Determining Factors That Exacerbate Nurse Migration in Puerto Rico and Other Countries

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ABSTRACT

The availability of investigations that develop into the reasons for nurse migration in Puerto Rico is close to none. On top of that, the government has out-of-date information that fails to provide an adequate, accurate, or feasible number that appropriately represents the current crisis that plagues the island in the healthcare system. This investigation is done to determine and identify the factors causing nurse migration in Puerto Rico. From push factors making nurses leave the country and pull factors that make the nurses have more intention to leave the country. This investigation concluded that the main factor causing the nurses to leave Puerto Rico is their low salary, among other sub-factors like working conditions, excessive working hours, and lack of resources.

Introduction

Nurse migration has always been a topic and situation happening in numerous countries worldwide, from under-developed countries to developed countries, such as the Philippines, India, Nigeria, South Africa, Jamaica, Zimbabwe, and Puerto Rico. This investigation aims to discover and determine the factors causing nurse migration in Puerto Rico and why so many are leaving.

On the other hand, only a few people know what it takes to be a nurse and to be one. According to the Merriam-Webster Dictionary, a nurse is a licensed healthcare professional who practices independently or is supervised by a physician, surgeon, or dentist and is skilled in promoting and maintaining health.

In the 1940s and 1950s, the United States of America went through high levels of nurse shortage. The U.S.A. needed recruitment, so those vacant gaps were replaced with nurses from Puerto Rico. This situation happened in many events, including "Operation Bootstrap" or "Operación Manos a la Obra," which was done to fill those spaces of unemployment in the U.S.A. while encouraging emigration in Puerto Rico to boost the country's economy. After these events, nurses realized their pay was better and decided to stay. Ever since those events, there has been constant nurse migration, significantly impacting both healthcare systems.

However, the profession is diverse in every country but with the same purpose. However, the motivations and intentions of nurses considering migrating are similar, such as economic, working conditions, and technology levels. The purpose of the investigation would be to discover the specific reasons why many nurses are leaving. As well as this existing problem, the effect of this situation would be Puerto Rico without nurses for the patients to be cared for. What would a country be without nurses in their healthcare system? Nurses are a huge part of the country's healthcare system, not only in hospitals but also in medical offices; this is why this investigation is necessary not only to determine the causes here in Puerto Rico, but it can also help to determine in other areas of the world.

Research Question
Which factors contribute to the ongoing problem of nurse migration in Puerto Rico and other countries?

**Literature Review**

**Nursing Profession**

Only a few individuals know the nursing profession or concept and what it takes to be one. This source explains the nursing concept of the diverse healthcare systems throughout different countries. Locations such as North and South America, India, China, and Eastern and Western Europe were cited as instances of the various systems. Specific health systems perform better and yield better outcomes than others. Furthermore, professionals must be receptive to system updates and modifications to suit the needs of the public. The author claims that the most comprehensive understanding of humans should always be a part of nursing preparation. Put another way, health professionals should constantly be willing to adapt for the better and be open to modifying their practices in their jobs. It gives them new perspectives on how to advance their professions:

Even so-called 'professional nurses' function differently in Western and Eastern Europe, in India and mainland China, and in North and South America, and, within all countries, the nurse functions differently in the country and in the city.

While the ICN, representing nurses in 84 countries (in 1975), defines the term 'nurse' to imply that nursing is a profession, a small proportion in even the most economically favoured countries are prepared professionally according to most concepts of professions (McGlothlin 1964). There is a marked trend toward college education for registered nurses, but practical nurses, nurse's aides, attendants and orderlies, or auxiliary nursing personnel, outnumber professional nurses even in the USA where the movement toward higher education for nursing is most marked. (Henderson, 1978)

This source discusses nursing concepts in various countries' different health systems. It mentions how some health systems are better than others and have better results. Things that can give better results are resources, creating better working conditions, and raising the salary, among others. It also explains the nursing habits and things done in the profession depending on its region. This source is important because it will help explain what is expected to be done in nursing.

Additionally, how the work is performed in different regions, specifically in the USA, will help the investigation because Puerto Rico is a US territory. This information advances the inquiry because only some public audiences know the nursing profession in detail. However, this source will help the investigation delineate workload and how nurses deserve good working conditions and advancements.

**Motivations Involved in Nurse Migration**

Many factors can contribute to the reasons behind decisions that many healthcare professionals, in this case, nurses, make to improve their lives. This study aims to identify the elements contributing to nurse emigration and its development in particular areas. The source outlines the goals and motivations of nurses and the variables influencing their relocation. Most developed-nation nurses migrate for personal reasons. However, large-scale nurse migration frequently occurs in developing nations as nurses relocate for familial, professional, and economic reasons. Health system policies should protect the rights and choices of nurses who choose to leave the profession, but they should also show that efforts are being made to make the workplace better so that nurses choose to stay. "The increase in nurse migration from resource-poor countries has the potential to impair global
health," stated the article. The study also covers how the pressures of growing families and career progression affect nurses' pay and working conditions. Another factor is that country-level studies are necessary in research with limited funding to build sophisticated global health systems. In this regard, a study was able to delineate that:

Push factors influence a migrant's decision to leave the source country, and pull factors encourage migration to the destination country (Buchan, 2007; Dovlo, 2007; Kline, 2003). Commonly identified push-pull factors include wage differences, job satisfaction, working conditions, the HIV/AIDS epidemic, professional/educational opportunities, political climate, standards of living, family obligations and a desire to improve life for other family members (Buchan, 2007; Buchan et al, 2003; Dovlo, 2007; Kline, 2003; Ogilvie et al, 2007). Wage differences are considered one of the most influential pushpull factors (Buchan et al, 2003; Dovlo, 2007; Vujicic et al, 2004). Poor working conditions and the HIV/AIDS epidemic are also cited as major push-pull factors. (Ogilvie et al, 2007)

Other sources within this investigation will later imply that the dramatic increase in nurse migration affects global health because of vast numbers of health professionals in developed countries and few in resource-poor or less developed countries; however, there is an overall nurse shortage worldwide. Developed countries are getting more nurses abroad every year. Push-pull factors in nursing are wages, conditions, opportunities, and family reasons. Other factors like resource shortages affect nurse migration, such as including and implementing countrywide resources to increase nurse retention. Each reason the migrated nurses is studied to develop strategies and strengthen nurse retention. This source is important because it will help to compare common push-pull factors with the ones that will be investigated and found in Puerto Rico; this allows the investigation because it explains why nurses migrate to other countries.

**Nursing: The Most Sought Profession Worldwide**

While all occupations have value and are necessary, nurses are among the most in-demand. This study aims to educate others on the value of nursing while outlining both benefits and drawbacks. Examples include the rise in employment offers following COVID-19 and, more crucially, the global demand for health workers, particularly nurses. This site describes how the COVID-19 pandemic became a historic statement concerning nursing shortages across the globe. Over 50% more nurses are now needed than a decade ago. The pandemic also tested the dedication of nurses and demonstrated their worth during difficult times.

Furthermore, some undeveloped nations needed nurses even before COVID-19. Determining a country's quality of life is another factor. One of the most important factors involved is the openness of health access. The source also talks about how nursing is one of the top ten most demanding careers with the lowest pay in nations like Mexico. Countries and institutions are trying to show students that nursing jobs are excellent opportunities for them to grow as people and help with all the vacancies. There will be a need for more than 4.7 million nurses during the next ten years. The following source goes into detail on this subject by stating that:

Sin embargo, estos datos no aplican para el sector sanitario; de hecho, la situación es inversamente proporcional: en la medida en que la pandemia afectó la economía mundial, la demanda de profesionales de enfermería se incrementó considerablemente en más de un 50%.

Afortunadamente, la situación para los profesionales de la salud es muy diferente, ya que según datos de la propia ONU, el trabajo de enfermería es uno de los más solicitados en todo el mundo y la demanda de empleo incrementó más de un 60% después de la pandemia.

Lo anterior quiere decir que, tan solo para mantener las cifras actuales, durante la próxima década habrá una demanda de 4,7 millones de empleos de enfermería, pero para cubrir el total de plazas que realmente se necesitan en todo el mundo se requiere un total de 10,6 millones de plazas de enfermería para antes del 2030. (Pearson, 2022)
The importance of this source concerning this investigation is that it shows the number of nurses needed and the number of job offers. COVID-19 was a remark worldwide during and after because many required countries still need nurses, including Puerto Rico. According to this source, a factor determining the quality of life in a specific country is the openness of healthcare access for everyone. However, how will there be healthcare institutions to take care of the people if there are no nurses? If countries and institutions want their future students to practice nursing, their current professionals should be rewarded. The governments or institutions can reward nurses with a yearly incentive or a health plan. They should work in good conditions, have a deserving income, be supplied with the materials they need for their and their patients’ use, have advanced technology in the workplace, and have reasonable working hours, among others.

Study Exposes Disturbing Statistics on Nurse Burnout

Burnout was identified in this study as one of the many reasons associated with nurses quitting their professions and moving abroad. This study aimed to determine what nurses thought about their jobs and how they felt about them. This report considered numerous elements and factors. The source describes how nurses responded to a survey regarding their work and feelings while performing it. More than 2,000 healthcare partners responded to the report. The nurses’ sense of exhaustion was one of the key elements seen. However, some nurses who experience burnout or tiredness do not wish to quit, which suggests there are more reasons why nurses should be appreciated and rewarded for their work. Other sub-factors, such as teamwork and lack of staff and resources, also influenced commitment. This explanation of nurse engagement from authors Cynthia King and Leigh Ann Bradley was based on data from their study. These writers concluded that hospital administrators should provide nurses with greater expression, foster a positive work environment, and establish a trustworthy relationship between supervisors and nurses to improve the dedication of those nurses:

According to the study, 15.6% of all nurses reported feelings of burnout, and this percentage increased to 41% of nurses “not committed.” What is also interesting is that 50% of nurses who reported feeling burnout also reported that they did not plan to leave their organization, which indicates the importance of supporting and knowing nurses in the workforce to prevent nurse burnout.

And as detailed in the report, the demand for nurses will increase by 15% by 2026. For those who are more important, that nurses are not giving up on their organization, even though many nurses are experiencing exhaustion and burnout work, most are still committed to their profession and do not want to leave. This source will help advance the investigation by adding another factor related to why nurses leave their jobs and possibly migrate. Exhaustion, or what is also called burnout, builds up to working in harmful conditions. The study also mentions recommendations that could help reduce those factors causing nurse migration.

Migration of Healthcare Workers: Some Nations Succeed, While Others Face Setbacks

While some countries are benefiting, others are losing. This study aims to determine the impacts and flaws in nurse migration. Particularly nations in need of nurses and those experiencing high migration rates, as other nations organize hiring and recruitment drives for foreign nurses. The source lists numerous instances where
nurse migration has happened and continues to happen. While some countries are creating campaigns to hire and recruit foreign nurses, those foreign countries need more staff. For instance, in 1999, the United Kingdom hired South African nurses. However, Nelson Mandela had to battle for it because the nation was seeing a large-scale migration. These and other criteria suggest that those nurses should address the nation's demands. Health professionals are being taken from underdeveloped countries to developed ones when they are most needed. The fact that nurses depart for other nations has yet to be acknowledged, but even in the absence of their departure, there would still be much work to be done due to the limited staff. Moreover, the following source goes into detail by indicating that:

En 1999 Nelson Mandela criticó al Reino Unido por reclutar enfermeras en Sudáfrica. A raíz de este llamado de atención el Departamento de Sanidad de este país europeo incluyó en sus guías a los empleadores un llamado planteando que "es esencial que no se realicen campañas de contratación en países que están experimentando una escasez de enfermeras para atender sus propias necesidades". Por otra parte, "los trabajadores migrantes del sector de la salud con frecuencia se sienten vulnerables y por lo tanto restringidos en su capacidad para protestar por sus condiciones laborales".

"En el caso de las políticas estatales de contratación internacional, es necesario minimizar los efectos negativos sobre los países de origen mediante una migración mejor administrada y regulada". (Organización Internacional del Trabajo, 2003)

The importance of this source and its usefulness within this investigation is to showcase and alert countries that recruiting nurses from foreign countries hurts the healthcare system, which loses its nurses. Most of the time, the countries needing nurses and other professions still need to be developed. Therefore, recruiting nurses from undeveloped countries that genuinely need it is unethical and detrimental. So why is it that no matter how many times it has happened, and presidents have even fought for it, the situation is still happening? If there is a shortage of nurses in Puerto Rico, then nurses should not be recruited and taken from the country by other countries. What would be a country without nurses and health professionals? People will not be able to meet their necessities. Instead of taking the nurses, those governments should help with factors like lack of resources and low salary, which will make the nurses stay in the country of origin, possibly needing the staff.

Study of Jamaican Nurse Migration

Jamaica, as of late and demonstrated through this article, is going through a healthcare crisis because of the migration of their nurses. This study sought to understand the motivations behind Jamaican nurses' desire to immigrate abroad. Finding out why Jamaican nurses wish to relocate was the study's goal. We conducted in-person interviews with six Jamaican nurses who had been educated in public and private institutions and had one to five years of professional experience. Numerous breakdowns in the workplace were discovered. Increased stress levels, hospital closures, the availability and quality of care, and other factors all interfere with nurses' capacity to perform their jobs in institutions. Living without necessities, working in unfavorable conditions, and experiencing other problems are all caused by the lack of concern for the nurses' well-being. The study concluded with recommendations for the Jamaican healthcare system, which were made in the study's conclusion to aid in the migration of nurses. One is to give nurses the pay and benefits they are entitled to. The following source indicated that:

Kingma (2007) maintains that a direct link exists between health outcomes and the number of nurses' in healthcare systems. Data from the study can be used to inform policies for better outcomes. Scholars suggest that nurses' emigrate due to unmet needs (Brown, 2012; Kingma, 2007). Nurses' stories identify the challenges and barriers they experience in Jamaican and reasons why they emigrate. Nurses who intend to emigrate may provide insight to problems and proposed goals of the future. The findings from this study sought to facilitate the needed collaborative discussions and policies, to foster the way Jamaica's and other low resource countries address nurse emigration. (Lewis, 2018)
This study is relevant to the purpose of this investigation because it aims to find reasons why Jamaican nurses are leaving the country. Six Jamaican nurses who studied in private and public institutions with one to five years of working experience were interviewed. Many issues were found because of the need for more necessities, working in bad conditions, and little concern for the nurses' well-being. Therefore, this source is essential because it demonstrates many push factors of nurses' intent to migrate to other countries from Jamaica, such as necessities, working in bad conditions, and suffering from illnesses because of the little concern for the nurses' well-being. It also gave many recommendations that would help the healthcare system in Jamaica. This information would help advance the investigation because Jamaica is a country in the Caribbean very close to Puerto Rico. Overall, it would help because there are many similarities between these two countries rather than another country from another part of the world.

Promotion to Create Laws on Reducing the Workload of Nurses in Puerto Rico

There is now no legislation or regulation protecting nurses' work hours; consequently, laws should be enacted to lessen the excessive workloads on nurses. This study aims to raise awareness of a project that creates laws to reduce Puerto Rico's nursing workloads. Professionals in nursing are the most prevalent in processes, but they also receive the lowest pay and the most work. Public and private institutions are putting 25 to 30 patients per shift for a nurse to care for. Nurses have to work extra time after their shifts because they still need to finish their duties, making the workload excessive.

Nevertheless, nurses are not compensated for the spare time they work. However, of the 42,000 active nurses across all institutions in Puerto Rico at the time of the survey, 28% planned to migrate primarily to the United States of America. It is usual for nurses to depart in search of better pay and working circumstances elsewhere. If nurses left, they would take on fewer patients, work fewer hours, have more possibilities for training and studies, and so on. The life of the professional and the care that patients require and deserve will improve if the law is passed. The following source was able to indicate that:

"Sin embargo, aunque son los que más están presentes en todos los procesos, son quizás los peor remunerados y con mayor carga laboral, según la Dra. Ana Cristina García, presidenta del Colegio de Profesionales de Enfermería. Actualmente, en las clínicas, tanto públicas como privadas, las enfermeras están atendiendo de 25 a 30 pacientes por turno, aunque un reciente estudio realizado por ellos mismos con una colaboración de una compañía externa, afirme que son 15 los que atienden. Por el mismo tiempo, estas no alcanzan a cumplir con sus deberes a la hora de terminar su turno, por lo que requiere que las y los enfermeros, utilicen su tiempo extra en terminar con sus labores, pero estas horas adicionales jamás son remuneradas, aclara la doctora Ana Cristina. (Rendón, 2022)

The usefulness of this source within this investigation delineates how nurses have excessive workloads, or "nurse burnouts," during and even after work. Nurses even have to stay for 16, 17, and 18 hours to care for the number of patients they have. So, not only are they working extra hours and not getting paid for those, but the working conditions could be better. A typical shift is already 12 hours long, which must be exhausting for nurses. Additionally, for long shifts like these, nurses deserve an excellent resting area with necessities such as bunk beds, food, water, and personal hygiene.

Regarding the shift hours, 12 hours is still a lot. Institutions should make the shift hours shorter, like 8 hours. Nurses finish their shifts exhausted, and what about those with kids or parents at home that they must take care of? Many factors are involved, yet the institutions must fix the working hours and raise the nurses' salaries because it creates commitment, a better professional-to-patient relationship, and better physical and mental health for those professionals. If these recommendations were to be taken by the institutions and organizations, they could all come together to cause nurse retention in Puerto Rico.
Acute Care Nurses Local Salary

The salaries of acute care nurses in Puerto Rico and the United States of America are vastly different. This study aimed to compare acute care nurse salaries in Puerto Rico and certain regions to those in the United States. The article discusses and displays the disparities in pay between graduate acute care nurses. There are several salaries listed and shown. Most of the figures indicate monthly or annual salaries. For instance, a city in the metropolitan region where the numbers differ is compared to certain Puerto Rican rural villages. For example, in Guavama, the hourly wage for a nurse is $9.33, whereas in San Juan, it is $14.19. However, the U.S.A. average is $29.45. The outcome was that the salaries in the two nations differed significantly.

However, this source will help explain the work and how nurses deserve good working conditions and advancements. (Mi próximo paso, 2023)

The focal point of this source concerning this investigation is that it shows the average salary of acute care nurses in Puerto Rico and the U.S.A. There are various values and wages shown. Some are monthly, and others annually. This source is important because it has many data that can help support the topic investigation. It shows the different numbers, specifically in graduate nurses. This source would help advance the research by proving how many nurses are leaving. For example, for a nurse in Puerto Rico, the average hourly salary is $16.96; in the U.S.A., it is $39.05. Meanwhile, the average yearly wage in Puerto Rico would be $35,380; in the U.S.A, it would be $81,220. The difference between the two is enormous, so it is essential data for this investigation.

Future Nursing Professionals Take their Oath

People who are now learning and graduating are the countries' future. This article aimed to display the future nursing professionals of Puerto Rico — graduates from the University of Puerto Rico, Mayagüez Campus. The article describes the 2023 students' Initiation Ceremony into the Nursing Profession held at the University of Puerto Rico, Mayagüez Campus. The article contains the speeches that were delivered during the ceremony. The speakers primarily discussed the significance and relevance of this event, which led the students into what will likely be their lifetime careers. The students this year who persevered through storms, earthquakes, a pandemic, and numerous other events while pursuing this career were also honored by their professors. It also highlighted how, for various personal reasons, as well as having watched family members pursue their education, some students had always dreamed of going to school and being able to work in this field. Most students interviewed for the article stated how excited they were about the future and how committed they were to their careers. The following source indicates that:

"Este grupo de colegiales culmina sus estudios luego de cuatro o cinco años estudiando en el Departamento de Enfermería y hacen esa juramentación tan hermosa para proveer un servicio de calidad a nuestros pacientes, que tanto se necesita en estos tiempos y en todas las áreas de salud. Es el compromiso que hace el estudiante con la comunidad, el pueblo, con Puerto Rico y el mundo entero, porque tenemos colegiales en todas partes brindando un cuidado de excelencia y calidad. Soy egresada de esta Universidad y puedo dar fe de ello", indicó.

Según trascendió en el evento, el Departamento de Salud Federal ya ha informado que para el 2030 se requieren muchos profesionales de Enfermería, pues necesitan 50 mil cada año para cubrir las principales necesidades. Existen alrededor de 62 especialidades en áreas relacionadas con la tecnología, inteligencia artificial e informática. (Valentín, 2023)

The presented information is paramount for advancing this investigation because the initiation ceremony in the University of Puerto Rico, Mayagüez Campus had around 42 nursing students graduating this year, 2023, which means there are only 42 future nurses on this campus. Despite this, the Federal Department of Health declared that there would be a need for 50,000 nurses by 2030 to cover the primary necessities. Even
though only one campus is being counted on this article, with all other universities, it is most probable that there will still be a need for nurse professionals. On the other hand, these students expressed a commitment to their profession by addressing the nurse vacancies. Institutions and organizations should fix those factors creating nurse migration for the nurses working in these moments and those coming in. For nurses to perform a good job and care for the country's patients, they need good working conditions, resources for themselves and working areas like advanced technology, and a good salary, among others. If these recommendations are not taken and applied to health policies, even new students will leave the country and seek better opportunities and lifestyles.

753 New Professionals Graduated from the Medical Science Campus of the University of Puerto Rico

University of Puerto Rico's Medical Science Campus students graduated from various medical fields. This article aimed to inform readers about the number of graduates. The students in this class represent the future of the healthcare system in Puerto Rico. The Medical Sciences Campus of the University of Puerto Rico graduated 753 students who studied different health disciplines. These individuals are all graduates of Puerto Rico's six medical sciences institutions.

Public health, pharmacy, nursing, general medicine, and dentistry are among the fields covered in the schools. They will serve as the nation's healthcare system in the future. All those students' professions are in the health service for citizens. The following sources are able to indicate that:

"Hoy 753 estudiantes lograron su meta profesional en las ciencias de la salud, convirtiéndose en la nueva generación de profesionales, listos para aportar a la salud y el bienestar del pueblo puertorriqueño. Para mí es un privilegio presenciar su crecimiento y desarrollo y tener ante mí a los futuros líderes en el campo de la salud. Cada uno ha demostrado una capacidad increíble para superar los desafíos y ha mostrado una determinación y resiliencia excepcional', expresó el profesor Carlos Ortiz, Rector Interino del RCM.

Por su parte, durante su alocusión la doctora María M. Hernández Maldonado, Decana de Estudiantes del RCM le expresó a los graduandos que hoy "pasan de ser estudiantes a convertirse en profesionales dedicados al bienestar de otros, al cuidado de este país y al desarrollo de nuevos avances para una mejor calidad de vida. (Universidad de Puerto Rico, 2023)

The information extrapolated from this source states that this year, 2023, there were only 753 students who graduated from the Medical Sciences Campus of the University of Puerto Rico. Even though the article did not include other universities in Puerto Rico, more graduates are still needed. Additionally, all those students are from different medical areas in the healthcare system, which means those students are not all graduates of the nursing profession. It makes it an even lower amount of nurses in the country. However, what can be or is the reason why students choose another career instead of nursing? A standard answer would be the salary. Students see that nurses are not paid well, work in bad conditions, and many other things that make them choose another career. Some students study the profession, and once they start working, they make new plans and decisions because of all the factors involved in a job where they need to give their life for others while receiving a low salary.

Survey for Health Professionals (Nurses)

Even if it was common ideas and perspectives, the survey was an effective way to gain a proper viewpoint from each nurse. This source was used to get feedback from nurses on their work and the variables influencing nurse migration in Puerto Rico. Eleven questions in total, with unidentified responses, were included in the survey. The first five questions asked about the nurse's background, education, and occupation, among other things. The age and gender of the nurse were enquired about in the first and second queries. The third and fourth
questions focused on the nursing professional's preparation for the workforce and their university of study. The sixth and more introspective question asks the nurses about the factors that most influenced their career choices. The sixth question asks if the nurse has worked in a hospital previously. Subsequently, the seventh and eighth queries inquire about the nurse's willingness to relocate to another nation to carry out their professional duties and whether they have received a personal employment offer overseas. The reasons for the nurse's migration and resignation from their current position are posed in the ninth and tenth questions. The eleventh and final question concerns nurses' thoughts on professionals in the nursing field who are migrating from Puerto Rico:

Anonymous response 4: "Everyone has their own objectives and goals, if by migrating to another country they can have a better lifestyle, better salary or better benefits, they have every right to seek their future, why oppose them leaving the island?"

Anonymous response 10: "I think that there is a need for nurses in PR, but to have nursing staff here in PR and not keep leaving the country, everything has to be improved, from the number of staff, dividing the work fairly, promoting teamwork, improving pay, giving vacations to nursing staff accordingly to avoid burnout, etc."

Anonymous response 12: "It is very sad to see how as nursing professionals we cannot sustain a healthy life physically, emotionally, economically, socially, or in any way." (Betancourt, 2023)

The significance of this source regarding this research is that it provided the collected responses from a survey, which received 12 responses. All the replies came from female nurses aged between 22 and 59. These nurses had studied at nine different universities. They all had a bachelor’s degree, except one with a master's. The factor that influenced most of the nurses was their families. Most of the nurses had recently worked in a hospital. Most respondents stated that they would leave Puerto Rico to practice their profession. However, only five nurses had been offered a job abroad. The majority responded that these nurses would leave the country and their current position because of their salary in search of a better lifestyle and benefits. Finally, regarding the exodus of nurse professionals, most opined that it all depends on what the individuals are looking for and what is best for them if they are willing to do it. The source is important because all the other sources included nurses' perspectives from other nations. All these replies, though, come from Puerto Rican nurses.

Materials and Methods

The investigation used a computer with an internet connection and a browser (Safari). In order to find the documents required for this investigation, the Google search engine was paramount for pinpointing the necessary sources to clarify the research question. Although the internet connection was unstable at times, it proved sufficient to conduct all the required constituents of this investigation. Some sources were peer-reviewed, and even though some were not, the sources were revised and approved by the research advisor once their validity was confirmed.

This investigation was completed utilizing a documentary analysis design. To populate this research, it was necessary to specify the purpose of each of the 11 sources used. Furthermore, it was essential to recognize the source's design and approach, indicate the target audience, highlight their limitations, and determine their recommendations and findings. An analytical component outlining the significance of the data presented in the inquiry was generated, so a descriptive content analysis methodology had to be utilized for this investigation.

Additionally, a survey was provided to 12 healthcare professionals (nurses). This data collection instrument contained 11 questions that pinpointed their age, education level, possible reasons they would consider leaving the island, and more. Another methodology within this investigation included an interview with the Health Secretary of Puerto Rico; this interview was conducted via telephone, and a set of questions regarding the government's stance on nurse migration and strategies to improve nurse retention were asked. All these components working in tandem created the optimal conditions for the consummation of this project.
Results

Ebsco Host and Google Scholar were the most applicable search engines for the sources selected for this investigation. These findings will be delineated according to their publication date; however, the order in which they appear in the Literature Review will dictate the number they are ascribed (id est first source, second source, et al.). The first, fifth, and second sources were not recent since they were published in 1978, 2003, and 2007 respectively. The first dealt with information regarding a description and brief history of the nursing profession, the fifth provided an outlook on how some nations can retain nurses versus others that suffer high migration rates, and the second delineated the motivations involved in nurse migrations. The sixth source was published in 2018, and the fourth was published in 2019; both can be considered recent, and they delineated information regarding an in-depth study of the motivations of Jamaican nurses to migrate and an expository study that outlined the statistics on nurse burnout. The remaining eighth, ninth, tenth, and eleventh sources were very recent since they were published in 2023. The eighth source showcased future nursing professionals who took their oath in Puerto Rico, and the ninth source covered how 753 recently graduated students will become future representatives of the nursing profession on the island. The tenth source provided salient salary data on local acute care nurses. Finally, the eleventh source delineated the results of another methodology of this investigation, which was a survey for healthcare professionals, namely nurses.

Discussion

The sources in the investigation help develop the main idea of factors causing nurse migration in Puerto Rico. The first source discusses the concept of nursing in different parts of the world. The second source delineated the common motivations and factors in nurse migration in general. The third source helped state how nursing is among the most sought-after professions, especially after the COVID-19 pandemic. The fourth source conducted a report asking nurses about their jobs and feelings. The source concluded that burnout or excessive workloads are the main factors associated with nurses quitting their professions and migrating. Then, the fifth source explained how some countries are winning while others are losing, such as developed countries taking nurses from undeveloped countries that need it more than those with more resources and personnel. The next source organized interviews with 6 Jamaican nurses and found numerous breakdowns in the workplace. The source also ended up with some recommendations for the Jamaican Healthcare System. Since Jamaica is very similar to Puerto Rico and relatively close to it, the situation and results are used in this investigation to compare those with the Puerto Rican situations in this field. The seventh source shows how nurses feel about their working conditions in Puerto Rico, specifically the excessive workloads. The eighth source provides data tables demonstrating the huge difference in salary for acute care nurses in Puerto Rico compared to the U.S.A. The ninth source displays some future nursing professionals and the number of students who graduated from the University of Puerto Rico, Mayagüez Campus. It also stated that there would be a need for 50,000 nurses by 2030 to cover primary necessities. The tenth source also talks about future health professionals from many medical fields. It mentions how there are only 753 new professionals, but as the previous source stated, there will be a need for 50,000 nurses, which is already another situation to fix. The eleventh source surveyed nurses for feedback on their jobs and factors influencing nurse migration in Puerto Rico. The survey concluded that low salary and pay are the main factors influencing migration or reasons to leave their job. For the interview, the current Health Secretary of Puerto Rico, Mr. Carlos Mellado López, was contacted and offered a virtual meeting to answer six questions relating to the topic. The first question was on the state of the Puerto Rican health system, and an important thing mentioned in the response was that nurse migration has been happening for around ten years, so it is not something new. The second question consisted of the factors contributing to the nurses’ exodus. The answer for that one was the lack of pay since in Puerto Rico, 68% of the population is
a patient of Medicare, which is an insurance program for seniors and people with disabilities, and Medicaid is an assistance program for low-income people. These two programs come from federal aid, where deficiency starts, and why nurses can not get paid well. Also, 15% of the population does not have access to a health plan, making the budget to pay nurses smaller and smaller. It is a complicated situation that has caused many people to leave the country and seek better pay and lifestyle. The secretary also stated this, "Enfermeros aquí en Puerto Rico, tiene un enfermero por cada 12 a 15 pacientes, cuando en los estados unidos tienen un enfermero por cada 6 a 7 pacientes. O sea que las condiciones aquí de trabajo son mucho más y a menos paga;" this means that here in Puerto Rico, there is one nurse taking care of 12 to 15 patients, while in the U.S.A., there is one nurse taking care of 6 to 7 patients. Hence, working conditions in Puerto Rico are much better with a smaller salary. The next question asked the secretary if there was any awareness of nurses leaving only for the U.S.A. Then, the fourth question asked if there were any suggestions to promote nurse retention and other health professionals. The response was that even though it is not something the health system wants to do, they had to raise the Medicaid health plan rates since there are no budgets. However, the health system can raise health professionals' salaries if the country receives more funds and aid for the next five years. However, the uncertainty is that no funds will be designated for our country for the next five years. Increasing residency and trying to raise the salaries that are being paid will make it more attractive to stay in the country, but Puerto Rico would still be deficient in funds.

The fifth question asked what the government has done or has planned to bring solutions to these problems. The response to that question was this, "¿Qué hay un reto bien grande? Sí, tenemos que seguir trabajando para mejorar nuestro sistema de salud y que el gobierno federal entienda que nosotros decidamos tener mas accesos a fondos y esa es la parte que hemos estado luchando. Es un reto en el país que ha venido sucediendo por los pasados diez años y después de María se acrecentó y ciertamente después de la pandemia duplicó;" this means that yes, there is a big challenge for the health system, yet they have to keep working on those things to better the country's health system and that the federal government also understands that there is a decision that the health system wishes to be provided with funds and that is the part the health system is struggling with. It is a challenge that has been happening for the last ten years, and after Hurricane María, it increased, and certainly, after the COVID-19 pandemic, it doubled. The secretary also stated that even though this situation happened after the pandemic, it is also important to recognize how the health system worked during and after the pandemic to better the situation, and that is where the positive outcomes appear. The last question asked if the government has a campaign encouraging nurses and other health professionals to return to the island. In this answer, the secretary mentioned how the Centro Médico hospital added around 300 additional jobs, but the salary situation makes it harder to recruit new nurses. The secretary also stated this, "Simpre nos apelamos al sentimiento patrio de querer estar aquí, de querer ayudar a Puerto Rico, de querer echar a Puerto Rico hacia adelante pero de la misma forma como profesional de salud te tengo que decir que no culpo a nadie que se vaya." Which translates to, "We always appeal to the patriotic feeling of wanting to be here, of wanting to help Puerto Rico, of wanting to move Puerto Rico forward, but in the same way as a health professional, I have to tell you that I do not blame anyone for leaving." However, the secretary mentioned how, from this current position, the health system has tried to make the federal government understand that Puerto Rico has some disparities in these fields, and as citizens of the U.S.A, they should also help Puerto Rico with the funds and have the professionals better paid. Because Puerto Rico has good professionals, what is missing is better pay.

Conclusion and Future Study

The presented sources were able to delineate a detailed explanation of the nursing concept and elucidate common motivations for nurses to migrate; moreover, this investigation developed by stating with a source how nursing is one of the most sought professions worldwide and how burnout is a factor causing nurses to leave
their jobs. Furthermore, one of the sources presented how some nations are winning by taking nurses from undeveloped countries while those undeveloped countries lose the nurses they genuinely need. Besides, this investigation delineated with the help of a study regarding Jamaican nurses and migration. The following source discussed an initiative to fix the high levels of nurse workloads by creating a law.

Additionally, for this investigation, evidence was provided that the Puerto Rican nurse’s salary compared to a country like the United States is minimal. The process revealed some limitations, which might be resolved by more investigation. The other two sources displayed the health and nursing professionals graduating from two universities in Puerto Rico with fewer students compared to what will be needed for 2030. A survey was administered to find a correlation between nurses’ perception of the profession and nurse migration in Puerto Rico. With the responses, it concluded that, generally, it would have been beneficial if the sources had outlined more information on the function of a nurse during working hours. Generally, the sources could present a vignette on the nurse migration. For upcoming continuing research and data analysis, recommendations include securing more years of data and requesting more study resources.

Ultimately, this investigation aimed to answer What are the factors causing nurse migration in Puerto Rico? Sources converged to answer why nurses are migrating and turned out to have low salaries, working conditions, and technology levels, among others.

**Limitations**

For the investigation to succeed, the scope of the research question had to be expanded to find additional information on the issue, allowing the best conditions to answer the research question. The essay would have been better written if the original research question had been amended because the research question would have been difficult to finish. All of the sources have several limitations. One of the impersonations was for the survey, which was carried out promptly and with only a few nurses. Another disadvantage was that the nursing profession source was required to describe what is done to demonstrate why nurses require higher earnings, working conditions, and other benefits. Instead, the source provided concepts and perspectives on healthcare systems. However, it was revealed while looking for sources for the investigation that the government requires recent or up-to-date information.

**Acknowledgments**

I want to thank my research advisor, prof. López for his guidance throughout the investigative process. I would also like to extend my gratitude to the Health Secretary of Puerto Rico for his disposition to provide the necessary information for this investigation and the nurses who participated in the survey. Lastly, I thank my family for their constant encouragement and continuous support.

**References**

Betancourt, J. (2023, November 27). Nurse Migration as Described by Puerto Rico’s Health Secretary. personal.


