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Assessing Cultural Competence in Nursing Students At a Small Private Liberal Arts University

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Assessing Cultural Competence in Nursing Students

At a Small Private Liberal Arts University

By

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Acknowledgments

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Table of Contents

Acknowledgements 2
List of Tables 4
Abstract 5
Introduction 6
Methods 8
Results 11
Discussion 13
Limitations 17
Future research 18
Conclusion 19
References 20
Table 1 23
Table 2 25
Appendix A 26
Appendix B 29
Appendix C 32
Appendix D 31
Appendix E 35
List of Tables

Table 1- Quality and culture quiz results 23
Table 2- Quick discrimination index results 25
Appendix A- IRB application 26
Appendix B- IRB approval 29
Appendix C- Sample e-mail 32
Appendix D- Quality and Culture Quiz 31
Appendix E- Quick Discrimination Index 35
Assessing Cultural Competence in Nursing Students at a Small Private Liberal Arts University

Abstract

Appropriate care across cultures can occur only when patient, family, and community expectations are aligned with provider knowledge, attitude, and behavior (Doorenbos et al, 2005). Because nurses treat patients from all types of backgrounds, a culturally competent approach should and must be used when educating and training future nurses. The purpose of this study is to assess various cultural competence components of senior nursing students at a small Midwestern University. In order to assess this sample population, two peer-reviewed surveys were chosen; the Quality and Culture Quiz and the Affective Racial Attitudes subscale from the Quick Discrimination Index. Three more questions were created to assess attitudes towards health disparities. Students presented excellent knowledge regarding communicating with an interpreter and general knowledge on different cultures around the world. They also showed fairly high scores regarding affective racial attitudes. The results were lacking however, when discussing unconscious bias and non-verbal communication. The students did not seem completely convinced that minorities receive poorer quality healthcare and that cultural competence were equally as important as clinical skills. The high scores obtained by the students are an indicator that they are being trained sufficiently regarding those specific components, the lower scores however indicate some components of cultural competence training are lacking within the program.
Introduction

Disparities within the healthcare system are prevalent in today’s society. According to selected findings by the Agency for Healthcare Research (2011), racial and ethnic minorities are more likely to leave the emergency room without being seen, suffer an amputation due to diabetes, and lack health insurance, when compared to white Americans. Racial and ethnic minorities are also less likely to receive the recommended hospital care, have a usual primary care provider or receive a number of lifesaving tests such as colorectal cancer screenings. Furthermore, white Americans are twice as likely to say that their provider had “listened carefully, explained things carefully, explained things clearly, respected what they had to say, and spent enough time with them” than their Asian counterparts (AHRQ, 2011 p.23).

Regarding African Americans specifically, they receive less intensive hospital care, including fewer cardiovascular procedures, lung resections for cancer, kidney and bone marrow transplants, cesarean sections, peripheral vascular and orthopedic procedures. They have also been reported to receive less aggressive treatment for prostate cancer, received fewer antiretroviral medications for the human immunodeficiency virus infection, antidepressants for depression, tympanostomy tubes, hospital admissions for chest pain, and lower-quality prenatal care (Fiscella et al, 2000).

Directly related to their lack of quality healthcare, there is overwhelming evidence that demonstrates ethnic and racial minorities continuously suffer from poorer health outcomes at larger disproportionate levels than their white counterparts (Doorenbos et al, 2005). They tend to suffer at higher rates from cardiovascular disease, diabetes, asthma, and cancer, among other conditions (Bentacourt et al, 2003).

Many explanations are put forth to explain disparities in minority health and outcomes. Some in society blame the victims of these poor health outcomes to circumvent addressing the
root causes of racial/ethnic health disparities. Others often ignore the reality that “minorities are more likely than whites to live in compromised environments that lack health-promoting resources” (Williams et al. 2001). When compared to white Americans, minorities have different experiences in the healthcare system, even when they have similar medical conditions and insurance coverage. Since financial barriers should not be a factor in these cases, researchers have concluded that the health care delivery system, for whatever reasons, must be doing an inferior job in meeting the needs of racial and ethnic minorities than in meeting the needs of the non-minority population (Brach et al. 2000)

Culturally competent care has been proposed as one potential strategy to overcome ethnic inequalities in quality care (Smedley et al.2003, Kirmayer et al. 2012). Although there is no definitive definition of Cultural Competence, the most often cited is that of Cross et al. (1989) where he states “A set of congruent behaviors, attitudes, and policies that come together in a system, agency, or amongst professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations” (Truong et al 2013, Cross et al 1989, p7).

The cultural competence of healthcare providers is central to the United States health care system’s ability to provide access to, and deliver high quality and value healthcare. It is also instrumental in reducing health disparities (Doorenbos et al, 2005). One of the key recommendations from the Institute Of Medicine’s report (2003) on unequal treatment is also to integrate cross-cultural education into the training of all health professionals (Neander et al, 2003; Smedley et al, 2003). The rationale for proposing the integration of cultural competence in baccalaureate nursing education is to support the development of patient-centered care, which identifies respects and addresses differences in patient’s values, preferences and expressed needs (Nelson A.R, 2003)
The nursing program at a small private, liberal arts institution was developed in accordance to the American Association of Colleges of Nursing (AACN) requirements. In their 2015 Policy Brief, the AACN states that professional nurses must demonstrate a sensitivity to and understanding of a variety of cultures to provide high quality care across settings. This university’s nursing program developed a Mission/Philosophy specific to the nursing program while including the AACN recommendations. Their appendix contains various mentions of treating diverse patient populations and implementing a culturally competent, holistic nursing care. Based on the suggested recommendations above, the nursing program at this small private, liberal arts institution was chosen for inclusion in this cultural competence assessment. The three research questions developed and assessed were 1) Do student’s present sufficient knowledge regarding minority patients and how to treat them 2) Do student’s present positive racial attitudes towards racial/ethnic minorities 3) What is the student’s overall belief about health disparities.

Methods

Participants

The sample population for this assessment included senior nursing students from a Midwestern private liberal arts university. Graduating nursing classes from the years 2015 & 2016 received an online survey to complete. All participants were of senior-level status with most self-identifying as female (n=29; 96.7%). Most identified their primary political affiliation as Republican 56.67% (n=17), followed by Democrat 30% (n=9), Independent 3.33% (n=1) and 10% other (n=3). The mean age of our population is 22.3 years old, while 96.7% of our sample population self-identified as Caucasian (n=29) and African American/
African/Black/Caribbean (n=1; 3.33%). The total number of responses was 30 for a response rate of 37.5%.

**Instrument**

Two separate surveys were included in the development of this online survey. The “Quality and Culture Quiz” is the first survey included in this assessment. “The Provider’s Guide to Quality and Culture” website, which offers the survey, is a joint project of the Managements Sciences for Health, The U.S Department of Health and Human Services, The Health Resources and Services Administration and the Bureau of Primary Health Care. A disclaimer on the page reads, “A high score on this quiz does not "certify" or qualify you as a culturally competent provider! Rather, the purpose of this quiz is to stimulate your thinking about cultural competence and help you to reflect on your experience, knowledge, and attitudes regarding culturally diverse populations” (“Providers guide to quality and culture”, 2008). We included this survey because of its reliable sources, documented validity and reliability and its ample usage in the medical community. All 23 questions in this assessment were integrated into the final survey.

An additional eight questions were acquired from the “Quick Discrimination Index” (QDI) survey. Like the aforementioned survey, this survey demonstrated good internal consistency of scale and subscales and proved stable over a 15-week test-retest while having face, content, construct-and criterion-related validity (Kumas et al, 2013). The QDI, developed by Ponterotto et al. (1995), is a 30-item Likert-scale instrument with responses ranging from 1 (strongly disagree) to 5 (strongly agree), which measures attitudes toward racial minority groups and women. Although the QDI has three subscales, only the Affective Racial Attitudes subscale was included in this survey. Both surveys were identical in content except for three extra questions added to the second survey, sent specifically to 2016 class. The final three
questions were included late during this analysis and subsequently only the second set of senior nursing students were able to answer these questions. The three questions were included to assess the students’ belief with respect to the causes of health disparities and minority’s quality of health care received.

Procedure

After receiving IRB approval (# 14/15-103, Appendix A), a digital survey was created using Survey Monkey based on the instrument to assess the sample population. Subsequent to receiving permission from the nursing department to include their senior nursing students in this survey, an email with a link to the survey was sent out to all senior students in three waves for two consecutive years, 2015 and 2016. The original email explained the reason for this research project, that the data is kept confidential and each student has the right to either not participate or stop participation at any time (Appendix B).

Data Analysis

The results of this survey were calculated using the Statistical Package for the Social Sciences (SPSS), v. 22. SPSS calculated descriptive statistics such as means, frequencies, and standard deviations. Based on those results, an analysis occurred to assess the data for issues and themes. Means and percentages were reported in separate tables for both the Quality and Culture Quiz and the Affective Racial Attitude subscale assessment. Lastly, the results and discussion section were developed and written based on the obtained data.
Results

A majority of the sample population identified themselves as female (n=29; 96.66%) and 3.33% identified themselves as male (n=1). The primary political affiliation for the sample population was Republican 56.67% (n=17), followed by Democrat 30% (n=9), Independent 3.33% (n=1) and 10% other (n=3). The mean age of our population was 22.3 years old, while 96.7% of our sample population self-identified as Caucasian (n=29) and African American/African/Black/Caribbean (n=1; 3.33%). All students were senior status in their final year of their undergraduate nursing program.

The first 23 questions included all questions from the “Quality and Culture Quiz” (Table 1). From these results, the statements with the highest percentage of correct responses by the nursing students included: When asked if cross-cultural misunderstanding between providers and patients was likely to have an impact on objectively measured clinical outcomes, 70% (n=21) of nursing students noted that this could have a negative impact on clinical outcomes. Furthermore, 56% (n=17) of the students acknowledged that if the patient and provider come from different cultural backgrounds, the medical history obtained may not be accurate. The students appear to have a good grasp on the concept of working with an interpreter, with 60% (n=18) spotting the errors in different scenarios given and 90% (n=27) knowing how to handle a situation where the patient’s relative is willing to act as an interpreter. Students also demonstrated excellent knowledge on different cultures around the world, with 96.7% (n=29) of them noting that cultural background, diet, religious, and health practices, as well as language can differ widely within a given country or part of a country. All students are aware that even if their patients are mostly European-American, U.S. born and middle-class it is important to know about health practices from different world cultures (n=30).
Conversely, the students did not seem to understand or acknowledge their own personal bias. For example, only 6.7% (n=2) of students noted that even if a health provider is very conscientious, they cannot fully eliminate his or her own prejudices or negative assumptions about certain types of patients. Furthermore, results also varied greatly when students were asked about talking to a patient with limited ability to speak English. Only 26.7% (n=8) selecting the correct answer “The least useful technique is asking questions that require the patient to give a simple yes or no answer”. Results were also very skewed based on the results about the general migrant population, with only 30% (n=9) of the students correctly noting that Hispanic women have a lower incidence of breast cancer than the majority of the population.

There also seems to be some confusion in non-verbal communication with patients. Forty seven percent (n=14) of the participants believed that some symbols- a positive nod of the head, a pointed finger, a “thumbs up” sign- are universal and can help bridge the language gap, however, this response is incorrect. Students also seem to lack some knowledge on the fact that immigrants who use healers and traditional medicines do not usually avoid conventional Western treatments, with 66.7% (n=20) stating that immigrants who use these practices tend to avoid conventional Western treatments.

The second set of questions in this assessment included eight from the QDI (Quick Discrimination Index) assessment (Table 2). Statements with the highest means include “Most of my close friends are from my own racial group” (Mean=4.57, SD= .513), “I think it is (or would be) important for my children to attend schools that are racially mixed (Mean= 4.64, SD=0.497) and I would feel ok about my son or daughter dating someone from a different race (Mean=4.35, SD =.744) The statements with the lowest scoring means were: “My friendship network is very racially mixed” (Mean=3.00, SD=1.037) “I was very happy when a African American person (Barack Obama) was elected president of the U.S in November” (Mean=3.42,
An additional three questions were added during the second round of surveys, sent exclusively to the second group of nursing students. These three questions assessed their personal perceptions of health and healthcare disparities. The first question assessed the nursing students’ opinion on the importance of cultural competence in comparison to clinical skills when dealing with patients. The results yielded a mean of 3.92 (SD=1.255). The second question asked students to identify what they believed the majority of health disparities in minorities were primarily due to with a majority of nursing students selecting Social Determinants (N=11, 91.66%) and only a small percentage (n=2, 8.34%) identifying the primary reason was due to personal choice. None of the students selected genetics as a viable reason for these disparities. The third question assessed the students’ belief that “minorities in general received poorer health care than white Americans” with a resultant mean of 3.23 (SD=1.0919).

Discussion

According to a 2013 survey conducted by the National Council of State Boards of Nursing (NCSBN) and The Forum of State Nursing Workforce Centers, nurses from minority backgrounds represent 19% of the registered nurse (RN) workforce. (Bleich et al, 2015). Furthermore, the national accrediting agency for nursing, the Commission on Collegiate Nursing Education (CCNE), has urged nursing educators to increase the number of racial and ethnic minorities in the field of nursing (Gardner et al, 2005). According to the CCNE, minority nurses are needed to continue creating nursing models for the unique needs of minority populations. However, even with positive strides towards a more diverse workforce,
the students in this study lacked diversity, with only one participant not identifying as Caucasian. The makeup of this sample populations’ demographic does not allow for generalization and furthermore the lack of diversity can be detrimental to cultural competency with these nursing students.

While having a diverse workforce is indicated and a necessity, another issue that hinders good quality care is communication between the nurse and his/her patient. The detrimental consequences of poor communication for minority/ethnic communities have long been highlighted. This is especially an important topic when it comes to nursing and the ability to treat people with limited English speaking skills. While the ability to communicate in English varies both within and across ethnic groups, there are a significant number of people from minority and ethnic backgrounds who are not fluent in English (Modood et al. 1997, Chamba & Ahmad 2000). Community participants are often reluctant to initiate contact with health professionals because of language barriers. Where consultations do occur, poor communication often results in a lack of understanding the health-related issue and resulting treatment modality, which can have a detrimental effect on health outcomes.

The quality of care is further compromised through a lack of privacy and the negative impact on social relationships resulting from reliance on family interpreters (Gerrish et al. 2004, 407). The nursing students in this study presented ample knowledge regarding communicating with an interpreter. In the first set of questions, a trend can be seen in the accuracy of Nursing Students in dealing with interpreters, with a majority of students identifying the correct response. There seems to be however, a discrepancy when the students were asked how they would interact with people who were not fluent in English. In situations where an interpreter is not available, this could prove detrimental to patient-nurse relationships and affect the quality of healthcare. For example, a number of students noted that some
symbols - a positive nod of the head, a pointed finger, and a “thumbs up” sign- are universal and can help bridge the language gap. However, many symbols have different meaning depending on the country of origin of the patient, and some might even be offensive. This can lead to poor communication between provider and patient.

The students also seem vastly unaware of unconscious bias, with only 6.7% of students recognizing that a provider cannot fully eliminate his or her own prejudices or negative assumptions about certain types of patients even when being very conscientious. Providers, like all humans, are likely to unconsciously apply stereotypes when thinking of patients. Extensive evidence has demonstrated that when humans mentally categorize individuals as belonging to a particular class or group, the characteristics assigned to that group are unconsciously and automatically applied to the individual  (Van Ryn et al. 2000, Schulman et al.1999) This process has received considerable research attention in a number of domains. In health care, there is substantial evidence that patient categories such as race/ethnicity, gender, age, sexual orientation, and socioeconomic status influence provider beliefs about and expectations of patients. As an example of evidence of automatic stereotyping, providers in one study rated their black patients, on average, as less educated than their white patients and less likely to have demanding careers, regardless of the patients’ actual level of education and/ or occupation. (Burgess et al, 2004). The lack of awareness of unconscious bias could prove detrimental to the nursing student’s ability to provide quality healthcare.

There also seems to be some discrepancies within the student population regarding general knowledge of migrant populations. It is important to note that this was a very narrow sample of questions that could have been asked about any migrant populations. Considering this, only 30% of students were aware that Hispanic women had a lower incidence of breast cancer than the rest of the general population. In fact, according to a 2015 study published by
the Cancer Journal of Clinicians, Hispanic women reportedly had a lower incidence of breast cancer than non-Hispanic Whites, non-Hispanic Blacks and American-Indian/Alaskan Native. Asian/Pacific Islander was the only group with a lower breast cancer incidence in women (Siegel et al. 2015).

When looking at QDI questions, a couple of means emerged. Because people usually socialize with those around them and this university consists primarily of Caucasians, the low mean score related to “I feel like my friendship network is very racially mixed” is to be expected. This result also correlates with a high mean score of “Most of my close friends are from my own racial group”. The statement, “I was very happy when an African American person (Barack Obama) was elected President of the United States on November 4, 2008” had one of the lowest means at 3.63. Although this mean could tell us something about attitudes towards minorities in positions of power, the reasoning behind this question could be more related to political affiliation than to race, as the majority of our respondents identified as Republican and President Obama was as Democratic candidate. There could be other personal reasons of disliking the presidential candidate, regardless of race, but overall, that was not assessed in this study.

Interestingly, the statement “I feel like I could develop an intimate relationship with someone from a different race” elicited a response mean of 4.1. This result indicated that a majority of respondents chose to “Agree” but not “Strongly Agree” with this statement. Similarly, according to our sample population, a majority of respondents chose to select “Disagree” as opposed to “Strongly Disagree” when asked, “I feel it is better for people to marry within their own race”. The results seem to illustrate acceptance for interracial dating or marriage, but not a total 100% buy-in by this population.
The last few questions on this survey assessed the participant’s belief about health and healthcare disparities. The statement “I believe cultural competence is equally as important as clinical skills when dealing with patients in a healthcare setting” had a mean of 3.1 which indicated the majority of respondents “Agreed” but did not necessarily “Strongly Agree” with this statement. On the other hand, and more importantly, 20% indicating that they disagreed with the statement. A lack of importance placed on Cultural Competence could have a negative impact in the nursing student’s schoolwork. Research shows that negative attitudes and beliefs often cause poor strategy use of or lack of orchestration of learning strategies. (Oxford et al. 1994)

The last two questions assessed the nursing students belief as to the primary reason for health disparities within minority populations and their quality of care received. An overwhelming majority believe the main reason for this is “Social determinants of health” which has been well documented through previous research (Williams et al. 2008, Marmot et al, 2009). Sadly, the results for “minorities receiving poorer quality health care” were not as strong. An overabundance of research highlights the fact that minorities receive a poorer quality of healthcare, however the standard mean (3.23) was not as high as one would expect from such a straightforward question. This seems to point to the fact that nursing students are not aware or want to believe that certain minority groups receive poorer quality healthcare, despite the ample evidence that shows otherwise (Smedley et al. 2003, Fiscella et al. 2000, Bentacourt et al. 2004).

Limitations

There are several limitations to this study. One limitation of this research is the low response rate (37.5%). Due to the low response rate, the results from this study may not be
generalizable to other nursing departments or schools. Social desirability could be another study limitation. This occurs when participants respond in accordance to social norms, over reporting socially acceptable behaviors and under reporting socially undesirable behaviors (Colton & Covert, 2007). Furthermore, due to the closed-survey format of this questionnaire, the responses were limited and additional input was not recorded. Lastly, the monothematic nature of the project only allows the respondent to answer the question within the given responses.

**Future Research**

For future research, a survey designed using the *specific* components of the nursing department’s Cultural Competence requirements would be appropriate. If the requirements were compiled into a survey that assessed the students’ knowledge on those particular topics, a much more concise conclusion could be drawn. In addition, a larger sample size would be ideal such that all nursing students could be assessed. One way to do this would be to include all the professors in the nursing department. Then, distribute the survey in each class to assess the Cultural competence level and assess if the objectives (as developed by the nursing department) are being met and properly preparing the students for the real world. Lastly, focus groups could be used to collect narrative data, which could help elucidate, and more deeply assess the students’ beliefs about cultural competence, health disparities, different immigrant populations and their beliefs in health and health care. Based on the results of these focus groups, a seminar class (for example) could be implemented to address the issues that arose from these focus group discussions.
Conclusion

This research attempted to assess various components of cultural competence in senior-level nursing students. The survey included three different components consisting of: Affective racial attitudes (8), knowledge based-questions (23) and attitudes towards health disparities (3). The results highlighted areas that nursing students excelled and others that were deficient.

Regarding the knowledge based questions, although the students presented excellent preparation for working alongside an interpreter, in communicating with non-English speaking patients in general or in non-verbal communication, they seemed to miss some basic concepts. The students seemed largely unaware of unconscious bias or its consequences within the healthcare setting and seemed to have some confusion regarding the general migrant population, and their usage of conventional Western treatments. In the personal assessment of affective racial attitudes component, students generally scored high regarding racial attitudes, but there lower scores did exist when asked about interracial marriage and the election of a black president. Students seem to believe that clinical skills are more important than cultural competence; however, they did have an excellent grasp on the reason for disparities.

Unfortunately, this sample population seemed somewhat unaware that, in general, minorities receive poorer quality healthcare. It is our recommendation that components educating on unconscious bias and minority health education be integrated into the nursing curriculum, and as a result, this would hopefully aid the program in producing more culturally competent nurses. It is also our suggestion that the nursing students continue to pursue increasing diversity within the program, as this will be beneficial to the effort of creating culturally competent individuals.
References


Gardner, J. (2005). Barriers influencing the success of racial and ethnic minority students in nursing programs. *Journal of Transcultural Nursing*, 16(2), 155-1


Kirmayer L.K (2012). Rethinking cultural competence. *Transcultural psychology* 49(2) 149-164;


## Table 1: Results from the Culture and Quality Assessment

<table>
<thead>
<tr>
<th>Question</th>
<th>Num. Correct</th>
<th>% Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cross-cultural misunderstandings between providers and patients can lead to mistrust and frustration, but are unlikely to have an impact on objectively measured clinical outcomes.</td>
<td>21</td>
<td>70%</td>
</tr>
<tr>
<td>2. When the patient and provider come from different cultural backgrounds, the medical history obtained may not be accurate.</td>
<td>17</td>
<td>56.70%</td>
</tr>
<tr>
<td>3. When a provider expects that a patient will understand a condition and follow a regimen, the patient is more likely to do so than if the provider has doubts about the patient.</td>
<td>14</td>
<td>46.70%</td>
</tr>
<tr>
<td>4. A really conscientious health provider can eliminate his or her own prejudices or negative assumptions about certain types of patients.</td>
<td>2</td>
<td>6.70%</td>
</tr>
<tr>
<td>5. When taking a medical history from a patient with a limited ability to speak English, which of the following is LEAST useful?</td>
<td>8</td>
<td>26.70%</td>
</tr>
<tr>
<td>6. During a medical interview with a patient from a different cultural background, which is the LEAST useful technique?</td>
<td>20</td>
<td>66.70%</td>
</tr>
<tr>
<td>7. When a patient is not adhering to a prescribed treatment after several visits, which of the following approaches is NOT likely to lead to adherence?</td>
<td>29</td>
<td>96.70%</td>
</tr>
<tr>
<td>8. When a patient who has not adhered to a treatment regimen states that s/he cannot afford the medications prescribed, it is appropriate to assume that financial factors are indeed the real reasons and not explore the situation further.</td>
<td>26</td>
<td>86.70%</td>
</tr>
<tr>
<td>9. Which of the following are the correct ways to communicate with a patient through an interpreter?</td>
<td>18</td>
<td>60%</td>
</tr>
<tr>
<td>10. If a family member speaks English as well as the patient’s native language, and is willing to act as interpreter, this is the best possible solution to the problem of interpreting.</td>
<td>27</td>
<td>90%</td>
</tr>
<tr>
<td>11. Which of the following statements is TRUE?</td>
<td>29</td>
<td>96.70%</td>
</tr>
</tbody>
</table>
12. Which of the following statements is NOT TRUE?  
17  56.70%

13. Which of the following statements is NOT TRUE?  
8  26.70%

14. Because Hispanics have a lower incidence of certain cancers than the majority of the US population, their mortality rate from these diseases is correspondingly lower.  
25  83.30%

15. Minority and immigrant patients in the US who go to traditional healers and use traditional medicines generally avoid conventional Western treatments.  
10  33.30%

16. Providers whose patients are mostly European-American, U.S.-born, and middle-class still need to know about health practices from different world cultures.  
30  100%

17. Which of the following is good advice for a provider attempting to use and interpret non-verbal communication?  
13  43.30%

18. Some symbols—a positive nod of the head, a pointing finger, a “thumbs-up” sign—are universal and can help bridge the language gap.  
16  53.30%

19. Out of respect for a patient’s privacy, the provider should always begin a relationship by seeing an adult patient alone and drawing the family in as needed.  
16  53.30%

20. In some cultures, it may be appropriate for female relatives to ask the husband of a pregnant woman to sign consent forms or to explain to him the suggested treatment options if the patient agrees and this is legally permissible.  
21  93.30%

21. Which of the following is NOT TRUE of an organization that values cultural competence:  
28  93.30%

22. A female Muslim patient may avoid eye contact and/or physical contact because:  
21  70%

23. Which of the following statements is NOT TRUE:  
23  76.70%
Table 2: Affective Racial Attitude Results from the QDI

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel I could develop an intimate relationship with someone from a different race.</td>
<td>4.07</td>
<td>1.05</td>
</tr>
<tr>
<td>2. My friendship network is very racially mixed.</td>
<td>3.17</td>
<td>1.05</td>
</tr>
<tr>
<td>3. I would feel O.K. about my son or daughter dating someone from a different race.</td>
<td>4.27</td>
<td>0.64</td>
</tr>
<tr>
<td>4. I was very happy when an African American person (Barack Obama) was elected President of the United States on November 4, 2008.</td>
<td>3.63</td>
<td>1.00</td>
</tr>
<tr>
<td>5. Most of my close friends are from my own racial group</td>
<td>4.33</td>
<td>0.80</td>
</tr>
<tr>
<td>6. I think that it is (or would be) important for my children to attend schools that are racially mixed.</td>
<td>4.30</td>
<td>0.79</td>
</tr>
<tr>
<td>7. If I were to adopt a child, I would be happy to adopt a child of any race.</td>
<td>4.17</td>
<td>0.83</td>
</tr>
<tr>
<td>8. I think it is better if people marry within their own race.</td>
<td>2.20</td>
<td>0.96</td>
</tr>
</tbody>
</table>

1= Strongly disagree, 2= Disagree, 3= Not Sure, 4= Agree, 5= Strongly Agree
Appendix A – IRB Application

Otterbein University
Institutional Review Board

Cover Page for
SUMMARY SHEETS

Principal Investigator(s): Robert Braun PhD, MPH, CHES

(If student, list advisor's name first)
Mikah Barrueta
Name
Signature

Name
Signature

PI Academic Title: Assistant Professor

Department: HSS

Campus Address: 160 Center Street, Rike #226
(Faculty Member's Campus Address)

PROPOSAL TITLE:
Cultural competence in Otterbein Nursing Students.

Are you applying for expedited review? If so, indicate, by number, the category from the Guidelines material entitled “Research Eligible for Expedited Review” which best describes your project.

3

Is there outside funding for the proposed research? If so, please indicate the source: N/A

When do you plan to begin collecting data? 4/15

When do you plan to finish collecting data? 5/16

Revised September 2010]

OTTERBEIN UNIVERSITY INSTITUTIONAL REVIEW BOARD
Be specific about exactly what subjects will experience when they participate in your research, and about the protections that have been included to safeguard them. Careful attention to the following may help facilitate the review process.

1. In a sentence or two, describe the background and purpose of the research.

Our research will assess the level of cultural competence in two consecutive classes of senior nursing students (2015 and 2016).

2. Briefly describe each procedure or manipulation to be implemented that will impact subjects included within the study.

All subjects will be sent a link to a survey and a brief explanation of what the survey entails. This link will take them to the webpage which will contain our 34 questions survey.

3. What measures or observations will be taken in the study? If any questionnaires, tests, or other instruments are used, provide a brief description and include a copy for review.

The first 23 questions of the survey consists of the “Quality and Culture Quiz” developed by Management Sciences for Health (MSH), The U.S. Department of Health and Human Services, The Health Resources and Services Administration and The Bureau of Primary Health Care. These questions assess the general knowledge of nursing students in clinical situations involving patients with different cultural backgrounds. The next 7 questions are taken from the “Quick discrimination Index” developed by Joseph G. Ponterotto (1999). These questions will assess the affective attitudes toward more personal contact with minorities. The final four questions inquire about the participant’s demographics.

4. Who will be the subjects in this study? How will they be solicited or contacted?

Senior Otterbein nursing students will be our subjects. The goal is to survey the senior class in 2015 and 2016 before graduation. They will be contacted via e-mail after their department chair’s approval.

5. What steps will be taken to insure that each subject’s participation is voluntary? What, if any inducements will be offered to the subjects for their participation?

The students will be informed that they are under no obligation to participate and that this is an anonymous survey. Yes, there will be inducements. All of the students who complete the survey will have the option to enter their name separately into a drawing for a gift card to Chipotle if they so choose.

6. If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subject or society?
7. Approximately how much time will be demanded of the subject? 10-15 minutes

8. Will the subjects encounter the possibility of psychological, social, physical or legal risk? If yes, please describe.
   x

9. Will any stress to subjects be involved? x

10. Will the subjects be deceived or misled in any way? x

11. Will there be a request for information which subjects might consider to be personal or sensitive? If yes, please describe.
    Subjects will be asked their age, gender, race and political affiliation
    x

12. Will the subjects be presented with materials which they might consider to be offensive, threatening, or degrading? If so, please describe.
    x

13. a. Under federal law 45CFR 46.116.d.1-4 informed consent may be waived if the research involves no more than minimal risk to the subjects. (Please see Guidelines for Submission of Protocols for definition of minimal risk.) Will a written consent form be used? If so, please include the form. If no, please answer b.
   I believe this I believe this study falls under the “minimal risk” category.

13. b. Will you insure that the subjects give their verbal consent prior to participating?

14. If you are recruiting students who are participating for either fulfillment of a course requirement or for extra credit, will an alternative assignment be provided for those students who do not wish to participate?
   N/A

15. Other than for class requirement or for extra credit, will the fact that a subject did or did not participate in a specific experiment or study be shared with a supervisor, teacher or employer?
   x

16. Will subjects’ contributions to the research (data base) be kept confidential?
    x

17. Will any data from files or archival data be used?
    x
Appendix B - IRB approval

INSTITUTIONAL REVIEW BOARD
RESEARCH INVOLVING HUMAN SUBJECTS
OTTERBEIN UNIVERSITY

ACTION OF THE INSTITUTIONAL REVIEW BOARD

With regard to the employment of human subjects in the proposed research:

HS # 14/15-103
Braun & Barrueta: Cultural Competence in Otterbein Nursing Students

THE INSTITUTIONAL REVIEW BOARD HAS TAKEN THE FOLLOWING ACTION:

☑ Approved
☐ Disapproved
☐ Approved with Stipulations
☐ Waiver of Written Consent Granted
☐ Deferred

*Stipulations stated by the IRB have been met by the investigator and, therefore, the protocol is APPROVED.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject’s participation in the proposed activity. Should the principal investigator leave the college, signed consent forms are to be transferred to the Institutional Review Board for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the IRB, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: 20 March 2015

Signed: ___________________________
Chairperson

OC HS Form AF
Appendix C - Sample e-mail

“Hello, my name is Mikah Barrueta, and I am a Senior Biochemistry and Molecular Biology student working on my thesis project which is based on assessing the cultural competency level of senior nursing students at Otterbein University. This project is under the direct supervision of Dr. Rob Braun from the Department of Health and Sport Sciences and we already received Otterbein IRB approval (HS# 14/15-103). Your participation will include completing an online survey containing some questions that we feel assesses your personal cultural competence level. Completing this survey will take approximately 15 minutes of your time. We believe the information will be useful in evaluating the current cultural competency level in Otterbein nursing students before they venture off into the clinical field. Your participation is solicited, although strictly voluntary. By clicking on the link below you agree to participate in this research project. You should be aware that even if you agree to participate, you are free to withdraw and stop completion of this survey at any time without penalty. You may also choose not to answer any specific questions. While your participation is strictly voluntary, after completing this survey you will be entered in a drawing for one of three $10 Chipotle cards if you so choose. We also assure you that your name will not be associated in any way with the research findings. If you would like additional information concerning this study before or after it is complete, please feel free to contact me by phone 937-825-2941 or email mikah.barrueta@otterbein.edu.”
Appendix D.

Quality & Culture Quiz

1. Cross-cultural misunderstandings between providers and patients can lead to mistrust and frustration, but are unlikely to have an impact on objectively measured clinical outcomes.
   a. True
   b. False

2. When the patient and provider come from different cultural backgrounds, the medical history obtained may not be accurate.
   a. True
   b. False

3. When a provider expects that a patient will understand a condition and follow a regimen, the patient is more likely to do so than if the provider has doubts about the patient.
   a. True
   b. False

4. A really conscientious health provider can eliminate his or her own prejudices or negative assumptions about certain types of patients.
   a. True
   b. False

5. When taking a medical history from a patient with a limited ability to speak English, which of the following is LEAST useful?
   a. Asking questions that require the patient to give a simple “yes” or “no” answer, such as “Do you have trouble breathing?” or “Does your knee hurt?”
   b. Encouraging the patient to give a description of her/his medical situation, and beliefs about health and illness.
   c. Asking the patient whether he or she would like to have a qualified interpreter for the medical visit.
   d. Asking the patient questions such as “How has your condition changed over the past two days?” or “What makes your condition get better or worse?”

6. During a medical interview with a patient from a different cultural background, which is the LEAST useful technique?
   a. Asking questions about what the patient believes about her or his illness - what caused the illness, how severe, what type of treatment is needed.
   b. Gently explaining which beliefs about the illness are not correct.
   c. Explain the “Western” or “American” beliefs about the patient’s illness.
   d. Discussing differences in beliefs without being judgmental.
7. When a patient is not adhering to a prescribed treatment after several visits, which of the following approaches is NOT likely to lead to adherence?
   a. Involving family members.
   b. Repeating the instructions very loudly and several times to emphasize the importance of the treatment.
   c. Agreeing to a compromise in the timing or amount of treatment.
   d. Spending time listening to discussions of folk or alternative remedies.

8. When a patient who has not adhered to a treatment regimen states that s/he cannot afford the medications prescribed, it is appropriate to assume that financial factors are indeed the real reasons and not explore the situation further.
   a. True
   b. False

9. Which of the following are the correct ways to communicate with a patient through an interpreter?
   a. Making eye contact with the interpreter when you are speaking, then looking at the patient while the interpreter is telling the patient what you said.
   b. Speaking slowly, pausing between words.
   c. Asking the interpreter to further explain the patient’s statement in order to get a more complete picture of the patient’s condition.
   d. None of the above.

10. If a family member speaks English as well as the patient’s native language, and is willing to act as interpreter, this is the best possible solution to the problem of interpreting.
   a. True
   b. False

11. Which of the following statements is TRUE?
   a. People who speak the same language have the same culture.
   b. The people living on the African continent share the main features of African culture.
   c. Cultural background, diet, religious, and health practices, as well as language, can differ widely within a given part of a country.
   d. An alert provider can usually predict a patient’s health behaviors by knowing what country s/he comes from.

12. Which of the following statements is NOT TRUE?
   a. Friendly (non-sexual) physical contact is an important part of communication for many Latin American people.
   b. Many Asian people think it is disrespectful to ask questions of a health provider.
   c. Most African people are either Christian or follow a traditional religion.
   d. Eastern Europeans are highly diverse in terms of customs, language and religion.

13. Which of the following statements is NOT TRUE?
   a. The incidence of complications of diabetes, including lower-limb amputations and end-stage renal disease, among the African-American population is double that of European Americans.
b. Japanese men who migrate to the US retain their low susceptibility to coronary heart disease.
c. Hispanic women have a lower incidence of breast cancer than the majority population.
d. Some Native Americans/American Indians and Pacific Islanders have the highest rate of type II diabetes mellitus worldwide.

14. Because Hispanics have a lower incidence of certain cancers than the majority of the US population, their mortality rate from these diseases is correspondingly lower.
   a. True
   b. False

15. Minority and immigrant patients in the US who go to traditional healers and use traditional medicines generally avoid conventional Western treatments.
   a. True
   b. False

16. Providers whose patients are mostly European-American, U.S.-born, and middle-class still need to know health practices from different world cultures.
   a. True
   b. False

17. Which of the following is good advice for a provider attempting to use and interpret non-verbal communication?
   a. The provider should recognize that a smile may express unhappiness or dissatisfaction in some cultures.
   b. To express sympathy, a health care provider can lightly touch a patient’s arm or pat the patient on the back.
   c. If a patient will not make eye contact with a health care provider, it is likely that the patient is hiding the truth.
   d. When there is a language barrier, the provider can use hand gestures to bridge the gap.

18. Some symbols—a positive nod of the head, a pointing finger, a “thumbs-up” sign—are universal and can help bridge the language gap.
   a. True
   b. False

19. Out of respect for a patient’s privacy, the provider should always begin a relationship by seeing an adult patient alone and drawing the family in as needed.
   a. True
   b. False

20. In some cultures, it may be appropriate for female relatives to ask the husband of a pregnant woman to sign consent forms or to explain to him the suggested treatment options if the patient agrees and this is legally permissible.
   a. True
b. False

21. Which of the following is NOT TRUE of an organization that values cultural competence:
   a. The organization employs or has access to professional interpreters that speak all or at least most of the languages of its clients.
   b. The organization posts signs in different languages and has patient education materials in different languages.
   c. The organization tries to hire staff that mirror the ethnic and cultural mix of its clients.
   d. The organization assumes that professional medical staff do not need to be reminded to treat all patients with respect.

22. A female Muslim patient may avoid eye contact and/or physical contact because:
   a. She doesn't want to spread germs.
   b. Muslim women are taught to be submissive.
   c. Modesty is very important in Islamic tradition.
   d. She doesn’t like the provider.

23. Which of the following statements is NOT TRUE:
   a. Diet is an important part of both Islam and Hinduism.
   b. North African countries have health care systems that suffer because of political problems.
   c. Arab people have not historically had an impact on the medical field.
Appendix E. Quick Discrimination Index

1. I feel I could develop an intimate relationship with someone from a different race. 

2. My friendship network is very racially mixed. 

3. I would feel O.K. about my son or daughter dating someone from a different race. 

4. I was very happy when an African American person (Barack Obama) was elected President of the United States on November 4, 2008. 

5. Most of my close friends are from my own racial group. 

6. I think that it is (or would be) important for my children to attend schools that are racially mixed. 

7. If I were to adopt a child, I would be happy to adopt a child of any race. 

8. I think it is better if people marry within their own race.