



The Last Ten Years: Nurse Practitioners in the Southern United States Employed in Medically Underserved Areas.

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Introduction

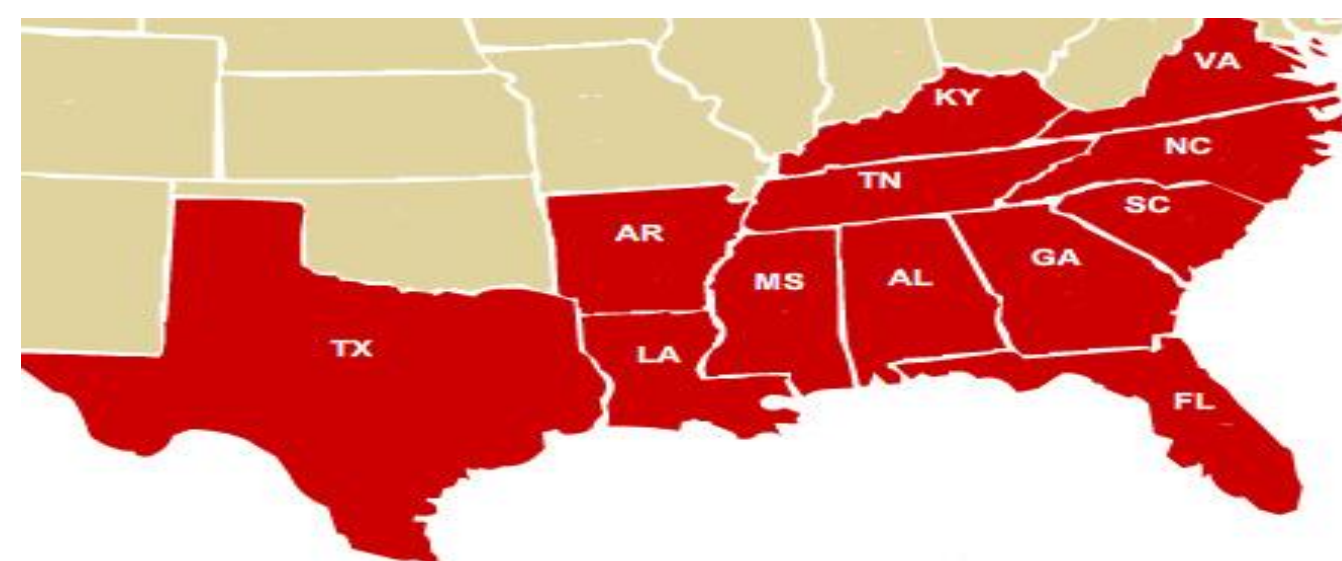
Background & Significance

The first nurse practitioner program in the United States started in 1965 with the goal of easing the effects of the physician shortages and maldistribution of health services in rural settings. Knowledge is limited regarding the NP workforce in rural and medically underserved areas of the country. According to governmental and health care institutions, the U.S. Southern Region has poor economical and health care outcome data. The region contains a highly rural located population. Collectively, the U.S. Southern states are some of the poorest, most rural, and socioeconomically deprived regions in the county. Related to these conditions are the poor healthcare outcomes such as higher morbidities, shorter life spans, and higher death rates. The South is home to many rural citizens and medically underserved areas.

Purpose

The aim of this research is to gain a better understanding of the characteristics of NPs working in the Southern U.S. More specifically, the objectives were to examine and compare the demographic and descriptive characteristics (gender, race, income, practice specialty, and employer type) of NPs working in (a) health professional shortage areas (HPSAs) versus non HPSAs and (b) rural versus urban areas during the past decade.

States in the Study



Methods

A non-experimental quantitative methodology employing three data collection sources was used in the study. The survey contained demographics and descriptive information such as education, practice specialties, employer type, and workload. To obtain face validity of the survey tool, the researchers distributed a paper version of the survey during a local professional development meeting. Twenty-five NPs were asked for their feedback regarding clarity and appropriateness of questions, logical flow of questions, and potential other questions to be asked. The subjects' names and addresses were obtained from the state boards of nursing. Most participants were recruited via postcard in both 2000 and 2010, although one state provided e-mail addresses. The postcard or e-mail provided basic information about the survey, a web address for respondents to access more details about the study, and a secure website for respondents to complete the survey online. Other data sources included the Health Resources and Services Administration that identified HPSAs and the U.S. Census Bureau to distinguish urban and rural employment settings.

The HPSAs were identified by HRSA designation and the U.S. Census Bureau identified urban areas. Zip codes from respondent survey data identifying geographic location of employment were used to link practice location with HPSAs and rural/urban designation.

Another descriptor of practice type was employer type. The researchers were interested in primary care because of the rural and HPSA variables being studied. The World Health Organization (WHO, 1978) definition of primary care was used to sort the 14 employer types into two categories: primary care and all others. The primary care employers were private practice, rural health centers, retail clinics, physician offices, community clinics, and health maintenance organizations.

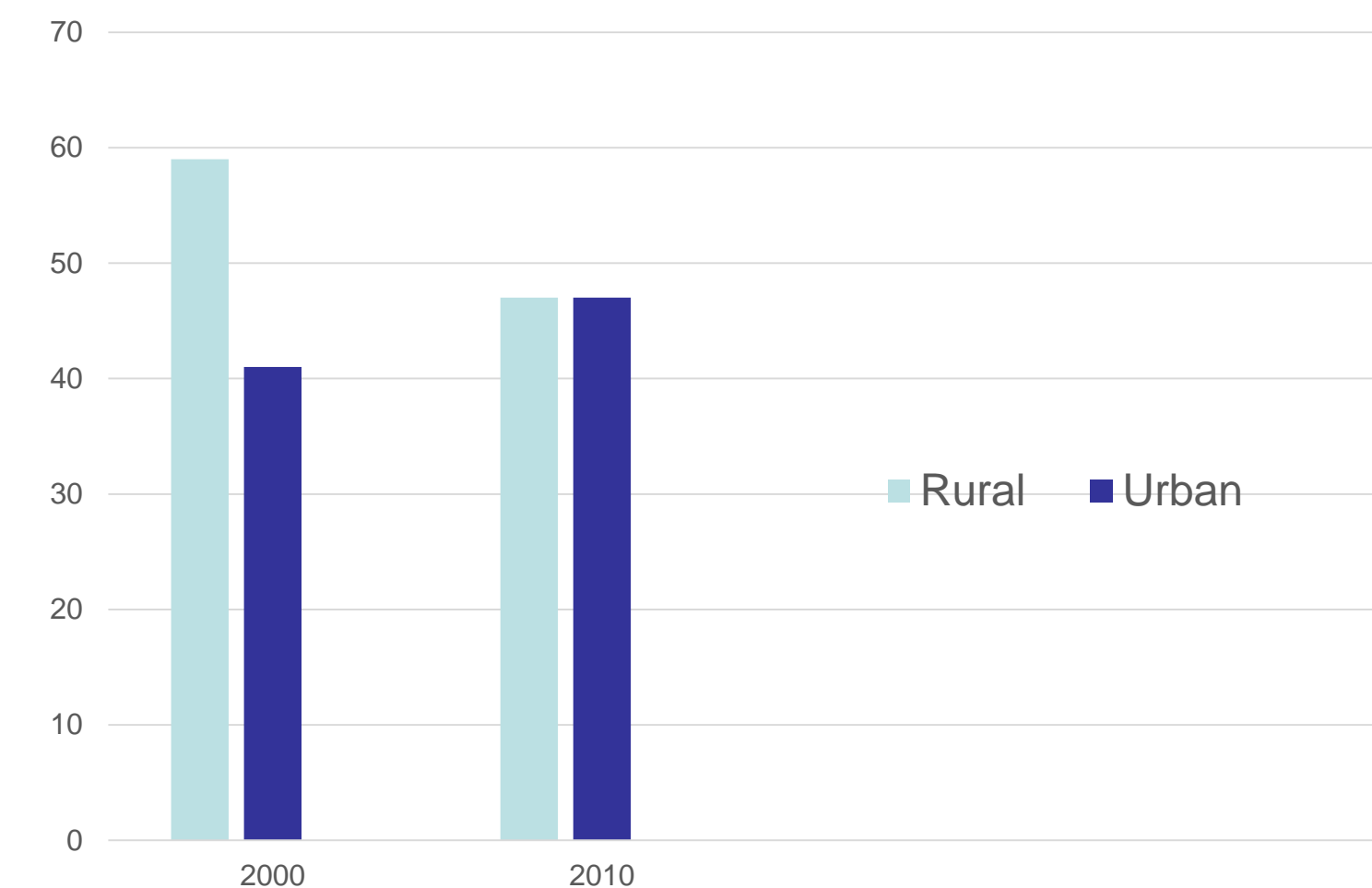
Data Analysis

Following preliminary descriptive analysis, a Chi-square analysis was conducted to assess statistical significance of associations between various response categories.

Results

Variable	Significantly Statistical Change
Gender	Female NPs were higher (93.6%) in 2000 than in 2010 (90.8%).
Education	The proportion of NPs who had a master's or doctoral degree increased from 2000 to 2010.
Practice	Family practice rather than nonfamily practice was 34.96% higher in Year 2010 than in Year 2000.
Workload	Daily number of patients seen in 2010 decreased when compared to 2000.
Employer	The proportions of private practice, managed care, and rural health centers decreased from 2000 to 2010. In contrast, there were increases in self-employed and medical centers.
Rural	The proportion of NPs working in urban areas increased from 41% to 53% over the 10 years.
HPSAs	The proportion of HPSAs increased almost 15 folds within the past decade.

Changes in Rural and Urban Employment Setting



Conclusions

Despite three decades of attempting to diversify nursing student enrollment and increase the number of graduates, racial diversity was almost non-existent within the NP population. Collectively, the majority of White NP respondents in this survey do not reflect the racial and ethnic diversity of the citizens they are serving. The small minority of NP participants in this study (Blacks 6.4% and Hispanic 1.9%) is far below the number of Blacks and Hispanics living in the region as reported by the U.S. government.

The findings of the study continue to suggest that NPs are an important workforce in the delivery of primary care services to rural and underserved populations of the Southern Region, an area of the country associated with poor economic and health care outcomes. Close to half of the reporting NPs working in the Southern states reported working in rural areas as indicated by employer zip code. This service is consistent with NP history and traditional educational frameworks, focused on providing health care services to rural and underserved populations including the South.

The U.S. continues to face a serious shortage of primary care clinicians at a time when demands for health care services are scarce and expected to rise, particularly in rural and underserved areas. The National Center for Workforce Analysis (2013) projected a national primary care provider (PCP) shortage of 6,400 FTEs in 2020. Physicians remain the dominant PCP workforce but will decrease from an overall 77% of PCPs to 70% in 2020. The Center reported NPs as the 2nd leading primary care provider (55,400) and predict an increase to 72,000 in 2020. Compounding the national PCP shortage are the many regional shortages.

While NPs are a valuable asset to primary care services, unfortunately their ability to practice to the full extent of their educational preparation is often limited by unnecessary restrictions, including such barriers as equitable reimbursement and prescriptive authority.