of Ethics for Pharmacists highlights patient and community welfare, professional competence, accountability, and the safe and effective use of medicines (Professional Regulatory Board of Pharmacy, 2021). Pharmacists contribute to healthcare efficiency through the identification, prevention, and management of medication-related problems (Dalton & Byrne, 2017). Faller et al. (2020) reported moderate to high levels of professional knowledge and competencies among pharmacists in ASEAN, highlighting their potential contribution to healthcare delivery. However, professional responsibilities and competencies must be supported by adequate workplace conditions. Salary dissatisfaction, limited incentives and promotion opportunities, and inadequate staffing have been identified as concerns affecting pharmacist retention (Carandang et al., 2024b). Caino and Castillote (2024) also identified excessive workloads, unfavorable workplace culture, inadequate compensation and benefits, workplace inequality, and limited career advancement as factors influencing healthcare professionals' decisions to seek employment abroad. These findings place domestic working conditions among the important considerations in understanding the overseas migration of Filipino pharmacists.

Migration also requires pharmacists to adapt to different professional and regulatory environments. Kawaguchi-Suzuki et al. (2019) discussed the challenges Filipino pharmacists may encounter in developing confidence in their professional knowledge and skills, particularly when they have limited exposure to PharmD-level education or clinical practice. Pharmacists employed overseas may also need to adjust to different licensure requirements, workplace expectations, language, and professional practices. Atento et al. (2025) emphasized the importance of coordinated investments in workforce development, competency alignment, and modernization of healthcare workforce pipelines to address global health workforce shortages. International demand for

pharmacists is connected not only to staffing requirements in destination countries but also to the capacity of source countries, including the Philippines, to prepare and develop a competent pharmacy workforce.

The literature shows that migration has social and personal dimensions. Flotildes et al. (2023) found that constructive coping strategies and supportive perspectives are important in addressing migration-related personal and professional challenges. Filipino migrant professionals may rely on social support, familial communication, religious observance, and individual resilience while adapting to new environments. At the same time, migration may involve nostalgia, family separation, social alienation, and emotional adjustment. These experiences coexist with economic motivations, including higher income, financial stability, and the capacity to support families.

For pharmacists, migration represents a multidimensional process involving economic, professional, organizational, and social considerations. Madrid et al. (2022) identified migration decision-making, workforce mobility, overseas pharmacy employment opportunities, previous professional experience in the Philippines, workplace dynamics in foreign healthcare settings, and compensation as relevant considerations in pharmacist migration. Carandang et al. (2024b) emphasized pharmacist burnout and its physical, psychological, and professional consequences, reinforcing the relevance of workplace conditions to workforce mobility. These findings suggest that pharmacist migration cannot be viewed solely as movement between labor markets but as an interaction among employment conditions, career aspirations, professional adaptation, and social circumstances.

Workforce retention and migration are linked to institutional and policy conditions that push Filipino pharmacists to leave. Abdullahi et al. (2023) found that remuneration, working conditions, and interpersonal relationships are areas requiring strategic attention to improve job satisfaction and retention. Toyin-Thomas et al. (2023) noted that migration drivers demonstrate substantial commonality across low- and middle-income countries, indicating that healthcare-worker migration represents a broader health workforce issue. Alibudbud (2022) similarly acknowledged the responsibility of governments and institutions to address the rights, welfare, and professional needs of healthcare workers. At the international level, the World Trade Organization (2019) noted increasing trade in health services and healthcare workforce mobility while also identifying a limited understanding of the relationship between international trade in services and health-worker migration. In the Philippine context, Tiu et al. (2025) identified financial and non-monetary benefits, constructive workplace environments, manageable workloads, career progression, and occupational safety as areas relevant to employee retention. Ghadiri et al. (2025) further emphasized the need to align pharmacist education, training, and placement with evolving healthcare needs to improve patient care.

The literature describes Filipino pharmacist migration as a multidimensional phenomenon shaped by economic opportunity, domestic employment conditions, career development, international workforce demand, professional mobility, and social adaptation. Migration has implications beyond individual employment, extending to pharmacist retention, workforce development, and healthcare-system sustainability. Although existing literature has extensively examined healthcare worker and pharmacist migration, evidence specifically describing Filipino pharmacists with migration experience in Saudi Arabia and how they perceive the factors associated with migration remains limited. This provides the basis for examining economic opportunity, career advancement, global labor mobility, and increasing international demand for healthcare professionals among Filipino pharmacists who currently or previously worked in Saudi Arabia.

Research Gap

Although existing literature has examined the international migration of Filipino healthcare professionals and pharmacists, evidence specifically describing Filipino pharmacists in Saudi Arabia and the factors associated with their migration remains limited. This study addresses this gap by examining economic opportunity, career advancement, global

labor mobility, and international demand for healthcare professionals.

Significant of the Study

This study provides evidence on the factors associated with Filipino pharmacists' migration to Saudi Arabia, particularly economic opportunity, career advancement, global labor mobility, and international demand for healthcare professionals. The findings may contribute to workforce planning, pharmacist retention, professional development, and migration policy.

Hypotheses

H_0: There is no significant difference between the two groups of respondents in their assessment of the factors associated with the migration of Filipino pharmacists to Saudi Arabia.

H_1: There is a significant difference between the two groups of respondents in their assessment of the factors associated with the migration of Filipino pharmacists to Saudi Arabia.

Theoretical Framework

The study is anchored in three migration theories: Push–Pull Theory, Human Capital Theory, and Dual Labor Market Theory. Lee's (1966) Push–Pull Theory explains migration through conditions in the country of origin and opportunities in the destination country. For Filipino pharmacists, this relates to employment and economic conditions in the Philippines and professional opportunities in Saudi Arabia. Human Capital Theory (Sjaastad, 1962) views migration as an investment in skills, knowledge, and potential economic and professional returns, reflected in employment, income, professional development, and international work experience. Dual Labor Market Theory (Piore, 1979) explains migration in relation to structural demand for foreign workers in destination labor markets, including healthcare professionals such as pharmacists. In the Philippine context, Peralta et al. (2024) described migration in relation to employment, income, and job opportunities.

These theories provide the theoretical basis for examining the economic, professional, and labor-market dimensions associated with the migration of Filipino pharmacists to Saudi Arabia.

Conceptual Framework

The conceptual framework translates the theoretical perspectives on migration into a structure applicable to Filipino pharmacists working in Saudi Arabia. It organizes the study around four factors associated with migration: economic opportunity, career advancement, global labor mobility, and increasing international demand for healthcare professionals. These factors represent the economic, professional, mobility, and workforce-demand aspects examined in the study. The framework also situates pharmacist migration within the broader context of selected Sustainable Development Goals (SDGs) relevant to healthcare, employment, workforce mobility, and international cooperation.

The framework presents economic opportunity, career advancement, global labor mobility, and increasing international demand for healthcare professionals as the four factors examined in relation to the migration of Filipino pharmacists to Saudi Arabia. The four factors are positioned as the principal areas associated with the migration phenomenon. The framework further identifies the contextual relevance of the migration of Filipino pharmacists to SDG 3 (Good Health and Well-Being), SDG 8 (Decent Work and Economic Growth), SDG 10 (Reduced Inequalities), and SDG 17 (Partnerships for the Goals). The selected SDGs provide a broader development context for the study and are not treated as variables measured by the research.

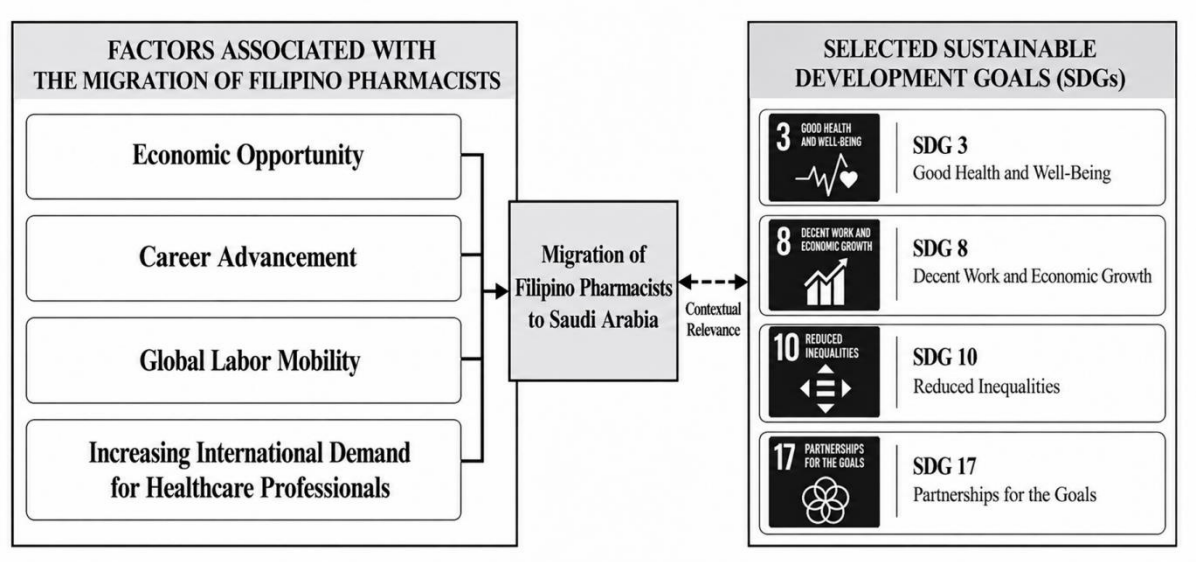

Figure 1. Conceptual Framework of Filipino Pharmacist Migration to Saudi Arabia

Methodology

Research Design

A quantitative descriptive-comparative design was used to examine factors associated with the migration of Filipino pharmacists to Saudi Arabia. The study examined four dimensions: economic opportunity, career advancement, global labor mobility, and international demand for healthcare professionals. The comparative component assessed differences between pharmacists currently working in Saudi Arabia and those who previously worked there.

Participants and Sampling

The study involved 50 Filipino pharmacists with current or prior professional work experience in Saudi Arabia. Of these, 25 respondents were currently employed in Saudi Arabia, while the other 25 had previously worked there. Purposive sampling was employed to identify eligible participants, with snowball sampling used to reach additional respondents through professional and social networks. A non-probability approach was adopted due to the specialized and geographically dispersed nature of the target population. The study was conducted within the context of a changing Saudi pharmacy labor market. According to the Ministerial Resolution No. 103111, which was implemented on 27 July 2025, established Saudization requirements, mandating 35% for community pharmacies and medical complexes, 65% for hospital pharmacy activities, and 55% for other pharmacy-related activities in private-sector establishments employing five or more pharmacy professionals (MHRSD, 2025).

Research Instrument

Data were collected through a structured questionnaire administered using Google Forms from June to September 2026. The instrument included demographic and professional characteristics, 20 migration-related statements, and three separate questions concerning professional satisfaction and intention to continue working in Saudi Arabia. The 20 migration-related statements comprised four dimensions, with five items per dimension: economic opportunity, career advancement, global labor mobility, and international demand for healthcare professionals. Responses were measured using a five-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The three additional questions were analyzed separately and were not included in the four migration-related domains.

Instrument Development and Reliability

The questionnaire was developed based on the research objectives, research questions, conceptual framework, and relevant literature. The 20-item migration scale was assessed for internal consistency using Cronbach's alpha for the overall scale and its four dimensions.

Data Collection and Analysis

Data were collected through Google Forms following informed consent. The survey was distributed through professional and social networks using purposive and snowball sampling. Completed responses were exported to Microsoft Excel, screened for completeness, and prepared for analysis.

Frequencies and percentages were used to summarize categorical characteristics. Means and standard deviations described responses to the migration-related items and the four domain scores. The Mann–Whitney U test was used to compare the four domain scores between currently working and previously working Filipino pharmacists. Median and interquartile range (IQR) were reported for each group, along with the U statistic and p-value. Statistical significance was evaluated at $\alpha = .05$.

Ethical Considerations and Data Privacy

Participation was voluntary and based on informed consent. Respondent information was handled confidentially and processed only for legitimate research purposes. Data handling followed the principles of transparency, legitimate purpose, and proportionality under the Data Privacy Act of 2012 (Republic Act No. 10173). Access to the dataset was limited to the researcher and intended solely for academic research.

Limitation

The sample of 50 respondents and non-probability sampling limit statistical power and generalizability. The use of snowball sampling through existing social and professional networks may have resulted in respondents with similar professional backgrounds and practice settings. This is particularly relevant because 66% of the respondents were engaged in hospital pharmacy, potentially limiting the representation of pharmacists from other practice areas. The concentration of responses within the Strongly Agree range may also indicate a ceiling effect and restricted variability. Finally, the study measured respondents' reported perceptions rather than objective changes in salary, employment conditions, career progression, or professional competencies; the findings should not be interpreted as causal or population-level evidence.

Results and Discussion

Demographic and Professional Characteristics of the Respondents

The study included 50 Filipino pharmacists, equally divided between those currently working in Saudi Arabia (n = 25, 50%) and those who had previously worked there (n = 25, 50%). Most respondents were 41–50 years old (52%), female (84%), and married (72%). The majority held a Bachelor of Science in Pharmacy (92%), while hospital pharmacy was the most commonly reported area of practice (66%).

Before migration, 46% had less than five years of pharmacy practice experience in the Philippines, while 78% had worked in Saudi Arabia for more than 10 years. Monthly income, including allowances, varied, with 32% reporting earnings above SR 9,000. Regarding intention to return to the Philippines and practice pharmacy, 48% indicated yes, 36% were undecided, and 16% indicated no.

Table 1. Demographic and Professional Characteristics of Respondents (N = 50)

Variable	Category	n	%
Age	31–40 years	5	10
	41–50 years	26	52
	51–60 years	16	32
	Above 60 years	3	6
Sex	Female	42	84
	Male	8	16
Civil Status	Married	36	72
	Single	8	16
	Separated	3	6
	Widowed	3	6

Variable	Category	n	%
Highest Educational Attainment	Bachelor of Science in Pharmacy	46	92
	Master's Degree	3	6
	Doctorate Degree	1	2
Area of Pharmacy Practice in Saudi Arabia	Hospital Pharmacy	33	66
	Community Pharmacy	14	28
	Others	3	6
Years of Pharmacy Practice in Philippines Prior to Migration	Less than 5 years	23	46
	5–10 years	17	34
	11–15 years	3	6
	More than 15 years	7	14
Years of Work Experience in Saudi Arabia	1–5 years	3	6
	6–10 years	8	16
	More than 10 years	39	78
Monthly Salary in Saudi Arabia, Including Allowances	4,000–4,999 SR	7	14
	5,000–5,999 SR	7	14
	6,000–6,999 SR	6	12
	7,000–7,999 SR	9	18
	8,000–8,999 SR	5	10
	Above 9,000 SR	16	32
Intention to Return and Practice in Philippines	Yes	24	48
	Undecided	18	36
	No	8	16

Note. Percentages are based on N = 50

Descriprive Assessment of Factors Associated with Migration

The four migration-related dimensions were assessed using five Likert-scale statements each, with domain scores calculated as the mean of the corresponding items. As shown in Table 2, all four dimensions were rated within the Strongly Agree range.

Economic opportunity received the highest overall mean (M = 4.62, SD = 0.83), followed by global labor mobility (M = 4.52, SD = 0.71), increasing international demand for healthcare professionals (M = 4.50, SD = 0.73), and career advancement (M = 4.47, SD = 0.73). Although career advancement had the lowest mean, it remained strongly endorsed. Differences in group means were observed. Currently working pharmacists reported higher scores for global labor mobility and increasing international demand, whereas previously working pharmacists reported higher scores for economic opportunity and career advancement. The significance of these differences is presented in Section 4.5.

Table 2. Descriptive Statistics of the Four Factors Associated with Migration

Factor	Currently Working M (SD)	Previously Worked M (SD)	Overall M (SD)	Interpretation
Economic Opportunity	4.59 (0.85)	4.65 (0.82)	4.62 (0.83)	Strongly Agree
Career Advancement	4.34 (0.60)	4.59 (0.84)	4.47 (0.73)	Strongly Agree
Global Labor Mobility	4.70 (0.43)	4.35 (0.89)	4.52 (0.71)	Strongly Agree

Factor	Currently Working M (SD)	Previously Worked M (SD)	Overall M (SD)	Interpretation
Increasing International Demand for Healthcare Professionals	4.55 (0.64)	4.46 (0.82)	4.50 (0.73)	Strongly Agree

Note. M = mean; SD = standard deviation. Interpretation is based on the overall mean

Item-Level Assessment of the Migration Factors

Table 3 presents the item-level descriptive statistics for the 20 migration-related statements. All items were rated within the Strongly Agree range. For Economic Opportunity, item means ranged from 4.58 to 4.66, with financial stability receiving the highest rating (M = 4.66, SD = 0.85). For Career Advancement, means ranged from 4.40 to 4.58, with enhanced professional competencies receiving the highest rating (M = 4.58, SD = 0.76).

For Global Labor Mobility, item means ranged from 4.48 to 4.58, with international recruitment opportunities facilitating migration receiving the highest rating (M = 4.58, SD = 0.73). For Increasing International Demand for Healthcare Professionals, means ranged from 4.40 to 4.62, with recognition of Filipino pharmacists as valuable members of international healthcare systems receiving the highest rating (M = 4.62, SD = 0.78). The corrected ID5 item, "International demand for pharmacists increased my willingness to migrate," obtained M = 4.48 (SD = 0.79) based on responses from all 50 respondents.

Response Scale

The 20 migration-related statements were measured using a five-point Likert scale:

Mean Range	Interpretation
4.21–5.00	Strongly Agree
3.41–4.20	Agree
2.61–3.40	Neutral
1.81–2.60	Disagree
1.00–1.80	Strongly Disagree

Table 3. Item-Level Descriptive Statistics of Migration Factors

Factor	Statement	M	SD	Interpretation
Economic Opportunity	Higher salary influenced my decision to migrate to Saudi Arabia.	4.62	0.88	Strongly Agree
	Migration improved my financial stability.	4.66	0.85	Strongly Agree
	Better compensation and benefits encouraged me to work abroad.	4.64	0.88	Strongly Agree
	Limited financial opportunities in the Philippines motivated me to seek employment overseas.	4.60	0.86	Strongly Agree
	Working in Saudi Arabia improved my family's economic well-being.	4.58	0.88	Strongly Agree
Career Advancement	Migration provided better opportunities for professional growth.	4.40	0.95	Strongly Agree
	Access to advanced pharmacy practice opportunities influenced my decision to migrate.	4.48	0.95	Strongly Agree

Factor	Statement	M	SD	Interpretation
	Working abroad enhanced my professional competencies.	4.58	0.76	Strongly Agree
	Saudi Arabia provides better opportunities for continuing professional development.	4.46	0.73	Strongly Agree
	Career advancement opportunities are greater in Saudi Arabia than in the Philippines.	4.42	0.81	Strongly Agree
Global Labor Mobility	International recruitment opportunities facilitated my migration.	4.58	0.73	Strongly Agree
	Overseas employment pathways were accessible to me.	4.48	0.79	Strongly Agree
	Professional networks influenced my decision to work abroad.	4.52	0.79	Strongly Agree
	The growing mobility of healthcare professionals encouraged me to migrate.	4.48	0.79	Strongly Agree
	Migration has become a common career pathway among Filipino pharmacists.	4.56	0.79	Strongly Agree
Increasing International Demand for Healthcare Professionals	International demand for healthcare professionals influenced my migration decision.	4.56	0.70	Strongly Agree
	Foreign healthcare institutions actively recruit Filipino pharmacists.	4.46	0.79	Strongly Agree
	Global shortages of healthcare professionals created employment opportunities for me.	4.40	0.86	Strongly Agree
	Filipino pharmacists are recognized as valuable members of international healthcare systems.	4.62	0.78	Strongly Agree
	International demand for pharmacists increased my willingness to migrate.	4.48	0.79	Strongly Agree

Reliability of the Migration-Factor Instrument

Internal consistency was assessed for the four five-item dimensions and the complete 20-item instrument. As shown in Table 4, Cronbach's alpha coefficients were 0.973 for Economic Opportunity, 0.919 for Career Advancement, 0.954 for Global Labor Mobility, and 0.961 for Increasing International Demand for Healthcare Professionals, with an overall alpha of 0.969. The high Cronbach's alpha coefficients indicate excellent internal consistency, demonstrating that the items within each dimension, as well as the overall instrument, reliably measured their respective constructs in this sample.

Table 4. Reliability Analysis of the Migration-Factor Instrument

Dimension	Number of Items	Cronbach's α
Economic Opportunity	5	0.973
Career Advancement	5	0.919

Dimension	Number of Items	Cronbach's α
Global Labor Mobility	5	0.954
Increasing International Demand for Healthcare Professionals	5	0.961
Overall Instrument	**20**	**0.969**

Comparison of Migration Factors by Employment Status

The Mann–Whitney U test was used to compare the four migration-factor scores between currently working pharmacists (n = 25) and previously working pharmacists (n = 25) in Saudi Arabia, with α = .05. As shown in Table 5, none of the four factors differed significantly between the groups.

Economic Opportunity showed no significant difference (U = 318.00, p = .913). Previously working pharmacists reported a higher mean for Career Advancement (M = 4.59, SD = 0.84) than currently working pharmacists (M = 4.34, SD = 0.60), but the difference was not statistically significant (U = 216.00, p = .05). Currently working pharmacists reported higher means for Global Labor Mobility (M = 4.70, SD = 0.43 vs. 4.35, SD = 0.89; U = 386.50, p = .122) and Increasing International Demand for Healthcare Professionals (M = 4.55, SD = 0.64 vs. 4.46, SD = 0.82; U = 330.00, p = .716).

Thus, none of the four comparisons reached statistical significance at the prespecified α = .05 level, and the null hypothesis was not rejected.

Table 5. Mann–Whitney U Test of Migration Factors by Employment Status

Migration factor	Currently working, M ± SD	Median (IQR)	Previously worked, M ± SD	Median (IQR)	Mann–Whitney U	p-value	Interpretation
Economic Opportunity	4.59 ± 0.85	5.00(0.80)	4.65 ±0.82	5.00 (0.40)	318.00	.913	Not significant
Career Advancement	4.34 ± 0.60	4.20 (1.00)	4.59 ±0.84	5.00 (0.40)	216.00	.05	Not significant
Global Labor Mobility	4.70 ± 0.43	5.00 (0.60)	4.35 ±0.89	4.80 (1.00)	386.50	.122	Not significant
Increasing International Demand for Healthcare Professionals	4.55 ± 0.64	5.00 (1.00)	4.46 ±0.82	5.00 (0.80)	330.00	.716	Not significant

Note. M = mean; SD = standard deviation; IQR = interquartile range; U = Mann–Whitney U statistic. The median and IQR are based on the five-item domain scores. Statistical significance was evaluated at α = .05

The median scores were generally high across both groups, with several domains reaching the maximum scale value of 5.00. The relatively narrow interquartile ranges (IQRs) suggest limited variability in responses, which aligns with the consistently high levels of agreement observed across the four migration dimensions.

Hypothesis Decision

The null hypothesis stated that there was no significant difference between currently working and previously working Filipino pharmacists in the four factors associated with workforce mobility and professional migration. Since none of the four comparisons reached statistical significance at the prespecified α = .05 level, the null hypothesis was not rejected. The observed differences in group means do not provide sufficient statistical evidence, within this sample, to conclude that employment status was associated with significantly different ratings of the four migration factors.

Professional Satisfaction Among Currently Working Pharmacists

The three additional items assessing professional satisfaction and intention to remain in

Saudi Arabia were analyzed separately among the 25 currently working pharmacists and were not included in the four migration-factor scores. As shown in Table 6, all three items were rated within the Strongly Agree range. The highest mean was observed for intention to continue working in Saudi Arabia (M = 4.68, SD = 0.56), followed by overall career satisfaction (M = 4.48, SD = 0.71) and satisfaction with current pharmacy practice (M = 4.44, SD = 0.77).

Table 6. Professional Satisfaction and Intention to Continue Working in Saudi Arabia Among Currently Working Pharmacists (n = 25)

Statement	M	SD	Interpretation
I am satisfied with my current pharmacy practice in Saudi Arabia.	4.44	0.77	Strongly Agree
I intend to continue working in Saudi Arabia.	4.68	0.56	Strongly Agree
Overall, I am satisfied with my professional career in Saudi Arabia.	4.48	0.71	Strongly Agree

Policy Implications

- The strong endorsement of Economic Opportunity (M = 4.62) highlights the significance of compensation, benefits, and employment conditions in the respondents' migration experience. This finding supports the need to strengthen domestic pharmacist retention and improve workforce conditions within the framework established by Republic Act No. 10918 (2016) (Philippine Pharmacy Act).
- Career Advancement (M = 4.47) received similar strong endorsement, underscoring the necessity for enhanced domestic career pathways, continuing professional development, and opportunities for advanced pharmacy practice. Republic Act No. 10912 (Continuing Professional Development Act of 2016) serves as the policy foundation for ongoing professional competence.
- The high ratings for Global Labor Mobility (M = 4.52) and Increasing International Demand for Healthcare Professionals (M = 4.50) further emphasize the critical role of international employment pathways in the respondents' migration experiences. Republic Act No. 8042, as amended by Republic Act No. 10022, along with Republic Act No. 11641 (Department of Migrant Workers Act), provide essential frameworks for protecting migrant workers, governing overseas employment, developing skills, and facilitating reintegration.
- The inclusion of 25 previously employed pharmacists emphasises the necessity of structured reintegration mechanisms that enable returning Filipino pharmacists to apply their internationally acquired knowledge and competencies within the Philippine healthcare system. Section 17 of Republic Act No. 11641, which provides for the Full-Cycle National Reintegration Program, offers a policy basis for supporting returning Filipino migrant workers. In the context of pharmacy practice, this framework may be translated into practical reintegration mechanisms through coordination among the Department of Migrant Workers (DMW), the National Reintegration Center for OFWs (NRCO), the Department of Health (DOH), and the Professional Regulation Commission (PRC). Proposed measures may include recognition of overseas professional experience, competency assessment, continuing professional development, employment matching, and placement opportunities in public hospitals, community health facilities, and other healthcare institutions. These initiatives should be complemented by competitive compensation, adequate staffing, manageable workloads, and career advancement opportunities to encourage returning pharmacists to remain in the Philippine healthcare workforce.
- At the health-system level, Republic Act No. 11223 (Universal Health Care Act) offers a comprehensive framework for health workforce development and sustainability. Therefore, pharmacy workforce planning should address domestic retention, international mobility, and reintegration as interconnected concerns.
- These findings support consideration of coordinated policies regarding pharmacist retention, professional development, migrant protection, international mobility, and reintegration. Given the study's sample size of N

= 50, derived from purposive and snowball sampling methods, these implications should be interpreted as evidence-informed policy directions rather than general population conclusions.

Discussion

The findings support a multidimensional interpretation of Filipino pharmacist migration to Saudi Arabia, with economic opportunity, career advancement, global labor mobility, and international demand all strongly endorsed by respondents. The predominance of economic considerations is consistent with literature identifying remuneration, employment conditions, economic disparities, and opportunities abroad as necessary components of health-worker migration (Leitão et al., 2024; Toyin-Thomas et al., 2023; Salo et al., 2025). Within the present theoretical framework, this pattern is compatible with Push–Pull Theory and Human Capital Theory. The study measured respondents' perceptions rather than pre-migration economic conditions or actual income differentials; the findings indicate perceived economic relevance rather than a causal effect of income on migration.

Career advancement was also strongly emphasized, particularly in relation to professional competency development. This is consistent with evidence that Filipino pharmacists' international migration experiences may involve professional opportunities, work experience, and differences in practice environments (Madrid et al., 2022). The finding supports the human-capital perspective in which migration may be viewed in relation to skills, knowledge, experience, and professional returns. The present study did not objectively measure changes in competencies, promotions, credentials, or career progression; the findings demonstrate a strongly perceived professional dimension rather than demonstrated career gains attributable to migration.

Global labor mobility and international demand further suggest that migration was experienced within broader labor markets and recruitment structures rather than solely as an individual decision. Recruitment pathways, professional networks, and international employment opportunities were strongly endorsed, consistent with literature describing health-worker migration as a process shaped by interacting economic, professional, and labor-market conditions (Toyin-Thomas et al., 2023; Sweileh, 2024). The results also align with Dual Labor Market Theory, which emphasizes structural demand for foreign workers in destination labor markets. All respondents had current or previous Saudi employment, and most had extensive Saudi work experience; the results primarily describe pharmacists who have already participated in international migration and should not be generalized to those without overseas experience.

The difference between currently and previously working pharmacists did not demonstrate statistically significant differences across the four dimensions. The relatively close career advancement result may warrant further investigation, but its p-value remained above the prespecified .05 threshold. The absence of significant differences should not be interpreted as evidence that the two groups are equivalent. The small sample, non-probability sampling, and restricted variability resulting from uniformly high ratings may have limited the study's ability to detect between-group differences.

Among currently employed pharmacists, the strong ratings for professional satisfaction and intention to continue working in Saudi Arabia provide an additional perspective on the respondents' current employment experience. These findings should be distinguished from intention to return to the Philippines, as the two measures represent different aspects of career planning. Existing Philippine literature on pharmacist and healthcare-worker employment conditions provides contextual support for considering compensation, workload, workplace conditions, and career development, but the present study did not directly test whether these factors determined respondents' decisions to remain in Saudi Arabia.

The theoretical perspectives collectively provide a useful framework for interpreting the findings. Push–Pull Theory contextualizes economic and employment conditions, Human Capital Theory explains the professional and economic returns associated with skills and experience, and Dual Labor Market Theory addresses destination-country demand for

foreign healthcare workers. They support viewing pharmacist migration as an interaction of individual, professional, and structural conditions rather than as a single-factor process. The findings do not establish that any particular theory caused migration decisions.

The demographic and professional profile also gives important context. The sample consisted largely of experienced pharmacists with substantial Saudi work exposure, and hospital pharmacy represented the predominant practice setting. These characteristics describe the accessible study population rather than the entire Filipino pharmacist workforce in Saudi Arabia. The observed sectoral and demographic pattern may reflect the composition of the recruited sample and the accessibility of pharmacists with Saudi experience; contextual factors such as changes in the Saudi labor market may also be relevant, but their effects were not directly measured.

Overall, the study provides quantitative evidence that economic opportunity, professional development, global labor mobility, and international workforce demand were all strongly perceived as relevant to the migration experience of Filipino pharmacists represented in the sample. The close endorsement of all four dimensions suggests that pharmacist migration is better understood as a multidimensional phenomenon. At the same time, the descriptive-comparative design, non-probability sampling, limited sample size, and reliance on self-reported perceptions require the findings to be interpreted as sample-specific evidence of perceived migration factors rather than causal or population-level conclusions.

Conclusion

This study provides quantitative evidence that Filipino pharmacists with current or previous employment in Saudi Arabia experienced migration as a multidimensional process involving economic opportunity, career advancement, global labor mobility, and international demand for healthcare professionals. All four dimensions were broadly endorsed, with no statistically significant differences detected between the two employment groups. The results support pharmacy workforce planning, retention strategies, and migration policy. They also highlight the importance of linking migrant reintegration with domestic pharmacist workforce development. Returning pharmacists should have opportunities to apply their overseas experience through appropriate professional roles, supported by competency recognition, employment pathways, competitive compensation, adequate staffing, and career advancement opportunities. Future research should use larger and more diverse samples and examine salary differentials, employment conditions, career progression, reasons for returning, and factors associated with remaining abroad.

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