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Public Perceptions of Nursing Careers: The Influence of the Media and Nursing Shortages

EXECUTIVE SUMMARY

- The high public regard for nurses has not necessarily translated into an adequate supply of individuals who are willing to be nurses.
- The expected future demand for nurse labor challenges us to look more closely at the public's perceptions of nursing and nursing careers, and consider how they are shaped by personal experience, media messages, and socio-demographic factors.
- As part of ongoing efforts to examine factors shaping the future of the nursing workforce, a national survey of Americans was conducted to probe attitudes toward the nursing profession and their experiences with nurses.
- The data in this national survey of the public about nursing demonstrate that the nursing profession is highly respected and that the vast majority of the general public would recommend nursing careers to qualified students.
- If the profession is so well thought of and so highly recommended, why are there persistent concerns that not enough people are becoming RNs to avoid or at least slow down the development of future shortages?
- A prolonged and persistent effort is needed to educate people about nursing careers, to stimulate the expanded production of nursing faculty, and to bring creative approaches to financing nursing education and workforce improvements to convert the large number of seriously interested candidates into the nursing profession.

HE PUBLIC'S LONG-STANDING esteem for registered nurses (RNs) is well documented in public opinion polls. Nurses and physicians both rate highly with the public in trended national survey questions about trusted professions, prestigious occupations, and "honesty and ethical standards" of the professions (Gallup Organization, 2007; Harris Interactive 2006, 2007). The high public regard for nurses, however, has not necessarily translated into an adequate supply of individuals who are willing to be nurses. The expected future demand for nurse labor challenges us to look more closely at the public's perceptions of nursing and nursing careers, and consider how they are shaped by personal experience, media messages, and socio-demographic factors.

The best available evidence suggests that, barring a major reorganization of health care delivery in the next generation, our society

will need more nurses. Although the current nursing shortage that began in 1998 has begun to ease in recent years, projections of the future supply of RNs consistently point to a substantial slow-down in the growth in the number of RNs in the workforce over the next decade. Given current federal government projections of steady and strong growth in the future demand for RNs as the Baby Boom generation ages, shortages of RNs are projected. The most recent projections suggest that a shortage of RNs will develop midway into the next decade and that the deficit will grow to as many as 285,000 RNs by 2020 (Buerhaus, Staiger, & Auerbach, 2008). A shortage of this size would be nearly three times larger than any shortage experienced in the United States during the past 50 years. If this future shortage materializes, it could cripple access, quality, and safety to millions of Americans. Unfortunately, assum-

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ing that there is no let up in the demand for RNs, by 2025 the nursing shortage is projected to reach 500,000 RNs. The impact of a shortage of this size is difficult to comprehend.

Promoting a stronger convergence between the public's esteem for and interest in the nursing profession is also important in light of the changing demographic makeup of both the population and the nursing workforce. As the composition of our society has changed, growing older as 78 million American Baby Boomers age, the demographic composition of the workforce nursing has changed. A considerable influx of second career workers has changed the face of the nursing student, but not the face of the active workforce. In particular, the nursing workforce has become older, with the average age of employed RNs at 43.7 years in 2007 (Buerhaus et al., 2008). Projections suggest that by 2012, the largest age group of the RN workforce will be over the age of 50 years. The workforce has become more racially and ethnically diverse, in part through substantial growth in the proportion of foreignborn RNs. Still, the profession is disproportionately comprised of non-Hispanic whites (79%) and females (91% of the current workforce).

Efforts to inform the public about nursing careers and nursing shortages have not always been free of controversy. Some have challenged the images of nursing portrayed in the popular media as well as in recruitment campaigns, suggesting that these images are detrimental to the image of the profession (Gordon, 2005; Summers, 2006). Yet, there is remarkably little available national data in the United States on the public's perceptions of nursing and the factors that shape those perceptions. How is the nursing profession viewed in comparison with other career options? Does the public know of recent nurse labor shortages? What news and advertising messages

resound with the public, and with the diverse population of people of different ages, gender, race, and ethnicity who might form the future nursing workforce? As part of ongoing efforts to examine factors shaping the future of the nursing workforce, we conducted a national survey of Americans to probe attitudes toward the nursing profession and their experiences with nurses. In particular, we examine the influence of societal demographics, perceptions of the nursing shortage, and media influences on perceptions of nursing careers.

METHODS

The data reported in this article come from two surveys. Some data were drawn from the National Survey of Registered Nurses, a national mail survey of a random sample of RNs that we conducted in April 2006 to June 2006. Because elsewhere (Buerhaus et al., 2007) we have reported many findings from this survey, including a description of the survey methodology, we do not describe details about how the RN survey was conducted. Rather, we focus here on describing the 2007 survey of the American public.

The National Survey of the Public about Nursing is a survey of the public about the value of nurses in the lives of Americans. This survey investigates how nursing careers are viewed by the public and what nurses mean to the public. The interviewing was conducted by ICR in Media, PA. All interviews were conducted by telephone using the Computer Assisted Telephone Interviewing system from March 8 to April 15, 2007 among a representative sample of 1,604 respondents age 18 and older. Given the high degree of interest in increasing workforce diversity and in measuring racial and ethnic disparities in health care, a disproportionate stratified sampling design was used to oversample African American and Hispanic or Latino respondents; interviews were conducted in English and Spanish. In all, a total of 299 African-American and 319 Hispanic respondents were surveyed.

The margin of error for total respondents is \pm 2.5% at the 95% confidence level. For the minority sub-samples, margins of error are +/- 5.7% for African Americans and +/- 5.5% for Hispanic and Latino respondents. A disproportionate stratified sampling design was utilized, dividing telephone exchanges into strata based on the prevalence of African American and Hispanic/Latinos in geographic regions of the United States. The overall design effect of this stratification scheme was 1.2. Design effects are accounted for in tests of significance.

Following completion of interviews for each survey area, weights were developed to account for varying probabilities of selection due to the stratification scheme as well as sample balancing to reflect current population estimates by age, sex, race/ethnicity, education, and geographic stratification based on 2006 U.S. Census Current Population Survey estimates. Applying standards developed by the American Association for Public Opinion Research, an overall response rate for this study was calculated at 55.5%.

RESULTS

Impressions of Nursing: First Words

We asked the general public to tell us the first words that come to mind when they hear the term "registered nurse." This same question was asked of nurses in the National Survey of Registered Nurses conducted in 2006. There is considerable variation in the responses of both groups. Table 1 shows the comparative responses of the public and nurses. Similar proportions (about 1 in 5 respondents) used forms of the word "care" or "compassion" in their responses. Nurses (23%) were more likely to use the word "pro-

Table 1.
What Are the First Words That Come to Mind When You Hear the Term "Registered Nurse?"

	Public (2007) n=	Registered Nurses (2006) n=
First Words	(Percentage)	(Percentage)
(Highly) knowledgeable, qualified, skilled	17	6
Care, caring, empathy, compassion, caregiver, caretaker	16	20
Hardworking, long hours, stress, overworked	12	5
Help, helping, helpful, helper	9	1
Professional	8	23
Education, highly educated, smart	7	4
Good, good person, great	7	0
Dedicated, loyal	6	3
Trust, confidence, dependability, honest, trustworthy	5	4
Medical facilities (hospitals, doctor's office, clinic, nursing home, etc.)	5	1
Health care, health care provider/professional, health	5	0
Medical profession, medical care, medicine	4	0
Certified, licensed, registered, trained	4	3
Doctor, assistant to doctor	4	0
Underpaid	4	1
Person specified who is a nurse	4	1 (me, myself)
Friendly, nice	2	0
Important, necessary, valuable	2	0
Sick, illness, sick people	2	0
Good job, good career	2	0
Girl, female, woman	1	1

fessional" than were members of the public (8%); however, the public acknowledged the "skill," "knowledge," licensure, and certification of nurses. The public was more likely to say that nurses are "overworked" and to describe nurses using the word "help" or "helper."

Nurses in Media

Images of nursing are shaped in part by personal experience with nurses, but also by exposure in the media. Substantial proportions of the general public watch television shows (60%) and news stories that include nurses or have seen advertisements about nursing (see Figure 1). In general, the

Figure 1.

Media Exposure and the Public's Respect for Registered Nurses, 2007

	Percent who Saw in Past Year (Percent)	More Respect (Percent)	Less Respect (Percent)	Made No Difference (Percent)
News: RNs help in disaster	66	75	0	24
Scrubs, House, ER, Grays Anatomy	60	28	5	66
News: RN shortage	62	51	1	47
Advertisements about nursing	47	38	1	60
News: RNs important to patient safety	36	64	2	33
News: RNs on strike	22	38	11	49

Table 2.

Public and Registered Nurse Perceptions of Nursing Shortage

Perceptions of Shortage	Public (2007)	RNs (2006)
Think there is a shortage Very serious Somewhat serious Not serious	61% 35% 60% 5%	81% Think supply of RNs is less than demand34% Much less47% Somewhat less
Main reasons for shortage	 56% Salary and benefits 17% Faculty shortage 15% Difficult hours 11% Poor working environment 8% Nursing not respected 	 30% Salary and benefits 27% Faculty shortage 25% Undesirable hours 16% Negative perception of health care work environment 33% More career options for women 12% Lack of students
Don't think there is a shortage	26%	16% Think supply is about equal to demand,3% Think supply is greater than demand
Don't know	13%	0

medical television shows we inquired about were more likely to be seen by women (64%) than men (55%), and by people under 65 years of age (66% 45 and under, 60% 46-64) compared with people over 65 (40%). Hispanic/Latinos were less likely to watch these shows (38%) compared with Whites or Blacks (63% and 62% respectively). Viewers compared to non-viewers were more likely to have considered a career in nursing (69% vs. 57%), as were those who reported they or a member of their family worked in health care compared to those not working in health care (73% vs. 58%).

Respondents were also asked if watching television, news stories, or advertisements had any impact on their respect for nurses. News stories about RNs working in disaster situations, such as Hurricane Katrina, generated substantial public respect for nurses (66% had seen these stories, 75% said it made a positive impact). Similarly, news stories about the importance of nurses to patient safety were reported by a majority of the public to have a positive impact on their respect for the profession. We observed interesting demographic differences in response to questions about whether seeing these stories led to more respect for nurses. The elderly (76%) were significantly more likely to say stories about patient safety led to more respect for nurses than were respondents under 65 (61%), and 81% of Hispanics thought patient safety stories gave nurses more respect compared to 63% of Whites and 61% of Blacks. The public reported that television shows and advertisements, as well as negative news stories about strikes, were more likely to have no impact than a positive or negative impact on their respect for nurses.

Nursing Shortage

Among the general public, 62% reported seeing news stories about nursing shortages in the year prior to the survey, and 61% of the public believe there is a nursing shortage in their community. In 2006, a year earlier than the public survey, 81% of nurses believed there was a nursing shortage in their community. Comparative perceptions of the shortage between nurses and the public, as well as reasons for the shortage, are shown in Table 2. The public is more likely to attribute the shortage to issues of salary and benefits and less likely than nurses to identify faculty shortages or difficult working hours.

Perceptions of Nursing Careers

The public was asked about nursing careers in several different types of questions, including positive/negative perceptions of nursing and other careers and professions, comparative perceptions of pay for nursing and other careers, personal experience considering nursing as a career, and the recommendation of the career to others.

Positive/negative view of careers. We measured public views of 13 different careers, including nursing, using a response scale of "very positively, somewhat positively, not very positively, not at all positively" (see Figure 2). Nursing, along with several other health/science careers, was viewed positively as a career choice with 70% of the public rating nursing "very" or "somewhat positively." Medicine was ranked positively by 67%. Teaching was the only profession rated more positively by those we surveyed, achieving a 74% positive rating. Bivariate analyses of career ratings show no significant difference in positive ratings of nursing careers by race, ethnicity, age, age, hospitalization, or viewing of TV shows or advertising about nursing during the year prior to the survey. Women were significantly more likely than men to rate nursing

Figure 2. Public Perceptions of Careers, 2007

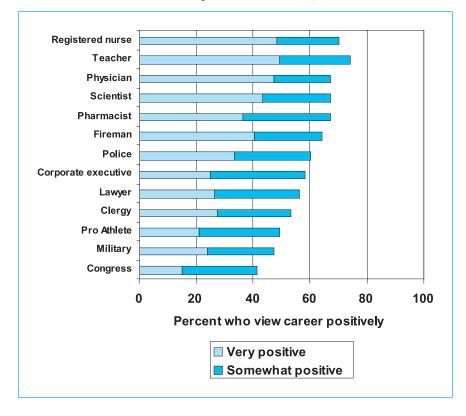
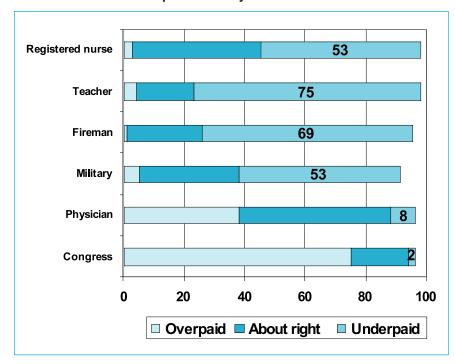


Figure 3.

Public Perceptions of Pay for Selected Careers



positively (74% vs. 64%), as were those who are employed in health care versus non-health workers (80% vs. 68%), and people who perceive there to be a nursing shortage versus those who do not (73% vs. 62%).

Overpaid/underpaid. Perceptions of career compensation were measured with a scale of "overpaid, underpaid, or about right" for the six careers shown in Figure 3. More than half of Americans believe that nurses are underpaid, although nearly half also indicate they think nurses are paid about right or too much. Of the careers we asked about, the public was more likely to believe that teachers and firefighters are underpaid than believe the same of nurses. There are significant differences by gender (female 55%, male 48%), by age group (people 45-64 are significantly more likely to think nurses are underpaid compared with people either 18-35 or over 65), and by race (White 55% vs. Hispanic 41%). People who believe there is a nursing shortage are more likely than those who do not to perceive that nurses are underpaid (58% vs. 42%). Of interest, there was no difference between health workers and nonhealth workers. Additionally, people who have seen health television shows are more likely to think nurses are underpaid than people who have not seen such programs (58% vs. 45%), but there was no difference among those who have seen advertisements about nursing and those who have not.

Considered nursing career. Many Americans have considered a nursing career and/or have discussed a career with someone else that was considering it (see Table 3). One in four Americans (25%) indicates that they personally have considered a nursing career (15% of Americans have considered it seriously, 8% not as seriously, and 2% actually are nurses). Among those who did not pursue a career in nursing, the rea-

sons are varied including conflicts of time, commitment, and financial or educational requirement barriers. One in three Americans surveyed (32%) discussed nursing with someone else who was considering the career, whether a family member or friend. Among those who considered the career seriously for themselves, significant differences were observed by gender

(more women vs. men), age (young vs. old), income (low income vs. higher), race and ethnicity (minority vs. White). Among those who discussed the career with others, personal experiences of illness were most frequently a factor (46%), though guidance/career counselors (27%), and media (24% news, 20% television shows, 17% advertisements) were also the stimuli for many discussions.

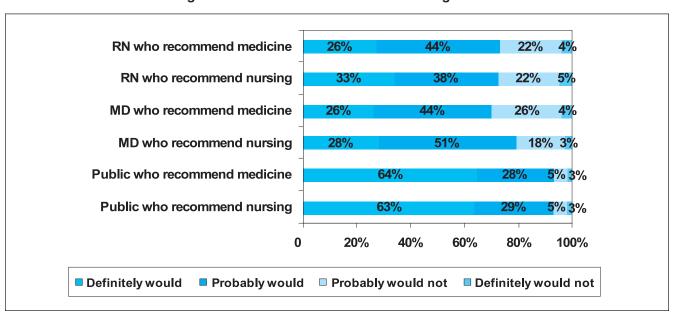
Table 3. Interest in Nursing Careers, 2007

Interest in Nursing	Public (Percentage)
Considered career in nursing Yes, seriously Yes, not seriously I am already a nurse No	25 15 8 2 75
Considered career, not currently a nurse Did not pursue due to lack of ambition/alternative interest Did not pursue: marital/family commitment Did not pursue: high/difficult education requirements Did not pursue: difficult working conditions Did not pursue: high education cost Currently studying to be a nurse	23 6 3 3 2 1
Ever discussed a career in nursing with family member/friend who was considering a nursing career Never discussed a career in nursing with family member/friend	32 67

Recommend nursing to others. In our various surveys of health professionals, we asked about the willingness to recommend pursuing nursing and medical careers. Figure 4 shows a comparison of the public's recommendations as compared with physicians and nurses surveyed in the 2005-2006 period. The public is significantly more likely to recommend either nursing or a career in medicine to qualified students than are either doctors or nurses. Several bivariate relationships between key demographics and public recommendations of nursing and medical careers were explored. African-American or Black respondents were significantly more likely to advise nursing careers than Whites (94% vs. 89%), middle-aged respondents were more likely than elderly respondents to recommend both careers, and people who watch television shows (such as ER, Scrubs, Grey's Anatomy) were more likely to recommend both careers as compared with people who did not watch these programs.

Figure 4.

Given What You Know About Health Care, How Likely Would You Be to Advise a Qualified High School or College Student to Pursue a Career in Nursing or Medicine?



DISCUSSION

The data in this national survey of the public about nursing demonstrate that the nursing profession is highly respected and that the vast majority of the general public would recommend nursing careers to qualified students. Indeed, one in four Americans has personally considered a career as a nurse, and one in three know someone else who has. The public sees nursing as combining knowledge, skill, and professionalism with caring. These data provide perspective on the public image of nursing. The data also point to a divide between nursing professionals and the public. Health professionals are significantly less likely to "definitely" or "probably" recommend careers in nursing or medicine than is the general public. Nevertheless, a nursing shortage persists, and major future shortages in the United States and abroad are projected. If the profession is so well thought of and so highly recommended, why are there persistent concerns that not enough people are becoming RNs to avoid or at least slow down the development of future shortages?

Our prior surveys point to issues in work environment and respect as major obstacles for nurses in recommending their career to others. Still, one wonders about the environment in which interested candidates might decide not to become a nurse in the face of discouraged nurses. The single biggest influence on conversations about nursing careers is personal experience with nurses as a patient or family members. What are those patients and family members seeing and hearing from nurses about that work environment? Clearly the public is inspired by the positive work that nurses do to provide skilled, caring assistance to those in ill health. These interactions represent a significant opportunity for nurses to inspire the next generation of nurses.

While a majority of the public

(61%) perceived a nursing shortage in 2007, that percentage is significantly less than the 80% of nurses who, a year earlier, said that nursing supply is less than demand. While nurses themselves have become less likely to attribute nursing shortages to salary and benefit issues, and consistently point to working conditions and faculty shortages, the majority of the public who perceive shortages still sees the main obstacle as salary. Nurses are seen by a majority of the public (53%) as being underpaid, as compared with only 8% who think physicians are underpaid. Differences between the public's and nurses' understanding of the causes of nursing shortages are not surprising. Nurses are closer to the realities of the labor market and issues in nurse training and education. To the extent that public perceptions inform career interest decisions, it is important to address public perceptions, especially if they are incomplete or inaccurate.

Some nurses and nurse researchers have challenged the role of the media in harming the image of nurses (Gordon, 2005; Summers 2006). The data in this study lead us to the conclusion that while people are exposed to nurses in a variety of media, this exposure is more helpful than harmful. News stories about nurses helping during disasters, about the importance of nurses to patient safety, and about nurse shortages are seen by the public to have a positive impact. People who watch television shows about nurses are more aware of nurse shortages and hold nurses in high esteem. Television advertisements about nursing careers are most likely to reach the young and minorities, and have stimulated discussions about careers, but are not associated with negative images of nursing in our analyses (Donelan, Buerhaus, Ulrich, Norman, & Dittus, 2005). While personal experience is the largest factor stimulating discussions of nursing careers, media

and advertising both play a role for a substantial share of those who consider the career.

The public is very enthusiastic about nursing careers, and many people have considered them, but many have also chosen other careers for a variety of reasons. Among those who have considered the career seriously, salary does not appear to play a major role in decision making, rather a variety of conflicts of time and commitment are cited. Not surprising, there is a persistent gender difference in who considers nursing as a career, and in perceptions of nursing careers and compensation. Women are significantly more likely to see the work as difficult and as underpaid. Men are less likely to see nursing as a career for them.

As we move to the future, we must consider strategies that engage the public to move beyond high regard for nursing and into careers. Efforts to expand the capacity of nursing education programs and continue efforts aimed at increasing public awareness of the career advancement and salary opportunities in nursing are all important.

Many Americans have some interaction with health care services in the course of the year. These interactions provide critical windows of opportunity for patients, family members, and friends to become aware of the professionalism and skill required of a registered nurse. For many Americans, however, interactions with hospital-based nurses may be infrequent. That is especially true for young, healthy people who are considering careers. For this group, print and broadcast media are major sources of information. News, television dramas, and advertising all play a role in reaching this audience. But we can see in these data that the media in which nurses are typically viewed are more likely to have a positive influence (or no influence) on perceptions of nurses than they are to have a negative influence on their

respect for nurses. Thus, the media will continue to be an important tool in engaging the population to consider a nursing career. Print and broadcast news stories about the work of nurses in responding to crises and in enhancing patient safety have a positive impact on public perceptions. Advertisements and media stories also play an important role in starting conversations about nursing careers and draw an already interested audience of young people. Positive stories from nurses themselves about the rewards of the profession will have an important impact on patients and the public.

It is rare that the public is surveyed about nurses in a routine and comprehensive way, whereas national surveys about medical care are commonplace and widely reported in the press and in major health and medical journals (Balkrishnan, Dugan, Camacho, & Hall, 2003; Chu-Weininger & Balkrishnan, 2006; Tai-Seale & Pescosolido, 2003). More routine and systematic data collection about nurses is needed and the resultant data will help improve dramatically the design and analysis of interventions to increase and improve nursing recruitment, especially among the largely untapped population of men in the U.S. labor pool. Some 15% of U.S. adults we surveyed indicated that they have seriously considered a nursing career and not pursued it, representing approximately 1.8 million potential workers, more than enough to fill the nation's labor needs for nurses in the next 20 years. A prolonged and persistent effort is needed to educate people about nursing careers, to stimulate the expanded production of nursing faculty, and to bring creative approaches to financing nursing education and workforce improvements to convert the large number of seriously interested candidates into the nursing profession.

Concluding Comments

To be sure, results of this study provide a measure of comfort and satisfaction to the nursing profession. Over the past several years, we have conducted a number of studies about many facets of the nursing profession and the data from this study form only part of the picture of the state of the nursing profession in the United States. Adding the results described here to those of our other studies, we see a nursing profession that is much stronger today than it was only a few short years ago. Many improvements in the workplace environment have, and are continuing to occur, job and career satisfaction have grown markedly, interest in nursing has increased, the private sector has come forth with large amounts of funding to support the profession, evidence of the impact of nursing on patient care quality and safety has grown tremendously, projections of the future supply of RNs have improved (but remain very worrisome), and prominent organizations and individuals focusing on improving the quality of health care have not only grown in influence in recent years, but its leaders have come to realize that without a well-educated and adequately sized nursing workforce their agendas will not be accomplished. The nursing profession has many new supporters, in addition to the admiration, trust, and respect of the public, who want to see these improvements continue and strengthen.

Finally, as we ponder these successes and positive momentum now apparent in the nursing profession, we confess to harboring a concern that there is still no national commitment to ensure that the nursing workforce will be ready to meet the challenges that await the health care system in the next decade, particularly as Baby Boomers retire and consume more resources on health care. Today, there is still no national workforce strategy nor is there any assurance

that data will be routinely gathered, analyzed, and interpreted to allow us to know whether and how the state of the nursing profession is getting better or falling behind. Implementing an overall workforce strategy, supported by timely and relevant data collection function, is essential to understand and hopefully maintain the public's support of the nursing profession, and provide for the continued strengthening of the nursing profession.\$

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