

The migration of nurses: trends and policies

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Abstract This paper examines the policy context of the rise in the international mobility and migration of nurses. It describes the profile of the migration of nurses and the policy context governing the international recruitment of nurses to five countries: Australia, Ireland, Norway, the United Kingdom, and the United States. We also examine the policy challenges for workforce planning and the design of health systems infrastructure. Data are derived from registries of professional nurses, censuses, interviews with key informants, case studies in source and destination countries, focus groups, and empirical modelling to examine the patterns and implications of the movement of nurses across borders.

The flow of nurses to these destination countries has risen, in some cases quite substantially. Recruitment from lower–middle income countries and low-income countries, as defined by The World Bank, dominate trends in nurse migration to the United Kingdom, Ireland, and the United States, while Norway and Australia, primarily register nurses from other high-income countries. Inadequate data systems in many countries prevent effective monitoring of these workforce flows.

Policy options to manage nurse migration include: improving working conditions in both source and destination countries, instituting multilateral agreements to manage the flow more effectively, and developing compensation arrangements between source and destination countries. Recommendations for enhancements to workforce data systems are provided.

Keywords Nurses/supply and distribution; Brain drain/trends; Emigration and immigration/trends; Foreign professional personnel/supply and distribution; Personnel selection/trends; Public policy; Developed countries; Developing countries; Australia; Ireland; Norway; United Kingdom; United States (*source: MeSH, NLM*).

Mots clés Infirmières et infirmiers/ressources et distribution; Exode des compétences/orientations; Emigration et immigration/orientations; Personnel professionnel étranger/ressources et distribution; Sélection personnel/orientations; Politique gouvernementale; Pays développé; Pays en développement; Australie; Irlande; Norvège; Royaume-Uni; Etats-Unis (*source: MeSH, INSERM*).

Palabras clave Enfermeras/provisión y distribución; Éxodo intelectual/tendencias; Migración internacional/tendencias; Personal profesional extranjero/provisión y distribución; Selección de personal/tendencias; Política social; Países desarrollados; Países en desarrollo; Australia; Irlanda; Noruega; Reino Unido; Estados Unidos (*fuelle: DeCS, BIREME*).

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Voir page 592 le résumé en français. En la página 593 figura un resumen en español.

Introduction

In their nursing labour markets, many developed countries are facing a demographic dilemma: they need to care for increasing numbers of elderly people while their nursing workforce is also ageing (1–3). This demographic conundrum has been exacerbated in some countries by a slowdown in the number of people enrolling in nursing programmes, creating nursing shortages now and into the foreseeable future. The policy challenge facing these countries, therefore, is to find a way to sustain their nursing workforce during the coming decades and to decide where

the supply of nurses will come from in the short term and in the long term.

The options available to bolster the supply of nurses largely fall into two categories: improving retention (i.e., keeping the nurses who are already working) and broadening the recruitment base. Although a series of prominent reports on the shortage of nurses has exhorted policy-makers and administrators to focus on improving working conditions in order to retain nurses and attract new recruits, there has been little in the way of an organized effort by either to exploit the opportunities such retention strategies offer. Instead, recruitment efforts

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have been the dominant mechanism through which the nursing workforce is being shored up. Nursing education programmes have been provided to a broader range of recruits, including mature entrants, entrants from ethnic minorities, and those with vocational qualifications or work-based experience. Programmes to encourage nurses to return to the profession have also been pursued by countries, such as the United Kingdom, that have pools of former nurses with the necessary qualifications to return to nursing.

The recruitment strategy that is gaining ground is that of developed countries recruiting nurses from developing countries. While much of the international flow of nurses is from one developed country to another and is relatively short term, such as the exchanges between the United Kingdom and Australia, it is the recent and rapid growth in international recruitment from developing countries that has garnered media interest and public policy attention. Developed countries are positioned to exploit factors that motivate migration among those amenable and able to relocate, such as relatively low pay, poor career structures, and the lack of professional development opportunities that characterize nursing in many developing countries, as well as other unsafe or undesirable domestic conditions (4–9).

This migratory flow is becoming substantial in a number of instances. For example, in 2000 more than 500 nurses left Ghana to work in other industrialized countries: that is more than twice the number of new nurses who graduated from nursing programmes in the country that year (10). In Malawi, between 1999 and 2001 over 60% of the entire staff of registered nurses in a single tertiary hospital (114 nurses) left for jobs in other countries (5). Between 2000 and 2001 alone, 10% of nurses in Barbados left the nursing sector, the majority of whom left the country for employment elsewhere (11).

The significant increase in the international flow of nurses in recent years has heightened concern about the impact of migration on the nursing workforce and health systems in both the nurses' home country (the source country) and the destination countries. The ethics of international recruitment practices have been debated, resulting in a series of policy statements and guidelines from leading international organizations as well as from several national governments who have been involved most directly (2, 12). Despite these actions, international recruitment continues to flourish relatively unchecked. In particular, recent

activity, driven by national governments, employers, and recruitment agencies, has targeted specific countries as sources of nurse recruits.

A pressing need for many of these countries is to have the ability to plan for shifts in their nursing workforce that may result from, or give rise to, the migration of nurses. Yet little information exists to guide decision-makers on preparing for its effects. This paper highlights the policy challenges for workforce planning and health system infrastructure that are created by the migration of nurses, and outlines the data needed to inform future policy actions.

Methods

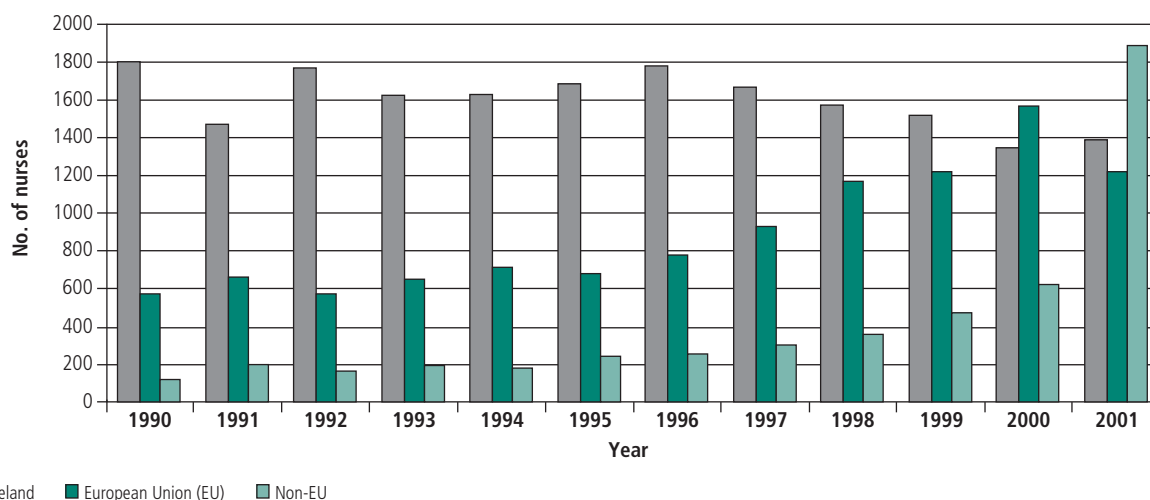
This paper draws on data compiled for a study supported by WHO, the International Council of Nurses, and the Royal College of Nursing (in the United Kingdom) (2, 13, 14). The study used interviews with key informants, data from professional registers and censuses, case studies in source and destination countries, focus groups of nurses, and empirical modelling to examine the dynamics of the cross-border mobility of nurses as well as the implications of this mobility in five countries. The destination countries we looked at were: Australia; Ireland; Norway; the United Kingdom, and the United States. We selected a range of destination countries that were increasing recruitment of foreign-trained nurses and where sufficiently detailed data on the nursing workforce were available for analysis.

Findings

Profile of nurse migration

Registration data sources in the five destination countries were used to examine the international flow of nurses to each country. Professional registration data can be used to assess the relative contributions of both domestic and international sources to the total pool of nurses as well as of new entrants. These data revealed a noteworthy increase in the flow of nurses into these destination countries both in terms of actual numbers and as a proportion of all new nurses becoming eligible to practise. Ireland and the United Kingdom in particular saw a steep rise in the number of internationally trained nurses joining their registers. Fig. 1 and Fig. 2 show that in both cases the level of

Fig. 1. Number and place of origin of newly qualified nurses registered with the Irish Nursing Board (*An Bord Altranais*), by year (15) for the period 1990–2001



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reliance on international sources has risen rapidly since the mid-1990s.

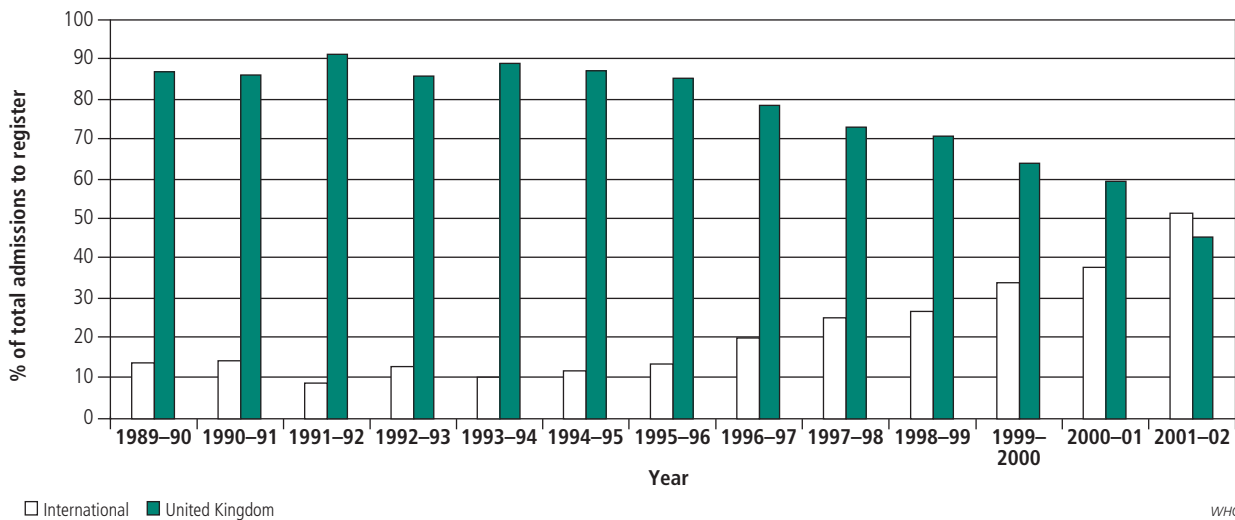
In Ireland the relative importance of nurses from non-Irish backgrounds has risen to the extent that in 2001 about two-thirds of new entrants to the Irish nursing register were from other European Union and international sources. The principal sources of nurses for Ireland were Australia, India, the Philippines, South Africa, and the United Kingdom (Fig. 1). The comparative importance of sources outside the United Kingdom as a proportion of the annual total of new nurses entering the United Kingdom register is similar to that of Ireland (Fig. 2). In the early and mid-1990s in the United Kingdom, about 1 in 10 new nurses was from a country outside the United Kingdom. Between 2001 and 2002 for the first time there were more overseas nurses added to the register than there were nurses from the United Kingdom. These 16 000 international nurses came largely from Australia, India, the Philippines, and South Africa.

Empirical analysis of the pattern of nurse migration to the United Kingdom, a country from which detailed data are

available, showed that between 1990 and 2001 there was a significant increase in the number of countries sending nurses there. In 1990 nurses came from 71 countries, but by 2001 they came from 95 countries (14). While growth in the number of foreign nurse registrants from the Philippines has certainly been the most dramatic, other sources of nurses (mostly countries in Africa) have also experienced a notable increase. Furthermore, among the countries that have experienced the highest average annual change in the number of nurses travelling to and registering in the United Kingdom, most are low-income or lower-middle income countries, as defined by The World Bank (17).

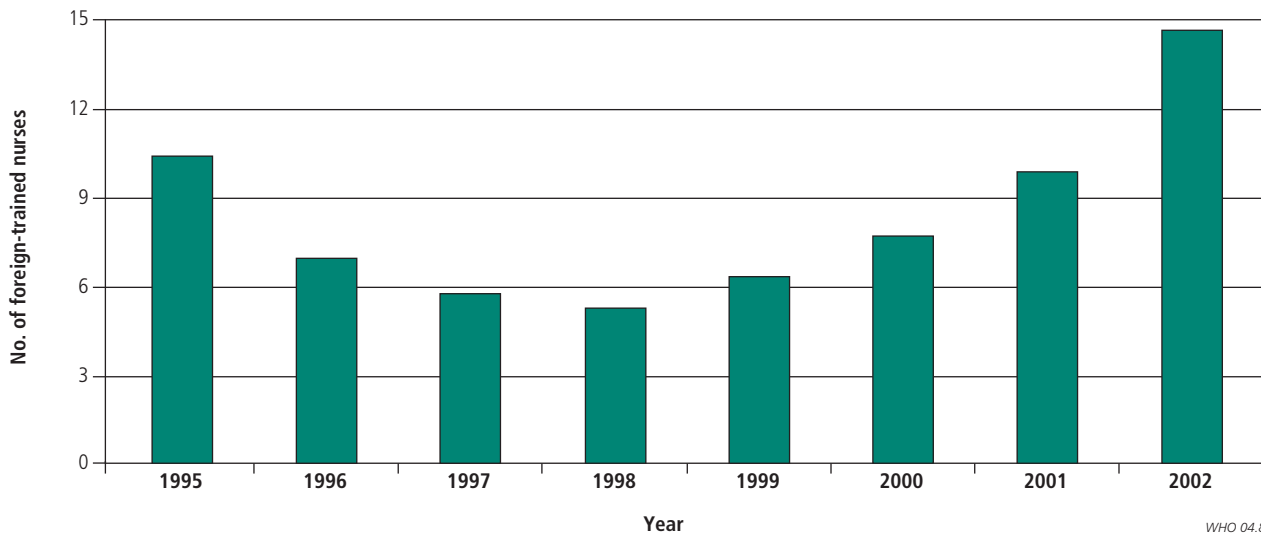
Even in the United States, where the international recruitment of nurses has been occurring in a much less organized and pronounced fashion, a pattern of growth in international nurse migration is emerging. As seen in Fig. 3, after falling in the second half of the 1990s, the ratio of newly licensed foreign-trained nurses to newly licensed nurses trained in the United States surged in the subsequent decade, and is surpassing the numbers seen in 1995. Nurses from the Philippines

Fig. 2. Sources of nurses in the United Kingdom as % of total admissions to the UK Nurses and Midwives Register, 1989–2002 (16)



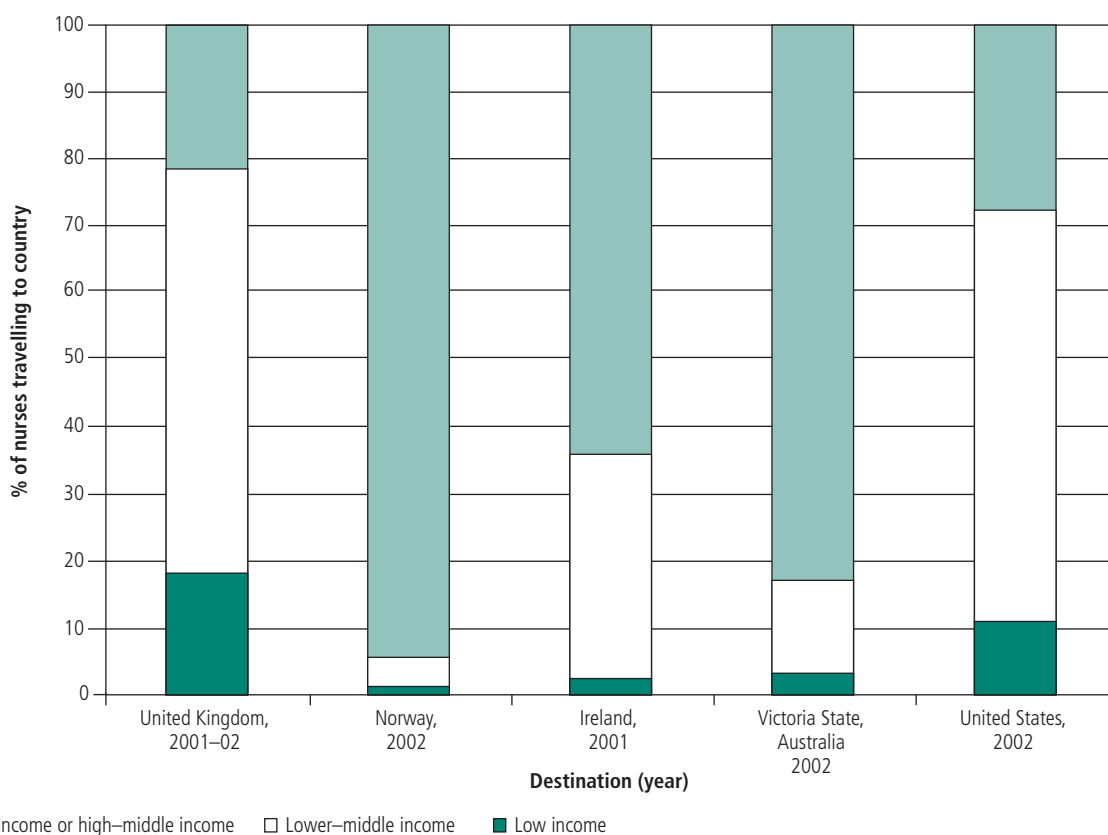
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Fig. 3. Number of newly licensed foreign-trained nurses per 100 newly licensed US-trained nurses in the USA, 1995–2002 (18)



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Fig. 4. Proportion of international nurses travelling to Australia (Victoria), Ireland, Norway, the United Kingdom, and the United States by home country's income (16, 17, 19, 20). Income of source countries is classified according to World Bank classifications (17). For purposes of analysis, data from all Caribbean countries have been incorporated into the lower–middle income category



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account for the largest proportion of new foreign nurses, with the proportion of nurses from Nigeria, Korea and India also growing. Because it borders the United States, Canada is also a significant source of nurses, although it sends far fewer nurses than the Philippines does.

Fig. 4 contrasts the source countries from which nurses travelled to Victoria, Australia; Ireland; Norway; the United Kingdom; and the United States. (Australia is a federated country and registration is the responsibility of each state. We have used data from Victoria as an example.) The United Kingdom, the United States, and, to a lesser extent, Ireland are recruiting significant proportions of international nurses from countries that are lower–middle income and low-income. In contrast, Norway and Victoria, Australia, are primarily registering nurses from other high-income or high–middle income countries.

Improving the evidence base

One of the most notable aspects of the dialogue on the impact of the migration of nurses is the inadequacy of the information gathered that might inform policy analysis and decision-making (12). Basic information, such as the annual number of nurses trained and current nurse-to-population ratios in each country are not available, and other health-system data are likewise difficult to obtain. Thus, it is difficult to assess the impact of migration. The ability to monitor trends in the flow of nurses into a country, in terms of both the numbers and sources, is vital if any country is to integrate this information into its planning process. In many countries the process of tracking

the flow of nurses is impeded by the paucity of data, so monitoring is difficult. Data that are incomplete or incompatible further complicate efforts to draw an accurate picture of the trends in the flow of nurses from one country to another, let alone make an assessment of their impact on the delivery of health services. Even sources such as professional registration data have their limitations.

- Registration data measure the intent to move to and work in another country, not actual employment, so not all nurses who move from one country to another and register actually take up employment in nursing.
- Registration may occur some time after the nurse relocates, thus underestimating the pool of nurses who intend to register for employment at any point in time.
- Where regional or specialty registration is available, individual nurses may apply for registration on more than one register and thus be counted twice.
- Registration data include information on individuals beyond those who move to take up conventional employment, such as those on study tours, enrolled in advanced nursing education programmes, and those who take up occasional work for nursing agencies.
- In some countries, the statistics on registrants relate to the country of origin of the applicant, which will not necessarily be the country in which the nurse was trained.

Ensuring that essential data are collected, verified, and monitored for trends is critical; methods to improve data availability

and comparability should be promoted collectively by stakeholders, including governments, employers, and nurses' associations. The information base should enable policy-makers to assess the relative loss of nurses to other countries in comparison with other internal losses, such as nurses leaving the public sector to work in the private sector, nurses moving from rural to urban areas, or nurses leaving the profession. The growing international flow, especially to developed countries, may be exacerbating the internal flow of nurses from rural to urban areas where their advanced skillset makes them attractive to recruiters. Thus, to fully appraise the migratory flow of nurses, the information base should track the proportion of new registrants who come from other countries, the proportion who migrate to other countries, and the proportion of those who leave the workforce or migrate internally within the health sector.

Box 1 outlines the key policy questions confronting source and destination countries and international agencies, and the areas on which research should focus to inform policy-making at the national or international level. Rigorous research on the migration of nurses and its predictors and effects does not exist due in part to data inadequacies. While a noteworthy body of empirical study on the migration of workers does exist, studies to determine whether it is applicable to nursing have not been undertaken. Consequently, the evidence base on nurse migration is inadequate in many countries and so cannot be used to underpin effective policy interventions.

In order to address some of the policy questions outlined in Box 1, decision-makers need to have access to information on trends in the flow of nurses and other health workers. Table 1 sets out recommendations for data that need to be collected at the national level so that governments can accurately monitor the flow of nurses into and out of the country.

Developing a minimum dataset to track only the international flow would not be as effective as establishing an integrated system for collecting the broader range of data on the nursing workforce. In particular, if the international flow was tracked in isolation it would not be possible to assess its relative impact and compare it with the flow to and from internal sources and destinations. In addition, the annual output of nurse training programmes within a country is a critical comparative measure. Development of this minimum dataset is based on an approach that collects data on each individual nurse. These data would then be aggregated to provide country-level estimates of the nursing workforce. Countries may also wish to examine in greater detail the motivations of nurses for moving abroad and their career plans. This is best achieved through surveys, for example, in collaboration with national nurses' associations, or by using structured focus groups.

Policy context

Although the migration and recruitment of nurses has been high on the international health policy agenda in the past few years (21, 22), it is not a new issue. The scope of nurse migration was the subject of detailed examination, supported by WHO, more than two decades ago (23), and the ethical aspects of international recruitment were raised at least as early as the 1940s (24). In the face of an international shortage of nurses, the debate has intensified as countries facing shortages turn yet again to foreign nurses for relief. From a global perspective however, instead of being a solution, recruiting nurses from overseas often serves only to redistribute the shortage to a country less well equipped to deal with it. The destination countries that are now recruiting internationally have failed to "grow their own" and "keep their

Box 1. International migration of nurses: policy questions and subsidiary research questions (adapted from 2)

Countries from which nurses migrate (source countries)

Policy questions

- Should flow of nurses out of the country be supported or encouraged? (for example, to stimulate remittance income).
- Should flow of nurses be constrained or reduced? (for example, to reduce "brain drain". If so, what is an effective and ethical means of dissuading nurses from leaving?)
- Should recruitment agencies be regulated?
- How should flow of nurses out of the country be monitored?

Research questions

- Which countries are nurses migrating to?
- What proportion of the flow of nurses out of the country is permanent? What proportion is temporary?
- What proportion of nurses is going to health-sector-related employment or education in other countries?
- What proportion of nurses leave health care employment?
- How does the flow to other countries compare with the flow to other sectors within the country?
- What is the impact of the flow out of the country?
- Why are nurses leaving?

Countries to which nurses migrate (destination countries)

Policy questions

- Is the flow of nurses into the country sustainable?
- Is the flow into the country a cost-effective way of solving the problem of skills shortages?
- Should recruitment agencies be regulated?
- How should the flow of nurses into the country be monitored?

Research questions

- Which countries are nurses coming from?
- What proportion of nurses is in the country permanently? temporarily?
- What proportion of nurses is going into health-sector-related employment or education?
- What proportion is leaving health-care employment?
- Is the flow into the country managed effectively?
- Why are nurses coming?

International agencies

- How should the international flow of nurses be monitored?
- In the context of the working relationship with the government, what is the appropriate role or response of the agency to the issue of the international migration of nurses?
- Should the agency intervene in the process? (For example, by developing an ethical framework, supporting government-to-government contracts, or introducing regulatory compliance.)

own" nurses in sufficient numbers and have used the quick fix of international recruitment, exploiting the existence of factors that push nurses to leave by exerting the pull of better salaries and conditions of employment.

These accelerated levels of nurse migration may be a symptom of systemic problems in the nursing workforce in both the source and destination countries. If national governments and international agencies wish to respect the rights of an individual nurse to move but also wish to create an "ethical" environment in which the individual is under no pressure to leave, they must engage actively and positively in these dynamics. Thus, they have three principal policy options.

- The first option is to support improvements in pay, working conditions, scheduling, career prospects, and the security and prestige of nurses in their own countries in order to modulate

Table 1. Data needed to support policy analysis of nurse migration (2)

Analysis	Data needed		
	Minimum	Additional	Attitudes
Inflow or outflow	<ul style="list-style-type: none"> No. leaving the country (by destination) No. entering (by source) Qualifications Sex Race or ethnicity Age 	<ul style="list-style-type: none"> Work location of nurses leaving the country Year first qualified as a nurse 	<ul style="list-style-type: none"> Reasons for leaving the country, or Reasons for coming to the country
Stock	<ul style="list-style-type: none"> Total no. of nurses No. working in nursing Qualifications Sex Race or ethnicity Age 	<ul style="list-style-type: none"> Geographical distribution of nurses No. of nurses by work location Length of stay 	<ul style="list-style-type: none"> Career plans Career history Cultural adaptation issues Job satisfaction

the factors that push nurses to look for jobs elsewhere or to reduce the need to actively recruit internationally (8, 25). Case studies and information derived from focus groups of internationally recruited nurses revealed that in many cases nurses were receptive to stay in their home country if their quality of life were adequate.

- The second option is to encourage and facilitate bilaterally or multilaterally managed flows of nurses between countries. This should also include the possibility for the nurse to return to the home country if desired. Some countries have already begun to discuss this issue (8, 26, 27).
- The third option is to institute arrangements whereby compensation flows from the recruiting country back to the source country. This could be direct or indirect financial compensation, remittances pledged from nurses, educational support as part of a donor package, or the return flow of better-trained staff. Some source countries favour financial compensation but there is little evidence of this approach being operationalized.

Policy interventions that help governments reach mutually beneficial managed models of international recruitment have greater potential for success (7). However, it is clear that the flow of nurses, partly as a result of active recruitment by developed countries, is a symptom of deep-seated problems in countries that have failed to plan for, and retain, sufficient nurses. Identifying and addressing the factors contributing to nursing shortages in any country is an important step that must be taken. The continuing need for the international recruitment of nurses is a symptom of the global shortage of nurses but the underlying problems can be solved only by making local-level and country-level improvements in the status of nursing, the planning of health services, and the management of the nursing workforce. ■

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Conflicts of interest: none declared.

Résumé

Migration des personnels infirmiers : tendances et politiques

Le présent article examine le contexte de l'augmentation de la mobilité et de la migration internationales des personnels infirmiers. Il décrit le profil migratoire des infirmières et infirmiers et les conditions qui régissent le recrutement international de ces personnels dans cinq pays de destination : Australie, Etats-Unis d'Amérique, Irlande, Norvège et Royaume-Uni. Nous examinons également les problèmes qui se posent au niveau de la planification des ressources humaines et de l'infrastructure des systèmes de santé. Les données ont été tirées de registres d'infirmières et infirmiers professionnels, de recensements, d'entretiens avec des informateurs clés, d'études de cas dans les pays d'origine et de destination, de groupes de discussion et de modèles empiriques afin d'analyser les caractéristiques et les répercussions des mouvements transfrontaliers de personnel infirmier.

Les migrations de personnel infirmier à destination des cinq pays considérés ont augmenté, assez fortement dans certains cas. Le recrutement dans les pays à revenu intermédiaire (tranche

inférieure) et à faible revenu, selon la définition de la Banque mondiale, domine la tendance migratoire vers le Royaume-Uni, l'Irlande et les Etats-Unis d'Amérique, tandis que la Norvège et l'Australie recrutent principalement des infirmières et infirmiers en provenance de pays à revenu élevé ou à revenu intermédiaire (tranche supérieure). L'insuffisance des systèmes de collecte et d'analyse des données dans de nombreux pays empêche de suivre efficacement ces mouvements de personnels.

Pour gérer la migration des personnels infirmiers, on peut envisager plusieurs options politiques, qui consistent à améliorer les conditions de travail dans les pays d'origine et de destination, négocier des accords multilatéraux en vue de gérer plus efficacement les flux migratoires et développer des accords de compensation entre pays d'origine et pays de destination. L'article présente également des recommandations pour le renforcement des systèmes de collecte et d'analyse des données relatives aux ressources en personnel.

Resumen

Migración de personal de enfermería: tendencias y políticas

En este artículo se analiza el contexto de política en que se inscribe el aumento de la movilidad y migración internacional del personal de enfermería. Se describen las características de ese tipo de migración y el marco normativo que rige la contratación internacional de enfermeras en cinco países: Australia, Irlanda, Noruega, el Reino Unido y los Estados Unidos. También examinamos los retos de política que entraña la planificación de esos trabajadores y el diseño de la infraestructura sanitaria. Con datos procedentes de registros de enfermeras profesionales, censos, entrevistas con informantes clave, estudios de casos realizados en los países de origen y de destino, grupos de discusión y estudios de modelización empírica, se examinan las modalidades y las repercusiones del movimiento de enfermeras a través de las fronteras.

El flujo de enfermeras a los países de destino citados ha aumentado, en algunos casos muy sustancialmente. La contratación

a partir de los países de ingresos bajos y medios, según la definición del Banco Mundial, es la tendencia predominante en la migración de enfermeras al Reino Unido, Irlanda y los Estados Unidos, mientras que Noruega y Australia tienden sobre todo a absorber enfermeras de otros países de ingresos altos o medio-altos. Los sistemas de datos inapropiados que tienen muchos países impiden llevar a cabo un monitoreo eficaz de esos flujos de trabajadores.

Entre las opciones de política a considerar para gestionar la migración del personal de enfermería cabe citar la mejora de las condiciones de trabajo tanto en los países de origen como en los países de destino, el establecimiento de acuerdos multilaterales para gestionar esos flujos más eficazmente y la búsqueda de arreglos de compensación entre los países de origen y de destino. Se facilitan recomendaciones para mejorar los sistemas de datos sobre ese tipo de trabajadores.

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