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A Mixed-Method Study on the Factors Associated with Emigration of Nurses and its Impact on Nursing Profession and Health Sectors- A Preliminary Study

Samantha Burnett-Harry[1*], Joseph Jeganathan[2]
[1]*School of Nursing, Texila American University, Guyana*
[2]*Department of Nursing, College of Health and Sports Sciences, University of Bahrain, Kingdom of Bahrain*

Abstract

Over the past decade, the increase in migration of Registered Nurses has been on the rise worldwide. There are numerous pull and push factors that force nurses to migrate. This study sought to assess the factors that contribute to the increased migration of Registered Nurses at the Milton Cato Memorial Hospital. A mixed method, cross sectional research design was adopted. 10 Registered Nurses were selected by purposive sampling technique and responded to the questionnaire on migration, followed by interviews. The findings of the study revealed that the majority of respondent 90% were females, 80% of respondent stated that outward migration has increased, 56% respondent stated that England was the main destination, 31% British Virgin Islands and 13% United States of America. 24% percent of respondents attributed this to poor working environment; 24% respondent indicated that wages were the main reasons for nurse's migration. The results of this study prompted a recommendation that the Government need to implement better wages, working environment, better patient to staff ratio, more opportunities for upward mobility, specialization, and flexible working hours.

Keywords: *Factors, Health System, Implication, Migration, Registered Nurses, Saint Vincent, and the Grenadines.*

Introduction

"Achieving population health, universal health coverage and unbiased access to healthcare is based on having a health workforce that is of sufficient magnitude, competence, and caliber to meet epidemiological challenges and changing demand. By 2030, The World Health Organization (WHO) predicts an expanded global demand for health and case workers with the creation of forty million new jobs. Additionally, half the global healthcare personnel will comprise certified nurses, which constitutes the largest skillful group in most countries. It was estimated in 2014 by WHO and the World Bank that a global scarcity of nine million nurses and midwives. They predicted this will lessen by 2030 to 7.6 million, but it will have an imprudent impact on regions such as Africa and low-income countries". WHO and the World Bank defined "shortage as lower than the minimum number of doctors and nurses per head of population needed to achieve population health goals." The goals as stated in the Sustainable Development plan include: twelve infectious diseases, Child and Maternal Health and Non-communicable diseases. Moreover, many national systems have other developments beyond minimum goals that create request for

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Corresponding Author: Samanthab84@hotmail.com

nurses, but few have undertaken nurse staffing planning forecast at a country level. Australia, Canada, Ireland and UK have modelled their request for and supply of nurses by 2025. Also, they have forecast shortages on the other hand only the US, predicted a surplus of qualified nurses. The state of the wider labour market influences nurses' choices about their employment. One result of prominent levels of demand or shortages is that the nurses have choices in jobs within their home country and overseas [1].

Evidence suggests that at least five million people have emigrated from the Caribbean during the past 50 years, a region known to have extremely high emigration rates. In relative terms, most emigrants are from Guyana and Saint Vincent and the Grenadines with a migrant population of 58.2 percent and 55.5 percent, respectively, compared to the size of the population living at home. An estimated 9.3 percent of the total US population represent the total diaspora community of the Caribbean region [2] According to the Institute of Migration, in Antigua and Barbuda, Barbados, Belize, Grenada, Saint Lucia, Saint Vincent and the Grenadines (SVG), and Trinidad and Tobago, females represent more than 50 percent of migrants. Sixty percent of the migrant population from Barbados are females. The majority of settlers from the West Indies are health Care practitioner, nurses. This long and persistent migration trend and the brain-drain it creates have significantly impacted some of the countries [2].

A Vincentian news network stated the local nursing sector is experiencing one of the highest attrition rates it has ever seen, as Vincentian nurses opt to resign from their posts to seek greener pastures abroad due to poor working conditions and impudence in the field [3]. In 2021 approximately sixty nurses have relinquished their position from the Hospital Services and on a weekly basis nurses continue to submit resignation letters for several reasons and this issue continues to permeate the Department of health. The record notes that a total of fifty-eight nurses resigned in 2021, 37 voluntarily resigned, twenty-one nurses were termed to have abandon their job due to the government's vaccine policy this included: five nursing aides who did not agree to take the vaccine. Figures from the Nursing governing body of the United Kingdom outline that as of September 30, 2021, there were a sum of forty-one people registered in England, who was educated originally in St Vincent and the Grenadines. At the end of September 2021 statistics showed that there was an increase of twenty-five nurses as compared to the figures that were registered at the end of March. In 2022, there have been approximately seventeen nurses who have withdrawn their service and most of them were from the main hospital [3]. This situation is quite alarming since nurses constitute the largest professional group in health care services and form the backbone of Primary Health Care (PHC).

According to the Bilateral Migration Matrix 2013, emigration from the Caribbean region was an estimated 7.01 million people in 2013, counting both intraregional and extra-regional emigrants. In 2007, Economic Commission for Latin America and the Caribbean (ECLAC) established that the emigration rate of the Caribbean was 15.5 percent. This emigration rate is four times as high as in Latin America. In recent years, the Caribbean remains a net emigration area, although no longer as strongly as in 2007. In 2013, only two Caribbean countries had a positive net migration rate of eleven, with 2.23 and 0.57 people entering per one thousand of the population, respectively. All other countries have a negative net migration rate, with higher rates for Guyana (-9.65) and SVG (-9.60) [4]. Refugee from Latin America and the Caribbean share three socio-demographic characteristics: a) an elevated participation of feminine migration, b) migrants are of the most productive working age, and c) the

emigrants are more highly educated than their domestic-born who do not migrate. More specific to the Caribbean, over half of the total migrants heading for the United States and Canada are women [5].

A study finding revealed that most of the participants convey numerous desires to relocate due to low salaries, unemployment, poor working conditions, insufficient postgraduate education and lack of professional autonomy in Nepal as reasons for their intention to migrate [6]. In another cross-sectional study findings reported that specialist nurses' intention to migrate was higher than registered nurses, the associated challenges of specialist nurses' emigration are increased cost of training, mediocre quality of expert nursing care, exhaustion among staff and poor patient health outcomes [7]. In another study, it was reported the prevalence of migration of health workers from Jamaica, it was based on the differences in living and working conditions between Jamaica and destination countries.

Few indications exist regarding the implementation or efficacy of the various national and international initiatives that have been made to manage and lessen the negative effects of migration. The use of information systems to formally monitor migration, updating the national cadre system for hiring health personnel, making sure that the current personnel management policies, like bonding are both understood and fairly enforced, and offering greater formal and informal recognition of health personnel are all the potential additional strategies for better managing the migration of Jamica's health workers. [8].

Humphries, N., et al (2015) reported that nurses and midwives are emigrating from Ireland in search of better working conditions, clear career progression pathways and a better practice environment [9]. An integrative review reported that the healthcare workers destination countries were Europe and North America, with an inclination for nurse migration of 14.3%–85%. Poor pay, unfavorable working conditions, inadequate healthcare infrastructure, antiquated medical technologies, a lack of job opportunities, a younger age, single status, social pressure, urban living, work experience, insecurity, high crime rates, political corruption, and proficiency in foreign languages were among the reasons for emigration. The author advised nursing leaders and the healthcare authorities of nations to put into action workable steps to reduce nurse emigration [10].

According to the analysis of Toyin-Thomas P., et al (2023) reported in the review that in most of the studies doctors 64.5% and/or nurses 54.2% were immigrating to other nations. United Kingdom (44.9%) and the United States of America (42%) were the top destination countries. The low/middle-income countries (LMICs) with the highest number of studies were South Africa (15.9%), India (12.1%) and the Philippines (6.5%). The major driving forces for migration were due to macro-level and meso-level factors. Remuneration (83.2%) and security problems (58.9%) were the key macro-level factors and healthcare workers migration/intention to migrate. Comparatively, the main meso-level drivers were job satisfaction (57.9%), a favorable working environment (63%), and career opportunities (81.3%) [11]. Mselenge Hamaton Mdegela (2020) identified participants characteristics were substantially correlated; the age range of exhibiting greater retention than the others , growing-up in a rural rather than urban setting ($p<0.001$), and duration in the job of 11 to 15 years compared to less than 10 or more than 15 ($p=0.03$). In addition, two other aspects of retention were measured; the retention in government employment and the retention in the provision of clinical care which was 76.1 % and 69.5% in Malawi and 72.8% and 76.5% in Tanzania respectively [12].

Consequently, if large numbers of nurses migrate from Saint Vincent and the

Grenadines the entire health care service suffers. Adverse effects of this situation are the burn out of existing nurses who will be burdened with added responsibilities. This will therefore impact on the standard of nursing care that the patient admitted gets. The contributing factors of the increased migration of registered nurses and the impact on the nursing services at the Milton Cato Memorial Hospital and the implications on the national health system must be investigated. The purpose of this study was to investigate and comprehend the reasons influencing the increased migration of Vincentian Registered Nurses.

Materials and Methods

This study adopted a mixed method approach, Quantitative component includes a cross sectional survey and a qualitative component. The study was conducted among ten registered nurses at the main hospital. Serving the people of Saint Vincent and the Grenadines, the Milton Cato Memorial Hospital has 215 beds and employs over six hundred employees, the majority of whom are nurses. Through the non-probability purposive technique, a total of ten nurses aged 30-50 years were selected. The evaluation part of the tool consists of two sections they are: demographic characteristics of registered nurses and questionnaire regarding the factors influencing migration among nurse and semi-structured face-face interview schedule. A total of five nurses were interviewed during the period January to April 2024. Participant opted to be interviewed in person. The interview was recorded using a digital voice recorder and was later transcribed. Descriptive analysis was done on the data using statistics and displayed in tables and figures.

Results

Demographic Characteristics of Respondents

Table 1. Frequency Distribution of Demographic Characteristics of the Respondents (N-10)

Sl. No.	Demographic Characteristics	Frequency	Percentage
1.	**Age**		
	30-35	3	30%
	36-40	4	40%
	41-45	1	10%
	46-50	2	20%
2.	**Gender**		
	Male	1	10%
	Female	9	90%
3.	**Ethnicity**		
	African	9	90%

	Mixed	1	10%
4.	**Educational Background**		
	Registered Nurse	9	90%
	Nursing Bachelor of Science	1	10%
5.	**Marital Status**		
	Single	6	60%
	Married	4	40%
6.	**Religion**		
	Pentecostal	4	40%
	Seventh Day Adventist	2	20%
	Methodist	3	30%
	Fundamental Baptist	1	10%
7.	**Length of Employment**		
	< 1year	1	10%
	2-5 years	1	10%
	11 – 15 years	2	20%
	16-20 years	4	40%
	20 years	1	10%
	Not responded	1	10%
8.	**Family Status**		
	Extended	4	40%
	Nuclear	5	50%
	Not responded	1	10%

9.	**Health District**		
	Kingstown	4	40%
	Calliaqua	3	30%
	Pembroke	1	10%
	Marriaqua	1	10%
	Chateaubelair	1	10%
10.	**Monthly income**		
	$2600 -$3000	3	30%
	$3000-$4000	5	50%
	>$4000	1	10%
	Not responded	1	10%

Table 1 shows the frequency and percentage of demographic characteristics of the respondents. Regarding age, 40% were between 36 to 40 years of age, 30% were 30 to 35 years, 20%, 46 to 50 years and only 10% of them were 41 to 45 years of age, respectively. With respect to gender, the majority, 90% of them were females and only 10% were males. Regarding the ethnicity, majority 90% of the respondents were Africans and only 10% of them were belonged to mixed ethnicity. According to the educational background, majority 90% of them were registered nurses. With respect to marital status, 60% of the respondents were single and 40% of them were married. Regarding the religion, all of them were Christians and 40% of them were from the Pentecostal denomination, 30% were Methodist, 20% from Seventh Day Adventist and only 10% were Fundamental Baptist. According to the Family status, 50% of them belonged to nuclear family and 40% were living in extended family. Regarding the Health District, 40% of the respondents were from Kingstown, 30% from Calliaqua and 10% of them were from Pembroke, Marriaqua and Chateaubelair, respectively. Regarding the Monthly income, half (50%) of them were earning between $3000 to $4000, while 30% were earning $3000 to $4000 and 10% above $4000 as monthly income.

The results of the respondent's interview data on the following major themes were identified. The qualitative data are presented below and the sub themes such as the push factors and pull factors were discussed along with the major themes.

1. Reasons why nurses are migrating.
2. Impact on patient care and nursing services.
3. Interventions to curtail this problem.

The Rationale Behind Nurses' Relocation

There is no structured system whereby the government can track the destinations that nurses are migrating to. Accordingly figure 1 depicts that majority 80% respondents felt that the movement of nurses to other countries increased and more nurses among the healthcare professional were migrating. There are several factors associated with migration, in figure 2, it shows that the majority, 60% of

the nurses have no intention to migrate, 20% have intention to migrate. Figure 3 illustrates the reason behind the nurse's relocation, one fourth (24%) of the nurses were migrating due to the working environment and wages. Eighteen percent of them migrate due to upward mobility or to have better personal and professional growth, and due to nurse and patient ratio, 16% migrate due to the working hours. The major destination countries were shown in figure 4, which depicts that majority 56% of the nurses wants to migrate to England, 31% wants to migrate to the British Virgin Island and only 13% of them have America as their destination for migration.

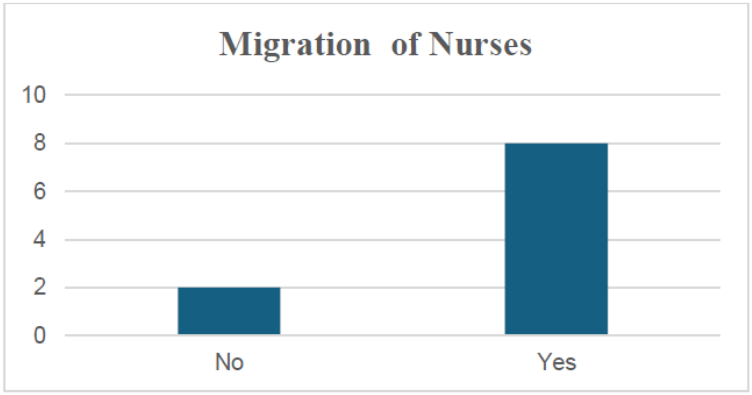

Figure 1. Frequency Distribution of Respondent Showing Increase in Outward Migration

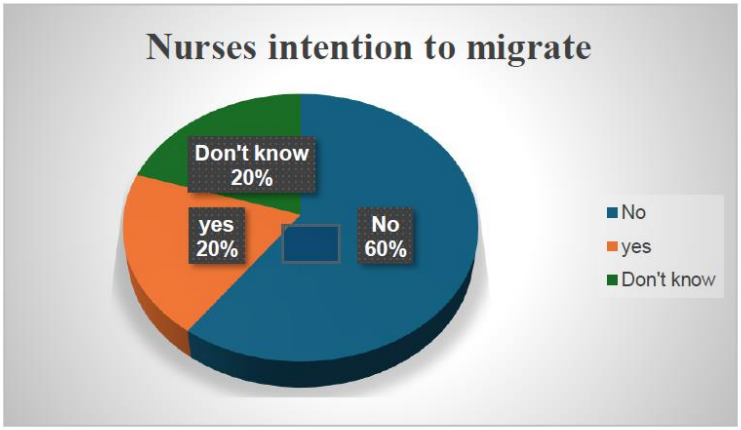

Figure 2. Percentage Distribution of Nurse's Intention to Migrate

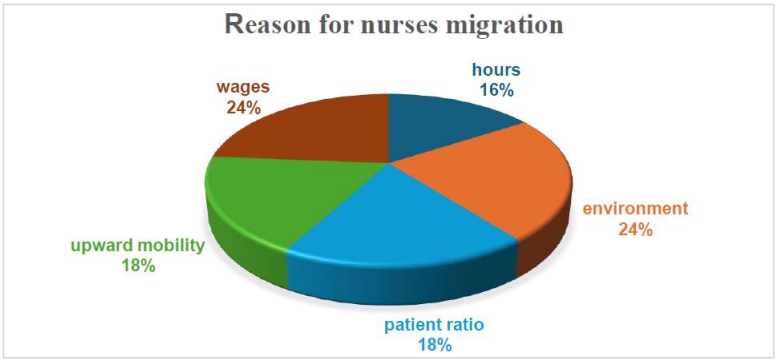

Figure 3. Percentage Distributions Showing the Reasons for Nurse's Migration

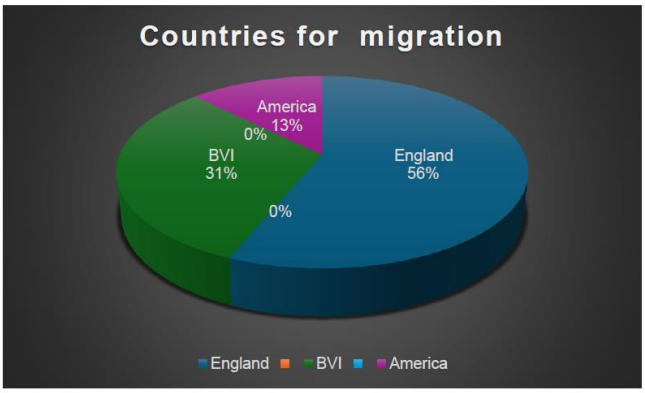

Figure 4. Percentage Distribution Showing the Destination Country for Nurse's Migration

Impact of Migration of Nurses on the Healthcare System

Table 2 shows the Frequency and Percentage distribution of the respondents towards the Impact of Migration on the health system. All of respondents stated that there will be increased Absenteeism among nurses. The majority, 70% of them, agreed that there will be an acute shortage of nurses, 40% of them responded that staff would undergo brain drain and the standard of care will be reduced. Only 10% responded that nurses will take more sick leave and an increase in mortality.

Table 2. Frequency and Percentage Distribution of the Impact of Migration on the Health System

Sl. No.	Impact of Migration	Frequency	Percentage
1.	Increased Absenteeism	10	100%
2.	Increased Sick leave by nurses	1	10%
3.	Brain Drain	4	40%
4.	Shortage of nurses	7	70%
5.	Reduction in the quality of care.	4	40%
6.	Rise in mortality	1	10%

Strategies to Limit the Migration of Nurses

Table 3 illustrates the Frequency and Percentage distributions of recommended strategies to be adopted by the Ministry of health to restrict the movement of nurses. The majority, 60% of the respondents, stated that reasonable salaries and better working conditions for nurses will keep nurse's

retention within the country. Forty percent of the Participants agreed that incentives to nurses, specialization, and reasonable working hours may limit the nurse's migration to other countries, 30% responded that adequate staffing in the clinical setting could retain nurses. On the other hand, only 10% agreed that standard nurse patient ratio and revamped healthcare system curtails the migration of nurses.

Table 3. Frequency and Percentage Distributions of Strategies to Curtail Migration of Nurses

Sl. No.	Strategies to Curtail Migration of Nurses	Frequency	Percentage
1	Reasonable Salary	6	60%
2	Adequate staffing	3	30%
3	Incentives to nurses	4	40%
4	Standard Nurse Patient Ratio	1	10%
5	Better working conditions	6	60%
6	Specialization	4	40%
7	Staff recognition	2	20%
8	Upgraded Technology & Equipment	2	20%
9	Reasonable Working hours	4	40%
10	Revamp Healthcare system	1	10%

Discussion

This chapter presents the results along with the data analysis. The data analysis is in harmony with the specific objectives where patterns were investigated, interpreted and inferences drawn on them. Most (90%) participants surveyed were therefore females, this indicate that the nursing profession is predominantly females. This also agrees with [13] research conducted in Kenya nurses intending to out-migrate were more likely to be female (85%), the odds of out-migration for females were 1.7 times higher than for males. Forty (40%) of the participants were aged between ages 36- 40 and 30% between the age group 30-35 [13].

Regarding the marital status, most (60%) of them were single, according to the educational status, majority (90%) possessed a diploma in nursing, the findings agree with [13] who found that nurses intending to out-migrate were more likely to be highly educated (85%) were intending to out-migrate and were registered or B.Sc. nurses. Compared to nurses aged 21-25, those in the age categories of 26-30, 31-35 and 36-40 had higher likelihood of

out migrating (2.2, 1.6 and 1.4 times, respectively). Compared to nurses aged 21-25, those aged 56-60 had a 3.4 times higher likelihood of out migrating [13].

Low salaries and unfavorable working circumstances were frequently mentioned as the reason nurses migrated to more industrialized and developed countries. England, British Virgin Island, and the United States of America were the main destination of migration. Finding agrees with [14] who presented five main causes of migration: poor remuneration, lack of professional development in home country, poor healthcare and system, easy availability of jobs in developed countries [14]. Okafor and Chimereze (2020) stated that the push factors - such as inadequate pay, bad government regulations and unpleasant working environment and pull factors such as favorable working conditions [15]. Similar studies conducted by Jenkins in Africa and in Southeastern Europe by Komusanac reported that the emigration of health professionals stems from the multifaceted push and/or pull factors [16, 17]. They were also of the view that Staff nurses' motivation to migrate is not limited to a single reason, but economic reasons, professional development, social concerns, health system and political factors [16, 17]. Another article proposed that emigration of staff nurses is mostly influenced by pull and push economic factors [18]. A similar study found that migration of staff nurses is due to push factors such as low salary pull factors such as higher wages, improved, quality of life growing economy and education opportunities [19-22].

With reference to the impact of migration on the national health system. The majority, 70% of them, agreed that there will be an acute shortage of nurses, 40% of them responded that staff would undergo brain drain and the quality of care will be reduced. Only 10% responded that nurses will take more sick leave and an increase in mortality. These finding were supported by a similar study that found, migration of nurses decreased the expert and more specialized nursing workforce while increasing the workload, emigration also led to unequal distribution of staff nurses which result in inadequate quality nursing care [23-27]. Another study noted that when nurses are overworked this subsequently leads to burn out which negatively affects their relationship with colleagues and patients which in turn has an impact on overall patient safety and care management [24]. A study conducted on how a low nurse–patient ratio results in lower mortalities, this study found that emigration leads to a shortage of staff nurses that results in a prolonged stay in the hospital, poor patient health outcomes and increased mortality [28, 29].

The findings of this study showed that 80% of respondents were of the view that there was an increase in migration as compared to 20% who thought there was no increase in migration. In a similar study conducted in Iran 54.77% were inclined to migrate. A significant relationship noted with age, work experience, employment status, marital status familiarity with a foreign language, foreign language skills, foreign language courses, having relatives or family living abroad, and prior experience of being abroad ($p< 0.05$) [30].

Nurses in low-income countries encounter several "pushes" and "pull" factors that influence out-migration. Poor employment conditions and lower quality of life situations in many developing countries serve as the push factors [31, 32]. Wage discrepancy between the source and destination countries is a major factor in global migration of health care workers [33]. For instance, in 2003, Filipino RNs working abroad made up to $4000 per month whereas RNs working in the Philippines made $170 per month in the urban areas and less than $100/month in the rural areas [34]. Professional development opportunities in the destination countries, in addition to money, have been found in another

study to be a motivator for registered nurses to relocate from their home countries. [35, 36, 37]. According to WHO (2006) states that the exodus of nurses from low-income nations experiencing a scarcity of medical professional is exacerbating the crisis of human resource for health (HRH) and creating obstacles to achieving the Millennium Development Goals [37].

Limitation

The main limitation in this study which could be addressed in research in the future is the sample criteria of the subjects. This study was limited to Registered Nurses trained in Saint Vincent and the Grenadines, employed by the Government and those who migrated during the period 2013- 2023 was sampled. Future research should consider extending the study to all registered nurses in Saint Vincent and the Grenadines.

Recommendation

1. Conduct a strategic review of nursing and prepare a five-year strategic plan for Nursing.
2. Upgrade the physical infrastructure of all Health facilities.
3. Acquisition of updated equipment and supplies.
4. Review of wages, working hours, incentives, and promotion.
5. Improve workplace conditions such as staff's levels and safety.
6. Create positive practice work environments by putting in place the necessary requirements.
7. Improve salaries based on education, experience, and outstanding performance on the job.
8. Recognize individual nurses based on merit.

Conclusion

Expatriation of the nursing workforce at Milton Cato Memorial Hospital continues to be in overdrive, policy makers have been provided with the requisite information through this preliminary study to enhance the working conditions, wages, patient to staff ratio, and incentives thus in turn prevent the exodus of nurses.

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Conflict of Interest

The author declared that there is no conflict of interest related to this paper.

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