International nurse migration:

Impact on low- and middle-income source countries and policy responses

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Degree Thesis
Bachelor’s Degree in Health Sciences, Nursing
2020

DEGREE THESIS	
Arcada University of Applied Sciences	
Degree programme:	Nursing
Identification number:	21894
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Title:	International nurse migration: Impact on low- and middle-income source countries and policy responses
Supervisor (Arcada):	Pamela Gray
Commissioned by:	Anna Suutarla, head of international affairs at Sairaanhoitajaliitto ry

Abstract:

Nursing shortages around the world and the increased rates of nurse migration have profound effects on the source countries, especially if health systems in those countries are underfunded and health needs of the population are not being met. Globalization, increased demand for nurses and the strong “push” and “pull” factors drive nurse migration. This study examines the impact of international nurse migration on the low- and middle-income source countries in a comprehensive manner and presents an overview and evaluation of the policy responses adopted to mitigate the negative effects and to promote more equitable and sustainable practices in nurse migration. The UN’s Sustainable Development Goals and Primary Health Care are used as conceptual frameworks. This study is a narrative literature review with an inductive methodological approach used to analyze the fourteen articles included in this review. The findings show the existence of both negative and positive impacts of nurse migration on the source low- and middle-income countries, although the positive impacts are still subject to debate by researchers. Policy responses ranging from international, national, and bilateral agreements and Codes of Practice have had varied levels of effectiveness and adherence. The biggest challenge is the limited adherence and the voluntary nature of these measures. The long-term effects of the source country responses that focus on retention and mutual benefit are yet to be seen. In the discussion chapter pitfalls of taking a linear view on such a complex and multi-dimensional issue as international nurse migration is mentioned, as managing it requires awareness and involvement from all recipient and destination countries, no matter the income level. Managed migration should be directed by both sides at strengthening the health care system and the nursing sector of the source country

Keywords:	Nurse migration, low- and middle-income countries, nurse migration policy, nursing shortage
Number of pages:	47
Language:	English
Date of acceptance:	

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Acronyms

ICN – International Council of Nurses

LAMI – Low- and middle-income

MOU – Memoranda of understanding

PAHO – Pan American Health Organization

PHC – Primary health care

SDG – Sustainable development goal

UK – United Kingdom

UN – United Nations

UNICEF – United Nations Children's Fund

WHO – World Health Organization

WHO Code – The WHO Global Code of Practice on the International Recruitment of Health Personnel

1 INTRODUCTION

As more and more countries report nursing shortages, the inability to fulfill the demand for nurses has become a global issue. According to the World Health Organization (WHO), the majority of its member countries have reported some degree of nursing shortage, with the demand being projected to continue increasing substantially (WHO, 2015). With the aging population and a higher prevalence of chronic disease, most high-income countries are also experiencing shortages, although it is not classified as needs-based (WHO, 2015). In response to this, many have turned to foreign-trained nurses, mostly from low- and middle-income (LAMI) countries, to "plug the gap", offering them better workplace conditions, salaries, a higher quality of life and, in many countries, the immigration process for nurses has been simplified in order to facilitate the migration flow (Sparacio, 2005). The practice raises concerns about various issues, such as the legal aspects of immigration, requalification, adaptation and integration. The focus of this thesis, however, is on the impact that international nurse migration has on the LAMI source countries and the policy responses to the increased levels of nurse migration.

Currently, the shortage of health workers in the developed world is being effectively subsidized by "the brain drain" in the developing world. Migration of healthcare workers, including nurses, has always been a part of health systems, but with the age of globalization it is increasingly seen as a big factor in undermining attempts to improve health systems of developing countries (Buchan & Dovlo, 2004). United Nations Population Fund (2005) reports that this "brain drain" is overwhelming the world's healthcare systems, which is not surprising considering nurses make up about half of all the health workforce in the world (WHO, 2020a). According to a WHO report (2015), more than 60% of the global needs-based shortage of nurses and midwives is represented in only two regions, Africa and South-East Asia. In those regions the need for nurses is even greater. For example, only 10% of the global burden of disease is concentrated in the Americas, but 37% of all health professionals work there. Africa, with 24% of the global burden of disease, employs only 3% (Lancet Editorial, 2006). Therefore, implications of the "poaching" of nurses from LAMI countries on the domestic health care systems and wider social structures are great, especially in the

context of reaching the United Nations Sustainable Development Goals and a renewed drive towards achieving Primary Health Care for all.

The existing literature on the issue of international nurse migration has predominantly focused either on specific source countries like India and the Philippines (Walton-Roberts et al., 2017; Thompson & Walton-Roberts, 2018; Brush, 2007; Hawkes et al., 2009), specific regions like Sub-Saharan Africa (Dovlo, 2007) or the Caribbean (Salmon et al., 2007; Yan, 2006), or destination countries like the United States, Canada or the United Kingdom (Buchan & Dovlo, 2004; Little, 2007; Brush et al., 2004). There is a gap, however, of research examining specifically the impact of international nurse migration on the LAMI source countries in a comprehensive manner. Based on the literature examined for this thesis, there is only one study by Khaliq et al. (2008) with the same objective.

This thesis looks at the impact of international nurse migration on source low- and middle-income countries, examines the policy responses by source and destination countries on this issue and attempts to evaluate their effectiveness. This thesis has been commissioned by Dr. Anna Suutarla, head of international affairs of the Finnish Nurses Association (Sairaanhoitajaliitto ry).

2 BACKGROUND

In 2015 the member states of the UN adopted the 2030 Agenda for Sustainable Development at the UN Sustainable Development Summit, making it a landmark year for its multilateral collaborative effort to implement the 17 sustainable development goals (SDGs). At the heart of the Agenda is the pledge by each and every member country to work together towards global equity, peace, and prosperity. Not surprisingly, health and well-being are recognized as essential elements for achieving the SGDs (WHO, 2017). The current crisis in human resources in health will present a major obstacle in achieving accessible health care for all, especially in certain areas where the shortage is the most severe.

Globally there has been a significant increase in the demand for health and social care workers; the demand is projected to continue increasing substantially (WHO, 2015). The World Health Organization and the World Bank estimated in 2015 that there was a needs-based shortage of 9 million nurses and midwives worldwide, with a drastically uneven distribution of the shortage around the world. By 2030 it is estimated to fall to 7.6 million, due to a projected growth in supply in the Western Pacific and South East Asia (WHO, 2015). However, Africa, the worst area affected presently, will face an even more severe shortage of nurses/midwives - it is expected to increase by 56% from 1.8 million to 2.8 million in 2030. Therefore, health workforce shortages will continue to be greatest in sub-Saharan African countries “that together bear 24% of the world’s disease burden today, but have only 3% of health workers and less than 1% of the world’s financial resources to respond to this burden” (WHO, 2014 p.1).

Taking a closer look at the shortages reveals that the income level of a country is the biggest indicator for the worsening of the shortage (see Table 1). Upper-middle-income countries will see a 1.1 million decrease in the shortage, while low-income countries will collectively see a 0.9 million increase in the shortage (WHO, 2016).

Table 1. Estimates of health worker needs-based shortages (in millions) in countries below the SDG index threshold by region, 2013 and 2030 (WHO, 2016).

INCOME	2013	2030	REGION	2013	2030
High	0.05	0.06	Africa	1.8	2.8
Upper middle	2.6	1.4	Americas	0.5	0.5
Low middle	4.3	3.2	Eastern Mediterranean	0.9	1.2
Low	2.0	2.9	Europe	0.1	0.0
			South-East Asia	3.2	1.9
			Western Pacific	2.6	1.2
			World	9.0	7.6

This worrying statistic reflects the current trends in nurse migration and compels us to carefully examine the driving forces behind this unequal distribution and what has led to the current nursing shortage "crises".

Gostin (2008) identifies three broad factors that drive the international migration of nurses: *globalization*, *supply-demand*, and *"push-pull" factors*. Even though needs-based nursing shortages are almost non-existent in high-income countries, the aging population, a shrinking labor force, a shift in prevalence from acute to chronic illnesses, and the increased professional responsibility of nurses mean there is an ever-growing *demand* for trained nurses in high- and upper-middle-income countries (Gostin, 2008). Despite the abovementioned nurse shortages in LAMI countries, some of these countries have a significant number of unemployed or underemployed nurses, due to the lack of economic capital and the consequent underfunding of the health systems, further shifting the supply-demand balance (Thompson & Walton-Roberts, 2018).

Yeates (2010) considers *globalization* the single biggest factor behind the increased scale and magnitude of international nurse migration. Over the past two decades the rates of health worker migration have increased around the world, with health workers being able to migrate more freely precisely due to the shortages (Aluttis et al., 2014). In this context of undersupply, the opening of the markets, new international and labor laws, and government strategies that encourage highly skilled worker migration have resulted in the ability of nurses to choose their country of work (Tam et al., 2016). The most significant characteristic of the

migratory patterns is the flow of nurses, and other health workers, from LAMI countries to high-income countries (Yeates, 2010). This is not a new characteristic. For example, Ireland from the 1950s until the 1990s, while it was a middle-income country with a stagnant economy and high unemployment, was a major exporter of nursing labor globally. This strategy, which was supported by the government as part of the economic development plan, has now been reversed to meet the domestic demand for nursing labor (Yeates, 2009). Ireland now remains a major importer of nursing labor recruiting mainly from the Philippines and India (Kingma, 2008).

Buchan et al. (2003, p.2) state, however, that "it is oversimplistic to suggest that the flow of nurses is only from developing to industrialized countries", referencing the high levels of what is called "North-North" and "South-South" migration. The "global North" is comprised of the high-income countries mainly in the Northern hemisphere which are the main destination countries while the "global South" consists of the main source countries in Sub-Saharan Africa, parts of the Middle East, South Asia, and other low-income countries (Buchan et al., 2003). The flow of nurses from one high-income country to another represents the "North-North" migration. Kingma (2007) notes that historically nurse migration was a linear "North-North" or "South-South" phenomenon – Irish nurses moving to the United Kingdom or Bangladeshi nurses moving to India – with relatively small numbers moving to high-income countries from low-income countries. However, the patterns of nurse migration have become increasingly complex and more global in the recent years, as many nurse move from low-income to middle-income countries and then on to high-income countries. This pattern reflects how most countries both receive and send health workers (Brush, 2007).

The third major factor of nurse migration are the "*push-pull" factors*: the "push" factors in source countries drive emigration, while "pull" factors in the destination countries stimulate immigration. Due to the population boom in LAMI countries, many young people are faced with socioeconomic issues, like poverty, limited employment and professional development opportunities, which turn them to seek employment abroad, thus representing the "push" factors. In the Caribbean region, where there is also a critical shortage of nurses (Yan, 2006), financial reasons, lack of promotion opportunities, and noninvolvement in the decision-making process were the top three "push" factors (PAHO, 2001).

As for the "pull" factors in "South-North" migration, a 2006 WHO study of four African countries on the reasons for health worker migration put better remuneration, safe environment, and living conditions as the top reasons health workers migrate. Better career advancement opportunities, higher quality of life, stable socio-political environment, and recognition of professional expertise are a few of the other "pull" factors in nurse migration (Li et al., 2014). As another "pull" factor, government initiatives have been implemented to recruit foreign nurses to address the domestic nursing shortages (Trines, 2018). The United States and other high-income countries' strategies for recruiting foreign nurses were deemed "aggressive" by many researchers and international organizations (Haour-Knipe & Davies, 2008; Kingma, 2007; Salmon et al., 2007; ICN, 2019), making it a prominent "pull" factor through decreasing the barriers for migration.

There are many examples, some recent and some as early as the 80s, of high-income countries using foreign nursing labor to "plug the gap" in the domestic nursing workforce. Trines (2018) notes some of them:

- Ireland's National Health Service started an annual recruitment fair for nurses and midwives in 2017 offering registered nurses a tax-free relocation payment of USD$ 1,800
- In 2013 the government of Germany signed an agreement with China, the Philippines, Tunisia, and several other countries to import nursing labor to address the "acute shortage of nurses in Germany"
- The recruiting strategies used on nurses and other health workers in South Africa has been deemed as "poaching". In an interview with the Walrus (2008), a Canadian magazine, the international relations coordinator for the professional association for South Africa's nurses "emphasized that Western health care associations recruit overtly through regular newspaper and magazine advertising campaigns" and said that this has dire "implications for the country, because they further deepen the staff shortages we have had for many years. The gap is getting wider"
- In 1989 the United States introduced the "Nursing Immigration Relief Act" to import temporary nursing workers to address the domestic nursing shortage. The program expired in 1997

- In the United States, the number of nursing recruitment agencies grew from 30-40 to 267 in the late 2000s
- In 2013 the Canadian province of Quebec awarded the highest number of points to nurses in their points-based immigration system due to the high demand
- In 2016 Japan passed legislation to make it easier for foreign nursing students to stay in the country upon graduation, as part of an unprecedented move to address the shrinking workforce and aging population.

Due to the current trends in nurse migration and the unequal distribution of the nursing shortages, attempts have been made to limit the aggressive recruitment of nurses from countries with domestic critical nursing shortages. In 2004 the United Kingdom introduced a Code of Practice for the International Recruitment of Healthcare Professionals with a principle that “any international recruitment of healthcare professionals should not prejudice the healthcare systems of developing countries” (UK Department of Health). The International Council of Nurses has issued a position statement on ethical nurse recruitment calling for more “regulated, ethical, and cost-effective recruitment processes” (2019, p.2). Most notably, the World Health Organization adopted the WHO Global Code of Practice on the International Recruitment of Health Personnel in 2010 with the primary aim to “protect vulnerable source countries whose health systems are undermined through losing scarce health professionals to wealthy destination countries” (Brugha & Crowe, 2015, p.333). The effectiveness of these voluntary codes of practice have been called into question (Brugha & Crowe, 2015; Tam et al., 2016; Bourgeault et al., 2016) and it is yet to be seen how much of an effect they are having on the international nurse migration patterns of today. An overview of the policy responses are presented in the findings chapter.

3 CONCEPTUAL FRAMEWORK

The concept of Primary Health Care (PHC) and the wider framework of the UN's Sustainable Development Goals (SDGs) are used as conceptual frameworks for this study. The concepts of accessibility and sustainability are at the core of these frameworks, and these concepts will provide a lens through which to evaluate of the impact of international nurse migration from a LAMI source country perspective. The concept of health itself represents one of the four main nursing metaparadigms that define the discipline of nursing (Fawcett, 1984). It is one of the core concepts that provides an ethical, moral structure to the nurses' caring acts (Thorne et al., 1998); the attainment of health, that is individual to every person, can be considered the main goal of nursing practice (King, 1992). The concept of health is central to the conceptual frameworks used, and it connects the wider, global aspects of the frameworks with the nursing practice.

PHC was put forth by the WHO in 1978 as a global framework for health care delivery and signified a commitment of the ratifying 134 countries to attain health for all (Braveman & Tarimo, 2002). Although it is not a conceptual framework by definition, it serves as a relevant philosophy/ethic for studying the impact of nurse migration from poorer, resource-scarce countries to richer countries. The basic principles of PHC include 'equitable distribution and accessibility of health services to the population', 'use of appropriate, socially acceptable, and sustainable technology and local resources'. The concept of equity is one of the key concepts in PHC:

> Primary health care is rooted in a commitment to social justice and equity and in the recognition of the fundamental right to the highest attainable standard of health, as echoed in Article 25 of the Universal Declaration on Human Rights: "Everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing and medical care and necessary social services […]" (WHO, 2019).

PHC, as defined at Alma-Ata, is based on the idea that health for all cannot be achieved without appropriate economic, social, and political changes; development in health and well-being is dependent on addressing the social, economic, and environmental inequities – "the wider determinants of health" (Hone et al., 2018). This principle works in the opposite

direction as well – health is key not only to individuals, but to the development of a country and the world as a whole, as "achieving health in any one country directly concerns and benefits other countries" (WHO, 1978). Tejada de Rivero, the deputy director-general of the WHO at the time of the signing of the declaration, wrote in 2003 that the word "primary" in PHC means "principal or first in order or degree" and stressed the importance of viewing health care as "care for everyone by everyone […] that is multisectoral and multidisciplinary, health-promoting and preventative, participatory and decentralized". PHC as defined in the Alma-Ata Declaration:

> Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community and through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work and constitutes the first element of continuing health care process (WHO, 1978, p.1).

It is acknowledged that economic development alone can bring considerable health benefits to the population (Bishai et al., 2016). However, it is the appropriate allocation of economic resources and investments into a variety of sectors (health, education, infrastructure, etc.) that ensures health improvements across the population (McElmurry, 2006). According to this concept of PHC, true health for all cannot be achieved without enacting wider national and local policies in sectors other than health and addressing deficiencies in sectors, such as human resources for health.

In 2018, the WHO and the UN's Children's Fund (UNICEF) organized the Global Conference on Primary Health Care and released a draft Astana declaration (Alma-Ata 2.0) revisiting the concept of PHC forty years after the release of the Alma-Ata Declaration and renewing the focus on health as an essential factor for achieving the 17 SDGs (Hone et al. 2018). Just as the PHC emphasizes an integrated, multisectoral approach to health and well-being, the SDGs, that cover a wide variety of issues, from poverty and sanitation to energy and the environment, also aim to promote a more sustainable and integrated development

strategy. The Astana Declaration also reiterates the broader principles of PHC as a concept irreversibly interlinked with the social and environmental determinants of health and inequality, and aims to shift the focus from treatments of individual diseases and "vertical" programs to strengthening the "pillars" of PHC and, consequently, of the SDGs: community empowerment, multisectoral policies and actions, and integrated delivery of quality primary care and public health services (Kraef & Kallestrup, 2019).

With this renewed focus on sustainability and integration, it is not surprising that Astana Declaration identified human resources for health as one of the four "drivers of success of PHC" (WHO, 2018). The pressing matter of the international migration of health workers is addressed explicitly in the new declaration:

> We will strive for the retention and availability of the PHC workforce in rural, remote and less developed areas. We assert that the international migration of health personnel should not undermine countries', particularly developing countries', ability to meet the health needs of their populations (WHO, 2018, p.8).

The absence of the mention of human resources for health in the original Alma-Ata Declaration speaks of the escalating urgency of the issue in the last several decades. Perhaps unsurprisingly, the WHO has designated 2020 and the "Year of the Nurse and Midwife" (2020b). Consequently, without an adequate supply of health workers, of which nurses make up the majority (WHO, 2019), the international efforts to attain "health for all" and reach the arguably modest goal of realizing the basic human rights for people around the world could prove to have limited effect. After all, how can we achieve these noble goals without nurses in the field providing care, delivering treatments, promoting health, and empowering communities?

Thus, the concept of Primary Health Care, within the wider foundation of the Sustainable Development Goals, is used as a framework to evaluate the effect of international nurse migration on these "developing" source countries. The values set forth by the two concepts, namely the principles of international cooperation for reaching equitable health care distribution and accessibility, and of sustainable practices in health care, guide the research process and help to identify the priority areas for evaluating this impact.

4 AIM AND RESEARCH QUESTIONS

As more and more countries report nursing shortages, the inability to fulfill the demand for nurses has become a global issue. Most high-income countries are much better equipped to deal with the crisis, with some strategies including the importation of nurses from LAMI countries. The literature, unfortunately, but perhaps unsurprisingly, has been predominantly focused on the “developed” world through a recipient country perspective, whereas the implications of the “poaching” of nurses from LAMI countries on the domestic health care systems and wider social structures are great. Therefore, the aim of this study is to study the impact of international migration on the LAMI source countries and explore the international, source, and destination country policy responses to the increasing levels of international nurse migration. A wider definition of policy is used in this paper to indicate policies by governments, businesses, local and international organizations: “policy is a set of plans or actions agreed on by a government, political party, business, or other group” (Macmillan dictionary, n.d.). This study does not aim to study of the individual gains and losses of nurse migrants. Instead it focuses on the wider dynamics of global nurse migration.

To meet the aim, the following research questions have been posed:

1. What is the impact of international nurse migration on the low- and middle-income source countries?
2. What are the policies being implemented to alleviate the negative impacts and how effective have they been?

5 METHODOLOGY

This study is conducted as a traditional, or narrative, literature review. A traditional literature review critiques, summarizes, and synthesizes the research available on a specific topic, highlights new research, and identifies the gaps and deficiencies of the available body of knowledge (Guide to literature reviews for research students, n.d.). An inductive methodological approach is used in this qualitative narrative review.

5.1 Data collection

According to Cronin et al. (2008, p.38), the methodology of a traditional literature review means being selective in the material included in the review, "although the criteria for selecting specific sources for review are not always apparent to the reader".

According to Paré G. and Kitsiou S. (2017), there are three main strategies for covering the extant literature in the data collection process: exhaustive, representative and pivotal. The exhaustive strategy is employed when the goal is to make the review as comprehensive as possible with the conclusions based on this all-inclusive knowledge base. The exhaustive strategy is commonly employed for systematic reviews, as its aim is to provide a complete summary of the current literature (Jahan et al., 2016). The representative strategy means only research representative of most other works in the field are used in the review. The pivotal strategy is used when the focus of the review is on the works that have been central or pivotal to a particular research question, that have introduced an innovative method or concept.

Based on the research aim, the representative strategy has been employed in conducting the data collection. Randolph notes that in his experience, even though data collection usually begins with an electronic search of relevant databases, only 10% of the literature included in the review comes from the initial searches. The most effective method, according to Randolph (2009), is retrieving relevant articles from the reference/citation lists of the articles that were found through the electronic search. This is often referred to as the snowball method for data collection.

A 2014 study by Wohlin concluded that "snowballing", even though it is not an alternative to database searches, is an effective method of data collection for literature reviews. The author also points out backward and forward snowballing – using references and citations respectively. In this paper electronic searches of relevant databases were used as the primary method of data collection, with backward and forward snowballing used as a secondary method.

The inclusion criteria are influenced primarily by the research question and should be explicit and comprehensive enough to include or exclude any article solely based on these criteria (Randolph, 2009). The inclusion criteria used in this review are:

- Publication date 2000 – present;
- Language of study English;
- Focus of research partly or fully on the impact of international nurse migration on the source country and/or strategies for addressing these impacts;
- The source country in question a low- or middle-income country;
- Research or review article;
- Published in a peer-reviewed journal.

The initial electronic search was conducted through EBSCOhost, with articles from CINAHL, Academic Search Elite, and MEDLINE. Filters:

- language: English;
- date: 2000 – present;
- scholarly (peer-reviewed) journals;
- document type: article;
- source type: academic journals;
- limit to: full text.

After removing duplicates, the search resulted in 27 hits, out of which two articles were selected for review after employing the inclusion/exclusion criteria. Separate searches were also conducted through the databases of the main health journal publishers: Elsevier (Science

Direct), Wiley Online Library, SAGE Journals, PubMed, Springer Link, and Taylor & Francis Online, using the same filters (when available) (see Fig. 1).

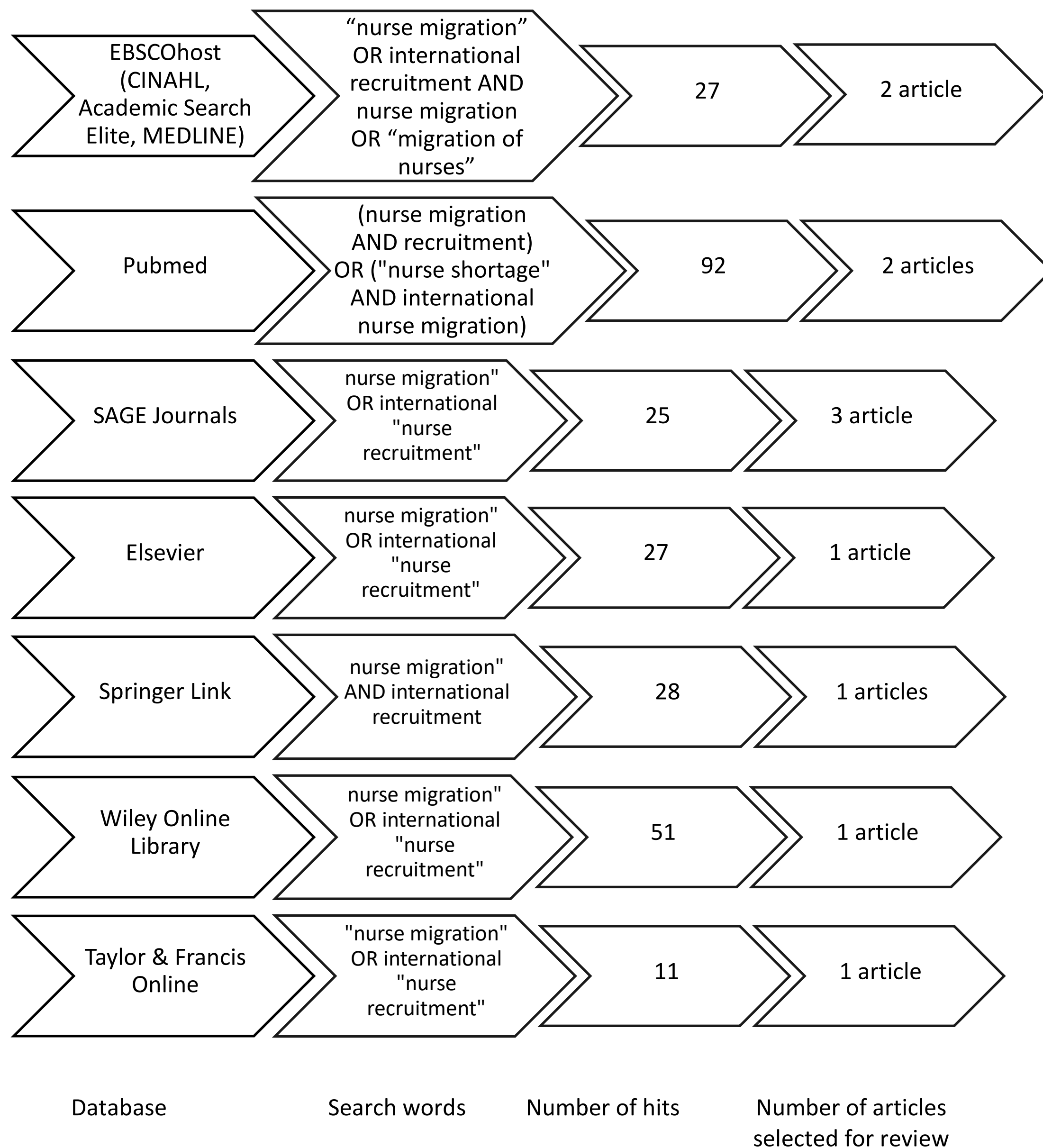

Figure 1. Graphic detailing the data collection process from databases

Through the above-mentioned methods of backward and forward snowballing, citation and reference lists of the articles selected from the primary database searches. This cycle was repeated until reaching a “saturation point” (Randolph, 2009). Four more studies were selected for review through this method.

The review studies were selected based on the following information (Derish & Annesley, 2011): (a) key findings; (b) limitations; (c) methodology; (d) quality of the results obtained; (e) interpretation of the results; (f) impact of the conclusions on the field. Some studies were excluded due to content redundancy.

List of articles chosen for review:

1. Abuagla, A., & Badr, E., 2016, Challenges to implementation of the WHO Global Code of Practice on International Recruitment of Health Personnel: The case of Sudan. *Human Resources for Health*, 14(1).
2. Aluttis, C., Bishaw, T., & Frank, M. W., 2014, The workforce for health in a globalized context - global shortages and international migration. *Global Health Action*, 7:23611.
3. Brush, B., 2007, International nurse migration: lessons from the Philippines, *Policy, Politics, and the Nursing Practice*, 8(1), pp.37–46.
4. Connell, J., & Buchan, J., 2011, The impossible dream? Codes of Practice and the international migration of skilled health workers. *World Medical and Health Policy*, 3(3), pp.1–17.
5. Delucas, A., 2014, Foreign nurse recruitment: Global risk. *Nursing Ethics*, 21(1), pp.76–85.
6. Dimaya, R., Mcewen, M., Curry, L., & Bradley, E., 2012, Managing health worker migration: a qualitative study of the Philippine response to nurse brain drain. *Human Resources for Health*, 10:47.
7. Dovlo, D., 2007, Migration of nurses from Sub-Saharan Africa: A review of issues and challenges. *Health Services Research*, 42(3 II), pp.1373–1388.
8. Khaliq, A. A., Broyles, robert W., & Mwachofi, A. K., 2008, Global nurse migration: its impact on developing countries and prospects for the future. *World Health & Population*, 10(3), pp.5–23.
9. McElmurry, B. J., Solheim, K., Kishi, R., Coffia, M. A., Woith, W., & Janepanish, P., 2006, Ethical concerns in nurse migration. *Journal of Professional Nursing*, 22(4), pp.226–235.

10. Salmon, M. E., Yan, J., Hewitt, H., & Guisinger, V. (2007). Managed migration: The Caribbean approach to addressing nursing services capacity. *Health Services Research*, 42(3 II), pp.1354–1372.
11. Thompson, M., & Walton-Roberts, M., 2018, International nurse migration from India and the Philippines: the challenge of meeting the sustainable development goals in training, orderly migration and healthcare worker retention. *Journal of Ethnic and Migration Studies*, 0(0), pp.1–17.
12. Walton-Roberts, M. et al., 2017, Causes, consequences, and policy responses to the migration of health workers: key findings from India. *Human Resources for Health,* 15(28).
13. Xu, Y. & Zhang, J., 2005, One size doesn't fit all: Ethics of international nurse recruitment from the conceptual framework of stakeholder interests. *Nursing Ethics*, 12(6), pp.571–581.
14. Yeates, N., 2010, The globalization of nurse migration: Policy issues and responses. *International Labour Review*, 149.

According to Ferrari (2015), subjectivity in the selection of studies for review is the biggest weakness of narrative literature reviews, as it can lead to biases. Therefore, it is important to establish that, due to the limited literature available focusing solely on the impact of international nurse migration from a source country perspective, studies that examine health workers as a whole and contain data specific to nurse migration have been included in the review.

5.2 Content analysis

Elo & Kyngäs found that the inductive content analysis method is appropriate for topics where "there are no previous studies dealing with the phenomenon or when it is fragmented" (2007, p.107). The subject of the impact of international nurse migration on the source countries can be called "fragmented" based on the literature available. The inductive approach is also called text-driven, as it is "characterized by a search for patterns" (Graneheim et al., 2017, p.30). The analysis involves looking for similarities and discrepancies in the data and moving from concrete, specific information to theories and abstractions. "Meaning units", or "constellation(s) of words or statements that relate to the

same central meaning", according to Graneheim & Lundman (2004), are labelled into "codes" and used to create categories and sub-categories. These codes allow the data to be viewed in a new light and assists the process of creating abstractions. Category is "a group of content that shares a commonality", while themes connect the underlying patterns in categories together (Graneheim & Lundman, 2004). At the end, generalized conclusions are drawn from the patterns found. However, Graneheim et al. (2017) warn that, when conducting inductive data analysis, there is a risk of getting stuck of surface descriptions and general summaries without providing any new insights and abstractions. Coding through using only the frequency of words/phrases puts the research at risk of missing the context, therefore, it is crucial in content analysis to always consider the context of data (Vasimoradi et al., 2013).
In this study codes were identified through using the word frequency tool of the qualitative data analysis software NVivo with 37 potential codes related to the research questions identified. To avoid the risks laid out by Graneheim et al., the potential codes were evaluated closely within their contexts. Finally, 22 codes were selected, out of which 10 categories emerged based on their commonalities. The underlying connections between categories have led to division of categories into 3 themes: positive impacts, negative impacts, and policy responses. The final results of content analysis classified into codes, categories, and themes are listed in Table 2.

5.3 Research ethics

Ethical issues need to be considered when conducting any type of research. Orb et al. state that "ethics pertain to doing good and avoiding harm" (2000, p.93). Depending on the type of research being conducted, the ethical issues that need to be considered vary. However, decisions that are relevant to any research on how to choose the appropriate methodology, how to record and publish the findings, how to pose an ethically sound research question, and correctly reference to other research papers are all important to consider (Robley, 1995).

Due to the less structured nature of qualitative research, the ethical considerations in qualitative research may be subtler and harder to anticipate (Orb et al., 2000; Ritchie & Lewis, 2003). According to Ramos (1989), there are three types of ethical issues pertinent to qualitative research: the researcher/participant relationship, the researcher's subjective

interpretations of data, and the design itself. For this literature review the two latter types were relevant, while the first type took the form of examining the ethics of the articles selected for review.

The guidelines by the Finnish Advisory Board on Research Integrity were followed and ethical issues re-evaluated throughout the whole research process (TENK, 2012). The articles included in the review were critically evaluated to ensure that the research ethics were followed. The results of the review were checked for reliability, objectiveness, and trustworthiness, according to the guidelines of responsible conduct of research by the Finnish advisory board on research integrity, or TENK (2012).

For this study, respecting the original research used was particularly important. This meant considering the issue of plagiarism, intended or non-intended, using correct referencing and citing, and obtaining the research through ethical and legal means. With regard to plagiarism and referencing, awareness about not presenting other researchers' work or text as my own was crucial during the research process.

6 FINDINGS

The findings of the study are presented in the following chapter, with subchapters divided into the research questions of the study and according to the categories and themes identified during content analysis (see Table 2). The findings to the research question on the impact of international nurse migration on LAMI source countries is divided into two themes: positive and negative impacts. The second research question on policy responses is identified as a separate theme of its own.

Table 2. Codes, categories, and themes from content analysis.

Codes	Category	Themes
Remittances	Economic gain	Positive impacts
Private nurse recruitment sector		
Nurse unemployment	Safety valve	
Skills and knowledge	Brain recirculation	
Human/intellectual capital	Economic loss	Negative impacts
Investment in training/education		
Tax receipts, consumption		
Exacerbation of inequalities		
Exacerbation of shortages	Quality of healthcare	
Quality of care		
Working conditions	Nursing as a profession	
Lower morale		
Loss of nurse educators	Education systems	
Quality of education		
Privatisation		
Increased cost		
Regional and national codes	Codes of practice	Policy responses
WHO Code		
Lack of incentives	Destination country	
Promotion of migration	Source country	
National and regional initiatives		
“Managed migration”		

6.1 What is the impact of international nurse migration on the low- and middle-income source countries?

6.1.1 Positive impacts

Economic gain

Remittances from citizens employed overseas can have a number of positive effects on source countries. In LAMI countries like India, the Philippines, Jamaica, and Uganda remittances constitute 2% to 14% of the GDP, helping to support the economy, and decrease poverty rates (Khaliq et al., 2008). In 2004, in the Philippines, the biggest exporter of nurses in the world, the remittances sent by Filipino nurses working abroad amounted to 8 billion US dollars (Xu & Zhang, 2005). Although there is no data available on the amount of nurse-specific remittances sent internationally, due to nursing being a predominantly female profession and women statistically remitting more, it is suggested nurses are more likely to remit and to send larger portions of their income over extended periods of time (Khaliq et al., 2008; Thompson & Walton-Roberts, 2018). It is no surprise that, as a result, governments of India and the Philippines fostered the export of nurses through a systematic, state-supported system of producing an oversupply of nurses in order to be sent for export (Walton-Roberts et al., 2017).

Another benefit of nurse migration is the economic gain through the private recruitment sector and the nurse education sector, both of which have grown in countries with high nurse migration levels (Yeates, 2010; Walton-Roberts et al., 2017).

Safety valve for nurse unemployment

Certain countries that have a large number of unemployed or underemployed nurses are reported to have launched policies of using nurse exportation as a temporary “safety valve” (Khaliq et al., 2008; Xu & Zhang, 2005). The Chinese government has started programs for exporting nurses to Singapore, Saudi Arabia, Germany, and other countries in order to alleviate the unemployment of nurses, due to the local health system not being able to fund

nursing positions, even in a context of need for nurses (Khaliq et al., 2008). This phenomenon is expanded on in the policy response subchapter.

Brain recirculation

Some researchers also cite "brain recirculation" as a potential benefit for source countries. It is referred to when skilled workers apply their newly acquired knowledge and skills in their home country upon their return. Aluttis et al. (2014) note that this supposition of benefit is made based on the assumption of circular migration. As authors of several articles in the review point out, there is a lack of statistics on return/circular migration to support this theory, while some studies demonstrate the limited scope of return migration, further emphasizing the "myth of return" (Connell & Buchan, 2011).

However, according to a survey conducted by Walton-Roberts et al. (2017), out of return migrant health workers in India nurses were nearly twice as likely to return. They report that the main issue associated with return migration for nurses was re-integration, as the valuable experience they gained does not translate into better employment opportunities.

The Philippines is reported to also have benefitted from new technologies and advanced training, as part of the higher expectation of education and training in the high-income destination countries (Dimaya et al., 2012). There is no evidence on whether this translates into a higher level of nursing care in the country.

6.1.2 Negative impacts

Economic loss

As opposed to the potential economic gain through remittances and export fees, economic loss is one of the most significant and highly cited impacts of international nurse migration on the source country. In many LAMI countries nursing education is publicly financed (Khaliq et al., 2008), therefore, nurse migration represents a direct loss of investment for the source country. Researchers note that remittances could not possibly offset the costs of

training/education and the losses associated with human and intellectual capital, tax receipts, and consumption (Aluttis et al., 2014; McElmurry et al., 2006; Yeates, 2010). The direct losses from training and education of nurses range from country to country: in 2003-2004 in Malawi, according to a study cited by Yeates (2010), the emigration of each enrolled nurse-midwife represented a loss of US$71,081-7.5 million, while the emigration of a certified nurse-midwife represented a loss of US$241,508-25.5 million. Kenya, on the other hand, loses investments worth US$300,000 for each emigrating nurse (Aluttis et al., 2014), whereas the losses in investment through nurse migration between 2000 and 2003 in the Caribbean region was approximately US$30,2 million (Khaliq et al., 2008). These are extremely high numbers for countries, many of which depend on medical charity and foreign aid to keep the health systems afloat, "with the nursing labour often provided by the same countries that have recruited their own nurses" (Yeates, 2010, p.428).

Yeates (2010, p.428) further argues that the remittances might not be as beneficial as some suggest: "remittances are usually sent back to families in private" whereas the investments lost are in the public healthcare sector, thus supporting the argument that remittances might, in fact, be exacerbating inequalities, enriching the families of the educated professionals and depriving the poorest from adequate health care.

Decreased quality of health care

Perhaps, the most significant impact of international nurse migration today is the exacerbation of nurse shortages. Each article in this review addresses its negative effect on health care delivery of the source countries, mentioning that LAMI countries have lower capabilities of addressing these shortages with already dysfunctional or underfunded health care systems (Thompson & Walton-Roberts, 2018; Aluttis et al., 2014).

This "brain drain" of nurses has a profound effect on health care service capacity of the source country, as health care facilities become understaffed and quality of care reduces. However, Aluttis et al. (2014) emphasize that, due to the lack of scientific data and evidence, it is difficult to directly link health outcomes with nurse migration. However, even with wide health care inequalities that are not caused or influenced by nurse migration, health outcomes

improve as the number of health workers increase (McElmurry et al., 2006; Khaliq et al., 2008). Several authors link child mortality and immunization rates, as well as the countries' ability to provide HIV/AIDS therapy, to nurse migration (Delucas, 2014; Khaliq et al., 2008; McElmurry et al., 2006). This is closely related to the impact on nursing as profession which is reviewed in the next subchapter.

Nursing as a profession

Due to the understaffing, the remaining nurses face harsher working conditions, having to take on more workload with a higher patient-to-nurse ratio and resulting in a drop in productivity and safe practices, increasing the risk of work-related illnesses and, thus, adding to the decrease in quality of care for the patients (Delucas, 2014; Khaliq et al., 2008; McElmurry et al., 2006). The most vulnerable countries, such as those in Sub-Saharan Africa, upon losing nurses in urban areas to international migration had to turn to recruiting nurses from rural areas, leaving the most deprived "to bear the brunt of this cycle of migration" (Brush, 2007, p.42).

Some evidence also suggests that it is the more experienced and highly trained nurses that migrate, leaving the source country with newly graduated, less skilled nurses as replacements, contributing to the decline in quality of care (Salmon et al., 2007). All these factors adversely affect the morale of the remaining staff (Aluttis et al., 2014), ultimately shaping the state of nursing in the country, and, as Khaliq et al. suggest (2008), triggering a vicious cycle of even more nurses choosing to leave the country.

Walton-Roberts et al. (2017) reported concern among nurse managers in India that the international orientation of nursing programs would lead to grave ramifications for those that took on loans, expecting to get employed abroad, when the overseas employment opportunities decline. This could lead to more nurse unemployment and to a further decline in wages.

Education systems

Nurse education is another sector that has been impacted by nurse migration, with the most direct consequence being the outflow of nurse educators, leaving the source country unable to start new nursing programs or expand enrolment into the existing ones (Khaliq et al., 2008; Aluttis et al., 2014). In the case of Sudan, a low-income country with a critical shortage of health workers and increasingly high nurse migration rates, it even led to some programs closing down or reducing their intake (Abuagla & Badr, 2016).

However, in the main exporter countries, like the Philippines and India, nurse education has changed in an entirely different way. It has become a lucrative business, with the number of nursing schools in the Philippines increasing ten-fold from the 1970s, and led to an increased privatization of the sector adversely affecting the quality of education and increasing the cost of nursing education (Dimaya et al., 2012; Thompson & Walton-Roberts, 2018). Corresponding to the increase in nursing schools, there has been a significant fall in the pass rates of the Philippines nurse licensure exam, from 85% in the 1970s and 80s to 45-54% from 2001 to 2004, most of this decline being attributed to the low quality of the new schools, and clinical practice sites being overcrowded by student nurses (Brush, 2007; Dimaya et al., 2012). A study by Dimaya et al. (2012) showed that the nursing education in the Philippines has shifted to meet the overseas demand for clinical, specialist nurses, which is not reflective of the need in the Philippines, where there is a growing need for community health nurses. In the Philippines, nursing has also become one of the most expensive programs available, leaving many potential domestic nurses not able to enter nursing, while in India the limited number of publicly funded nursing seats means many have to attend more expensive private colleges and take on loans (Thompson & Walton-Roberts, 2018).

6.2 What are the policies being implemented to alleviate the negative impacts and how effective have they been?

The rise of international nurse migration has influenced source and destination countries' national policies and given rise to a multitude of bilateral, regional, and international agreements and codes of practice on international recruitment of health personnel. One of

aims of these efforts is to promote sustainable and equitable nurse migration, without which PHC (Primary Health Care) and SDGs (Sustainable Development Goals) would continue to remain abstract concepts. Many of these responses manifested as multilateral and bilateral agreements and recruitment codes and MOUs (memoranda of understanding); nurse retention and reintegration programs; the promotion of initiatives towards the protection of migrant workers' welfare, and incentives for returning émigrés. It is beyond the scope of this study to list and evaluate the initiatives systematically. Therefore, only the several that have been studied in the review articles are outlined in this subchapter. The articles have been selected to be indicative of the focus of the wider literature on the topic. Many of the national and international codes and agreements have a wider scope and concern health workers, including nurses. Therefore, this subchapter, for the most part, refers to health worker migration policy, rather than nurse migration policy.

6.2.1 Codes of practice

The key theme of most national and regional codes of practice, according to Connell & Buchan (2011), is the protection of the migrant's rights and welfare and promoting their effectiveness in the workplace, with some codes not addressing the losses associated with migration and the right to health of populations in source countries.

The most significant international effort to promote equitable migration practices has been the introduction of the 'Global Code of Practice on the International Recruitment of Health Personnel' by the WHO in 2010. So far, it is the only far-reaching international framework for addressing the health workforce crisis and promoting ethical recruitment of health workers. It is intended to serve as a policy framework for source and destination countries to enter bilateral agreements to maximize the positive effects of health migration on the source country to prevent health worker migration disproportionally benefitting the destination country (Connell & Buchan, 2011). The personal rights of the health workers to migrate are emphasized in the WHO Code, and, therefore, it urges destination countries to instead work towards creating a sustainable health workforce to eliminate the need to import health personnel. On the other hand, the Code encourages source and destination countries to

collaborate in order to mitigate the “push” factors in the source countries (Aluttis et al., 2014).

The effectiveness of the WHO Code, however, has been called into question (Aluttis et al., 2014; Connell & Buchan, 2011; Abuagla & Badr, 2016). The biggest weakness of the code, according to Aluttis et al. (2014), is its voluntary nature, which means countries and stakeholders are merely encouraged to use it in their practices and policies. Thus, its implementation is reported to be highly variable and adherence is rarely monitored or enforced.

The government of Sudan, after the introduction of the WHO Code and 3 years of negotiations, signed bilateral agreements with Saudi Arabia and Libya, its two main destination countries. The agreements, however, were not complied with and Sudan did not receive technical or financial support from the two countries to alleviate the negative impact of health worker migration (Abuagla & Badr, 2016). The researchers also indicate the positive effects of the WHO Code – the first-ever national health workforce strategy was implemented in 2012, while the introduction of the code created a public momentum to scale up the health workforce data collection and research. Despite this, no changes in legislation was brought about (Abuagla & Badr, 2016).

6.2.2 Destination country responses

In regard to the destination country responses, despite some countries, like Norway and Switzerland, expanding their efforts to reach self-sufficiency, the Gulf States, the main new destination countries, have not introduced effective measures in response to the WHO Code (Abuagla & Badr, 2016). Researchers ponder whether the “ethical call” alone is enough to bring changes to the recruitment practices of destination countries that “benefit from the current practice, which makes them likely to resist any actions that put restrictions on them” (Aluttis et al., 2014; Abuagla & Badr, 2016). As Connell & Buchan (2011, p.15) write, “codes are essentially soft law, symbolic rather than practical”.

6.2.3 Source country responses

In the source countries that are actively using nurse migration as a "safety valve" in the context of a significant number of unemployed or underemployed nurses and that benefit financially and economically from nurse migration, there is also little to no incentive to implement any changes (Connell & Buchan, 2011; Walton-Roberts et al., 2017). This situation is observed in countries where there is no "demand" for nurses on labor market, but there is a "need". Thompson & Walton-Roberts (2018) highlight the difference between these two concepts – in many LAMI countries the state of the economy and the underfunding of health care mean that not nearly enough nursing positions are funded to meet the basic health needs of the population, leading to a "surplus" of nurses. This is seen in countries like the Philippines, China, India, and Egypt (Connell & Buchan, 2011).

Accordingly, Thompson & Walton-Roberts (2018) note that in the Philippines there is a high number of policies aimed at protecting its migrants, while, in comparison, there is a distinct lack of policies aimed at improving the working conditions of domestic nurses. Dimaya et al. (2012), however, cite a number of domestic initiatives aimed at promoting return migration, strengthening the nursing sector, widening the roles and responsibilities of nurses, and using the unemployed nurse workforce to plug the nursing gap in rural areas.

Other source countries are also adopting robust measures to manage nurse migration. Countries with nurse self-sufficiency or sustainability models include Iran, Malawi, and countries in the Caribbean (Delucas, 2014). Most prominently, countries in the Caribbean region independently or through bilateral agreements with recipient countries are creating recruitment programs that involve compensation payments to the source country government, promoting "temporary migration" arrangements that ensure the return migration of the nurses, developing training opportunities and twinning arrangements to share skills and expertise funded by recipient countries (Salmon et al., 2007; Connell & Buchan, 2011). The Caribbean regional Managed Migration Program started in 2001, and, although its effects are small in scale compared to the rates of nurse outmigration and its long-term results are yet to be seen, it provides a unique tool to assess the success of the efforts to achieve "managed migration" (Salmon et al., 2007). The program emphasizes the respect for an individual's

rights to migration while involving a multitude of regional stakeholders and partners to curb the negative impact on the source country health care system (Salmon et al., 2007).

In Sub-Saharan Africa, strategies for retention of health workers included the introduction of overtime allowances, provision of housing, increase in the intake to nursing schools, rural area allowances, and scarce skills allowances (Dovlo, 2007). Some of these measures were implemented through partnerships with international development organizations such as UNICEF, WHO, and others. Dovlo (2007) suggests that some of these schemes could have unintentionally led to increased nurse migration due to the dissatisfaction of nurses with the compensation disparity between doctors and nurses. The effect of these measures on long-term nurse migration rates is also yet to be seen.

6.3 Summary of the findings

Findings reveal that there are both positive and negative impacts of international nurse migration on LAMI source countries. The positive impacts consist of economic gain through remittances, the use of migration as a “safety valve” for nurse unemployment, and of brain recirculation through return migration. The economic gain is considered the result of remittances sent from nurses that emigrated, which is considerable for certain countries that rely heavily on remittances to make up a big portion of their GDP. Certain countries with high nurse under- or unemployment rates due to underfunding of the health care sector have implemented policies to use nurse exportation to relieve this issue. Another cited benefit is brain recirculation, when nurses return to their home country and apply their newly acquired skills. This is based on an assumption of return migration.

Negative impacts noted by researchers include economic loss, decreased quality of health care, and adverse effects on nursing as a profession and on nursing education. Economic loss represents the loss of investment in education/training, and losses associated with human and intellectual capital, tax receipts, and consumption. The positive nature of remittances is brought into question, as the public investment in the public health care sector is turned into private remittances to families of those that migrated, further increasing social inequalities and taking away investment from health care. With less nurses and more strain on nurses that remain, nurse migration adversely affects quality and delivery of health care. Lower morale

of the staff that remain, harsher working conditions, and economic effects of nurse migration can adversely influence the nature of nursing as a profession in a source country. Nursing education is also affected through the loss of nurse educators, increased costs of education and privatization, leading to a lower quality of education.

The rise of international nurse migration has given rise to a multitude of bilateral, regional, and international agreements and codes of practice on international recruitment of health personnel that aim to alleviate the negative effects of nurse migration. The most significant international effort to promote equitable migration practices has been the introduction of the 'Global Code of Practice on the International Recruitment of Health Personnel' by the WHO in 2010. Although its effectiveness has been called into question, in its most effective, it serves as a framework for bilateral agreements between source and destination countries to achieve a more equitable distribution of the benefits of nurse migration. Certain destination countries have expanded their efforts to reach self-sufficiency and sustainability in nurse recruitment, while the Gulf States, the main new destination countries, have not introduced effective measures in response to the WHO Code. Although the source countries that use nurse migration as a temporary fix for nurse unemployment and rely on remittances have little incentive to introduce any measures, other source countries have introduced nurse self-sufficiency or sustainability models and strategies for nurse retention. Some countries, notably in the Caribbean, have entered into bilateral agreements with the destination countries or organizations to ensure return migration or strengthen the source country nursing sector in return.

7 DISCUSSION

The findings reveal the far-reaching impact of nurse migration on the source countries: from the economy and health care delivery to staff morale and nursing as a profession. Despite the presence of positive effects, negative impacts certainly have more long-term implications on such fundamental areas as health care delivery and workforce sustainability.

Examining the findings through the principles of the UN's SDGs (Sustainable Development Goals), we find that increased international nurse migration has implications on the source countries' ability to achieve several of the SDGs, such as access to SDGs 4.3 access to training, 10.7 migration regulation, and 3.c retention of health care workers. In exporter countries, like India and the Philippines, the continued use of nurses as "export commodities" by the governments is not fully compatible with their efforts to achieve the aforementioned SDGs (Thompson & Walton-Roberts, 2018). Sustainability, which is the central concept to the SDGs, and "right to health", which is central to PHC (Primary Health Care), are the main drivers of the "ethical calls", in the academic discourse directed mainly on high-income Western countries. As a consequence, we observe that the WHO Code and other MOUs and agreements are in line with the SDGs and the concept of PHC. The recommended or adopted measures for management of nurse migration reflect the PHC principles such as equitable distribution and accessibility of health services, use of appropriate, socially acceptable, and sustainable technology and local resources.

The use of PHC and the UN's SDGs as conceptual frameworks shaped the focus of the study: the impact of nurse migration on LAMI source countries is examined in indirect opposition to high-income countries, through the sustainability and right-to-health perspectives. This, however, has the risk of making the analysis of the highly intricate issue of nurse migration one-dimensional, as the reality is a lot more complex. The WHO Code and other initiatives to prevent countries from using nurse migration as a solution to domestic shortages is applicable to all importing countries, high-income, middle-income, or otherwise. Jamaica, for example, is a middle-income country that faces a critical nursing shortage due to international migration, all the while importing nurses from countries like India, Burma, Guyana, Ghana, and Nigeria (Salmon et al., 2007). As Yeates (2010) states, it is the poorest countries lowest

down the supply chain that face the most severe shortages and have the highest burden of disease. Therefore, the burden of responsibility for the recruitment of nurses should not be solely on high-income countries. Nurse migration is a global issue and managing it requires the involvement of all destination and source countries, no matter the income level.

The pitfalls of having a one-dimensional view on nurse migration are also highlighted by Xu & Zhang (2005). They warn that, although the attention to the ethics of nurse recruitment from LAMI countries by Western scholars is well-intentioned, it often reveals a lack of understanding of the realities faced by the nurses in LAMI countries and of the "root causes" of nurse migration (Xu & Zhang, 2005). Echoing this, Kingma (2006) and Yeates (2010) assert that push factors play a bigger role in migration decisions than pull factors, citing studies that showed that nurses would stay in their home countries if working conditions and other push factors improved.

Additionally, in several of the review articles authors call upon the nurses of the source countries to take on the burden of making choices for the greater good. McElmurry et al. (2006) write in their recommendations that nurses should "hold themselves accountable to professional values and the rights of patients and communities". Salmon et al. (2007) propose mandatory service requirements in the home country, as a method of "paying back" for the investment in education. Delucas (2014) cites the ICN Code of Ethics for Nurses and writes that nursing entails "sharing societal obligations to meet the healthcare needs of the public".

In response, Kingma (2006) argues that regulations and policies restricting migration would not work in the long-term if the root causes of migration are not alleviated and domestic retention not improved, suggesting that without significant improvements in remuneration, professional opportunities, and other working conditions migration rates will continue to increase. As this study does not include the personal aspect of international nurse migration, the importance of an individual's right to migrate and seek a better life has possibly been muted. However, it is importance to stress that migration is a right and benefits that international migration can bring to an individual and their families are numerous and profound. Just the same as professionals from other sectors that migrate for various personal reasons when the destination country wants their skills and expertise, nurses should be free to

seek better opportunities and quality of life. Therefore, ignoring the factors that push nurses to migrate in the first place, while using “obligation to the home country” as a means of persuading nurses to stay or dissuading high-income countries from recruiting them, is unproductive and ethically not justifiable to the migrating nurses.

Reflecting on the individual gains from nurse migration, Xu & Zhang also make the argument that the “brain gain” from nurse migration could offset the wider losses mentioned in the previous chapter:

> An example is Dr Afaf Meleis, who came originally from Egypt and is now Dean of the School of Nursing at the University of Pennsylvania. As an internationally known scholar, nurse educator and nurse leader, Dr Meleis has made many contributions to the advancement of the nursing profession in her home country and has represented a much-valued non-western voice in the western nursing world on many critical issues (2005 p.574).

Although this is an issue that is not quantified and researched easily, Maurice Schiff tried to quantify the “brain gain” in a chapter of a book on migration published by the World Bank (2005). Through an analysis of the dynamics of brain drain, the author found that the positive impact of brain drain on welfare and growth of the source country are greatly exaggerated, and that the net brain gain is zero in a steady state.

In relation to the policy responses, the limited effect of the WHO Code and the previously signed agreements and MOUs support the notion that the reality of nurse migration is shaped not specifically by nurse migration policies or academic discourse on the subject and the calls for more ethical recruitment practices and bilateral agreements, but rather by the global power dynamics and national and international political shifts. Although this argument is not expressed categorically in any of the review articles, there is some data to support it. In the United States the number of foreign nurses migrating there reached its peak in 2007 and has continued falling since then, with the 2008 global economic crisis, election of Donald Trump, and rising anti-immigration sentiments playing a role (Trines, 2018). Whereas in the UK, its departure from the European Union is posed to further decrease the flow of nurses from Europe and, therefore, increase its reliance on overseas nurses, with the number of nurses arriving from the EU in 2018 having already dropped 87% compared to 2016 (NMC 2018). Walton-Roberts (2014) also posits that shifts within the EU have the capacity to shift global

nurse migration patterns, using the example of higher education credential integration around the EU leading to a higher reliance on nurses from the Eastern Bloc instead of overseas nurses.

It is view of the author that it is the recipient and source country governments' responsibility to implement policies to create a more equitable distribution of the wider benefits from nurse migration. The idea of recipient countries financially compensating the source countries for the economic losses has proved futile due to the logistical challenges of predicting migratory patterns, and the unwillingness of source countries to pay for the education costs (Connell & Buchan, 2011). Instead, as the WHO Code suggests, significant nurse migration from one country to another should be accompanied with signing of bilateral agreements or MOUs that aim to balance the impact on the source health systems through twinning arrangements, and initiatives to strengthen the nursing sector in the source country.

Various measures have been suggested to increase compliance with the WHO Code and the number of bilateral agreements signed. Aluttis et al. (2014) suggest implementing national accountability frameworks that include monitoring of compliance with the Code from public administration and healthcare providers and could include sanctions or fines for non-compliance. Plotnikova (2012) suggests holding an international summit with public and private stakeholders to explore the possibility of translating the ethical recruitment guidelines into laws and "mov[ing] on from accusatory rhetoric between source and destination countries to collaborative action within each country, with the practical aim of improving workforce planning, remuneration and the retention of health workers". As for creating incentives for high-income destination countries to change their recruitment practices, a 2014 study by Cortes & Pan on the impact of international nurse migration on the native nurses in the U.S. concluded that every foreign nurse that migrates to a city displaces one to two native nurses over a ten-year period. Another study showed that the flow of immigrants into the nursing field is associated with a decrease in the amount of men entering the profession (Munnich & Wozniak, 2020). This evidence suggests the possibility of strong displacement effects, and if further research confirms this, could effectively discourage destination countries' use of nurses as temporary import commodities.

Another clear area of collaboration is in the collection, analysis and utilization of data on the production and mobility of health workers, which is also reflected in the WHO Code's calls on governments to gather more comprehensive data on migratory patterns and numbers. The systematic monitoring of migratory flows could also be used for determining the effectiveness of and adherence to the WHO Code of Practice and other bilateral agreements. Aluttis et al. (2014) point out that even high-income countries with better infrastructure struggle in monitoring the in- and outflow of migrant health workers, and adds that "addressing this issue is key to successfully developing policies and interventions to meet the problems caused by health workforce migration". As Thompson & Walton-Roberts (2018) write, although robust data collection is unlikely to be a priority for countries such as the Philippines and India, international organizations like the WHO are well in a position to fund and assist these efforts on the ground.

8 CONCLUSION

This review has shown that the impact of international nurse migration on LAMI course countries is highly varied and multi-faceted. The examination of the impact of international nurse migration on LAMI source countries revealed that the negative effects are somewhat clearer – beyond having a significant impact on the source countries' capacity for health care delivery and being associated with considerable economic losses for said countries, the negative effects spread to nursing education and the state of nursing as a profession. With the renewed drive towards achieving Primary Health Care and the introduction of the UN's Sustainable Development Goals, sustainability and equity of the current practices in nurse migration are called into question. The positive effects, however, are subject to debate. Remittances play an important role in most source countries' economies; there may, however, be indirect effects on social equality and health care access. Return migration may be beneficial for the source country; return migration rates, however, are not available.

The evaluation of the policy responses also revealed a difficult picture. Not all LAMI source countries are calling for more ethical and equitable nurse migration practices – governments of certain source countries effectively encourage nurse migration due to remittances and nurse employment and have little incentive to look for long-term sustainable solutions. This is also the case for high-income countries that benefit from the current practices of no accountability and compensation to the source countries. It is, perhaps, the main explanation for the limited effect WHO Code of Practice on the International Recruitment of Health Personnel has had since its introduction in 2010. The policies adopted by source countries that aim to make nurse migration more sustainable and equitable include twinning arrangements, bilateral agreements with destination countries and organizations, incentives to increase return migration, training and development opportunities for source country nurses, as the WHO Code suggests.

In the discussion chapter, this study echoed the sentiments of Xu & Zhang (2005) on the pitfalls of taking a linear view on such a complex and multi-dimensional issue as international nurse migration. Nurse migration is a global phenomenon and most countries in the world both export and import nurses; managing it requires awareness and involvement

from all recipient and destination countries, no matter the income level. Hence, this study echoes the argument that international migration should be seen as compounding acute domestic problems in nurse workforce distribution. In LAMI countries, as long as nursing positions are not being created to meet the needs of the population and nurses continue facing low remuneration and a lack professional development, international nurse migration will continue rising, fueling a vicious cycle. It is, therefore, of paramount importance that managed migration is directed by both sides at strengthening the health care system and the nursing sector of the source country.

8.1 Strengths and limitations of the study

The main strength of the study lies in the relevance of the topic of nurse migration in the time of globalization and in the context of a gap in research that focus on the impact of nurse migration from a source country perspective in a comprehensive manner. Although the small number of articles reviewed (14) is a limitation on its own, the narrow topic of this study meant the body of knowledge available on the subject was limited, therefore, comparatively increasing the comprehensiveness of the review. Using an inductive methodological approach helped to ensure that content analysis was objective and exhaustive.

One limitation of this review results from the use of an extremely wide range of source countries as objects of study. Not only do the income and nurse shortage levels differ highly between LAMI countries, their roles in the global nursing labor chains also vary. As mentioned above, the dual role of most countries as both importers and exporters makes study of the impact of nurse migration and the policy responses on those countries fragmented.

Lack of reliable data and research on nurse migration hindered the accuracy of the description of benefits and losses associated with nurse migration and meant that certain connections were not based on extensive research. As addressed in the discussion chapter, reliable data in LAMI countries are lacking for many sectors, therefore, the estimates made about the impact of nurse migration is variable at best (Khaliq et al., 2008; Aluttis et al., 2014; Abuagla & Badr, 2016). The lack of comprehensive data on nurse migration patterns, access to education, nurse registration, retention, unemployment, and remittances in many countries

makes the assessment of the impact of nurse migration on the source countries indirect, and without it, a completely accurate assessment impossible (Khaliq et al., 2008).

REFERENCES

Abuagla, A., & Badr, E., 2016, Challenges to implementation of the WHO Global Code of Practice on International Recruitment of Health Personnel: The case of Sudan. *Human Resources for Health*, 14(1).

Aluttis, C., Bishaw, T., & Frank, M.W., 2014, The workforce for health in a globalized context - global shortages and international migration. *Global Health Action*, 7:23611.

Bishai, D.M., Cohen, R., Alfonso, Y., Adam, T., Kuruvilla, S., & Schweitzer, J., 2016, Factors contributing to maternal and child mortality reductions in 146 low- and middle-income countries between 1990 and 2010. *PLOS ONE*, 11(1), e0144908.

Bourgeault, I.L., Labonte, R., Packer, C., Runnels, V. & Murphy, G.T., 2016, Knowledge and potential impact of the WHO Global code of practice on the international recruitment of health personnel: Does it matter for source and destination country stakeholders? *Human Resources for Health*, 14(1).

Braveman, P., & Tarimo, E., 2002, Social inequalities in health within countries: Not only an issue for affluent nations. *Social Science & Medicine*, 54(11), pp.1621–1635.

Brugha, R. & Crowe, S., 2015, Relevance and effectiveness of the WHO global code practice on the international recruitment of health personnel - Ethical and systems perspectives, *International Journal of Health Policy and Management,* 4(6), pp.333–336.

Brush, B., Sochalski, J. & Berger, A.M., 2004, Imported care: Recruiting foreign nurses to U.S. health care facilities. *Health Affairs,* 23(3), pp.78-87.

Brush, B., 2007, International nurse migration: lessons from the Philippines. *Policy, Politics, and the Nursing Practice*, 8(1), pp.37–46.

Buchan, J., Parkin, T. & Sochalski, J., 2003, International nurse mobility: Trends and policy implications. Geneva, Switzerland: Royal College of Nursing, World Health Organisation, International Council of Nurses. [online] Available from: https://apps.who.int/iris/bitstream/handle/10665/68061/WHO_EIP_OSD_2003.3.pdf?sequence=1 [Accessed 15.04.2020]

Buchan, J., & Dovlo, D., 2004, International Recruitment of Health Workers to the UK: A Report for DFID. *Health Policy and Development*, 2(3), pp.180–189.

Connell, J., & Buchan, J., 2011, The impossible dream? Codes of Practice and the international migration of skilled health workers. *World Medical and Health Policy*, 3(3), pp.1–17.

Cortes, P. & Pan, J., 2014, Foreign nurse importation and the supply of native nurses. *Journal of Health Economics*, 37, pp.164–180.

Cronin, P., Ryan, F. & Coughlan, M., 2008, Undertaking a literature review: A step-by-step approach. *British Journal of Nursing*, 17(1), pp.38–43.

Derish, P.A. & Annesley, T.M., 2011, How to Write a Rave Review, *Clinical Chemistry*, 57(3), pp.388–391.

Delucas, A. C., 2014, Foreign nurse recruitment: Global risk. *Nursing Ethics*, 21(1), pp.76–85.

Dimaya, R., Mcewen, M., Curry, L., & Bradley, E., 2012, Managing health worker migration: a qualitative study of the Philippine response to nurse brain drain. *Human Resources for Health*, 10:47.

Dovlo, D., 2007, Migration of nurses from Sub-Saharan Africa: A review of issues and challenges. *Health Services Research*, 42(3 II), pp.1373–1388.

Elo, S. & Kyngas, H., 2007, The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), pp.107–115.

Fawcett, J., 1984, The metaparadigm of nursing: present status and future refinements. *Journal of Nursing Scholarship*, 16(3), pp.84–87.

Ferrari, R., 2015, Writing narrative style literature reviews. *Medical writing*, 24(4), pp.230–234.

Gostin, L., 2008, The international migration and recruitment of nurses: human rights and global justice. *JAMA*, 299, pp.1827–1829.

Graneheim, U.H. & Lundman, B., 2004, Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nursing education today*, 24, pp.105–112.

Graneheim, U.H., Lindgren, B.M. & Lundman, B., 2017, Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today,* 56(1), pp.29–34.

Guide to literature reviews for research students, n.d., the University of Queensland. [online] Available from: https://my.uq.edu.au/files/11020/guide-literature-review-research-students.pdf [Accessed 05.02.2020]

Haour-Knipe, M. & Davies, A., 2008, *Return migration of nurses*. [online] Available from: https://www.intlnursemigration.org/wp-content/uploads/2019/08/Return-Migration-of-Nurses.pdf [Accessed 03.03.2020]

Hawkes, M., Kolenko, M., Shockness, M. & Diwaker, K., 2009, Nursing brain drain from India. *Human Resources for Health*, 7(5).

Hone, T., Macinko, J. & Millett. C., 2018, Revisiting Alma-Ata: what is the role of Primary Health Care in achieving the Sustainable Development Goals? *Lancet*, 392(10156), pp.1461–1472.

International Council of Nurses, 2019*, International career mobility and ethical nurse recruitment*. [online] Available from: https://www.icn.ch/system/files/documents/2019-11/PS_C_International%20career%20mobility%20and%20ethical%20nurse%20recruitment_En.pdf [Accessed 03.03.2020]

International Labor Organization, 2015, *The contribution of labour mobility to economic growth*. [online] Available from: https://www.oecd.org/g20/topics/employment-and-social-policy/The-Contribution-of-Labour-Mobility-to-Growth.pdf [Accessed 03.03.2020]

Jahan, N., Naveed, S., Zeshan, M., & Tahir, M.A., 2016, How to conduct a systematic review: A narrative literature review. *Cureus*, 8(11), e864.

Khaliq, A., Broyles, R. & Mwachofi, A., 2008, Global nurse migration: its impact on developing countries and prospects for the future. *World Health & Population*, 10(3), pp.5–23.

King, I., 1992, King's theory of goal attainment. *Nursing Science Quarterly*, 5(1), pp.19–26.

Kingma, M., 2007, Nurses on the move: A global overview, *Health Services Research*, 42(3p2), pp.1281–1298.

Kingma, M., 2008, Nurses on the move: Historical perspective and current issues. *The Online Journal of Issues in Nursing*, 13(2). Available from: OJIN. [Accessed 03.03.2020]

Kraef, C. & Kallestrup, P., 2019, After the Astana declaration: is comprehensive primary health care set for success this time? *BMJ Global Health,* 4(6), e001871.

Lancet Editorial, 2006, Poaching nurses from the developing world, *The Lancet,* 367(9525), p.1791.

Li, H., Nie, W. & Li, J., 2014, The benefits and caveats of international nurse migration. *International Journal of Nursing Sciences*, 1(3), pp.314–317.

Little, L., 2007, Nurse migration: a Canadian case study. *Health Services Research*, *42*(3 Pt.2), pp.1336–1353.

Macmillan dictionary n.d., *Policy (noun) definition and synonyms,* Available from: https://www.macmillandictionary.com/dictionary/british/policy [Accessed 03.03.2020]

McElmurry, B.J., Solheim, K., Kishi, R., Coffia, M.A., Woith, W., & Janepanish, P., 2006, Ethical concerns in nurse migration. *Journal of Professional Nursing*, 22(4), pp. 226–235.

Munnich, E. & Wozniak, A., 2020, What explains the rising share of us men in registered nursing? *ILR Review*, 73(1), pp. 91–123.

Orb, A., Eisenhauer, L. & Wynaden D., 2000, Ethics in qualitative research. *Journal of Nursing Scholarship*, 33(1), pp. 93–96.

PAHO, 2001, *Report on Technical Meeting on Managed Migration of Skilled Nursing Personnel.* Pan American Health Organization, Bridgetown, Barbados.

Paré, G. & Kitsiou, S., 2017, Methods for Literature Reviews. In: Lau, F., Kuziemsky, C. (Eds.), *Handbook of eHealth Evaluation: An Evidence-based Approach* [Internet]. Victoria (BC): University of Victoria. Available from: https://www.ncbi.nlm.nih.gov/books/NBK481583/ [Accessed 15.04.2020]

Plotnikova, E.V., 2012, Cross-border mobility of health professionals: Contesting patients' right to health. *Social Science & Medicine*, 74(1), pp.20–27.

Ramos, M.C, 1989, Some ethical implications of qualitative research. *Research in Nursing & Health*, 12(1), pp.57–63.

Randolph, J.J., 2009, A guide to writing the dissertation literature review. *Practical Assessment, Research & Evaluation*, 14(13), pp.1–13.

Ritchie, J. & Lewis, J. (Eds.), 2003, *Qualitative research practice: a guide for social research students and researchers*, London: Sage, pp.66–71.

Robley, L. R., 1995, The ethics of qualitative nursing research. *Journal of Professional Nursing*, 11(1), pp.45–48.

Salmon, M.E., Yan, J., Hewitt, H., & Guisinger, V., 2007, Managed migration: The Caribbean approach to addressing nursing services capacity. *Health Services Research*, 42(3 II), pp.1354–1372. Tam, V., Edge, J. & Hoffman., S., 2016, Empirically evaluating the WHO global code of practice on the international recruitment of health personnel's impact on four high-income countries four years after adoption. *Globalization and Health*, 12, 62.

Schiff, M., 2006. Brain Gain: Claims about its size and impact on welfare and growth are greatly exaggerated. In: Schiff, M. & Ozden, C. (Eds.), *International migration, remittances, and the brain drain (English)*. Washington, D.C.: World Bank, pp. 201–226.

Sparacio, C., 2005, Winged migration: international nurse recruitment – friend or foe to the nursing crisis? *Journal of Nursing Law,* 10(2), pp.97–111.

Tam, V., Edge, J.S. & Hoffman, S.J., 2016, Empirically evaluating the WHO global code of practice on the international recruitment of health personnel's impact on four high-income countries four years after adoption. *Global Health,* 12, 62.

TENK, 2012, *Responsible conduct of research and procedures for handling allegations of misconduct in Finland – RCR guidelines*. [online] Available from: https://www.tenk.fi/sites/tenk.fi/files/HTK_ohje_2012.pdf [Accessed 03.03.2020].

Thompson, M., & Walton-Roberts, M., 2018, International nurse migration from India and the Philippines: the challenge of meeting the sustainable development goals in training, orderly migration and healthcare worker retention. *Journal of Ethnic and Migration Studies*, 45(14), pp.2583–2599.

Thorne, S., Canam, C., Dahinten, S., Hall, W., Henderson, A. & Kirkham, S.R., 1998, Nursing's metaparadigm concepts: Disimpacting the debates. *Journal of Advanced Nursing*, 27(6), pp.1257–1268.

Trines, S., 2018, Mobile Nurses: Trends in International Labour Migration in the Nursing Field. *World Education News + Review*, 1–17. [online] Available from: https://wenr.wes.org/2018/03/mobile-nurses-trends-in-international-labor-migration-in-the-nursing-field [Accessed 15.04.2020]

UK Department of Health, 2004, *Code of Practice for the international recruitment of healthcare professionals*. [online] Available from: nursingleadership.org.uk/publications/codeofpractice.pdf [Accessed 03.03.2020]

UNFPA, 2005, *International Migration and the Millennium Development Goals*. [online] Available from: https://www.unfpa.org/sites/default/files/resource-pdf/migration_report_2005.pdf [Accessed 15.04.2020]

Vaismoradi, M., Turunen, H. & Bondas, T., 2013, Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences*, 15(3), pp.398–405.

The Walrus,15.10.2019, *Poaching foreign doctors*, Available from: https://thewalrus.ca/poaching-foreign-doctors/ [Accessed 03.03.2020]

Walton-Roberts, M., 2014, European education regionalization and its influence on the global migration of nurses. In: Walton-Roberts, M. & Hennebry, J. (Eds.), *Territoriality and Migration in the E.U. Neighbourhood*, 5(1), pp.49–64.

Walton-Roberts, M., Runnels, V., Rajan, S. I., Sood, A., Nair, S., Thomas, P., Packer, C., MacKenzie, A., Murphy, G. T., Labonte, R. & Bourgeault, I. L., 2017, Causes, consequences, and policy responses to the migration of health workers: key findings from India. *Human Resources for Health,* 15(28).

Wohlin, C., 2014, Guidelines for Snowballing in Systematic Literature Studies and a Replication in Software Engineering. *In Proceedings of the 18th International Conference on Evaluation and Assessment in Software Engineering* (EASE '14). Association for Computing Machinery, New York, NY, USA, no.38, pp.1–10.

World Health Organization, 1978, *Declaration of Alma-Ata.* [online] Available from: https://www.who.int/publications/almaata_declaration_en.pdf [Accessed 03.03.2020]

World Health Organization, 2006, *Working together for health: A world health report*. [online] Available from: https://www.who.int/whr/2006/whr06_en.pdf [Accessed 03.03.2020]

World Health Organization, 2010, *Global Code of Practice on the International Recruitment of Health Personnel.* Available from: https://www.who.int/hrh/migration/code/code_en.pdf?ua=1 [Accessed 03.03.2020]

World Health Organization, 2014, *Migration of health workers: WHO code of practice and the global economic crisis*. [online] Available from: https://www.who.int/hrh/migration/14075_MigrationofHealth_Workers.pdf [Accessed 03.03.2020]

World Health Organization, 2015, *Global strategy on human resources for health: Workforce 2030*. [online] Available from: https://start.arcada.fi/system/files/media/file/2019-06/writing_guide_2018.pdf [Accessed 03.03.2020]

World Health Organization, 2016, *Health workforce requirements for universal health coverage and the sustainable development goals*. [online] Available from:

https://apps.who.int/iris/bitstream/handle/10665/250330/9789241511407-eng.pdf [Accessed 03.03.2020]

World Health Organization, 2017, Shanghai declaration on promoting health in the 2030 agenda for sustainable development. *Health Promotion International*, 32(1), pp.7–8.

World Health Organization, 2018, *Declaration of Astana*. [online] Available from: https://www.who.int/docs/default-source/primary-health/declaration/gcphc-declaration.pdf [Accessed 03.03.2020]

World Health Organization, 2019, *Primary health care.* [online] Available from: https://www.who.int/news-room/fact-sheets/detail/primary-health-care [Accessed 03.03.2020]

World Health Organization, 2020a, *Nursing and midwifery*. [online] Available at: https://www.who.int/news-room/fact-sheets/detail/nursing-and-midwifery [Accessed 03.03.2020]

World Health Organization, 2020b, *Year of the Nurse and the Midwife 2020.* [online] Available from: https://www.who.int/news-room/campaigns/year-of-the-nurse-and-the-midwife-2020 [Accessed 03.03.2020]

Yan, J., 2006, Health Services Delivery: Reframing Policies for Global Nursing Migration in North America – A Caribbean Perspective. *Policy, Politics, and Nursing Practice,* 7(3): 71S–75S.

Yeates, N., 2009, *Globalizing care economies and migrant workers: Explorations in global care chains,* Palgrave Macmillan, New York.

Yeates, N., 2010, The globalization of nurse migration: Policy issues and responses. *International Labour Review*, 149(4), pp.423–440.

Xu, Y. & Zhang, J., 2005, One size doesn't fit all: Ethics of international nurse recruitment from the conceptual framework of stakeholder interests. *Nursing Ethics*, 12(6), pp.571–581.