Internationally educated nurses in the United States: Their origins and roles

Joanne Spetz, PhD, FAAN[a],*, Michael Gates, PhD, RN[b],
Cheryl B. Jones, PhD, RN, FAAN[c]

[a] *Professor, Philip R. Lee Institute for Health Policy Studies, University of California, San Francisco, San Francisco, CA*
[b] *Assistant Professor, School of Nursing, San Diego State University, San Diego, CA*
[c] *Professor, School of Nursing, University of North Carolina—Chapel Hill, Chapel Hill, NC*

ARTICLE INFO

ABSTRACT

Despite the importance of the internationally educated nurse (IEN) workforce, there has been little research on the employment settings of IENs and other aspects of their employment. We analyzed data from the 2008 National Sample Survey of Registered Nurses to characterize IENs in the United States using descriptive statistics and multivariate ordinary least squares regression. We find notable differences in the decade of immigration, current age, and highest nursing education across the countries in which IENs were educated. IENs are more likely to be employed in nursing and to work full-time. They receive higher total annual earnings and earn higher average hourly wages. However, when demographic, human capital, and employment characteristics are held constant, IENs from every country except Canada earn no more than U.S.-educated nurses. Future research should seek to identify the causes of these employment and earnings differences to understand the role and impact of the IEN workforce.

Cite this article: Spetz, J., Gates, M., & Jones, C. B. (2014, FEBRUARY). Internationally educated nurses in the United States: Their origins and roles. Nursing Outlook, 62(1), 8-15. http://dx.doi.org/10.1016/j.outlook.2013.05.001.

Introduction

During periods of nursing shortage, employers pursue many strategies to meet their needs for registered nurses (RNs), often including increased international recruitment (Aiken, 2007). There were an estimated 146,097 internationally educated RNs employed in the United States in 2008, 23.6% of whom were licensed between 2004 and 2008 (U.S. Bureau of the Health Professions, 2010). Although there is debate about the desirability of international nurse migration, particularly with respect to its impact on developing countries' health care infrastructure (Evans & Tulaney, 2011; Khaliq, Broyles, & Mwachofi, 2008; Kingma, 2006), there is widespread agreement that internationally educated nurses (IENs) contribute to the RN workforce of the United States in significant ways (Xu, Zaikina-Montgomery, & Shen, 2010).

Despite the importance of the internationally educated RN workforce, there has been little research on workforce trends in the countries from which they emigrate, the employment settings in which they work, and their career trajectories. There is some evidence that IENs may face unethical recruitment practices and contract problems, particularly those

---

* *Corresponding author:* Professor Joanne Spetz, Philip R. Lee Institute for Health Policy Studies, University of California, 3333 California Street, Suite 265, San Francisco, CA 94118.
E-mail address: joanne.spetz@ucsf.edu (J. Spetz).

from low- and middle-income countries (Pittman, Herrera, Spetz, & Davis, 2012). IENs also may experience discrimination and a lack of promotion opportunities, faced by minority nurses in general (Seago & Spetz, 2008). This article provides a description of the IEN workforce in the United States, focusing on their origins and employment. We also explore earnings disparities between IENs and U.S.-educated nurses (USENs) to gain insights into whether IENs face different economic opportunities than their U.S.-educated counterparts.

Data and Methods

We analyzed data from the 2008 National Sample Survey of Registered Nurses (NSSRN) to characterize the IEN workforce in the United States (U.S. Bureau of the Health Professions, 2010). The NSSRN has been the primary source of data on the U.S. nursing workforce since its inception in 1977 and includes detailed information regarding the personal, demographic, educational, and employment attributes of nurses throughout the United States, as well as their annual earnings and household income. The 2008 survey was mailed to more than 55,000 RNs with active U.S. licenses and addresses, and about 62.4% (n = 33,549) of those responded.

The NSSRN asks nurses about their initial pre-licensure nursing education, as well as any additional nursing and non-nursing education completed. They report not only on the type of program in which they were initially educated (diploma, associate degree, baccalaureate degree, master's degree, or doctorate) but also the year in which they completed that program and the country or U.S. state in which the program was located. IENs are thus identified by reporting that their initial nursing education was completed outside the United States.

The NSSRN includes many questions about employment in both nursing and non-nursing positions. Nurses are asked to report their annual earnings from each of their primary and secondary nursing positions. However, annual earnings vary with the intensity of nursing work throughout the year; nurses who work full-time and for the full year will earn more than nurses who work part-time or only part of the year, holding all else equal. Thus, in order to account for the differences in nurses' intensity of work, we computed an equivalent hourly wage by dividing the annual earnings by the estimated annual hours worked per year. The survey data include the number of hours normally worked per week and the number of months worked per year. To estimate annual hours worked per year, we multiplied the number of hours normally worked per week (including overtime) by 4.3 (the average number of weeks per month) by the number of months worked per year. We dropped from the analysis any nurses whose estimated wage was less than $10 per hour or more than $200 per hour (282 cases were dropped for out-of-range earnings from nurses' principal nursing position; 20 cases were dropped for out-of-range earnings from all nursing positions).

In order to more accurately determine the difference in wages of IENs versus those of USENs, we estimated multivariate ordinary least squares regression equations. The dependent variable in these equations is the logarithm of wage, because the distribution of computed hourly wages is skewed. Following the literature (Jones & Gates, 2004; Spetz, 2002), we control for human capital variables (highest education, experience, and experience squared) and some demographic variables (gender and race/ethnicity). We also control for the state in which the RN lives, as well as whether the RN lives in a metropolitan area. We also sought to determine whether any wage differences were associated with IENs being more likely to work in certain settings or to hold specific job titles. In some equations, we controlled explicitly for job title and/or setting, and in others we did not. When we do not control for job title or setting, we then measure the full effect of human capital, immigration, and demographic variables on wages, which includes any wage increase obtained through position title or job setting. Robust standard errors were computed to account for potential heteroskedasticity.

Sample weights are provided in the NSSRN database and can be used to adjust for sample stratification and differential nonresponse across states and age groups. All analyses reported in this article used the weights; so the data represent the total RN workforce of the United States.

Origins of the USEN and IEN Workforce

In 2008, there were more than 3 million licensed nurses in the United States and approximately 2.6 million employed in nursing. IENs represented about 5.4% (or 165,539) of all licensed U.S. nurses and 5.6% (or 146,097) of all nurses who were employed in nursing. Among nurses licensed between 2004 and 2008, 8.4% were IENs, and half of these were educated in the Philippines (Figure 1). Canada provides 12% of the IEN workforce, and India provides 9%. There has been a particularly notable growth in the share of IENs from India in recent years. In 2008, there were an estimated 15,827 RNs educated in India living in the United States, compared with only about 1,271 in 2004 (U.S. Bureau of the Health Professions, 2006). There also was a large influx of RNs from the Philippines during this time, increasing from 50,605 nurses in 2004 to 82,988 in 2008.

Figure 2 highlights the decades in which IENs in the 2008 nursing workforce were first licensed as an RN in the United States. More than 80% of RNs from the United Kingdom and Canada were first licensed in the United States prior to 2000. In contrast, more than half