PERSPECTIVES OF REGISTERED NURSE CULTURAL COMPETENCE IN A RURAL STATE - PART II

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ABSTRACT

The article is the second in a two-article series. The first article in the series provided the reader a conceptual definition of cultural competence, a literature review and a description of the relevance of culturally competent care in a rural state. In this article, the author described the outcomes of a self-assessment survey completed by registered nurses in a homogenous rural state. The purpose of this study was to determine the relationship between cultural competence and educational preparation. It was hypothesized that the North Dakota nurses who reported participation in cultural competency educational programs would rank themselves higher on the IAPCC-R than those who had not reported participation in such programs. A voluntary sample of registered nurses from urban and rural hospitals in the state of North Dakota were surveyed using the Inventory for Assessing the Process of Cultural Competence – Revised version (IAPCC-R) and a demographic survey tool. The data analysis was accomplished through correlational statistics. Results of this research indicate that a majority (>80%) of the participants did not consider themselves culturally competent. While higher self rating scores did correlate to participation in educational activities, the quality and frequency of those activities varies. The author offered suggestions for improved rate and quality of cultural competence education as well as suggestions for further research.

THE IMPACT OF A LACK OF CULTURAL COMPETENCE

Health care providers who lack cultural competence may be putting patients at risk for delays in treatment, inappropriate diagnoses, noncompliance with health care regimens, and even death (Institute of Medicine, March 2002). Although health care providers may not see themselves as overtly racist or neglectful, they could be missing pertinent healthcare findings due to cultural blindness. In this style of interacting with clients, described by Bell and Evans, as quoted in Campinha-Bacote (2003), the health care professional has made a decision that he/she is committed to equality for all people and therefore treats all people alike, regardless of cultural background (p. 23). This type of interacting style lends to misinterpretation of verbal and physical cues made by the patient and ignores the fact that there are variations within cultural groups.

In states where a largely homogenous population resides, cultural blindness could logically exist. This, coupled with the desire to appear politically correct, may lend to behaviors wherein the healthcare provider indicates that she or he has no problem with the patient’s cultural beliefs and as well does not need to know more about them.

CONCEPTUAL DEFINITION OF CULTURE COMPETENCE

Cultural Competence can be conceptually defined as a referent to an individual who demonstrates cultural awareness, knowledge and skill and applies these components as he/she interacts with patients, co-workers, and customers. Further, the culturally competent individual operates from a platform of respect for others. He/She continuously self-assesses and adjusts to the dynamic and challenging opportunities in remaining culturally aware and effective.

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CULTURAL DEMOGRAPHICS OF NORTH DAKOTA

How did cultural competence look in a state such as North Dakota where US Census Bureau data indicated that the population was the 9th most white, or Caucasian, state in the union (North Dakota Fact Sheet, 2005)? At the same time, there was a large population of American Indians, many of whom were living off of their reservations and in the surrounding communities (North Dakota Indian Affairs Commission, 2005). There were also many refugees living mainly in the North Eastern area of the state who had emigrated from countries such as Kurdistan, Haiti, Russia, Bosnia, Zaire, Vietnam, Somalia, Sudan, Cuba, Armenia, and Iraq. These persons, and those who lived in college dormitories, military bases or other group settings, were likely not accurately accounted for in census data. This same US census data showed a trend of rising diversity in the state since 2001; however ND remains more than 90% white.

STUDY PURPOSE AND OBJECTIVES

The purpose of this study was to evaluate North Dakota registered nurses’ self-rating of cultural competency, with the intention of creating dialogue at the board of nursing, health care administrations, and university settings in our state about cultural competency education implementation and evaluation. This study tested the hypothesis that nurses who participate in ongoing and formalized cultural diversity training would rate themselves higher on the Inventory for Assessing the Process of Cultural Competence-Revised (IAPCC-R) scale than those nurses who have not participated in such programs.

RESEARCH QUESTIONS

1. What percentage of registered nurses in North Dakota rated themselves as culturally competent?
2. How did those registered nurses who rated themselves high (more competent) on the IAPCC-R differ demographically from those that rated themselves low (less competent)?
3. Did the type and frequency of cultural competency training impact the registered nurses’ self-rating?

THEORETICAL FRAMEWORK

Madeleine Leininger was truly a pioneer in developing the field of transcultural nursing in the 1950’s (Boyle and Wenger, 2002). Since then, several nursing scholars have added to the field-Andrews and Boyle, Spector, Giger, Purnell and Paulanka, Campinha-Bacote (Boyle and Wenger, 2002). This study was based on the work of Dr. Josepha Campinha-Bacote. Brathwaite (2003) described Campinha-Bacote’s model of cultural competence as one which provided direction for education, practice, and research and which met the criteria used to critically appraise conceptual models.

The Process of Cultural Competence in the Delivery of Health Care Services is a model that requires health care providers to see themselves as becoming culturally competent rather than being culturally competent (Campinha-Bacote, 2002). The following are the basic assumptions of the Model of Care:

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1. Cultural competence is a process, not an event.
2. Cultural competence consists of five constructs: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire.
3. There is more variation within ethnic groups than across ethnic groups (intra-ethnic variation).
4. There is a direct relationship between level of competence of health care providers and their ability to provide culturally responsive health care services.
5. Cultural competence is an essential component in rendering effective and culturally responsive services to culturally and ethnically diverse clients.

METHODS

This randomized descriptive study used an established self assessment tool, the IAPCC-R, which was cross tabulated with a demographic tool created by the author. The dependent variable, cultural competency, was correlated to several independent variables on the demographic tool. Of special interest to this investigator were the independent variables related to education in the workplace.

Nurses in select acute care hospital facilities in North Dakota volunteered to participate in the proctored survey. Returned surveys implied consent of the respondents to participate in the study. Of the 205 surveys returned, 26 were eliminated due to missing data for a sample size of 179 (Figure 1 and Table 1).
Table 1

Survey Participants by Region of North Dakota and Usable Surveys

<table>
<thead>
<tr>
<th>Region of ND</th>
<th>Requested</th>
<th>Returned</th>
<th>Response Rate</th>
<th>Response Surveys</th>
<th>Usable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest</td>
<td>95</td>
<td>66</td>
<td>69.47%</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>70</td>
<td>44</td>
<td>62.86%</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>56</td>
<td>39</td>
<td>69.64%</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>60</td>
<td>56</td>
<td>93.33%</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>281</td>
<td>205</td>
<td>72.95%</td>
<td>179</td>
<td></td>
</tr>
</tbody>
</table>

INSTRUMENTATION, DATA COLLECTION, AND ANALYSIS

The IAPCC-R was a 25 item self-administered tool that was designed for use by health professionals to measure cultural competence. Reliability of the IAPCC-R had been established in prior research studies which produced Cronbach’s Alpha coefficients ranging from .77-.90. Content validity was established by reviews of national experts in the field of transcultural health care (Campinha-Bacote, 2003). The IAPCC-R measured the five constructs of cultural competence: cultural knowledge; cultural skill; cultural encounters; cultural awareness; and cultural desire. Each construct had 5 corresponding questions. The survey items had 4-point Likert scales using positive to negative measurements for each of the constructs. Designated research assistants at each of the participating facilities proctored the survey process. The demographic questionnaire and the IAPCC-R took approximately 20 minutes total for respondents to complete.

DATA ANALYSIS

Campinha-Bacote (2003) provided descriptions of how competency scores on the IAPCC-R may be grouped: culturally proficient (scores 91-100), culturally competent (75-90); culturally aware (51-74); and culturally incompetent (25-50). Higher scores indicated a higher level of competency. This investigator chose to analyze scores instead by grouping them into low, medium and high categories, rather than using the Campinha-Bacote method for later use in bivariate cross tabulations against the demographic survey tool.

Frequency distributions were evaluated to determine participants’ gender and age; basic and current level of education; the frequency and types of cultural diversity training; ethnicity; and frequency of contact with individuals from cultures other than their own. Bivariate cross tabulations were calculated using SPSS to compare the dependent variable (cultural competence scores) to the various independent variables and the demographic tool. Statistical significance was evaluated using Pearson’s Chi-Square and a .05 level of significance was used.
**FINDINGS**

**Single item analyses and aggregate responses on the IAPCC-R and demographic survey**

The range for the high, medium and low scores on the IAPCC-R was 53-86 out of a possible 100 points with a mean of 68.1 and SD of 5.7. The low grouping was defined as scores less than 66; medium to a range of 66-70; and high scores to those over 70. Aggregate scores for this analysis revealed high scores to represent 32.4% of participants; medium scorers, 30.7%; and low scorers to represent 36.9% of the registered nurses participating in the surveys (Table 2). Sharing results of single item analysis of the questions provided in Caminha-Bacote’s IAPPC-R tool are not provided for under her copyright.

Table 2

<table>
<thead>
<tr>
<th>REGION</th>
<th>NW</th>
<th>SW</th>
<th>NE</th>
<th>SE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (71+)</td>
<td>21 (39.6%)</td>
<td>13 (33.3%)</td>
<td>12 (33.3%)</td>
<td>12 (23.5%)</td>
<td>58 (32.4%)</td>
</tr>
<tr>
<td>Medium (66-70)</td>
<td>13 (24.5%)</td>
<td>13 (33.3%)</td>
<td>12 (33.3%)</td>
<td>17 (33.3%)</td>
<td>55 (30.7%)</td>
</tr>
<tr>
<td>Low (&lt;66)</td>
<td>19 (35.8%)</td>
<td>13 (33.3%)</td>
<td>12 (33.3%)</td>
<td>22 (43.1%)</td>
<td>66 (36.9%)</td>
</tr>
<tr>
<td>Total</td>
<td>53 (100%)</td>
<td>39 (100%)</td>
<td>36 (100%)</td>
<td>51 (100%)</td>
<td>179 (100%)</td>
</tr>
</tbody>
</table>

Descriptive statistics were used to present findings from the demographic survey (Table 3). It is not surprising that the majority of respondents were white and female as this correlates not only to the lack of diversity in the state, but to the lack of diversity in nursing as a profession. The majority of participants held a Bachelor of Science in Nursing (BSN) which is also an expected finding as the state of North Dakota had the BSN as the entry of level into practice from 1987 until 2003. These nurses were on average 40 years old. Respondents were asked to describe all of the types of cultural diversity training in place at their current places of employment. A large percentage (38.6%) reported receiving no cultural diversity training at all in the last three years. Even more respondents (61.9%) had not attended any sort of continuing education (CE) program for cultural diversity (Table 3). Computer modules were selected as the primary source of education at facilities by 43% of participants across the state. Guest lecturer or speaker was selected by 28.5%, articles by 34.5%, and role playing by 3% (Table 4).

**Cross Tabulations**

 Aggregate frequency distributions show that 62.5% of the nurses had never attended or participated in a cultural diversity (CE) program. Nearly half (45.5%) of those had low IAPCC-R scores (i.e., scores <66). For those participants that attended cultural diversity CE programs, self-assessment scores revealed higher levels of competence: 41.8% of high scorers on the IAPCC-R (score of 71+) and 35.8% of medium scorers (score of 66-70). These results were statistically significant at the .01 level (Figure 2). Higher frequency of cultural diversity training attendance correlated to higher scores on the IAPCC-R (Figure 3). Of those that reported no diversity
Table 3

Demographic Questionnaire Aggregate Responses from ND nurse participants

1. What is your age?  
   Mean 40 yrs; Range 22-64
2. What sex are you?  
   a. male (3.5%)  
   b. female (96.5%)
3. Your culture/ethnicity can best be described as:  
   a. African-American  
   b. Asian/Pacific Islander  
   c. Hispanic/Latino  
   d. White/non Hispanic (98%)  
   e. American Indian  
   f. other (2%)
4. Level of basic nursing education:  
   a. AD (16.4%)  
   b. BSN (69.7%)  
   c. Diploma (13.9%)
5. Level of current education  
   a. AD (15.6%)  
   b. BSN (70.4%)  
   c. Diploma (9.5%)  
   d. Masters (4.4%)  
   e. Doctorate (none)
6. Years practicing as an RN:  
   Mean= 15 years; Range=0-42 years
7. Your Primary area of expertise/service is best described as:  
   a. Critical Care (27.5%)  
   b. Medical Surgical (6.1%)  
   c. Rehab (1.2%)  
   d. Peri-operative (3.5%)  
   e. Women’s Health (4.5%)  
   f. Mental Health  
   g. Long Term Care (4.5%)  
   h. Other (17%)
2.4% of respondents did not provide an answer to this question.
8. Have you attended a cultural diversity CE program?  
   a. yes (38.1%)  
   b. no (61.9%)
9. If you answered ‘no’ to number 8, would you be interested in attending one?  
   a. yes (90.4%)  
   b. no (9.6%)
10. How many times in the last 3 years have you received cultural diversity training?  
   a. none (38.6%)  
   b. 1-2 (45.5%)  
   c. 2-3 (8.9%)  
   d. 3-4 (6.9%)
11. Did your basic nursing program have a cultural diversity course?  
   a. yes (51.3%)  
   b. no (47.3%)
12. Place an ‘X’ on the line indicating the amount of contacts you have had with persons from cultures other than your own. The farthest left side of this line indicates no contact at all.  
   Note: the numbers have been placed on the line for purposes of reporting results. The respondents received the questionnaire without numerical indicators.  
   Mean=1.71
   ←1    2    3→
   Further right than left: 43.3%  
   Further left than right: 42.8%  
   In the middle: 13.9%
13. The types of cultural diversity training currently in place at your principal place of employment include (circle all that apply):  
   a. computer module (43%)  
   b. lecture/speaker (28.5%)  
   c. role-playing (3%)  
   d. articles (34.5%)  
   e. none (none)  
   f. other (none)
14. What number of hours do you work in your primary setting per week?  
   Mean = 35.44 hours; Range=0-60 hours

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Table 4

Frequency Distributions for Types of Cultural Diversity Training Methods in Place at Principle Place of Employment Reported by Nurses in North Dakota.

<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Module</td>
<td>86</td>
<td>42.0</td>
<td>43.0</td>
</tr>
<tr>
<td>Speaker</td>
<td>57</td>
<td>27.8</td>
<td>28.5</td>
</tr>
<tr>
<td>Role Play</td>
<td>6</td>
<td>2.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Articles</td>
<td>69</td>
<td>33.7</td>
<td>34.5</td>
</tr>
</tbody>
</table>

Figure 2. Correlation of Cultural Competence Score by Cultural Diversity CE Program Attendance: Have you attended a cultural diversity CE program? (Significant at the .01 level)

Figure 3. Correlation of Cultural Competence Score by Cultural Diversity Training Frequency: How many times in the last 3 years have you received cultural diversity training? (Statistically significant at the .01 level)
training, 55.6% of them had low scores on the IAPCC-R. Where as, of those who reported frequent training, from 2-4 times per year, nearly 80% had high IAPCC-R scores. Over half of respondents reported that they had a cultural diversity course as a part of their basic nursing education. The level of cultural competence was not impacted by the presence of a cultural diversity course in the participants’ basic nursing education according to their self-rating scores (Figure 4).

Frequency score results indicated that registered nurses who rated themselves highest on the IAPCC-R received the most frequent cultural diversity training through the use of article review. Bivariate cross tabulations revealed statistically significant results between the use of articles for use of cultural diversity training but not for other methods of training (Figure 5).

Figure 4. Correlation of Cultural Competence Level by Presence of Cultural Diversity Course in Basic Nursing Education: Did your basic nursing program have a cultural diversity course? (Differences not statistically significant)

Figure 5. Correlation of Cultural competency scores by articles as a method of training. (Significant at the .01 level)
DISCUSSION

**Percentage of Registered Nurses in North Dakota Self-Rated as Culturally Competent**

As described, only 14.5% of all study participants indicated that they were culturally competent when scores were evaluated using the Campinha-Bacote method. In examining the data from the perspective of rating these scores on a curve, or in terms of high, medium, and low scores, the distributions are fairly equal (Table 2). The mean score of 68.1, however, correlates to the Campinha-Bacote category of merely “culturally aware” (range score of 51-74), not culturally competent. Cultural awareness was described as self-examination and in-depth exploration of one’s own cultural background (Campinha-Bacote, 2003). Without this awareness, health care providers may tend to engage in cultural imposition, which is described as imposing one's own cultural beliefs upon those from another culture (Campinha-Bacote) or cultural blindness. Wells (2000) warned that cultural awareness does not go far enough toward achieving the level of cultural competence development that is required of health care providers and institutions to safely care for diverse populations. Some health care providers may believe that by treating others equally, regardless of cultural background that they are doing the right thing. Bell and Evans, as quoted in Campinha-Bacote, (2003) described this as racism, however. Racism is not easily talked about in health care. The American Nurses Association (2002) and the Institute of Medicine (2002) both described the existence of racism in healthcare and the detrimental effects on the health of patients.

**Demographic Differences Between IAPCC-R High and Low Self-Rating Scores**

Cultural diversity education, either CE program attendance, or cultural diversity training at the workplace, were factors that correlated to higher IAPCC-R scores (p. < .01). Research to date demonstrates that training is an effective means of improving provider knowledge of cultural and behavioral aspects of health care (IOM, 2002). Results revealed that computer modules and article review were the most widely used method of cultural diversity training at the participating hospitals. Adams (2000) suggested that training for cultural competency needed to reflect real life in order to be effective. The methods presently in place at participating facilities may contribute to cultural knowledge, but their value in enhancing cultural skill, and sensitivity was not supported in the literature as the sole means of education. Salimbene (1999), Smith (2001), Wells (2000), Campinha-Bacote (2003) and others emphasize that this training must be ongoing and supported by regular follow-up to evaluate effectiveness. Although 62% of the respondents reported never attending a cultural diversity CE program, a majority indicated that they had an interest in participating in one. This was encouraging and may have indicated a desire for varied learning experiences beyond those supplied by their places of employment.

It could not be determined if the number of cultural contacts influenced respondents’ IAPCC-R ratings. Unfortunately this question may not have been designed in a way that would extract the most meaningful information from survey participants. The calculated mean response indicates that on average, participants did not report having substantial contacts with persons of other cultures. Cross tabulations to cultural competence scores were not statistically significant in that the results were very similar. Low scores correlated to a mean answer of 1.78; medium scores to a mean of 1.75 and high scores correlated to a mean of 1.59 (Table 3).
Impact of Type and Frequency of Cultural Competency Training

Ongoing education, or cultural diversity training, at the workplace, positively impacted IAPCC-R scores more than any other variable. It was hypothesized that study participants who participated in cultural diversity training at their work places would score higher on the IAPCC-R than those who had little or no training at their work places. Higher scores did correlate to more frequent training (p. <.01). Article review was cited most often by those RNs who rated themselves highest on the IAPCC-R (p <.01).

The participants who reported having a cultural diversity course in their program of nursing did not rate themselves higher on the IAPCC-R than those nurses who did not have such a course in their program. Although there were no significant correlations made between higher IAPCC-R scores and participation in a cultural diversity course within the respondents nursing program, the survey participants did express a need and desire to learn more about those from other cultures. It could be that the amount of content taught in a course on cultural diversity and the time-constraints involved provided little opportunity to focus on important aspects. In Koempel’s (2003) study, respondents indicated that it was continuing education and training that contributed to their cultural competence. Coffman, Shellman, and Bernal (2004) suggested that the repeated opportunity to work with people of other cultures raised student nurse scores on the Cultural Self-Efficacy Scale (CSES). This has implications for curriculum development in cultural diversity courses within nursing programs. Even in states that are homogenous, such as North Dakota, there is opportunity to provide students with contact with persons of other cultures through community and international service learning projects and guest speakers.

RECOMMENDATIONS

Given that the IOM has linked health disparities to health care providers’ lack of cultural competence, it was encouraging to see that the majority of respondents (61.3%) were participating in training, though with varying rates of frequency. Dr. Campinha-Bacote (2003) recommends that nurses need to develop their cultural competence through self-examination of their awareness, skill, knowledge, encounters (with cultures other than their own), and desire. Computer modules and article review as the main method of learning about other cultures may not provide nurses with the most enriching learning experiences. Such linear modes of delivery without the benefit of interaction with an expert or the ability to ask questions could easily lead nurses to make generalizations about other cultures.

Campinha-Bacote’s model indicates that all constructs of cultural competence are important. Certainly in North Dakota, there may be a perception that there are few opportunities for frequent contact with persons of other cultures; however, healthcare facilities and programs of nursing could incorporate more creative means of providing for learning experiences.

Facilities participating in this survey received a report with aggregate results of this study. Assessment of cultural competence is a step in the right direction toward tailoring educational strategies that would increase cultural competence. Evaluation of the effectiveness of education activities will assist facilities in further planning of educational activities. It may be beneficial for individual facilities to collect data on patient demographics for their area of service, as well so that educational sessions can be tailored.

A limitation of this study is in that it was a paper and pencil survey. Survey participants may be aware of the heightened focus on cultural competency and political correctness in our
society and may have felt pressure to answer questions based on social desirability. Future research may be more meaningful if a trained observer could study participants’ interactions with patients.

Patients themselves should be surveyed on their perceptions of the cultural competency of healthcare providers in the state. Their responses could assist in tailoring healthcare provider training. JCAHO and other accrediting bodies mandate that hospitals provide proof that they are providing culturally competent care for their clients.

There are no previous surveys to provide benchmarking for cultural competence in North Dakota. There are other U.S. states that might be considered equally homogenous based on U.S. census findings. Comparison of IAPCC-R scores for healthcare providers in those states may reveal differences in educational preparation and training.

Another limitation of this particular study is that this sample was purposive in that participants were limited to registered nurses employed in acute care settings. Study participants were also mainly white females. Future work should include additional recruitment of other health care provider types and of culturally diverse providers.

Cultural diversity training has been identified as a factor that impacts nurses’ rating of their cultural competence. Cultural competence may be enhanced by designing and testing educational experiences that will help providers provide culturally safe and appropriate care. Dr. Campinha-Bacote (2003) provides a very fitting quote regarding the journey to cultural competence:

The more you think you know; the more you really don’t know.
  The more you think you don’t know;
  The more you really know.

(p. 66)

The results of this study revealed that the majority of nurses in this sample did indeed rate themselves to be less than culturally competent. It was encouraging that they indicated recognition of their own limitations in dealing with clients from cultures other than their own. At the same time, respondents indicated that they desired to learn more. Healthcare organization administrators, educators, and faculty in schools of nursing in our state need to foster this cultural awareness through education.

**SUMMARY OF RECOMMENDATIONS**

Based on the findings in this study the following recommendations are made:

1. Replication of this study should be conducted across other disciplines and healthcare settings in North Dakota to include doctors, nursing assistants, paramedics, respiratory therapists, dieticians, advanced practice nurses, physical therapists, and counselors.
2. Replication of this study should be conducted in other ethnically homogenous states and comparisons run between the states.
3. The IAPCC-R can be used as a benchmarking and evaluation tool within facilities when they are evaluating their training programs.
4. Health care providers’ IAPCC-R scores should be compared with patient satisfaction scores on constructs related to cultural competence.
5. Facilities should explore a variety of teaching learning methods to enhance cultural diversity training for healthcare providers. The use of articles as a major method of staff education does not provide for cultural contacts.
6. The IAPCC-R can be used in nursing programs and specifically in cultural courses to assess learning needs and effectiveness of teaching/learning strategies.

REFERENCES


