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REVIEW

An integrative review of the role of remittances in international nurse migration

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Abstract: This review seeks to understand the role of remittances in international nurse migration within the context of three theories of international migration: equilibrium approaches, social networks, and globalization. To analyze the phenomenon, an integrative review of the literature was conducted. Search terms sought articles discussing, either directly or indirectly, remittances and international nurse migration. The initial search returned 369 articles, and further screening decreased the total to 65. Full text screening reduced the final number for the analysis to 48. A directed content analysis structured the analytic approach by examining how authors discussed remittances in the content and context of the paper. The final analysis showed the majority of papers were policy analyses (five); opinion papers, reviews, or editorials that indirectly discussed remittances (27); or were qualitative and quantitative studies (16), either with primary data collection (14) or secondary data analyses (two). Overall, a nurse's individual motivation for sending remittances home stemmed from familial factors but was never a primary driver of migration. Domestic labor market factors were more likely to drive nurses to migrate. The nurse's country of origin also was a factor in the remittance dynamic. The identity of the author of the paper played a role in how they discussed remittances in the context of international nurse migration. The three theories of migration helped explain various aspects of the role of remittances in international nursing migration. While the phenomenon has changed since the 2008 global economic crisis and the passing of the World Health Organization's Global Code of Practice on the International Recruitment of Health Personnel in 2010, future research around the role of remittances needs to consider the confluence of gender, social, political, labor market, and economic dynamics, and not just view the phenomenon from an individual lens.

Keywords: nursing, health care worker, remittance

Introduction

In 2010, the World Health Organization passed the Global Code of Practice on the International Recruitment of Health Personnel.[1] The code was passed in response to a decade of growth in international health worker migration fueled by forces of globalization, the human immunodeficiency virus/acquired immune deficiency syndrome epidemic in sub-Saharan Africa, and other locally specific factors that drove record numbers of health care providers abroad for work and left many health care systems with critical health worker shortages.[1,2] While the passing of the code coupled with the 2008 global economic crisis has changed the dynamics behind migration and health labor markets since then, remittances from these emigrated workers still play a significant role in the economies of many countries.

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Remittances are money transfers sent back to the home country by the worker abroad.[3,4] For some countries, remittances comprise as much as 10% of the gross national product.[2] In some cases, the economic significance of remittances to a country's economy provides governments with multiple incentives to encourage emigration so they can capitalize on the economic gains from such returns.[5–7]

In the case of nurses migrating internationally for work opportunities, remittances are a known and expected part of their migration experiences.[8] A clear conceptual understanding of the role of remittances in international nurse migration (INM) and the extent to which they drive the phenomenon, however, has not yet been established. Thus, the purpose of this review is to conduct an integrative review using directed content analysis techniques of literature that directly or indirectly addresses the issue of remittances in INM in order to gain a better conceptual understanding of its role in the migration experiences of nurses.

Background

International migration occurs when an individual chooses to leave his or her home country to live and work in another one. Factors driving migration include war/conflict, ethnic, or racial genocide; lack of employment opportunities and other economic issues in a home country; interest in gaining professional experience abroad; and the personal desire to see new places or have new experiences. Migration is also a policy often used for national economic stabilization in regions like Latin America.[9,10]

INM is a multibillion dollar phenomenon that affects countries around the world, and one that health care organizations use to address significant staff vacancies.[6,11–24] Most nurses migrate internationally from low- and middle-income countries to work in high-income ones. They often remain permanently in the high-income country and never return to their places of birth, but do send millions of dollars in remittances to their home country.[19] The consequence to the developing world includes poorer health outcomes due to a lack of professional personnel to deliver health care services and poorly functioning health systems, to name a few.[2]

As a discipline, migration researchers cite three main theoretical schools of thought surrounding international migration: equilibrium approaches shaped by neoclassical economics; household and network approaches that prove the best for capturing gender dynamics involved in international migration; and globalization theories that assume a certain amount of inevitability about international migration as a phenomenon.[25] With each theory, the role of remittances will be distinct.

First, equilibrium approaches shape the majority of studies about INM, focusing on push–pull factors. The 2003 breakthrough study by Buchan et al,[6] under the equilibrium migration model, highlights "push factors" – domestic conditions influencing nurses' decisions to migrate. For nurses, push factors include several key components, mostly centered on low salaries and poor working conditions. Personal safety in the workplace and the home country of the nurses was also a driving factor. "Pull factors" include characteristics of the country attracting the nurse and the opportunity for aid work or to travel. The significantly higher salaries of nurses in high income countries also attract many nurses abroad. Thus, remittances represent a combination of both push and pull factors, resulting from new opportunities with the possibility of providing economic stabilization abroad, and in some cases, alleviating poverty for their families at home. Trade advocates, who are usually major supporters of migration for work to increase remittances for the purposes of economic development, draw from equilibrium approaches in their regulatory recommendations around trade in health services. Free market advocates push for minimal regulation of trade in health to maximize the potential of remittances,[5,26,27] while others show how the policies exacerbate inequality.[28–30]

Equilibrium approaches, however, fail to factor in gender and social conditions that often drive INM and to whom remittances are sent. Household and network approaches provide interesting alternative explanations sensitive to the gender dynamics involved with INM.[31,32] Robinson et al[33] suggest that age, family factors, and the presence of children affect migration decisions, acting as retention factors for some locations while driving migration in others, largely because of the potential support from remittances. Yet, that school of thought minimizes the labor market effects found in both equilibrium and globalization theories of international migration.

Finally, the globalization approach makes a core assumption that, once the market opens up through trade and other international regulations, people will inevitably migrate. Remittances serve as a primary, individual incentive in this theory. The globalization approach is the only one that incorporates state immigration policies as a potential driving factor since they have a long history of influencing INM trends. The state as a variable in the INM equation, however, is often understudied.[25,31,34–36] Therefore, the state could set policies to capitalize on the potential of remittances as an economic driver because globalization has greatly facilitated the possibility of remittances. The Philippines, for example, has these types of policies.[5]

All three theories inform our thinking about how we analyze the role of remittances in INM. We seek to understand the dynamics of remittances within the phenomenon based on the precepts of each of these theories.

Methods

We conducted an integrative review of the INM literature to specifically focus on the role of remittances in this international dynamic and used a directed content analysis approach to analyze the documents. Integrative reviews seek to synthesize evidence from various sources to capture multiple dimensions of a phenomenon.[37] Studies are selected for their content relevance to the question, and research rigor is not evaluated. The larger volume of studies and documents analyzed in an integrative review is thought to create a more comprehensive picture of a phenomenon.[37] Directed content analysis focuses specifically on a set of author-identified terms identified as important to answering the research question but still allows for themes and categories to iteratively emerge from the analysis.[38]

To select articles from both health and social science disciplines known to study INM, we conducted a literature search using Cumulative Index to Nursing and Allied Health Literature, Ovid Medline (medicine), and Web of Science (social sciences) databases with the terms "Nurs* AND migration", "foreign nurses", "internationally educated nurses", "Nurs* AND incentive AND migration", and "Nurs* AND remittances". Limited to publications after 1994, the search was then narrowed to include only the terms "Nurs* AND incentive AND migration" and "Nurs* AND remittances", which returned 264 and 167 articles, respectively. Duplicate articles were removed and the remaining titles (369) were screened for eligibility. Articles had to address international or foreign nurses and remittances or financial incentives in some way. Grey literature was excluded for feasibility reasons. We also operated under the assumption that the selected articles would largely capture nurses migrating by choice for work and not due to political instability or war. Choice in migration is an important factor in remittances dynamics. The flow diagram in Figure 1 illustrates our search and selection process.

Ultimately, 65 titles were identified, and their abstracts and full texts were reviewed. Seventeen publications were excluded because they did not address remittances or incentives of migration, or were not informative sources (eg, book review, call for abstracts, etc). A total of 48 articles were included and chosen for how they addressed remittances in the body of the work.

We adopted a directed content analysis approach to analyze the final 48 articles. We specifically looked for how authors discussed remittances or financial incentives in the article and the context of their discussion. Themes and categories not in our initial codes were allowed to emerge iteratively during the analytic process. Then, based on criteria described by Miller and Alvarado for managing documents serving as data,[39] we examined both the content of the articles around remittances and the context in which the author discussed them. The combined approach enabled us to synthesize our findings into a coherent picture of the role of remittances in INM.

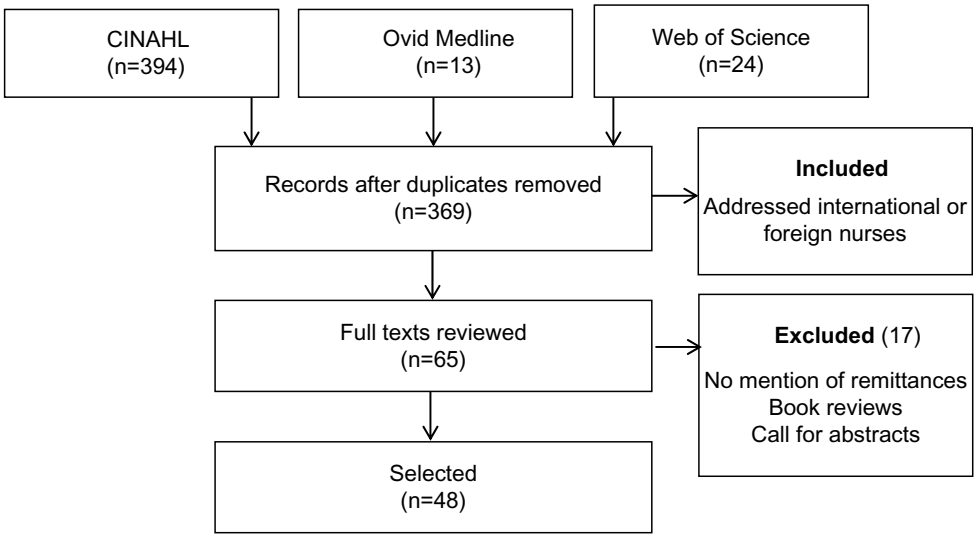

Figure 1 Search strategy for the literature review.
Abbreviation: CINAHL, Cumulative Index to Nursing and Allied Health Literature.

Results

An important trend observed during our search and the resulting literature is that overall, discussions of or research about INM, including remittances, has dropped significantly since 2011. This likely reflects the decrease in nurse migration resulting from the combination of the 2008 global economic crisis and national policy changes freezing international health worker recruitment that were enacted after the 2010 passing of the global code for ethical international recruitment of health care workers. The demand for internationally educated nurses dropped as the combination of one or more of the following happened in receiving countries: 1) slowed hiring in response to the economic crisis, 2) domestic labor market production of nurses approached equilibrium, and 3) nursing schools increased enrollments and graduates.[40] Therefore, most of the articles included in this analysis come from the peak international migration period between 2000 and 2009. Authors in these interdisciplinary articles do consistently note that it is nearly impossible to obtain reliable data on the amount of remittances sent to home countries by health workers alone. If remittance numbers are reported, the state reports them in aggregate form and rarely by discipline.

Of the articles selected for the analysis, 16 were qualitative, quantitative, or mixed methods; five were policy analyses; and 27 were categorized as level VII evidence (opinions, editorials, etc). Findings represent the perspectives of more than 7,000 nurses from 17 sending countries, and six receiving countries. Table 1 outlines the articles included in this integrative review.

Notably, only two articles directly addressed the topic of remittances among migrating nursing personnel. All other articles addressed the topic indirectly or it emerged as a factor in the migration issues discussed in the paper.

An interesting finding was how author identity affected discussions of remittances in the papers. Nurses in high-level policy positions or nonnurses were more likely to attribute individual motivation to migrate as affecting remittances without examining the larger picture of the contextual factors driving nurse migration or asking nurses themselves. Researchers studying the phenomenon, using quantitative or qualitative techniques, were more likely to be nurses than nonnurses. Evidence directly from nurses expanded the picture of the role of remittances beyond assumptions behind individual motivators.

Overall, however, we concluded from our analysis that the incentive provided by remittances represented, as a crude estimate, only about 25% of the motivating factors driving INM. We draw this conclusion from several trends in the analysis.

First, when remittances or other financial incentives are mentioned by nurses in qualitative studies, they are not extensively discussed and usually mentioned in what appears to be passing fashion in the manuscript.[41–49] This may be due to how the authors chose to present the information in the paper or how nurses were asked about remittances in the studies (directly or as something that might naturally emerge in the interview).

Quantitative studies also showed that remittances are one factor of many involved in the migration dynamic.[44,50–56] The domestic context of career advancement opportunities, working conditions, system management quality, and other factors prevailed as stronger factors influencing migration. Results from these studies, however, fit better into a domestic health labor market conceptual framework, like that described by McPake et al.[57] Within that lens, remittances from working abroad do not factor into domestic health labor market dynamics for nurses.

In contrast to formal research studies, editorials and opinion papers would consistently cite remittances as major individual factors involved with INM. Remittances were discussed with mixed perspectives, ranging from the socioeconomic benefits conferred on nurses' families to the "perceived" negative role as a driver of state policies encouraging migration to improve national gross domestic product statistics, along with links between remittances, exploitation of nurses, and recruitment companies' fees.[58–80]

Policy analyses covered very distinct issues related to remittances and migration. Chanda studied remittances through a trade lens and viewed them as a critical component that facilitates global trade, with health workers in general contributing significantly to the phenomenon.[62] A later publication with other colleagues from the health and trade disciplines on the same topic updated the arguments made in the 2002 paper yet still came out in support of remittances.[81] These papers fit best into the equilibrium approaches theoretical framework. Kingma,[67,68] a nurse herself, has led the policy analyses for INM within the field of nursing, and her results also come from equilibrium approaches. Her work, which specifically mentions remittances, takes a balanced approach as to the positive and negative aspects of them, but leans largely in support of nurses remitting to their home countries.

From the field of ethics and health policy, List[70] and Kirby and Siplon[69] both argue against remittances as an economic development strategy born on the backs of nurses and other

Table 1 Articles included in the integrative review

Author and date	Sending country or region	Receiving country	Purpose	Methods and analysis	Sample
Adams and Stilwell, 2004[58]	NA	NA	This article introduces the special issue from the *Bulletin of the World Health Organization* that focused on international nurse migration.	Editorial introduction	NA
Adlung and Carzaniga, 2001[59]	NA	NA	It provides an overview of the basic structure of GATS and of the patterns of current commitments in health services and of limitations frequently used in this context.	Report	NA
Ahmad, 2004[60]	40-country study	Australia, Canada, Germany, UK, USA	Discusses the context of international health worker migration at the time of publication.	Opinion	NA
Alonso-Garbayo and Maben, 2009[41]	India, Philippines	UK	This paper compares the diverse motivations of nurses from different countries to migrate as well as those of nurses with previous migratory experience and first-time migrants.	Qualitative	6 (India) 15 (Philippines)
No author listed, Australian Nursing Journal, 2006[61]	Africa, Philippines	Australia, Canada, USA, UK	To briefly report on the impact of health worker migration on developing countries.	Report	NA
Brown and Connell, 2004[50]	Fiji, Samoa, Tonga		This paper seeks to examine the rationale for the migration of skilled health professionals from a group of three Pacific island countries – Fiji, Samoa and Tonga – in each of which there has been a considerable international skill drain from the health sector.	Cross-sectional	182
Buchan et al, 2006[51]	Jamaica, Mauritius, Zambia, Kenya, India, Ghana, Australia/ New Zealand, Zimbabwe, South Africa, Nigeria, Philippines	UK	The paper reports on a survey of recently arrived international nurses working in London to assess their demographic profile, motivations, experiences, and career plans.	Quantitative	380
Chanda, 2002[62]	NA	NA	To provide an examination of the positive and negative implications of trade in health services for equity, efficiency, quality, and access to health care.	Policy analysis	NA
Chandra and Willis, 2005[84]	NA	US	To explore the current and projected shortage of nursing professionals in the USA, as well as some of the reasons for this shortage.	Report	NA
Christmas and Hart, 2007[63]	NA	NA	To review results, recommendations, and actionable items generated from a consortium of international organizations that focused on the worldwide shortages of health care workers and the migration patterns of health care workers from developing nations to the first world.	Report	NA
Cutcliffe and Yarbrough, 2007[64]	NA	NA	This two-part article examines the mass transplantation of nurses within the context of globalization.	Report	NA
Diallo, 2004[65]	NA	NA	This paper presents information on the uses of statistics and those who use them, the strengths and limitations of the main data sources, and other challenges that need to be met to obtain good evidence on the migration of health workers.	Report	NA
Dimaya et al, 2012[42]	Philippines	NA	This study examines how the development of brain drain-responsive policies is driven by the effects of nurse migration and how such efforts aim to achieve mind-shifts among nurses, governing and regulatory bodies, and public and private institutions in the Philippines and worldwide.	Qualitative	10
Dwyer, 2007[85]	NA	NA	To consider the right of the individual in migration and the social and international justice of health worker migration.	Report	NA

(*Continued*)

Table 1 (*Continued*)

Author and date	Sending country	Receiving country	Purpose	Methods and analysis	Sample
Dywili et al, 2013[43]	NA	NA	To identify the reasons why nurses continue migrating across international borders.	Integrative review	17 (articles)
El-Jardali et al, 2008[52]	Lebanon	Gulf, North America, Europe	The objective of this study is to provide an evidence base for understanding the incidence of nurse migration out of Lebanon, its magnitude, and reasons.	Cross-sectional	6,026
Fleck, 2004[66]	NA	NA	To explore the factors, such as remittances, that influence health care workers to migrate.	Report	NA
Francis et al, 2008[48]	India, Zimbabwe, the Netherlands, Singapore, Malaysia, UK	Australia	This study sought to identify and evaluate approaches used to attract internationally trained nurses from traditional and nontraditional countries and incentives employed to retain them in small rural hospitals in Gippsland, Victoria.	Qualitative	18
Harrington, 2005[86]	Africa, Asia, and Central/ South America	NA	Jan Harrington spoke with Dr Kingma about her research for the book and her findings.	Interview	NA
Harrington, 2010[87]	NA	NA	Jan Harrington, International Nursing Review news editor, spoke with Dr Kingma about her efforts with International Council of Nurses over 25 years to improve working conditions for nurses.	Interview	NA
Humphries et al, 2009[44]	NA	Ireland	This paper presents data on the remittances sent by migrant nurses to their families "back home."	Mixed methods	21 (qualitative) 336 (quantitative)
Johnson et al, 2014[81]	India	NA	To explore nurses' accounts of entry into nursing in the context of the globalization of the nursing profession in India, and the salience of "migration" for nurses' individual careers.	Qualitative	56
Jones et al, 2009[45]	Caribbean	UK	Based on the migration of nurses from the English-speaking Caribbean region to the UK, this paper explores the significance of gender at both the macro and micro levels.	Integrative review	15 (studies)
Walker, 2008[79]	Philippines	NA	To highlight the exploitation of Filipino workers and the challenges associated with international nurse migration.	Report	NA
Kingma, 2001[67]	NA	NA	To present the major motivators and barriers to international nurse migration, possible consequences of migration trends, and a number of recent government policies addressing related issues.	Policy analysis	NA
Kingma, 2007[68]	NA	NA	To look at nurse migration flows in the light of national nursing workforce imbalances, examine factors that encourage or inhibit nurse mobility, and explore the potential benefits of circular migration.	Policy analysis	NA
Kirby and Siplon, 2012[69]	NA	NA	To argue in favor of a variety of policy and development assistance measures that are grounded in an orientation of nonindifference toward others.	Opinion	NA
List, 2009[70]	Sub-Saharan Africa	NA	To examine ways in which destination countries and source countries can minimize incentives for health care worker emigration, while encouraging social responsibility in others by highlighting current policy and activism efforts that seek to reverse the brain drain through infrastructure and capacity-building in sub-Saharan Africa.	Policy analysis	NA

Lorenzo et al, 2007[71]	Philippines	NA	To describe nurse migration patterns in the Philippines and their benefits and costs.	Case study	NA
McGillis Hall et al, 2009[53]	Canada	USA	The purpose of this study was to gain an understanding of Canadian-educated registered nurses working in the USA.	Secondary data analysis	706
Muula et al, 2006[54]	Malawi	NA	To attempt to quantify the financial losses from the investment in training due to the migration from the developing nations.	Economic analysis	NA
Ntlale and Duma, 2012[46]	Lesotho	NA	The purpose of this study, which was exploratory, descriptive, and qualitative, was to investigate and describe the experiences of family members of migrant nurses from the Maseru district of Lesotho about the costs and benefits of nurse migration.	Qualitative	10
Parish, 2005[72]	Africa	UK	To highlight political attempts to stabilize health care recruitment and analyze it in the context of migration.	Report	NA
Perrin et al, 2007[55]	Philippines	Not specific	To assess the current registered nurse-staffing situation in Philippine hospitals.	Cross-sectional	NA
Record and Mohiddin, 2006[73]	Malawi	Not specific	This paper illustrates the arguments and possible policy options by focusing on the situation in one of the poorest countries in the world: Malawi.	Case study	86 (surveys; not just nurses)
Reinhard et al, 2009[88]	Not specific	USA	To examine how the USA can ensure an adequate supply of health care professionals and paraprofessionals to meet the needs of an aging population.	Report	NA
Ryan and Couglan, 2009[47]		Ireland	The aim was to explore the experience of the key stakeholders and individuals who had relocated to Ireland to work in the health and social care sector.	Qualitative	NA
Sapkota et al, 2014[49]	Nepal	UK	This study explored the reasons why a group of Nepalese health workers migrated to the UK.	Qualitative	6 (doctors) 9 (nurses)
Saravia and Miranda, 2004[74]	NA	NA	This article seeks to raise questions, identify key issues, and provide examples of policies that can be used to manage migration and the asymmetric distribution of highly educated and skilled people.	Report	NA
Schmid, 2004[75]	NA	NA	To review the large impact of temporary and permanent migration of the health care workforce.	Report	NA
Shaffer and Dutka, 2013[76]	NA	NA	This article presents the challenges and regulatory implications of nurses entering the USA on an occupational visa and in applying for a license to practice.	Report	NA
Stilwell et al, 2004[77]	NA	NA	The aim of this paper is to examine some key issues related to the international migration of health workers and to discuss strategic approaches to managing migration.	Policy analysis	NA
Thupayagale-Tshweneagae, 2007[78]	NA	NA	To examine reasons behind migration and to argue that there are greater incentives for migrating than staying.	Report	NA
Walker, 2008[79]	New Zealand	NA	The aim of this paper was to understand the scope and scale of problems facing other migrant nurses and to highlight the current and long-term implications for health care services in New Zealand.	Report	NA
Winkelmann-Gleed and Seeley, 2002[56]	NA	UK	This article, based on research carried out in 2002/2003, examines the experiences of recently internationally qualified migrant nurses to the UK and explores their stories with the aim of understanding aspects of their work-related identities.	Mixed methods	140

(*Continued*)

Table 1 (*Continued*)

Author and date	Sending country	Receiving country	Purpose	Methods and analysis	Sample
World Health Organization, 2006[2]	NA	NA	To explore possible solutions and steps of the World Health Assembly to address the brain drain.	Report	NA
Xu and Zhang, 2005[89]	NA	NA	This theoretical study examines the ethics of international nurse recruitment from the conceptual framework of stakeholder interests.	Qualitative	NA
Zivotofsky and Zivotofsky, 2009[80]	NA	NA	To argue for greater latitude in defining country of origin, personal autonomy, and contribution to society in the context of international health worker migration.	Opinion	NA

Abbreviations: GATS, General Agreement on Trade in Services; NA, not available.

health care workers. As issues of justice, they consider the consequences of "brain drain" to health systems and patient outcomes as overriding the economic benefits. Both analyses fit into globalization and equilibrium approach theories. Their lack of consideration of the nurses' familial issues as a motivational factor in remitting is a weakness in their work.

The final set of policy analyses focused on country case studies of Malawi[73] and the Philippines.[71] These countries have significant histories of nurse migration that have affected their economies and health systems, but different contextual dynamics that drive the phenomenon. In the case of Malawi, an underfunded and corrupt health care system (where nurses often went months without pay) drove workers abroad until the system was near collapse. In the Philippines, state policies and infrastructure encourages international migration of health workers. A strength of both the case studies is that compared to other research approaches, they proved better at illustrating the contextual factors that drive remittances while also emphasizing their commonalities and distinctions. Their findings suggest that the dynamics of remittances need to be considered on a country by country basis.

With the general trends illustrated, we now discuss the findings from the directed content analysis. It produced two primary themes: family as motivator and gender. The female dominance of nursing as a profession contributed to these themes emerging in the analysis. This contrasts with most other research about migration and remittances since outside of nursing, migration for work is largely a male phenomenon.

Family as motivator to remit

Overall, remittances appear to be a secondary factor as a driver of migration for nurses. Not once, unless the study specifically focused on remittances, did nurses indicate that their personal desire for money as their primary motivation for migrating for work. The analysis showed that the circumstances of the nurses' families – often of low socioeconomic status or involving a family member's health crisis that caused financial strain for the family – were the primary motivators for seeking work abroad. Familial need drove the need to migrate and subsequently set the parameters for how much they would send back to their loved ones while working abroad. Husbands often also served as strong proponents of nurses migrating for work because of the potential for remittances for the family. Home needs also determined how long nurses stayed abroad for work, with some authors positing that once "home needs" were met, the nurses were more likely to return.[51]

At the same time, familial need was country dependent. Filipino nurses most often referenced family needs as reasons for sending money back home while nurses from other countries were more varied in their reasons for sending back remittances to the home country.[41,42,55,56,71] Family often remained a primary reason and motivator, but often the ability to work abroad was a form of escape from family dynamics for the nurse. Remittances as a way to alleviate familial poverty, however, was not consistent across countries.

Gender

Jones et al's 2009 review of the role of gender best captured the dynamics of remittances among migrating nurses.[45] Amongst its findings and those of other documents, the reliability and consistency of female migrants in remitting wages home was the primary marker of gender distinction when compared to male nurse migrants. Gender also dictated how the money was spent, with females emphasizing children's education and paying for medical care of ill relatives.[41,56,81] Males tended to remit for the purpose of building houses in their home countries for their families. This theme suggests that gendered patterns of remittances among nurses needs to be explored further.

Discussion

We conclude from our analysis that the role of remittances is part of the overall migration experience of nurses, but is not the only nor the primary factor driving the phenomenon. The gender differences and familial factors also contrast findings from other disciplines that emphasize altruistic motivators behind remittances.[82]

The theme of "family as motivator" to remit suggests a confluence of both state and market failures to meet the basic needs of the population. If ill family members cannot receive quality care – due to limited availability, accessibility, or affordability – in the health care system, nurses may end up migrating abroad for work in response to these failures. As universal health coverage is implemented in many countries, it will be interesting to see the effects on the dynamics of INM as the need to pay for health care for family members is removed. Children's education was also another factor motivating nurses to remit, suggesting that failures in both the public and private education sectors will contribute to nurses migrating abroad for work so they can afford the best quality education for their children. Future poverty reduction initiatives, which are almost always linked to improving education, may also inadvertently shift migration dynamics. These familial and societal factors also align with neoclassical economic theory and represent diverse push factors that encourage, or pull, nurses to migrate in order to remit.

Our findings also support the work by Carling,[4] who comprehensively examined the role of remittances among migrants in general in the 1980s. His conceptual model (see Figure 2) may provide a more structured way for future researchers to study remittances in nurses and other health workers. While the model is limited to micro level factors that influence remitting dynamics, the framework offers a useful way to comprehensively study the phenomenon with specific health worker populations. Future research about internationally educated nurses and remittances that seeks to study the phenomenon in-depth may benefit from its framework.

On a methodological note, it is striking how the identities of the authors shaped their views of remittances, how it was discussed or studied, and the succeeding emphasis (or lack thereof) in the publication. Qualitative research recognizes that individual researcher bias always has the potential to

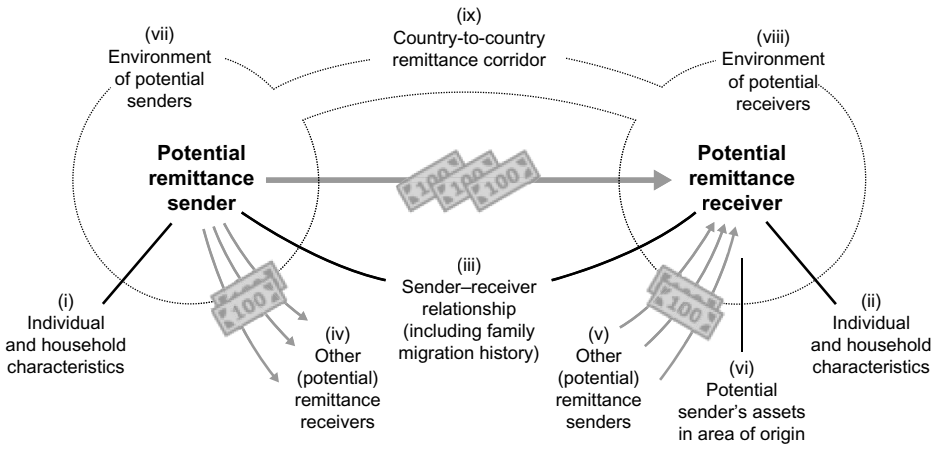

Figure 2 Carling's 2008 conceptual model for microlevel analyses of remittances. Copyright © 2008. Reproduced from Carling J. The determinants of migrant remittances. *Oxf Rev Econ Policy*. 2008;24(3):581–598, by permission of Oxford University Press.[4]

affect the analyses,[83] but other forms of research do not necessarily abide by the same principles. As we examined these data sources, it became apparent that author biases were prevalent throughout and associated with their professional discipline and/or employer. Miller and Alvarado's[39] content and context mediating methods for managing documents as data sources in research proved helpful in identifying this pattern.

Two types of studies not commonly conducted in the field of nursing further added a level of contextual detail that we feel enhanced the overall analysis greatly and in particular, because they used multiple data sources. The policy analyses provided an analytic depth not found in straightforward qualitative or quantitative studies while the case studies offered the strongest contextual picture when compared to other works. These studies also reinforce the importance of and need for country-specific analyses when understanding remittances. Case study approaches can also offer the methodological flexibility needed to comprehensively analyze a country's specific remittance dynamic that other approaches cannot.

From a theoretical standpoint, our analysis suggests that in the case of nurses, household and social network theory may serve as a better analytic framework for the role of remittances in INM because of how and where nurses migrate for work. Notwithstanding that factor, equilibrium approaches may help quantify the impact of remittances and, eventually, capture both the monetary amounts behind remittances and the extent it serves as an individual motivator. Globalization, therefore, is the vehicle creating the opportunity to be able to remit home and may be the better theory for cross-national comparisons given the interconnectedness of the phenomenon.

Yet, as with any analysis, our study also had limitations. With any type of systematic review, the first source of vulnerability stems from the search terms. While we believe we were able to gather a sufficiently rich set of articles for the review, we may have missed articles that would have further added to the richness of the analysis. Our studies are also biased toward those published in English and hence, reflect the experiences of nurses migrating from countries where English is an official language. Accessing studies in other languages would have enhanced our results by adding more contexts to study. The English language emphasis in the selection criteria leaves out several regions of the world where nurse migration and remittances has unique dynamics, such as Europe. In Europe, migration and remittances occur between high-income countries, whereas our analysis focused mostly on data sources representing low- and middle-income migration to high-income countries. Another notable limitation is the lack of integration of theories and conceptual models from social science-based migration studies in our data sources. Future studies should draw more from interdisciplinary sources to frame their analyses. Finally, excluding the grey literature minimized the perspectives of international institutions such as the Organization for Economic Cooperation and Development, the World Bank, and the Migration Policy Institute – all well respected international institutions or think tanks that contribute significant research to the remittances literature. A future review could focus on that literature exclusively due to sheer volume.

Conclusion

Remittances will always remain part of the INM experience. The role they play, as this analysis suggests, is part of a larger picture that is closely related to domestic labor market dynamics and the nurse's family. Both merit further examination in future research studies, with gender-sensitive analyses strongly recommended as part of any method used to study the phenomenon. Future policy work should include more comparative analyses of the role of the state and domestic health care labor market policies and how those factor into the remittances picture or migration pattern.

Above all else, with all INM dynamics it is important to remember that if nurses cannot get jobs that pay middle-class salaries, if there is a hostile work environment, if there is little room for professional advancement, or if patient assignment loads are so high that the workforce burns out quickly, nurses will migrate for one or all of those reasons. Furthermore, when large numbers of nurses emigrate, it does little to improve the local work environment, thus contributing to a cycle of poor opportunities and large-scale emigration. Working abroad to remit money home may be a commentary made by the feet of nurses about the current state of the health care system and its management.

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Author contributions

AS conceived the study design, search strategy, and wrote the majority of the paper. AA conducted the literature search, organized the coding schematic, and contributed to the writing and formatting of the paper.

Disclosure

AS is currently a nonresident research fellow of the Migration Policy Institute, a Washington DC-based, nonpartisan think tank that examines the global migration of individuals. She receives some salary support for her work with the institute. AS is also a consultant for the World Bank on health labor markets analyses. AS reports no other conflicts of interest in this work. AA reports no conflicts of interest in this work.

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