The Need for Cultural Competency in Health Care

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Purpose To highlight the importance of cultural competency education in health care and in the medical imaging industry.

Methods A comprehensive search of the Education Resource Information Center and MEDLINE databases was conducted to acquire full-text and peer-reviewed articles relating to cultural competency training in health care.

Results A total of 1008 academic journal articles and 3 books were identified for this literature review. Search criteria was narrowed to peer-reviewed articles published between 2000 and 2016, resulting in 24 articles. A majority of the research studies addressed cultural competency education in allied health professions, as well as psychology and athletic training. Recent research studies pertaining to the cultural competence of imaging professionals were not found.

Discussion Research shows that the behaviors of health care providers can contribute to health disparities. National standards have been established to promote patient-centered care that reduces or eliminates health disparities in the U.S. population. Lectures and training sessions help professionals maintain these standards, but they might not be adequate. Health care workers need to interact and work with diverse patient populations to increase their empathy and become culturally competent.

Conclusion A patient-centered care approach that responds to patients' unique needs and reduces health disparities among diverse patient populations can be achieved by training culturally competent health care professionals. More research is needed to determine the nature of cultural competency education taught in radiography programs.

Keywords | *cultural competency, medical imaging, health disparities, cultural competency models, health care.*

The 2015 U.S. Census Bureau's national population projections indicate that the United States is expected to become more racially and ethnically diverse in the coming years. The Hispanic population is projected to expand from 55 million in 2014 to 119 million in 2060, an increase of 115%. In fact, 29% of the United States is projected to be Hispanic by 2060. In 2014, the Asian population accounted for 5.4% of the total population, and this group is projected to almost double, accounting for 9.3% of the total population in 2060 (see **Figure 1**).[1]

As the United States becomes more diverse and global interaction increases, there is a need for all generations to understand this increasing diversity and

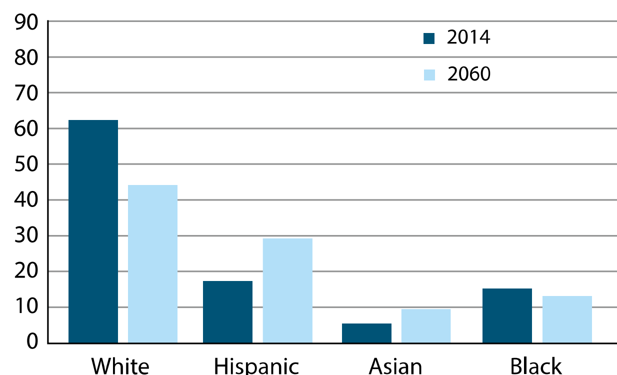

Figure 1. *Comparison of 2014 and 2060 population percentages of the United States. Figure courtesy of the author.*

be equipped with the tools necessary to interact with people who are different from them. Because cultural beliefs and values have an important effect on individuals' health-seeking behaviors, cultural competency and diversity education is crucial in the health care industry.

Cultural Competency Models

Health practitioners, health agencies, and researchers provide numerous definitions and models to describe cultural competence.

Bennet Model

Milton Bennett's view as an anthropologist introduced a continuum model of cultural competence that starts with denial and avoidance. On the far end, the person denies cultural differences or is unaware of world views that are different from his or hers. On the other end of the continuum of cultural competence in Bennet's model is integration. During integration, the person values a range of cultures and tries to incorporate aspects of his or her own culture, as well as the cultures of others, into clinical practices.[2]

Purnell Model

Larry Purnell developed a holistic model of cultural competence that can assess cultural values, behaviors, and health care practices of individuals. Used for all health care disciplines, the Purnell model depicts a large circle that starts from a very broad and global view and ends with the individual's personal life experiences. Purnell takes into consideration the influence of the individual's global society, community, family, and personal values in the health care setting as well as interactions with diverse patients. In short, the foundation of the Purnell model is that by combining an awareness of these complex factors and an understanding of themselves, health care providers can learn to respect patients as individuals and understand cultural differences.[3]

Cross Model

The most widely used model of cultural competence was introduced by Terry Cross and his colleagues in 1989. In this model, cultural competence is defined as a 6-stage continuum where the individual might start at the lowest stage of competence, cultural destructiveness, and progress to the highest stage, cultural proficiency.[4] The first stage, cultural destructiveness is when individuals are destructive to cultures and those with a culture different from the dominant group in the indigenous society. At this level, "the individuals working in a system lack the capacity to help minority or culturally diverse clients."[4] At the third stage, cultural blindness, individuals believe that there is no difference among their patients and that all patients should be treated the same way regardless of their background, culture, and life experiences.[5] In educational settings, an instructor who is culturally blind might think it is alright to treat all students the same regardless of a student's cultural values, background, race, or sexual identity. Similarly, culturally blind health care providers are not aware that each patient has a unique set of needs. Even patients who are of the same race or ethnicity as the health care provider might require unique care based on cultural values, age, sexual preference, or level of income.

In cultural precompetence, the fourth stage of the continuum, individuals and organizations realize shortcomings in providing care to culturally diverse patients and try to improve their services. For example, hospital administrators might hire more diverse health care professionals in the hope of providing better service to their diverse patient population.[4] It is important to emphasize that the sole act of hiring diverse health care professionals does not guarantee an improvement in cultural competency levels. Minority health care professionals and individuals from all backgrounds and ethnicities need education on how to work with diverse and multicultural patients.[5,6]

The fifth and sixth stages of the continuum introduced by Cross and his colleagues are cultural competence and cultural proficiency.[4] Culturally competent health care organizations aim to improve services for a diverse community and frequently look for additional employee assessment and education in the areas of cultural competence. At the culturally proficient level, a health care organization provides cultural competence through changes in its staff's attitudes toward different cultures, updates to old policies that reflect flexibility toward different populations, and revisions in its practices to become more compatible with the culture of the population being

served. In other words, at the level of cultural proficiency, a health care professional is aware of cultural differences, knows how to respect them, and advocates on behalf of all patients to ensure their needs are met.[4,5]

Each model provides a unique explanation and understanding of how important cultural competency training is to health care providers and their patients. The models agree that cultural competence is a continuous process with several stages. While Bennet viewed the social aspects of cultural competence as an anthropologist, Purnell provided a holistic model that considers an individual's global and personal values. Conversely, Cross provided a more relevant model for all health care professionals.[2-4] In his model, Cross explained that each level of the cultural competency continuum is a phase where individuals can improve and progress to the next level. He explains that cultural proficiency, which is the highest level in the continuum, can be reached only if knowledge, skills, and attitudes of individuals and organizations change.[4]

In future studies about cultural competence in health care, Cross' cultural competency model can be used as a conceptual framework because this model has been used repeatedly by health care professionals in educational settings. In addition, Cross' model gives clear direction for educators to guide their students: provide knowledge through appropriate curriculum, model the skills and practices, and shape the attitudes of their students to help them reach the highest levels of cultural competence (see **Figure 2**).

Methods

The author completed a comprehensive search of 2 scholarly research databases, the Education Resource Information Center and MEDLINE, using the following search terms: *cultural competency, cultural competence in imaging, health disparities, cultural competency models*, and *cultural competence in health care*. The search was limited to full-text and peer-reviewed articles that described allied health professions and were published in the English language between 2000 and 2016. A separate population data search was also completed.

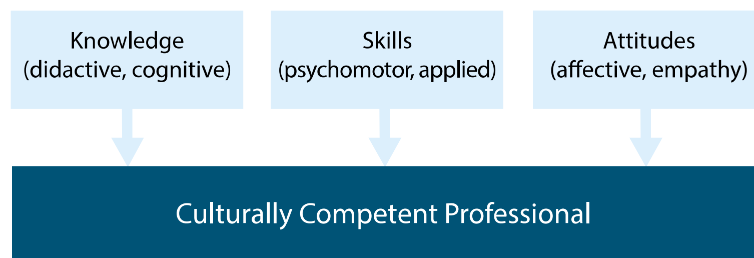

Figure 2. *Cross' theoretical framework for cultural competency education. Figure courtesy of the author.*

Results

A total of 1008 academic journal articles and 3 books were initially identified for this literature review. After refining the search to include only peer-reviewed articles focused on allied health professionals that were published between 2000 and 2016, 24 articles were selected for review. An additional 2 articles published before 2000 also were included in this review, because they were foundational to the origins of cultural competence and to the description of the cultural competency models. Most studies reported quantitative methods of research gathered from questionnaires and surveys.

Discussion

A variety of factors affect equity in health care. Research shows that the behaviors of health care providers, the lack of familiarity with, and discrimination toward, individuals of different backgrounds are significant contributors to health disparities.[7] Health disparities are defined as "racial or ethnic differences in the quality of health care that are not due to access-related factors or clinical needs, preferences, and appropriateness of intervention."[8] In addition to race and ethnicity, researchers have identified other factors that can contribute to health disparities, including[5,9,10]:

- age
- cultural and linguistic barriers
- disability
- education
- genetic and biological factors
- geographic location
- income
- sexual identity
- sexual orientation

In 2002, the Institute of Medicine published a prominent research study that

indicated nonminorities experienced higher-quality health care than racial and ethnic minorities in the United States. Among many recommendations made by this study, one was to "integrate cross-cultural education into the training of all current and future health care professionals."[8] Another important recommendation addressed the effect of cultural and background similarities between the health care provider and patients. When providers had the same cultural background as their patients, the patients reported more satisfaction, followed their provider's advice more closely, and in general, benefited from the health care system. Therefore, the report recommended to "increase the proportion of underrepresented U.S. racial and ethnic minorities among health professionals."[8]

Another study comparing access to and use of health care services by U.S.- and foreign-born Asian Americans found that foreign-born Asian respondents reported poorer access to care and less use of health care services than U.S.-born Asian Americans.[11]

The majority of the research findings indicate that minorities receive fewer medical services in areas of cardiovascular diseases, diabetes, mental health, and routine treatments for common health problems.[8] In 2003, the Agency for Healthcare Research and Quality released a report on minorities' health status in the United States.[12] According to the most recent reports from the agency, Asians are less likely to receive recommended hospital care for pneumonia than whites. Also, reports stated that black mothers were less likely to receive sufficient prenatal care than white mothers.[12] Therefore, it appears that disparities exist between the quality of care white individuals receive and the quality of care received by other racial and ethnic minorities. More importantly, a health care professional's lack of cultural awareness or biased attitude also might lead to health disparities.[10]

In the next few decades, it is projected that the population of the United States will continue to diversify. Currently, the non-Hispanic, white population is the majority group; in 2060, this population is projected to be 44% of our nation. When the non-Hispanic, white population falls below 50%, the United States will become a majority-minority nation, which is predicted to occur in 2044.[1] It is important to note that the term *minority* is defined by the U.S. Census Bureau as the combined population of people who are black, American Indian, Eskimo, Pacific Islander, Asian, or any race of Hispanic origin. According to the U.S. Census Bureau, the populations of California, the District of Columbia, Hawaii, New Mexico, and Texas reached majority-minority status in 2010.[13] It is apparent that the palpable health disparities and the increasing diversity of our population are important motives for health care professionals to deliver culturally sensitive and appropriate health care to all patients.

The introduction of the Patient Protection and Affordable Care Act, frequently shortened to the Affordable Care Act, has enabled more minorities and lower income individuals to obtain health insurance and gain access to health care.[14] According to a report by the Department of Health and Human Services, it was estimated that at the end of 2015, 17.6 million uninsured people obtained health insurance coverage.[14] A larger and more diverse patient population presents a greater need for unbiased and culturally competent health care. However, modifications to, or repealment of the Affordable Care Act might cause some individuals to lose their health care benefits. According to the Congressional Budget Office, if the individual health care mandate that was approved by the Senate in December of 2017 is repealed, "the number of individuals with health care insurance would decrease by four million in 2019 and 13 million by 2027."[15]

National Standards to Address Cultural Competence

Healthy People 2020, a key proposal presented by the U.S. Department of Health and Human Services, was created to address the issue of national health disparities. This nationwide health-promotion and disease-prevention program provides a clear definition of health disparity: "a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage."[16] As the U.S. population and health care needs changed over the decades, the goals of the initiative were modified and expanded to eliminate disparities, improve the health of all groups, and achieve health equity among diverse patient populations. In the October 15, 2008, meeting minutes of

the Healthy People 2020 subcommittee, it was determined that health equity "entails special efforts to improve the health of those who have experienced special or economic disadvantages.[17]" According to Healthy People 2020, "the range of personal, social, economic, and environmental factors that influence health status are known as determinants of health."[16] Social determinants are important among the many broad categories of health determinants. For example, the type of health services available and the quality of health care providers can have a primary effect on an individual's health status. When health care providers are competent in their skills, as well as cultural knowledge and awareness, a patient's social health determinants will improve and, consequently, health disparities will decline.

The first National Standards for Culturally and Linguistically Appropriate Services in Health Care (National CLAS Standards) were published by the Office of Minority Health in 2000.[18] The 15 standards released in 2014 were enhanced with a guide to help health care organizations advance culturally and linguistically appropriate services to their patients.[5] The first standard of this publication states that it is essential to "[p]rovide effective, equitable, understandable, and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy, and other communication needs." The fourth standard in this document, which is targeted toward health care professionals, emphasizes the need to "[e]ducate, and train governance, leadership, and workforce in culturally and linguistically appropriate policies and practices on an ongoing basis." These standards act as a set of blueprints to guide health care professionals, leaders, legislators, and educators in providing cultural competency education and training in schools and health care organizations. The need to educate the diverse group of students entering medical, nursing, pharmacy, imaging, and other health care professions is apparent in the third and fourth CLAS standards. These standards recommend the recruitment and promotion of a culturally and linguistically diverse workforce, as well as educating and training this group in appropriate practices of cultural competence.

For a complete list of the National CLAS Standards, visit asrt.org/as.rt?iWtTtP.

In addition to the CLAS standards, The Joint Commission, an independent, nonprofit, national health organization, introduced a set of standards to hospitals and select health care organizations that are voluntarily inspected by them. In order for the health care organization to participate in Medicaid and Medicare programs and receive funding, these standards have to be met and confirmed through inspections by The Joint Commission. As a result, The Joint Commission has the challenging task of accrediting and certifying nearly 21 000 health care organizations and health-related programs in the United States.[19] In 2012, The Joint Commission implemented the patient-centered communication standards for hospitals addressing patient communication and interpretation needs, as well as the need for staff orientation on sensitivity and cultural diversity. In 2015, The Joint Commission standards were integrated with the National CLAS standards to improve effective communication and cultural competence in health care organizations.[5,19]

These national standards have been established to promote patient-centered care that reduces or eliminates health disparities in the U.S. population. The importance of cultural competence and awareness of patient diversity has been the main theme in national standards. Therefore, it is imperative that health care educators emphasize the importance of cultural competency training and education in their programs.

Cultural Competence in Health Profession Programs

Students interested in health professions should receive education about working with diverse patients and health care teams. University of Toledo researchers conducted a study on second-year pharmacy students, providing them with videos, lecture material, and curriculum designed to increase the students' cultural competence. At the end of the study, 85 students completed a survey that evaluated their knowledge and understanding. The researchers concluded that students developed an understanding of diverse cultures through information covered in the lecture material. However, some students indicated that interacting with patients from different cultural groups also might

increase their knowledge and understanding of cultural diversity and competency.[5,20] Results of this study demonstrate the importance of interactions with culturally diverse patients.

Similarly, in a study designed to evaluate the outcomes of a 4-hour cultural competency training among health care professionals, researchers found that the providers, mostly doctors and nurses, self-reported an improvement in their skills to work with cross-cultural patients as well as an enhancement in their understanding of patients with different cultural backgrounds.[21] The results of these studies indicate that lectures and training sessions are helpful, but they might not be adequate. These professionals need to interact and work with a diverse patient population to become culturally competent individuals.

Many professions emphasize empathy, diversity, and multicultural awareness training. In counseling psychology, Wang et al first defined the term *ethnocultural empathy* as a "learned ability and a personal trait that can be learned over time and is composed of intellectual empathy, empathic emotions and the communications of those two."[22] Wang and his team developed a scale to quantitatively measure the construct of ethnocultural empathy and used the scale to study 323 psychology students at 3 midwestern universities and colleges. As part of the findings, the researchers discovered that nonwhite individuals had significantly higher levels of ethnocultural empathy than white participants. In addition, women were found to be more ethnoculturally empathetic than men in terms of empathetic feeling, expression, and awareness.[22] The Wang et al study concluded that understanding and empathy increased as a result of interactions with people of different cultures, backgrounds, and ethnicities.

Empathy in patient care also is defined by Hojat et al as "a cognitive attribute that involves an ability to understand the patient's inner experiences and perspective and a capability to communicate this understanding."[23] If health care professionals communicate empathy to diverse patients, they can become culturally competent and provide unbiased care.

A different study designed to explore the effects of 3, 90-minute lectures on 118 athletic training and nutrition undergraduate students concluded that the series considerably changed the students' attitudes related to health care quality and cultural sensitivity.[24] Comparably, a 3-year study conducted by researchers at the University of Utah investigated the effects of cultural competency and mutual respect education programs on more than 2000 students studying medicine, pharmacy, nursing, or physical therapy. This study concluded that students exposed to cultural competency and diversity awareness education made significant progress toward cultural competence.[25]

The results of these studies demonstrate that education in cultural competence and diversity is beneficial to students. However, more research needs to be conducted on the effects of this education on health care professionals' attitudes and practices toward patients. In addition, there is a need to determine the quality of these education programs by conducting curricular evaluations and improvements to evaluate content and methods of delivery. Educators need to consider what pedagogical methods are most effective in a classroom and how to integrate classroom knowledge into patient care practice.

Medical Imaging Profession

Numerous studies exist about nursing students' perception of cultural competence and the integration of cultural competence in nursing and medical schools.[10,20,21,23,25] However, little research exists on the effect of cultural competency curriculum and training in radiologic science programs.

Medical imaging procedures help provide accurate diagnosis and quality medical information for practitioners and their patients. To promote high standards of patient care for the radiologic technology profession and to guide the imaging professionals, the American Registry of Radiologic Technologists has developed the Standards of Ethics. This document outlines 10 ethical codes and numerous rules of ethics, which provide radiologic technologists with guidelines for maintaining high standards of patient care. The third code of ethics states:

> *The radiologic technologist delivers patient care and service unrestricted by the concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of sex, race, creed, religion, or socio-economic status.*[26]

The American Society of Radiologic Technologists (ASRT), the primary professional association for medical imaging and radiation therapy professionals, has mandated ethics and diversity as one of the core curriculum content areas in the associate and bachelor of science degrees.[5] The content provided in the ASRT curriculum "focuses on ethical and diverse issues that affect the radiologic technologist's interactions with patients, co-workers and the community."[26] ASRT also released a 10-module series called *Diverse Patient Populations*. Designed for technologists, module 6 emphasizes communication strategies and the importance of policies and procedures that help organizations meet the needs of their diverse population.[26] Professional societies in medical imaging have realized the importance of cultural competency education, but it is up to educators to use the appropriate teaching tools to convey the message to their students. These students are future radiologic technology professionals who will interact with diverse groups of patients. Therefore, progress in cultural competence can only be made by valuing differences, providing knowledge, and promoting empathy in clinical settings.

In 2000, the American Association of Medical Colleges integrated and evaluated cultural competence in the medical school curriculum by using a 67-item assessment tool called *Tool for Assessing Cultural Competence Training (TACCT)*.[27] The TACCT contains domains, such as knowledge, skills, attitude, and awareness, which have been successful in examining medical students' knowledge of cultural competence. The TACCT domains knowledge, skills, and attitude also were mentioned in Cross's model of cultural competence and with the appropriate application can help future health care professionals and, specifically, medical imaging professionals achieve cultural competence.

Conclusion

This literature review describes the importance of cultural competency knowledge and education in the health care profession, particularly in medical imaging. Increasing diversity, combined with the specific health care needs of each patient, has made cultural competence a critical issue. For decades, other health care practices, such as nursing, pharmacy, medical, and dental professions, have conducted research on cultural competence. However, research and data on this critical area in the radiologic technology profession is scarce.

More research is needed in radiologic science programs throughout the nation to examine the transition between didactic knowledge and clinical practice, and the quality of cultural competency education. This literature review can provide some light on the topic and serves as a preliminary document for further research in cultural competency education in radiologic technology. A study to determine the current radiologic technologists' level of cultural competence or a longitudinal study that investigates the effects of cultural competency education on students in a radiologic science program is warranted.

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