A Survey of Foreign-Educated Nurses: Workforce Experience

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Abstract

The United States (US) is currently undergoing a nursing shortage. As a result, many health care agencies in the US and around the world are turning to nurses educated in other countries to fill vacant positions. Despite the increased utilization of foreign-educated nurses, there is a lack of understanding of how these nurses transition into the US workforce. This study describes foreign-educated nurses who work in Illinois and the factors that affected their transition into the US professional nursing workforce. By focusing on nurses who were educated abroad and work in Illinois, this study will help Illinois nurses and Illinois nursing employers to better understand the transition process foreign-educated nurses undergo. An original questionnaire, entitled “A Survey of Workforce Experience of Foreign-educated Registered Nurses,” was developed based upon a literature review and two related studies. This tool was used to survey 18 foreign-educated nurses working in Illinois in two agencies. Results demonstrated that the demographic and workforce characteristics of the foreign-educated nurses working in Illinois are similar to national foreign-educated nurse data. Most nurses in this study indicated they encountered limited communication problems and were respected.
A Survey of Foreign-educated Nurses: Workforce Experience

Nursing shortages impact every country around the world, including the United States (US). As the nursing shortage has become more severe, US employers have been forced to look for new ways to improve staffing, including utilizing nurses educated in other countries. Furthermore, nursing has become a more transferable career due to increased global communication and travel. Many nurses are drawn to the US due to the opportunities available for increased pay rates, better educational, career advancement, and career development. These nurses have become a vital part of the US nursing workforce.

As the demand for nurses and the utilization of foreign-educated nurses increases, it will become progressively more important to have a thorough understanding of these individuals. Greater understanding will allow employers and nurses to better assist the foreign-trained nurse. To do this, we need to ask several questions: Who are these nurses? What affect does the utilization of foreign-educated nurses have on the Illinois nursing workforce? Do foreign-educated nurses experience communication difficulties that impact their ability to perform their jobs? Are foreign-educated nurses and US trained nurses treated equally in the workplace? What methods of adjustment are useful in assimilating to the US nursing workforce?

Background and Significance

Foreign-educated nurses have a unique role in the global nursing workforce. Using nurses educated in other countries helps alleviate acute shortages in the hiring countries. The foreign nurses taking part in this practice benefit by gaining professional development as well as financial benefits (Withers & Snowball, 2003). Since World War II, nursing immigration has been on the rise in the United States (Davis & Nichols, 2002).
Although the nursing shortage is a global issue, nurses choose to travel to the United States because of more diverse job opportunities and higher pay. The rate of foreign trained nurses entering the United States nurse workforce has been increasing faster than the rate of new nurses educated in the US since 1998 (Aiken, Buchan, Sochalski, Nichols, & Powell, 2004). While previous shortages drew 3,000 to 4,000 foreign-educated nurses, the current nursing shortage has drawn over 66,000 new foreign-educated nurses to the United States between 2001 and 2003 alone. Between 1994 and 2001, the number of foreign-born RNs increased an average of 6.0% each year, compared to the 1.5% growth of the United States RN population. The growth of the foreign-born RN population averaged a growth of 12.5% from 2001 to 2003. In the same time period, the US born nursing population increased only 3.9% (Buerhaus et al., 2004).

There are, however, changes occurring in the foreign nurse workforce. Throughout the 1980s, Filipino nurses represented about 75% of all foreign nurses in the US workforce. Since then, the percentage of Filipino nurses has been dropping as the diversity of immigrant nurses has increased. In 2000, Filipino nurses made up 43% of the foreign nurse workforce (Brush, Sochalski, & Berger, 2004), and are still the largest portion of nurses immigrating to the US (National Council of State Boards of Nursing, 2005). The majority of foreign educated nurses in the US come from the Philippines, the United Kingdom, India, and Nigeria where the culture and the practice of professional nursing are very different from the practice of nursing in United States (Davis & Nichols, 2002).

Nurse immigration is of particular interest in Illinois as it is one of the top five states to receive foreign-educated nurses in the US (Commission on Graduates of Foreign Nursing Schools [CGFNS], 2002). The exact number of Filipino nurses in Illinois is unknown. However,
Filipino nurses are included in the 7.7% of licensed nurses in Illinois who identify themselves as Asian or Pacific Islander racial or ethnic background (Baldwin & Metcalfe, 2001). No further data specific to the foreign-educated nurse population in Illinois is available.

Although the research on the foreign-educated nurse population is limited in the United States, several studies have been done in comparable English-speaking countries, Canada, Australia, and the United Kingdom, to better understand the experiences of these nurses. Many of the obstacles foreign-educated nurses face stem from cultural differences in nursing practice, societal values, and cultural norms (DiCicco-Bloom, 2004). In England, researchers found international nurses often reported their competency was challenged and they were placed in less important positions (Allan & Larsen, 2003). Decreased level of responsibility, poor career opportunities, and inadequate orientation have been identified as instrumental in 60% of Filipino nurses verbalizing their intent to leave the United Kingdom (Buchan, Jobanputra, & Gough, 2005). Cultural differences and professional disparity could create similar obstacles to foreign-educated nurses practicing in the US workforce.

The Problem

The research done to investigate the impact working in the US has on a foreign-educated nurse is limited. Further, none of the studies done in the US focused on foreign-educated nurses working in Illinois, although 26 respondents in a large national survey of foreign-educated nurses were from Illinois (CGFNS, 2002). Without proper support and instruction, foreign-educated nurses in Illinois may face many of the challenges reported in other countries resulting in the inability to fulfill the roles they were hired to fulfill. To help support the nurses who are vital to fulfilling nursing staffing needs in Illinois, it is important to understand their views and experiences. The purpose of this study is to describe foreign-educated nurses who work in
Illinois and investigate the factors that affect their transition into the professional nursing workforce.

Literature Review

While the research regarding foreign-educated nurses is limited in the US, there are many studies in the global nursing community that address this subject. Five themes are found in the existing literature: demographic characteristics, roles of foreign-educated nurses in the US workforce, communication difficulties, issues relating to respect, and issues related to transitioning into the workforce. Reviewing the existing research and other related articles provides data for comparison and identifies vital issues in this population.

The US Department of Health and Human Services (2005), using a large probability sample, reported that there were 2,909,467 nurses working in the United States in March 2004. Three and a half percent of registered nurses (RNs) received their education in another country, amounting to 100,800 nurses (US Department of Health and Human Services [DHHS], 2005). Of these nurses, 50% were educated in the Philippines, 20.2% were educated in Canada, and 8.4% were educated in the United Kingdom. An additional 0.3% of nurses received their education in US territories (DHHS, 2005). In 2002, the CGFNS study showed that only 41% of foreign-educated nurses in the US workforce received their education in the Philippines while 26% received their education in Canada. However, according to Xu and Kwak (2005), 38.9% of foreign-educated nurses in the US are from the Philippines, 17.5% were from Canada, 10.9% were from India, and 8.9% were from the United Kingdom.

In most states, foreign educated nurses must apply to the CGFNS for education verification and take the CGFNS exam prior to taking the NCLEX. According to Davis and Nichols (2002), 73% of CGFNS test takers between 1978 and 2000 were from the Philippines.
In 2000, 71% of CGFNS applicants were from the Philippines (Davis & Nichols, 2002). The majority of foreign-educated nurses live in California, Texas, New York, Florida, and Illinois (CGFNS, 2002).

**Demographics**

As the current US nursing workforce ages, more nurses approach retirement which in turn increases the severity of the nursing shortage. As a growing portion of the nursing workforce, the age of foreign-educated nurses has the potential to affect the workforce as age is a dominant factor in determining length of employment. The aging of the US nursing workforce is evident by national data. In 1996, DHHS reported the average nurse in the US was 42.3 years old. The average age of a US nurse was 45.2 years old in 2000 and 46.8 in 2004 (DHHS, 2005). Baldwin and Metcalfe (2001) found that the average age of nurses in Illinois is 45.9 years, which was slightly higher than the national average at the time of the study.

Xu and Kwak (2005) preformed a secondary analysis of foreign-educated nurses on the 2000 National Sample Survey of Registered Nurses by the Health Resources and Services Administration. The original study reported a 72% response rate and included 35,579 respondents, of which 1,300 (3.4%) identified themselves as a foreign-educated nurse. This analysis found that although the distribution of age was different from their US trained counterparts, the average age of foreign-educated nurses was 45.0 which was only slightly lower than the US trained nurses who were an average of 45.1 years old (Xu and Kwak, 2005). A demographic survey of Filipino nurses residing primarily in the southern and the southwestern US indicated that Filipino nurses were an average of 48.1 years, suggesting that this population may be older than their US educated counterparts. (Berg, Rodriguez, Kading, & DeGuzman, 2004). In contrast, a national study by CGFNS (2002) of a more heterogeneous sample reported
foreign-educated nurse to be almost 10 years younger than US nurses, averaging 36 years. A possible reason for the younger age in the last study could be that the researchers used a database of foreign-educated nurses who took the NCLEX between 1997 and 1999. It is also a possibility that younger nurses were more willing to participate in a telephone survey.

The 2001 CGFNS study has several limitations. This study does not include foreign-educated nurses who took the National Council Licensure Examination for Registered Nurses (NCLEX-RN) in the states that do not require CGFNS certification prior to taking the exam. This data is also limited as it targeted nurses who took the NCLEX-RN in a three year time period, which would exclude any nurses who received their licensure prior to the study. Response rate for this study was also extremely low. Of the 6,000 names randomly selected to participate in the study, only 619 (10%) participated in the first round of interviews. Of these, only 394 (64%) were employed in nursing and 277 (45%) were licensed foreign nurse graduates. After a second round of interviews was conducted, the total number of licensed foreign nurse graduates was 461 (58% of the study sample) and the total un-licensed foreign nurse graduates was 328 (42% of the study) bringing to total number of participants to almost 800 foreign nurse graduates. This study group represented 13% of the original participant list.

Both male nurses and foreign-educated nurses are minorities in the US nursing workforce. Although nursing is still a female dominated field, the percentage of males in nursing is on the rise. In 2000, 5.4% of US nurses were male while 5.7% of US nurses were male in 2004 (DHHS, 2005). By contrast, 4.1% of RNs are male in Illinois (Baldwin & Metcalfe, 2001). The secondary analysis of the DDHS data indicated that 6.2% of foreign-educated nurses in the US were male (Xu and Kwak, 2005). CGFNS (2002) reports that 7.4% of foreign-educated nurses are male while Berg et al. (2004) report that 6.4% of their study are
male. In both cases, the percentage of males in the foreign-educated nurse workforce is higher than the percentage of males at both national and state level. The male may be treated differently than their female or US educated peers. Nurses that are both male and foreign-educated offer a desirable combination for employers as diversity in the nursing profession becomes an increased issue.

Within the nursing profession, there are many levels of nursing education available. For entry-level practice, there are three primary degrees: diploma, associates, and baccalaureate. According to the 2004 DHHS study, 59.9% of foreign-educated nurses were estimated to have an education at baccalaureate level or higher while only 47.2% of US educated nurses are educated at a baccalaureate level or higher. This finding has been consistent over time. According to Davis and Nichols (2002), 71% of foreign-educated nurses applying for US licensure between 1978 and 2000 had a baccalaureate degree. Of the Filipino nurses included in the 2004 study by Berg et al., 73.8% had a bachelor’s degree in nursing, 16% had a master’s degree, and 1.8% had a doctoral level degree.

Roles of Foreign Nurses

While the majority of US nurses still work in the hospital setting, the proportion has declined from 59% in 2000 to 56.2% in 2004 (DHHS, 2005). The latest study in Illinois reports 57.6% of nurses are employed by hospitals (Baldwin & Metcalfe, 2001). No trend data is available for foreign-educated nurses in Illinois, but other studies have found a much higher percentage of these nurses to be employed by hospitals. Xu and Kwak (2005) reported that 72% of foreign-educated nurses work in the hospital setting while others reported that 71% to 84% of respondents worked in a hospital setting (Berg et al., 2004; CGFNS, 2002).
In the hospital setting foreign-educated nurses are found most frequently in medical­surgical or adult health settings (37%- 38.3%) followed by critical care (23%) (CGFNS, 2002; Xu & Kwak, 2005). These nurses make up an important component of the workforce in hospitals where the US workforce shortage is most acute (CGFNS, 2002).

The overwhelming majority of foreign-educated nurses labeled themselves as staff nurses (76.7%-85%) while approximately 62% of US educated nurses described themselves as staff nurses (CGFNS, 2002; Xu & Kwak, 2005). Foreign-educated nurses were less likely to be in management positions than their US educated counterparts (9.2% vs. 14.2%). However, at least 78% reported that they supervise others at work (Berg, et al., 2004). Most of the foreign­educated nurses (84.7%) in the study by Berg et al. (2004) indicated being in practice for more than 10 years. Similarly, in Illinois, 77% of nurses have 10 or more years of experience (Baldwin & Metcalfe, 2001).

The role of the nurse varies from culture to culture, particularly with regard to the delivery of patient care and professional responsibilities. In two qualitative studies of foreign­educated nurses working in the UK, researchers found that cultural differences contributed to differences in the foreign nurses’ delivery of care. For example, it is common practice in China, Nigeria, and the Philippines for the family, not the nurse, to assume the primary role in caring for the elderly in both the home and hospital setting (Matiti & Taylor, 2005; Taylor, 2005). This is not the case in the UK, where the nurse has the primary role in caring for the elderly. Hence, foreign educated nurses are asked to assume a role that is not only contrary to their culture, but one they have not been educated to perform. Nurses also experienced difficulty adjusting to the increased levels of autonomy and responsibility nurses have in the UK compared to their native country. Foreign-educated nurses working in the UK found they needed to develop new skills
such as discharge planning and increased involvement of the patient and family in the plan of care (Taylor, 2005).

Respect

Because foreign-educated nurses differ from US trained nurses demographically and within their roles in the workforce, the possibility for not receiving the desired level of respect increases. Ten foreign-educated nurses from Kerala, India working in New Jersey and Pennsylvania identified experiencing alienation, racism, sexism, and oppression (Di-Cicco-Bloom, 2004). In the UK, Taylor (2005) found that foreign-educated nurses, who were educated in a total of six different countries, felt their professional qualifications were not respected. These nurses felt they were awarded positions lower than they were qualified for, resulting in a perceived need for the foreign-educated nurses to prove themselves to their colleagues to gain respect and trust.

However, Taylor (2005) also found that the longer these nurses had been working in the UK, the more nurses felt accepted and valued by their colleagues. Five of the eleven foreign-educated nurses in this study described racial discrimination by their colleagues and/or their patients. Non-white or non-native English speaking nurses experienced more difficulty with respect and discrimination (Taylor). Magnusdottir (2005) found a similar situation in Iceland; foreign-educated nurses felt like outsiders; however, only the non-white foreign-educated nurses were rejected by patients. In Australia, foreign-educated nurses described feelings of alienation, otherness, marginalization, and segregation (Omeri & Atkins, 2002).

In contrast to these findings, a national survey conducted in 2000 by CGFNS (2002) 90% of foreign-educated respondents employed as registered nurses reported feeling they received the same or more responsibility by their supervisors as nurses born in the US. Over 80% of these
nurses reported that they received the same or more respect from other nurses, other healthcare personnel, patient families, physicians, and patients. Of all five categories, the nurses in this survey reported receiving the least amount of respect from patients.

Communication

Communication is the most frequently reported barrier to workforce transition. Improved communication skills result in improved acculturation, increased satisfaction, and increased contributions in the work environment (Yahes and Dunn, 1996). Without competency in English, nurses are not able to perform efficiently at work (Yi & Jezewski, 2000). Lack of proficiency in English has been shown to lead to difficulty in practice, feelings of isolation, decreased self esteem, decreased sense of professionalism, decreased feelings of authority and confidence, and decreased integration into practice (CGFNS, 2002; Magnusdottier, 2005; Matiti & Taylor, 2005; Omeri & Atkins, 2002; Taylor, 2005). Difficulty in practice related to communication problems has been linked to the rate and accent of the speaker as well as lack of non-verbal communication. Lack of non-verbal communication creates difficulty in communication areas such as the telephone (CGFNS, 2002; Magnusdottir; Yi & Jezewski, 2000). Foreign-educated nurses who do not speak English as their first language experience increased difficulty in both written and spoken communication (Omeri & Atkins, 2002). Non-native English speaking nurses experience different treatment from peers and coworkers (Taylor).

Adjustment

Beyond communication differences, both cultural and professional differences create difficulties adjusting to the differences between the workforce of a foreign-educated nurses’ home country and their new work environment (Davis & Nichols, 2002). Foreign-educated
nurses in these studies suggested that culturally sensitive orientation programs, information on nursing, and support systems would facilitate their practice. The perceptions of employers of foreign-educated nurses are consistent with those of the nurses. A survey of nurse executives reported that lack of English skills, cultural issues, and readiness to work as negative factors in hiring foreign-educated nurses (American Organization of Nurse Executives, 2005).

Davis from the Commission on Graduates of Foreign Nursing Schools recommends supporting enculturation through more of a social role that includes staff taking an active role in supporting the foreign nurse. By helping with difficulty areas such as pronunciation, medical terminology, orientation, cultural aspects of care, and finding useful resources, all members of the staff will benefit. Offering positive feedback, help, and mentorship also helps to ease the transition into a new healthcare system (Davis, 2003).

A survey of over 650 US nurse executives by Davis and Kritek (2003) revealed common methods for assisting the foreign nurse to adapt to his or her new work environment. The results showed that mentors and preceptors were by far the most common tool used, followed by a more extensive orientation, clinical assessments, and English classes. Other tools used were cultural workshops for the staff, an introduction to US healthcare, housing assistance, assertiveness training, computer, and social training. These same executives reported that the most critical skill for a foreign-educated nurse is English competency, yet the majority of the interventions used focused on clinical skill and competency. Use of US technology, knowledge of US nursing practice, US medications, and clinical skills were also found to be critical by the executives, which correlate to their interventions (Davis & Kritek).

According to a study conducted in the United Kingdom by Gerrish and Griffith (2004), the success of an adaptation program revolves around the mentor-mentee match. If there is a
good match between the foreign registered nurse and the domestic registered nurse, the adaptation will be more successful. Having previous experiences similar to the new work environment plays important roles in the enculturation of a foreign registered nurse (Gerrish & Griffith, 2004). A researcher in Australia found that embracing and utilizing the cultural diversity offered by foreign-educated nurses offers an improved healthcare environment. While they agree that communication in the major language is vital, they also found that utilizing the diverse language skills of these nurses has additional benefits. Josipovic (2000) also found that employing a diverse nursing staff helps increase understanding of what culturally and linguistically diverse patients experience on the unit. Furthermore, these nurses are able to deliver a different level of empathy to their patients who are also undergoing life changes because of the life adjustments they had to make.

Interviews of Korean nurses working in the United States revealed that adjusting to working in the US healthcare workforce took 10 years for most nurses (Yi and Jezewski, 2000). After this, foreign educated nurses enjoyed work, were comfortable with their English skills, were comfortable utilizing US problem solving techniques, were more comfortable being assertive in intrapersonal relationships, felt competent, and enjoyed their US life. The 10 year adaptation process was broken down into two stages by Yi and Jezewski (2000). They identified that the first stage, which was usually complete between two and three years, relieving the psychological stress, overcoming the language barrier, and accepting US nursing practice. Later, between five and ten years, the nurses adopt US problem solving techniques and US interpersonal skills. Yi and Jezewski (2000) identified that the transition from a collectivistic society to individualistic society played a large role in the length of the adjustment period. They
also identified that communication is not only a problem because of language differences, but because of non-verbal communication differences and cultural norms (Yi & Jezewski, 2000).

According to a 2003 study by Withers and Snowball of 120 Filipino nurses working in the United Kingdom, two thirds of Filipino nurses surveyed felt that they were given inadequate information prior to moving to England. The nurses interviewed by McGonale, O’Halloran, and O’Reilly (2004) also reported that they were given inadequate information prior to moving to Ireland. The nurses reported that expectations were unclear and not enough preparation was given. To help this problem, the nurses suggested more education on culture, value systems, taxation and cost of living, specialized technology, and unit specific training (McGonale et al., 2004). The Filipino nurses that took part in the Withers and Snowball study reported that more social, financial, and professional information should be given prior to moving. These nurses said that information on weather patterns, tax procedures, technology, unit specific training as well as the role of nurses in the country they are moving to would have aided in a smoother transition into their new jobs (Withers & Snowball, 2003).

In the US, CGFNS (2000) reported that foreign-educated nurses asked for improved orientation, more information about the healthcare system, more support at work, and more language and US medical terminology training. They also said that assistance with securing employment, the immigration process, and licensure would ease the transition to working in the US. CGFNS also reported that orientation should include medical terminology, the role of the US nurse as a manager and the patient advocate role, the role of the other healthcare team members, and information on US specific treatments (CGFNS).
Overall, the research shows that foreign nurses are in need of additional assistance the guide them through the enculturation process. A combination of additional orientation and education could help ease the stress of adapting to working in a new country.

Summary

Although several studies have been completed focusing on foreign-educated nurses, more information is needed. Many of these studies were completed outside the United States and until recently, little information about this specific nurse population in the US was available. It is established that the demographics of foreign nurses differ from the general US nurse population. Specifically, more information is needed on communication and respect.

Purpose

The purpose of this study is to describe foreign-educated nurses who work in Illinois and investigate the factors that affect their transition into the professional nursing workforce. This information can be used to compare the experience of foreign-educated nurses in Illinois to other nurses in Illinois. The results of this study will provide information that will allow Illinois employers of foreign-educated nurses to better aid these nurses in their adjustment to US nursing.

Research Questions

1. What are the demographic characteristics of foreign-educated nurses practicing in Illinois?
2. What roles (specialties, titles, settings, etc) do foreign-educated nurses fill within the Illinois workforce?
3. How do foreign nurses working in the Illinois perceive the amount of respect they receive when compared to their United States educated colleagues?
4. Do foreign nurses encounter communication difficulties during their transition to the United States workforce? If so, what difficulties do they experience?

5. What methods do foreign nurses perceive as helpful in adjusting to the Illinois workforce?

Study Methods

Subjects

For the purposes of this study, a foreign-educated nurse is defined as a registered nurse (RN) who received his or her initial nursing education in a country outside the United States. To be included in this study, respondents were required to have received their initial nursing education outside the United States and have current licensure in the State of Illinois. A convenience sample of nurses was recruited from two sources: a medium sized hospital in central Illinois and the Philippine Nurses' Association (PNA) in a large metropolitan area. The hospital used is estimated to have 40 foreign-educated nurses currently employed. The PNA is estimated to have 200 members in the chapter used.

Research Design

A nonexperimental design was used to describe foreign-educated nurses and explore current issues in this population. Prior to recruitment of participants, institutional review board (IRB) approval was received from the University IRB and the Hospital IRB. This study was found to place subjects at minimal risk.

Participants at the Illinois hospital were recruited through a research coordinator who was responsible for the distribution and collection of the questionnaires. Nurses were recruited at this hospital by an email that went out to all staff nurses. Those who fit the criteria and were interested in participating in the study were to contact the designated individual who then
distributed the survey to the foreign-educated nurse. A former president of the PNA Chapter was utilized as a contact to recruit and distribute questionnaires to PNA members. Fifty questionnaires were sent by mail and twenty were delivered by hand by the contact. All participants received a cover letter explaining the study and instructions. Due to the nature of the study, participants gave consent to participate by returning the questionnaire. Participants were given two weeks to return the questionnaire to the contact in their organization. For both sites, questionnaires were collected by the designated contact person and then sent to the researcher, which eliminated bias and provided for enhanced confidentiality. Due to the time constraints associated with this study, no follow up reminders were distributed.

Measures and Data Collection

The instrument used to conduct this study was based on a literature review. Selected questions from the instruments used in the 2001 Illinois Department of Professional Regulation Survey (Baldwin and Metcalfe, 2001) as well as the 2004 Filipino Nurse Demographic Data Survey (Berg et al., 2004) were part of the instrument and were used with the permission of the authors (see Appendix A). These questions provided basic demographic questions including employment information. Individual questions were chosen based on previously established research questions which were created from a review of literature. Several original questions were included to allow for a complete assessment of the research questions. The questionnaire contained 24 multiple choice questions that provided demographic, employment, and opinion information in addition to 6 short answer questions to provide information such as years and country of education. Each contact person was sent packets containing a cover letter, questionnaire, and envelope for return of the questionnaire to the contact. Information about the study, consent, and contact information for the contact person and the researcher was included in
the cover letter. After receiving responses, the contacts mailed the questionnaires to the researcher. Responses to the questionnaires are anonymous to the researcher. All questionnaires were locked in a secure storage cabinet to ensure security of the information. SPSS was used to analyze the data.

Findings

In total, there were 18 respondents to this study. Three respondents were from the Illinois hospital. The notification of the study went out to all nurses in the hospital, and it is estimated that there are 40 foreign-educated nurses working at this hospital, resulting in a 7.5% response rate. A total of 70 questionnaires were sent through the PNA. Of these, 15 completed questionnaires were received, amounting to a 24% response rate. To be included in this study, participants were required to have received their initial education outside the US; therefore, the two responses from US born nurses were excluded from the study. The overall response rate for the two organizations was 16.4%.

Demographics

The mean age of the respondents was 57 years, from 31 to 76 years. Fifteen nurses (93.8%) were female. The majority (87.5%) were educated in the Philippines. One nurse was educated in Japan and one nurse was educated in Israel. Ten nurses (62.5%) received a baccalaureate degree as their initial nursing education while six (37.5%) received diploma level education. None of the respondents received an associate’s degree for their basic nursing education. The total nursing workforce experience mean was 31.6 years, ranging from 6 to 49 years. Total workforce experience in the United States was, on average, 24.8 years, ranging from 2.75 to 37 years. Twelve respondents (75%) graduated from nursing school before 1976.

Role of the Foreign Nurse
Eighty percent of respondents indicated that they were currently employed as a licensed registered nurse in Illinois; the remainder of respondents were retired. Most nurses described their position title as a staff nurse (58.3%) and most nurses (91.7%) worked in a hospital setting. Critical care nursing was the most common specialty indicated with two responses (16.7%). Medical/surgical nursing, mental health/psychiatric nursing, obstetrics, perioperative nursing, and community health nursing were also identified as specialty areas with one response each. The majority of respondents (63.6%) indicated that they supervised others at work. The two most common methods identified for locating an initial nursing position in the US were either through an Illinois hospital recruiter or hospital placement service (43.3%) or through somebody the respondent knew who was working at the hospital or agency (31.3%).

Respect

To measure respect, respondents were asked to respond to five statements. For each statement, the participants selected strongly disagree, disagree, agree, or strongly agree. Responses were quantified based on a scale of one to four, representing strongly disagree to strongly agree respectively. Means were taken of the quantified responses. As shown in Table B1 (see Appendix B), responses averaged between 3 and 4 for all five areas related to respect, which correlate to agree and strongly agree.

Communication

To identify the effects of the potential language barrier, respondents were asked to answer five questions related to this issue. Three questions related to the understanding and communication of professional knowledge and/or ideas and the specific areas that communication problems create at work. Two additional questions related to the use of non-English language at work and discrimination based on language skills. Two respondents (12.5%)
indicated that they had been discriminated against while working because of their language skills. Nine nurses (56.3%) indicated they had utilized a non-English language at work. While 12.5% indicated they had experienced obstacles understanding professional knowledge and ideas due to their English skills, 18.8% indicated they had experienced obstacles in communicating their professional knowledge or ideas. When asked which work related situations were made more difficult because of language differences, 11 nurses (68.8%) selected “none.” However, the most common work related activities that were made more difficult include understanding what patients say (25%), talking on the phone (18.8%), and supporting patients who are upset (18.8%).

Adjustment

Expectations about working in the United States were met by all participants. Further, most nurses (62.5%) indicated that they had received sufficient information prior to coming to the US. Respondents were also asked to indicate which methods they encountered during their transition to US nursing, which methods would have made the transition to US nursing easier, and which method they felt was most important. As shown in Table C1 (see Appendix C), the responses regarding encountered transition practices were not the same as the processes respondents viewed would make the transition process easier or what these nurses viewed as the most important transition too.

Discussion

The respondents of this study were demographically similar to other studies in terms of education, gender, and work setting. The average age of the nurses in this study was significantly higher than the average age of US trained nurses found in other studies (57.0 vs. 45.1). This might be accounted for by the high percentage of Filipino nurses in this sample
(87.5%) and the large percentage of nurses who graduated nursing school prior to 1976 (75%). This is consistent with the foreign-educated nurse immigration patterns in the 1960s and 1970s which consisted of a large amount of Filipino foreign-educated nurses. The increased age of this population may result in these nurses leaving the workforce sooner than their US trained counterparts, further increasing the nursing shortage. The nurses in this study reported more variety in job specialties as compared to nurses in previous studies. This result is not surprising; the subjects in this group are older than nurses in previous studies and nurses have a tendency to increase specialization as they gain more experience and the subjects in this group are older than nurses in previous studies.

Overall, foreign-educated nurses in the sample reported they were respected. This finding is consistent with US national data (CGFNS, 2002). However, it is important to point out that the nurses included in the CGFNS study were an average of 36 years old (CGFNS). The 21 year difference in these populations could be significant, which decreases the ability to compare the two groups. The nurses in this study were also established in their careers in the US as opposed to the CGFNS study which focused on nurses who recently took the US licensure exam (NCLEX) which indicates they utilized nurses not established in practice. As a result of these facts, further research needs to be done to explore the levels of respect experienced by the entire foreign educated nurse population.

The two areas in which the subjects felt most respected were in their professional qualifications by coworkers and professional qualifications by patients and families. However, this contradicts international data which indicated foreign-educated nurses felt their professional qualifications were not respected (Taylor, 2005). Many of the other studies done on both the national and international level have been qualitative studies. As a result, study participants
would have been provided with more opportunity to discuss specific incidents of disrespect. Most of the qualitative studies focused on foreign-educated nurses utilize focus groups to collect data; the discussion-based nature of a focus group also could have increased reports of discrimination. Secondly, many studies have utilized foreign-educated nurses working in a country that is more dissimilar to the host country than the Philippines are to the United States. The fact that the nurses in this study have been working in the US for the majority of their career could be another reason for these feelings of being respected. This may also be related to the length of time the respondents have been in the US, as studies have shown that acceptance improves with the length of time in a country. Further, respondents who have been in the US for a longer period of time may not recall the amount of respect they received when they initially came to US, which also contributed to the inverse relationship between reports of disrespect and length of time in a country.

While reflections on the overall level of respect were positive, the amount of overall respect reported by this group is lower than the amount of respect received from supervisors, co-workers, and patients. The subjects also indicated that feelings of respect from patients were higher than from supervisors and co-workers, which indicates a possible need for changes in the work environment. The adjustments foreign-educated nurses must make might lead to an increased ability to empathize with their patients who are also undergoing life changes and transitions, which could lead to higher level of respect from patients. It is also possible that the level of respect for foreign-educated nurses in US hospitals is higher than those hospitals that utilize foreign-educated nurses in other countries because nurses have been immigrating to the US for an extended period of time, while nurse importation is a new development in some countries. This fact could contribute to a more respectful and supportive environment for
foreign-educated nurses. For instance, 56.4% of respondents indicated they received a specialized orientation programs designed for foreign-educated nurses, indicating that hospitals are aware of the needs of this population.

Levels of respect may derive from difficulties with communication. A higher percentage of nurses indicated that their English skills led to difficulty communicating professional ideas and knowledge (18.8%) compared to the percentage of nurses that indicated difficulty understanding professional ideas and knowledge (12.5%). It is not uncommon to understand a language with limited speaking abilities. Limited opportunity to use English prior to immigrating to the US may also contribute to decreased communication ability. Because of these findings, it appears English skills create more problems with the communication of professional ideas and knowledge than the understanding of communication. The majority (68.8%) of this sample reported that that there were no specific work situations that were made more difficult because of their language skills. Those who did indicate problems with specific situations that required increased verbal skills at work indicated problems communicating with patients, supporting upset patients, and talking on the phone. Because these problems were encountered by a group of foreign-educated nurses that had limited transition difficulties, and because these difficulties can lead directly to difficulty in the delivery of nursing care, these results are noteworthy. Additionally, these difficulties could impact the nurses’ ability to deliver safe and effective nursing care.

However, the findings of this study do not support the findings of qualitative researchers who suggest that communication is a challenge to delivering nursing care. The majority of respondents indicated their English skills did not create obstacles in their delivery of nursing care. Again, this result could be related to the fact that the majority of this sample is Filipino.
Nursing education facilities in the Philippines overproduce nurses with the intention to export them to work in other countries, specifically English-speaking countries such as the US and UK. Therefore, the nurses coming from the Philippines might have been more prepared for the challenges related to communication. Additionally, the qualitative studies that focused on communication in the US utilized nurses educated in India and Korea, which would possibly account for the differences.

Looking at Table C1, it is evident that the foreign-educated nurses taking part in this study encountered a variety of programs while transitioning to the US workforce. The differences between the encountered programs and the programs viewed as making the transition process easier are the most noteworthy. The two most common methods of transition received, unit-specific training (75%) and clinical assessment (68.8%) were only viewed as helpful by 31.3% and 12.5% respectively while only 6.3% and 12.5% viewed these methods as the most important. This could indicate that nurses might be receiving training that they believe is not a priority. On the other hand, 56.4% indicated that US healthcare information would be helpful, while only 31.3% received this during their transition process, indicating that this method should be used more often.

All of the respondents in the sample agreed that their expectations about working in the US were met. Because my subjects were primarily from the Philippines, there is a great likelihood these nurses had a larger support system than nurses from other countries based on what is known about this portion of the foreign-educated nurse population. A large portion of foreign-educated nurses working in the US are from the Philippines. Also, the nurses in this study found their initial position through people they know, indicating they already had a connection in the US. Furthermore, because one of the subject groups was a professional
organization specific to Filipino nurses these nurses have an existing support system which would ease the transition process. US hospitals and healthcare agencies might have developed orientation programs that are more effective at helping foreign-educated nurses in the adjustment process due to the fact that foreign-educated nurses have been coming to the US to work longer than other countries.

**Strengths**

This study was the first investigation focused solely on foreign-educated nurses working in the state of Illinois. To my knowledge, this is the first study focused on this specific group. This study was based on existing literature and existing problems in foreign-educated nurse workforce. Furthermore, the questionnaire utilized in this study was designed specifically for this study. Although the response rate for this study was low, the process of conducting this study initiated contacts that could prove valuable in future studies. These preliminary findings provide evidence that some foreign-educated nurses transition into the workforce with limited difficulty. This study also provides important information to help retain foreign-educated nurses. To improve adjustment, hospitals might consider incorporating US healthcare and cultural information.

**Limitations**

A major limitation of this study was that convenience sampling resulted in a sample that consisted of primarily of nurses educated in the Philippines. Utilization of the PNA could lead to bias. Additionally, the low response rate further limits the generalizability of the findings. Because the questionnaire used in this study had not been used before, the reliability and validity of this tool have not yet been established.
Implications

The results of this study have potential for influencing future research. The response rate for this study was low (16.4%). Similarly, the 2001 study by the Commission of Graduates of Foreign Nursing Schools received a 13% response rate after three rounds of follow up. Although this is consistent with national studies of this population, the low response rate might have a significant impact on this study. In order to increase knowledge about this population, researchers must implement methods to increase response rate. This could include providing incentives to participate and most importantly increasing access to this population, which is the most challenging aspect of this population. One possibility is to conduct informal interviews with foreign-educated nurses to gain a better understanding about what would motivate them to participate in a study and what the best method is to conduct a study on this population. With incentives and desired methods known, the response rate may increase, strengthening the study. Due to time constraints, it was not possible to send follow up notices, but this technique should be employed whenever possible.

Although not reflected in this study, over 60% of the foreign-educated nurse workforce in the US is educated outside the Philippines (Xu & Kwak, 2005). Further studies are needed to determine if this was the result of sampling error or a unique phenomenon in Illinois as Illinois has a higher incidence of registered nurses who identify themselves as Asian or Pacific Islanders. As the diversity of foreign-educated nurses increases, more studies are indicated to more fully the understanding of this population, specifically the understanding of those educated in countries with more diverse cultures. Future investigation is indicated to determine if orientation programs for foreign-educated nurses should include specific information about the culture as
well as information about the delivery of US healthcare and to explore the transition of foreign educated nurses who enter the US with strong support systems.
References


Appendix A

A Survey of Workforce Experience of Foreign-educated Registered Nurses

Nurses educated in other countries represent a vital part of the US nursing workforce. Please complete the following survey to help us better understand the experiences of foreign-educated nurses in the United States. Consent to participate is provided by completion of the survey. Please answer all of the following questions to the best of your ability. Do not put your name on the questionnaire. Thank you for your contribution.

1. Please indicate the country where you received your basic nursing education.

2. Indicate the basic nursing education program that prepared you to become a registered nurse.

   ____ Diploma       ____ Associate degree       ____ Bachelor’s degree       ____ Other

3. How many years have you worked for pay as a registered nurse since graduating from your basic nursing education program? Include work in all countries.

   ___________________________ years

4. How many years have you worked for pay as a registered nurse in the United States? If less than one year, indicate the months.

   ___________________________ years OR ___________________________ months

5. Which of the following methods did you use to find your first job as a registered nurse in the United States? (check all that apply)

   ____ Some one you knew worked at the hospital or agency
   ____ Public advertisements, job listings, or internet sources
   ____ Advice from a family member
   ____ Advice from faculty/teachers in your school of nursing
   ____ Illinois nurse recruiter or hospital placement service
   ____ Other (specify) ___________________________

6. Are you currently employed as a licensed registered nurse in Illinois?
   A. Yes
   B. No → (If no go to question # 11)
7. Which of the following best corresponds to the position title for your primary job as a licensed registered nurse? (Choose ONE)
   A. Staff Nurse
   B. Office Nurse
   C. Staff/patient Educator
   D. Nurse Manager
   E. Faculty
   F. Nurse Executive
   G. Advanced Nurse Practitioner
   H. Other (specify) ______________

8. Which of the following best describes the clinical specialty in which you are currently working? (Choose ONE)
   A. Medical/Surgical Nursing
   B. Pediatric Nursing
   C. Psychiatric/ Mental Health Nursing
   D. Obstetrics/ Gynecology/ Labor and Delivery
   E. Operating Room/ PACU
   F. Critical Care/Emergency Department
   G. Community Health/ Home Health
   H. Other (specify) ______________

9. Which setting best describes the area where you spend most of your time working as a registered nurse? (Choose ONE)
   A. Hospital
   B. Nursing home or skilled care
   C. Home healthcare
   D. Community health/public health setting
   E. Nursing education
   F. Other (specify) ______________

10. Do you supervise others at work?
   1. Yes
   2. No
I would like you to answer some questions about your experiences as a registered nurse in the United States that other foreign-educated nurses have identified. Please select the answer that reflects your experiences as a foreign-educated nurse.

11. I have had the same opportunities for advancement in my career as my colleagues educated in the United States.

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

12. My professional qualifications are respected by those I work with.

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

13. My professional qualifications are respected by my patients and their families.

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

14. My supervisor gives me the same amount of responsibility as my US trained colleagues.

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

15. I have an adequate understanding of the US nursing policies and procedures that affect my practice.

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree
16. Overall, I have received the same amount of respect as my US trained colleagues.

____ Strongly disagree
____ Disagree
____ Agree
____ Strongly agree

These questions are in regards to your experience in overcoming language barriers in your job.

17. Have your English skills ever created any obstacles in communicating your professional knowledge or ideas?
A. Yes
B. No

18. Have you experienced any obstacles in understanding professional/medical language or ideas in the English language?
A. Yes
B. No

19. Which of the following, if any, work-related situations are more difficult for you because of a language difference? (check all that apply)

____ Teaching patients
____ Assessing patients
____ Working with a patient's family
____ Supporting patients who are upset
____ Taking verbal orders from doctors
____ Writing, charting, and documenting nursing care
____ Delegating or asking others to assist you with care
____ Talking on the telephone
____ Understanding what patients say to you
____ None

20. Have you ever been discriminated against while working as a nurse because of your language skills?
A. Yes
B. No

21. Have you ever used a non-English language while working as a nurse in the United States?
A. Yes
B. No
The following questions are in regards to your experiences in transitioning to nursing in the United States

22. Do you feel your expectations about working in the United States have been met?
   A. Yes
   B. No

23. Do you feel you received sufficient information prior to coming to the United States?
   A. Yes
   B. No

24. Which of the following did you encounter during your transition to working in the United States? (check all that apply)
   ___ Mentor/preceptor assigned to help you
   ___ Orientation program for foreign-educated nurses
   ___ English classes
   ___ Clinical assessment of your nursing skills
   ___ Cultural information
   ___ Extended orientation
   ___ Technology training
   ___ Unit-specific training
   ___ Specific information about the US healthcare system

25. What could have been done to make your transition to working as a registered nurse in the United States easier? (check all that apply)
   ___ Mentor/preceptor assigned to help you
   ___ Orientation program for foreign-educated nurses
   ___ English classes
   ___ Clinical assessment of your nursing skills
   ___ Cultural information
   ___ Extended orientation
   ___ Technology training
   ___ Unit-specific training
   ___ Specific information about the US healthcare system
26. Which one measure do you consider most important in helping you make the transition to nursing in your place of employment? (select only ONE)

- Mentor/preceptor assigned to help you
- Orientation program for foreign-educated nurses
- English classes
- Clinical assessment of your nursing skills
- Cultural information
- Extended orientation
- Technology training
- Unit-specific training
- Specific information about the US healthcare system

27. What year were you born? ______________

28. What year did you graduate from nursing school? ______________

29. Are you male or female?
- Male
- Female

30. What helped you cope the most with your role as a nurse in the US?

Thank you for completing the survey
Please place your questionnaire in the envelope provided
Appendix B

Table B1

*Measures of perceived respect*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same opportunities for advancement</td>
<td>Mean: 3.5, n=16</td>
</tr>
<tr>
<td></td>
<td>Minimum: 2.0, Maximum: 4.0</td>
</tr>
<tr>
<td>Professional qualifications respected by co-workers</td>
<td>Mean: 3.6</td>
</tr>
<tr>
<td></td>
<td>Minimum: 3.0, Maximum: 4.0</td>
</tr>
<tr>
<td>Professional qualifications respected by patients and families</td>
<td>Mean: 3.7</td>
</tr>
<tr>
<td></td>
<td>Minimum: 3.0, Maximum: 4.0</td>
</tr>
<tr>
<td>Supervisor gives the same amount of responsibility</td>
<td>Mean: 3.5</td>
</tr>
<tr>
<td></td>
<td>Minimum: 2.0, Maximum: 4.0</td>
</tr>
<tr>
<td>Same amount of respect overall</td>
<td>Mean: 3.4</td>
</tr>
<tr>
<td></td>
<td>Minimum: 2.0, Maximum: 4.0</td>
</tr>
</tbody>
</table>
Appendix C

Table C1

Methods of Transitioning to the US Nursing Workforce

<table>
<thead>
<tr>
<th>Method</th>
<th>Encountered During Transition</th>
<th>Would Make Transition Easier</th>
<th>Most Important</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Mentor/preceptor assigned</td>
<td>10</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Orientation program for foreign-</td>
<td>9</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>educated nurses</td>
<td>(56.4%)</td>
<td>(43.8%)</td>
<td>(56.4%)</td>
</tr>
<tr>
<td>English class</td>
<td>2</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Clinical assessment of nursing</td>
<td>11</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>skills</td>
<td>(68.8%)</td>
<td>(31.3%)</td>
<td>(12.5%)</td>
</tr>
<tr>
<td>Cultural information</td>
<td>6</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(37.5%)</td>
<td>(62.5%)</td>
<td>(50%)</td>
</tr>
<tr>
<td>Extended orientation</td>
<td>0</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Technology training</td>
<td>8</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(50%)</td>
<td>(50%)</td>
<td>(37.5%)</td>
</tr>
<tr>
<td>Unit-specific training</td>
<td>12</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(75%)</td>
<td>(25%)</td>
<td>(31.3%)</td>
</tr>
<tr>
<td>US healthcare information</td>
<td>5</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>(31.3%)</td>
<td>(68.8%)</td>
<td>(56.4%)</td>
</tr>
</tbody>
</table>
December 6, 2005

Melissa Giegerich
Harriet House
Illinois Wesleyan University

Dear Melissa:

We are pleased to inform you that your proposal “A Survey of Foreign Educated Nurses: Workforce Experience” has been evaluated by the Illinois Wesleyan Institutional Review Board. This proposal has been approved as exempt.

This approval is valid for a period of time beginning on December 6, 2005, and will expire on December 6, 2006.

The research procedures should be implemented as detailed in your approved IRB protocol. You must inform the IRB of any changes in this protocol. Likewise, the IRB must be informed immediately of any concerns that arise concerning the health or welfare of subjects.

Sincerely,

William J. Walsh
Associate Professor and Chair of the IRB

WJW/pn

cc: Sharie Metcalfe
February 28, 2006

Melissa Giegerich
Harriett House
Illinois Wesleyan University

Dear Melissa:

We are pleased to inform you that your proposal “A Survey of Foreign Educated Nurses: Workforce Experience” has been evaluated by the Illinois Wesleyan Institutional Review Board. This proposal has been approved under expedited review.

This approval is valid for a period of time beginning on February 24, 2006, and will expire on February 24, 2007.

The research procedures should be implemented as detailed in your approved IRB protocol. You must inform the IRB of any changes in this protocol. Likewise, the IRB must be informed immediately of any concerns that arise concerning the health or welfare of subjects.

Sincerely,

William J. Walsh
Associate Professor and Chair of the IRB

WJW/pn

cc: Sharie Metcalfe
DATE: December 21, 2005

TO: Melissa Giegerich  
Illinois Wesleyan University/School of Nursing  
201 E Emerson  
Bloomington IL 61701

FROM: David M. Main, MD  
Chair, Carle Institutional Review Board

SUBJECT: 05-55 A Survey of Foreign-Educated Nurses: Workforce Experience

Thank you for submitting the above study to the Institutional Review Board. The study was reviewed and approved at the Institutional Review Board committee’s last meeting on December 21, 2005. The protocol has been approved at minimal risk. The consent form and questionnaire were also approved. No HIPAA documentation is necessary with this project. Research on this project may begin at any time.

• A consent form that has been approved by the Carle Institutional Review Board and should be used with subjects is enclosed. The original signed copy of the consent form should be kept with your study records. Another copy should be given to the subject for their records.

• If changes in procedure become advisable, these changes must be submitted to the Office of the Institutional Review Board and approved by the Institutional Review Board prior to initiating the changes.

• If any problems involving human subjects occur, the Carle Institutional Review Board needs to be notified within 24 hours. The phone number is 217/383-4366.

• If a research participant becomes incarcerated during the course of the study, the Carle Institutional Review Board needs to be contacted and approval must be obtained before research can continue with that participant.

• Materials submitted to the Carle Institutional Review Board should not contain participant names, clinic numbers, or other identifying factors.

• You will be asked to make a report on this research to the Carle Institutional Review Board in 11 months.

Thank you for your interest in research at Carle.

aya
c
cc Sharie Metcalfe, RN, PhD/Illinois Wesleyan University/School of Nursing/PO Box 2900/Bloomington IL 61702
Edith Matesic, RN/Parkview 1
Ann Benefiel, BS/MERC
DATE: March 15, 2006

TO: Melissa Giegerich
Illinois Wesleyan University/School of Nursing
201 E Emerson
Bloomington IL 61701

FROM: David M. Main, MD
Chair, Carle Institutional Review Board

SUBJECT: 05-55 A Survey of Foreign-Educated Nurses: Workforce Experience
Approve study modifications. Also approve the survey tool that has been substituted.

Thank you for submitting the study modifications for the above study to the Institutional Review Board. The study modifications and revised survey tool were reviewed and approved at the committee's last meeting on March 15, 2006.

- If changes in procedure become advisable, these changes must be submitted to the Office of the Institutional Review Board and approved by the Institutional Review Board prior to initiating the changes.

- If any problems involving human subjects occur, the Carle Institutional Review Board needs to be notified within 24 hours. The phone number is 217/383-4366.

- If a research participant becomes incarcerated during the course of the study, the Carle Institutional Review Board needs to be contacted and approval must be obtained before research can continue with that participant.

- Materials submitted to the Carle Institutional Review Board should not contain participant names, clinic numbers, or other identifying factors.

- You will be asked to make periodic reports on this research to the Carle Institutional Review Board.

Thank you for your interest in research at Carle.

cc Sharie Metcalfe, RN, PhD/Illinois Wesleyan University/School of Nursing/PO Box 2900/Bloomington IL 61702
Edith Matesic, RN/Parkview 1
Ann Benefiel, BS/MERC