Editorial

The Nursing Profession, Diversity, and Wages

Registered nurses (RNs) are the largest group of health professionals in the United States and provide care in every setting of the U.S. health care system (U.S. Bureau of Labor Statistics [BLS] 2013). The RN profession remains less diverse than the U.S. workforce as a whole. In 2013, nearly 75 percent of the RN workforce was white non-Hispanic, as compared with 65 percent of the overall U.S. workforce (author's calculations from the American Community Survey 2013 [US Bureau of the Census, 2014] and Bureau of Labor Statistics 2014). The lack of diversity in the nursing profession has received increasing attention due to the importance of health workforce diversity in addressing health disparities. Greater diversity of the health care workforce is associated with access to and quality of patient care (Cohen, Gabriel, and Terrell 2002, Institute of Medicine 2004; Bureau of Health Professions 2006).

While there has been progress toward increasing the diversity of the nursing workforce, improvement has been slow (Frogner and Spetz 2013). Causes for the lack of diversity among RNs might include differences in preparation at the high-school level, which would affect qualification for RN education; differences in interest in nursing (Fitzsimons and Kelley 1996); differences in successful completion of RN education (Rodgers 1990; Seago and Spetz 2005); and differential attrition from the nursing profession. Wage gaps could contribute to differences in the attractiveness of nursing and professional retention between whites and minorities (as well as between men and women).

Studies of wage gaps in nursing and other occupations recognize that wage differences can arise for a variety of reasons. Cost-of-living differentials are apparent across regions and even within relatively small geographic areas such as cities. Wage differentials also arise when workers have different skills

and knowledge, which are generally referred to as “human capital.” Labor economic theory predicts that a worker with greater human capital will be more productive for an employer, and that the employer will reward higher productivity with a higher wage. If cost-of-living and human capital-based differences are adequately measured, remaining differences in wages might be caused by different workers’ preferences for nonwage job attributes, other forms of compensation such as fringe benefits, or discrimination.

What We Know about Wage Gaps among RNs

Gender gaps in nursing pay have received more attention in the research literature than other wage differentials, in general finding that men earn higher wages (Link 1988; Schumacher 1997; Kalist 2002; Jones and Gates 2004; and Muench et al. 2015). Other analyses of wage gaps in nursing have examined the value of bilingualism (Kalist 2005) and wage differences between internationally educated nurses (IENs) and those educated in the United States (Brush, Sochalski, and Berger 2004; Xu and Kwak 2006, 2007; Xu, Zaikina-Montgomery, and Shen 2010; Walani 2013).

Few studies, however, have analyzed racial/ethnic wage gaps. Fisher and Houseworth (2012) found that black female nurses earned more at the mean and median than white female nurses; however, they included all nurses in the analysis, and thus may have confounded differences in the cost of living with true wage differentials. McGregory (2013) found that the average hourly wage of nonunionized black RNs was nearly 8 percent less than that for nonunionized white RNs. McGinnis and Moore (2009) used data from a survey conducted in New York to examine RN wages in New York City, thus reducing wage differences that might be caused by comparing rural and urban areas, or different cities. They found that minority RNs in New York City earned less on average than white RNs, and they determined that some of the wage variation could be explained by differences in the distribution of characteristics such as education level and experience across different racial/ethnic groups. However, a substantial share of the differential was due to differences in the wage value of the same characteristic, which could be indicative of discrimination.

IMPORTANCE OF MOORE ET AL.'S ANALYSIS OF URBAN NURSES

The paper in this issue by Moore and colleagues improves upon prior research by using national data, limiting the analysis to large urban areas, and including a cost-of-living index; this approach reduces unobserved heterogeneity in wages caused by cost-of-living differences (2016). By focusing on hospital-employed RNs, the analysis also reduces heterogeneity caused by differences in working conditions and other nonwage attributes of employment between hospitals and other settings such as ambulatory care, public health, and other settings. They document significant wage gaps, with both black and Hispanic RNs earning less than white RNs, and Asian RNs earning more than white RNs. For blacks, Hispanics, and Asians, the minority of the wage difference was attributed to differences human capital, while the majority was attributed to differences in the value received for human capital characteristics.

However, there still may be some unmeasured factors that affect wage differentials. First, there may be differences within metropolitan areas, such as between wealthier neighborhoods and poorer neighborhoods. Second, the authors are unable to address differences in working conditions that might exist across and within hospitals. Some hospitals may have good work environments and generous fringe benefits, while others may not. Within hospitals, nurses can work in a variety of departments, ranging from inpatient medical-surgical care to ambulatory clinics, which may have different non-wage attributes. If racial/ethnic groups are not randomly distributed across and within hospitals, these potential working condition differences may contribute to the wage differentials reported by Moore and colleagues.

Moore and colleagues were able to control for numerous human capital and employment variables that were not included in prior studies of racial/ethnic pay gaps in nursing. There still may be unmeasured human capital factors, such as good communication skills and a “can-do” attitude, which also can affect productivity.

Is There Discrimination?

Differences in wages due to differences in human capital do not indicate discrimination, although they suggest that policies to narrow human capital disparities may be warranted. Wage differences that are attributed to differences in the valuation of the same characteristics may indicate that discrimination

exists. Thus, one could interpret the results of Moore et al.'s study to suggest that blacks and Hispanics face workplace discrimination, and that blacks experience greater discrimination than do Hispanics.

However, other unobserved differences may be at play. For example, it has been reported that minority RNs are more likely to work in public hospitals (McGinnis and Martiniano 2008), which may pay lower wages than other hospitals. There may be racial and ethnic differences in the willingness of nurses to provide care for underserved populations, as has been identified among physicians (Marrast et al. 2014), perhaps due to differences in altruism or an interest in serving members of the communities in which they were raised. There also may be differences in the valuation of nonwage attributes of jobs. For example, U.S. surveys have found that blacks place more value on job security (Kalleberg and Marsden 2013); they thus might defer opportunities for promotion in exchange for greater predictability of wage outcomes.

Future research needs to uncover whether differences in the valuation of human capital among hospital-employed RNs are due to remaining unobserved factors, such as these, or discrimination. And, if discrimination exists, the mechanisms of discrimination require elucidation. For example, several studies have identified racial and ethnic bias in RN promotions among RNs in the United States (Seago and Spetz 2005), Canada (Hagey et al. 2001), and the United Kingdom (Pudney and Shields 2000a,b), suggesting one pathway through which discrimination may occur.

Regardless of whether racial/ethnic discrimination actually exists in nursing, the perception that it might exist could affect recruitment of minorities into the profession. To improve the diversity of the nursing workforce, multiple strategies will be required, including facilitating the enrollment of minorities in nursing programs, improving their graduation rates, and providing mentorship to advance their careers. The success of these approaches, however, will be limited if those considering and entering the profession perceive themselves to be treated unfairly.

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REFERENCES

- Brush, B. L., J. Sochalski, and A. M. Berger. 2004. "Imported Care: Recruiting Foreign Nurses to U.S. Health Care Facilities." *Health Affairs* 23 (3): 78–87.
- Bureau of Health Professions, Health Resources and Services Administration, U.S. Department of Health and Human Services. 2006. "The Rationale for Diversity

- in the Health Professions: A Review of the Evidence" [accessed on August 30 2013]. Available at <http://bhpr.hrsa.gov/healthworkforce/reports/diversityreviewevidence.pdf>
- Bureau of Labor Statistics. 2014. *Labor Force Characteristics by Race and Ethnicity, 2013*. Washington, DC: Bureau of Labor Statistics.
- Cohen, J. J., B. A. Gabriel, and C. Terrell. 2002. "The Case for Diversity in the Health Care Workforce." *Health Affairs* 21 (5): 90–102.
- Fisher, J. D., and C. A. Houseworth. 2012. "The Reverse Wage Gap among Educated White and Black Women." *Journal of Economic Inequality* 10 (4): 449–70.
- Fitzsimons, V. M., and M. L. Kelley. 1996. *The Culture of Learning: Access, Retention, and Mobility of Minority Students in Nursing*. New York: NLN Press.
- Frogner, B., and J. Spetz. 2013. *Affordable Care Act of 2010: Creating Job Opportunities for Racially and Ethnically Diverse Populations*. Washington, DC: Joint Center for Political and Economic Studies.
- Hagey, R., U. Choudhry, S. Guruge, J. Turriffin, E. Collins and R. Lee. 2001. "Immigrant Nurses' Experience of Racism." *Journal of Nursing Scholarship* 33(4): 389–94.
- Institute of Medicine. 2004. *In the Nation's Compelling Interest: Ensuring Diversity in the Health Care Workforce*, edited by B. D. Smedley, A. S. Butler, and L. R. Bristow. [accessed on August 30 2013]. Available at <http://www.iom.edu/Reports/2004/In-the-Nations-Compelling-Interest-Ensuring-Diversity-in-the-Health-Care-Workforce.aspx>
- Jones, C. B., and M. Gates. 2004. "Gender-Based Wage Differentials in a Predominantly Female Profession: Observations from Nursing." *Economics of Education Review* 23 (6): 615–31.
- Kalist, D. E. 2002. "The Gender Earnings Gap in the RN Labor Market." *Nursing Economics* 20 (4): 155–62.
- . 2005. "Registered Nurses and the Value of Bilingualism." *Industrial and Labor Relations Review* 59 (1): 101–18.
- Kalleberg, A. L., and P. V. Marsden. 2013. "Changing Work Values in the United States, 1973–2006." *Social Science Research* 42 (2): 255–70.
- Link, C. R. 1988. "Returns to Nursing Education: 1970–1984." *Journal of Human Resources* 23 (3): 372–87.
- Marrast, L. M., L. Zallman, S. Woolhandler, D. H. Bor, and D. McCormick. 2014. "Minority Physicians' Role in the Care of Underserved Patients." *JAMA Internal Medicine* 174 (2): 289–91.
- McGinnis, S., and R. Martiniano. 2008. *The Hospital Nurse Workforce in New York: Findings from a Survey of Hospital Registered Nurses*. Rensselaer, NY: Center for Health Workforce Studies, School of Public Health, SUNY Albany.
- McGinnis, S., and J. Moore. 2009. "An Analysis of Racial/Ethnic Pay Disparities among Hospital Nurses in New York City." *Policy Politics and Nursing Practice* 10 (4): 252–8.
- McGregory, R. 2013. "An Analysis of Black–White Wage Differences in Nursing: Wage Gap or Wage Premium?" *Review of Black Political Economy* 40 (1): 31–7.

- Moore, J., and T. Continelli. 2016. "Racial/Ethnic Pay Disparities among Registered Nurses (RNs) in U.S. Hospitals: An Econometric Regression Decomposition." *Health Services Research* 51 (2): 511–29.
- Muench, U., J. Sindelar, S. H. Busch, and P. I. Buerhaus. 2015. "Salary Differences between Male and Female Registered Nurses in the United States." *Journal of the American Medical Association* 313 (12): 1265–7.
- Pudney, S., and M. A. Shields. 2000a. "Gender and Racial Discrimination in Pay and Promotion for NHS Nurses." *Oxford Bulletin of Economics and Statistics* 62 (s1): 801–35.
- . 2000b. "Gender, Race, Pay and Promotion in the British Nursing Profession: Estimation of a Generalized Ordered Probit Model." *Journal of Applied Econometrics* 15 (4): 367–99.
- Rodgers, S. G. 1990. "Retention of Minority Nursing Students on Predominantly White Campuses." *Nurse Educator* 15 (5): 36–9.
- Schumacher, E. J. 1997. *Relative Wages and the Returns to Education in the Labor Market for Registered Nurses*, Volume 16. Research in Labor Economics, Solomon Polachek.
- Seago, J. A., and J. Spetz. 2005. "California's Minority Majority and the White Face of Nursing." *Journal of Nursing Education* 44 (12): 555–62.
- U.S. Bureau of Labor Statistics [BLS]. 2013. "National Employment Matrix" [accessed on August 30, 2013]. Available at <http://www.bls.gov/emp/nioem/empioan.htm>
- U.S. Bureau of the Census. 2014. American Community Survey, Public-Use Microdata File, 2013.
- Walani, S. R. 2013. "Earnings of the Internationally Educated Nurses in the U.S. Labor Market." *Nursing Research* 62 (3): 169–77.
- Xu, Y., and C. Kwak. 2006. "Trended Profile of Internationally Educated Nurses in the United States: Implications for the Nursing Shortage and Beyond." *Journal of Nursing Administration* 36 (11): 522–5.
- . 2007. "Comparative Trend Analysis of Characteristics of Internationally Educated Nurses and U.S. Educated Nurses in the United States." *International Nursing Review* 54 (1): 78–84.
- Xu, Y., H. Zaikina-Montgomery, and J. J. Shen. 2010. "Characteristics of Internationally Educated Nurses in the United States: An Update from the 2004 National Sample Survey of Registered Nurses." *Nursing Economics* 28 (1): 19–43.