

## REVIEWS

### Disability in Cultural Competency Pharmacy Education

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Improving health care providers' knowledge and ability to provide culturally competent care can limit the health disparities experienced by disadvantaged populations. As racial and ethnic cultures dominate cultural competency topics in education, alternative cultures such as disability have consistently been underrepresented. This article will make the case that persons with disabilities have a unique cultural identity, and should be addressed as an important component of cultural competency education in pharmacy schools. Examples of efforts in pharmacy education to incorporate cultural competency components are highlighted, many of which contain little or no mention of disability issues. Based on initiatives from other health professions, suggestions and considerations for the development of disability education within pharmacy curricula also are proposed.

**Keywords:** cultural competency, disability, health disparities, curriculum

## INTRODUCTION

Persons with disabilities use disproportionately more health care resources than the non-disabled population. In spite of this, persons with disabilities generally experience poorer health outcomes, are significantly less satisfied with the quality of care provided to them, and have greater difficulty accessing health care goods and services compared to persons without disabilities.<sup>1</sup> These inequalities may be attributable to the limited knowledge and ability of health care professionals, including pharmacists, to provide competent care to this population, because disability is not usually included as a component of cultural competency education. This paper identifies persons with disabilities as a distinct community having a unique cultural identity. By defining disability as a culture, we seek to advocate for its position within cultural competence curricula in colleges and schools of pharmacy. The primary objectives of this paper are to define disability as a culture, and describe how the concept of disability as a culture can be incorporated into cultural competency education.

### Disability Defined

Disability has been defined in medical, legal, and social terms. The most widely accepted definitions are by the World Health Organization (WHO) and the Americans with Disabilities Act (ADA). The WHO defines

disabilities as "an umbrella term, covering impairments, activity limitations, and participation restrictions."<sup>2</sup>

Under the ADA, Congress determined that an individual is legally disabled, and therefore deserving of legal protection against discrimination if she or he: (1) has a physical or mental impairment that substantially limits a major life activity; (2) has a record of such an impairment; or (3) is regarded as having such an impairment.<sup>3</sup>

The medical model of disability views persons with disabilities as individuals with physiological problems who need either assistance (in terms of rehabilitation) to overcome the limitation placed by the condition or a curative solution to the problem.<sup>4,5</sup> While acknowledging the physiological aspect of impairment, the social model defines disability as a social construct. In contrast to the medical model which locates the problem as being in (and the responsibility of) the individual, the social model views the problem not so much as a deficiency of the individual but the disadvantages this group of individuals experience in society as a result of these disabilities.<sup>4,5</sup>

### Establishing Disability as a Unique Culture

Culture is generally recognized in the literature as a shared way of life. Anthropologists Bates and Plog state that, "Culture is a system of shared beliefs, values, customs, behaviors, and artifacts that the members of a society use to cope with their world and with one another, and that are transmitted from generation to generation through learning."<sup>6</sup>

Drawing from various definitions of culture, people belonging to the same culture have: (1) a collective identity;

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(2) common history; (3) common experiences; (4) shared beliefs, values, and norms; and (5) distinctive material goods originating from a shared identity, like arts, music, etc.<sup>6-9</sup> Considering these components of culture, does disability meet the criteria to be classified as a culture?

**Collective identity.** There is a common sense of identity that unifies persons with disabilities and distinguishes them from people without disabilities.<sup>7</sup> This is evidenced by special or residential education, sheltered employment, disability allowances, privileged parking, distinctive language (eg, sign language for the deaf), etc.<sup>7,9</sup> Persons with disabilities have embraced a self-identity as shown in their ability to effectively put together organizations to advance their own good and in their celebration of themselves with self-affirming slogans such as “Disabled and Proud,” “Deaf Pride,” and “Disability Cool.”<sup>9-11</sup>

**Common history of discrimination.** Persons with disabilities have a shared history of discrimination. Landmark pieces of legislation, such as the ADA and its recent amendments aimed at protecting the rights of persons with disabilities have shined a light on past discrimination experienced by persons with disabilities.<sup>12</sup>

**Common experiences.** Persons with disabilities share an identity based on common experiences. Some of these shared experiences include extreme poverty, social isolation, deprivation of education, forced silence, and imposed immobility.<sup>13,14</sup>

**Shared beliefs, values and norms.** In tracing the evolution of disability culture, Longmore determined that people with disabilities have a different set of values and norms rooted in their own unique disability experience.<sup>11</sup> Core values of people with disabilities as listed by Gill include an acceptance of human differences and development of ways in which to adapt to challenging tasks stemming from their disabilities.<sup>14</sup>

**Distinctive material goods originating from a shared identity.** Persons with disabilities have conceptualized and expressed their unique life experiences through artistic expression. Many of these individuals create music, art, literature, drama, and poetry that focuses on their experiences in living with disabilities.<sup>12</sup> Projects exist that focus exclusively on supporting and promoting the creative and artistic expression of persons with disabilities, and Web sites have been created to showcase an array of creative endeavors by these individuals.<sup>15-19</sup>

In his definition of disability culture, Brown summarizes the above components in a way that provides evidence that disability indeed is a culture:

People with disabilities have forged a group identity. We share a common history of oppression and a common bond of resilience. We generate art, music, liter-

ature, and other expressions of our lives and our culture, infused from our experience of disability. Most importantly, we are proud of ourselves as people with disabilities. We claim our disabilities with pride as part of our identity. We are who we are: we are people with disabilities.<sup>10</sup>

### **Enormity and Diversity of Disability**

Much of the cultural competency literature in pharmacy has looked to the evolving ethnic demographics within the United States as a reason to advance educational initiatives.<sup>20-28</sup> In contrast, little is mentioned about disability demographics. The national prevalence of non-institutionalized people with one or more disabilities is about 12% of the US population or approximately 36 million people.<sup>29</sup> Other disability models estimated the prevalence of disability at up to 54 million people.<sup>30,31</sup>

Disability patterns in the United States are diverse, affecting people of all ages and racial/ethnic backgrounds. A 2008 Cornell University study found that Native Americans and African Americans reported the highest prevalence of disability among working-aged people (21-64 years): 18.8% and 14.3%, respectively.<sup>29</sup> Caucasians reported the third-highest prevalence of disability at 10.2% of their working-age population. Disability frequency also was found to increase with age, ranging from 0.7% of persons aged 4 years and under to 51.5% of persons aged 75 years and older.<sup>29</sup> Thus, health care providers must realize the enormity and diversity of the disabled population in the United States, especially as Baby Boomers age and the number of disability cases substantially increases. It is important for pharmacists to understand these patterns so that they may improve the services they provide to persons with disabilities.

The culture of disability is dynamic, one in which people can enter and exit over time; it is not limited to any individual or group and often overlaps with other cultures. Furthermore, most people will experience some sort of mental or physical limitation in their lives, perhaps due to an accident, illness, or advanced age. In this sense, the culture of disability contains a universal element that makes it unlike any other culture. Kirschner and Curry present the principle of universality as an argument for disability education as a core health care provider competency, stating that in order to develop this competency, society must accept that disability is a universal aspect of human experience that will affect nearly all members of it at some stage of their lives.<sup>32</sup> This assertion introduces a paradox to the common thinking about cultural competence education as a means of learning about minority populations.

## **DEVELOPING A CULTURALLY COMPETENT PHARMACIST**

Establishing disability as a culture creates a conceptual framework that justifies its position within cultural competency education, structuring the disabled population as a group of individuals with similar goals, desires, and needs. Nevertheless, while recognizing the shared experiences of persons with disabilities, there can be vast differences among individuals within the disabled community just as there are within any cultural group. The range of disabilities varies from physical to cognitive and developmental disabilities. Individual responses to disabilities differ between those born with disabilities and those who develop disabilities later in life. Understanding the commonality of experiences does not negate the necessity to assess each individual's values, beliefs, and needs. The next section will identify and discuss the importance of key terms in discussing disability as culture, setting the stage for the subsequent discussion of cultural competence education in pharmacy.

### **Defining Terms**

The development and incorporation of *cultural competency* curricula within professional colleges has resulted primarily from efforts to eliminate *health disparities*. Defining these terms is an essential yet complicated task, mainly because definitions in the literature are numerous and somewhat inconsistent.

The National Center for Cultural Competence at Georgetown University compiled a 16-item list of cultural competence definitions.<sup>33</sup> Among the definitions presented, one by Cross and colleagues is recognized for creating a foundation from which many other definitions have originated. Cross defines cultural competence as "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals, and enable that system, agency, or those professions to work effectively in cross-cultural situations."<sup>34</sup> This definition is also seen throughout pharmacy literature.<sup>20-23, 35,36</sup>

Carter-Pokras and Baquet present a table of 11 definitions of *health disparity* collected from various organizations.<sup>37</sup> Among them is the Health Resources and Services definition, which succinctly states that a health disparity involves differences in the presence of disease, health outcomes, or access to care that are specific to a given population. This definition effectively incorporates the basic points that the other definitions express, but the term *population-specific* is relatively unspecific. The definition of *health disparity* provided by Healthy People 2010, however, identifies populations that have historically faced challenges in accessing quality health care. Under this definition, gender, race or ethnicity,

education, income, disability, place of residence, or sexual orientation are factors that contribute not only to the quality of health care one receives, but also to the access of such care in the first place.<sup>38</sup>

Inconsistent and numerous definitions create confusion and inhibit standardization of cultural competency education. For example, the previously mentioned definitions of health disparities were not consistent in outlining the target populations affected by health disparities. One definition included persons with disabilities (Healthy People 2010) while the other did not (Health Resources and Services). Depending on the definition used, one may or may not recognize disability as a health-disparate culture. The discrepancies among definitions are apparent as few articles or studies consistently identify health-disparate cultures outside of a racial/ethnic framework. Perhaps educators are not cognizant of health care barriers experienced by those other than racial and ethnic minorities, or maybe they are overwhelmed by a seemingly infinite number of other cultures that exist. For whatever the reason, the common belief that culture is simply a product of race and ethnicity is slowly changing. One goal of this paper is to promote a more inclusive definition of culture in pharmacy school curricula that ensures attention to other health disparate cultures such as disability.

### **Reducing Barriers to Care for Persons with Disabilities**

Persons with disabilities commonly experience poorer health outcomes than persons without disabilities because of the significant barriers they face in the health care system. Drainoni and colleagues explored some of these barriers and classified them into 3 categories: structural, financial, and personal/cultural.<sup>39</sup>

Structural barriers include difficulties accessing transportation and navigating through the physical environment. Anticipating such structural barriers, pharmacists must properly adjust their work spaces to accommodate patients of all physical abilities. Installing a wheelchair-accessible consultation area or eliminating obstacles to the pharmacy register may seem like common sense adjustments, yet these basic accommodations frequently are overlooked. As pharmacists become more culturally competent, the barriers to quality care naturally become more obvious. Communication between persons with disabilities and health care providers was another structural barrier identified by Drainoni and colleagues. Pharmacists must recognize that patients with disabilities often encounter problems adequately communicating their needs. For example, although using telephone refill systems or browsing pharmacy Web sites are ordinary activities for many people, they may pose a serious

challenge to patients with a sensory disability like deafness or blindness.

Financial health care barriers include problems accessing prescription and nonprescription medications, medical equipment, repairs, and other supplies as a result of their costs. Although difficulty paying for health care is not unique to persons with disabilities, persons with disabilities use a disproportionate amount of health care services and constitute one of the largest groups of health care consumers in the nation.<sup>39</sup> Moreover, persons with disabilities generally require more complex care, are less likely to work, and are less likely to be insured than the general population.<sup>39</sup> Pharmacists must be able to foresee how a patient's disability may escalate health care costs to the point of affecting drug therapy outcomes. A person with a disability is likely to require more prescription medications than a person without a disability; consequently, adherence among persons with disabilities may be more susceptible to financial pressures. Early consultation about less expensive generics, alternative treatments, and community financial assistance programs may improve drug accessibility and therefore improve therapeutic outcomes.

Personal/cultural barriers encountered by persons with disabilities include health care providers showing insensitivity and lack of respect. One study participant recounted her experience of feeling that hospital staff members "have the attitude that we are all street people." Through identifying their own biases and recognizing how they affect personal attitudes and interactions, pharmacists can minimize the negative perceptions of health care providers held by some persons with disabilities. Additionally, "reluctance or unwillingness to provide care" concerned participants in the study. Drainoni and colleagues reported that study participants believed health care providers treated them as if they were not worthy of receiving high-quality health care, especially as they grew older.<sup>39</sup> Other articles have addressed similar concerns about health care providers, suggesting that barriers may arise due to discrimination and bias.<sup>40, 41</sup> "Cultural gaps" between patients with disabilities and health care providers also may present a major hurdle to optimal health care.<sup>39</sup> A culturally competent pharmacist, for example, would assume that a person with a physical disability would be perfectly capable of understanding information and making informed decisions regarding his or her care. Culturally competent health care providers can mitigate the barriers to quality health care faced by persons with disabilities. Bazaldua and Sias concluded that cultural competency education will lead to more cost-effective, high-quality care, and a decreased likelihood of liability and malpractice claims.<sup>42</sup> Pharmacy organizations also have recognized the impor-

tance of cultural competency in pharmacy practice. An American College of Clinical Pharmacy (ACCP) white paper on cultural competence includes the goals of reducing the incidence of compromised services and limiting misunderstandings as reasons why pharmacists must rise to the challenge of becoming more culturally competent.<sup>43</sup> In a call to action for America's pharmacists, the ACCP noted that pharmacists must be leaders in advocacy campaigns to bring critical health resources where they are needed most to bridge gaps in areas with the greatest health disparities.<sup>43</sup> Ultimately, culturally competent pharmacists are important in eliminating health disparities experienced by people of all populations, including those with disabilities.

### **The Cultural Competence Movement in Pharmacy Education**

Cultural competence education in health care has attracted much attention in the past decade. Key pieces such as the Institute of Medicine's report "Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare" and the government-sponsored health initiative Healthy People 2010 prominently exposed culturally-based health disparities and elicited help from the various health disciplines to eliminate them.<sup>44,45</sup> In reaction, cross-cultural training in health professions schools emerged as a leading approach to eliminating health care disparities in the United States. Sensing the proposed need, the Accreditation Council for Pharmacy Education (ACPE) has acted as a driving force for implementation of cultural competency curricula.

With the release of Standards 2007, ACPE demonstrated its commitment to cultural competence education by establishing accreditation standards that directed colleges and schools of pharmacy to incorporate cultural competency education within their curricula.<sup>46</sup> Whereas Standards 2000 did not mention cultural competency, Standards 2007 recognizes cultural competency directly, notably within Standard 9, Guideline 9.1, which states "the college or school must ensure that the curriculum addresses patient safety, cultural competence, health literacy, health care disparities, and competencies needed to work as a member of or on an interprofessional team."<sup>46</sup> Standard 12 provides additional language emphasizing that graduates must "be able to take into account relevant legal, ethical, cultural, economic, social/behavioral/administrative, etc. issues that may impact therapeutic outcomes."<sup>46</sup>

The ACPE also updated the language of these standards to emphasize the importance of cultural competency education. Many of the old standards use the subjective auxiliary verb "should," while the new standards employ the commanding verb "must." Essentially,

the new standards hold colleges and schools of pharmacy more accountable. Recent pharmacy literature reflects the new cultural competency standards.<sup>21,24,26,47-50</sup>

**Cultural competence education in colleges and schools of pharmacy.** Despite ACPE's initiative to require cultural competence education in colleges and schools of pharmacy, the directive has been interpreted inconsistently in curricula, possibly due to the Standards' lack of instructional examples. Standard 9, for example, only establishes cultural competence as a requirement and does not provide guidance for how it should be implemented in curricula. Both the AACP's Pharmaceutical Services Support Center (PSSC) Task Force and an article by Quist and Law call attention to the need for specific examples outlining how to implement a cultural competence curriculum.<sup>48,51</sup>

A review of the pharmacy literature specific to disability and cultural competence reveals that disability is only briefly mentioned in the cultural competence curriculum of colleges and schools of pharmacy. A basic PubMed search of the terms "disability" and "cultural competence" and "pharmacy education" yielded no results. For comparison, the search was repeated, replacing the term "pharmacy education" with the terms "medical education" and then "nursing education" and yielded 5 and 3 results, respectively. Even after using more general keywords and search techniques not specific to disability, it was difficult to find many articles and studies outlining cultural competence initiatives at colleges and schools of pharmacy. Key initiatives described in the pharmacy literature are presented in the next sections.

Onyoni and Ives investigated the extent of cultural competence curricula in colleges and schools of pharmacy by surveying 87 curriculum chairs.<sup>26</sup> Of the 49 curriculum chairs responding to the survey (57% overall response rate), 33 "declared that they both practice within their colleges of pharmacy, and have integrated cultural competence into the curriculum." Forty-six (94%) also perceived a need to add cultural competence topics into required courses. However, when asked about plans to implement new cultural competence material, only 49% of the respondents indicated that arrangements had been made. Although limitations are identified (eg, lack of standardized terms, small sample size, potential sample bias), this study provides insight into the extent of cultural competency education and demonstrates a general lack of follow through regarding cultural competence implementation.

A smaller initiative to gauge commitment of colleges and schools of pharmacy to cultural competence education also was conducted. The AACP-PSSC Task Force found that 8.6% of 92 accredited colleges and schools

of pharmacy mentioned the importance of caring for underserved communities in their mission statements; yet, less than 10% addressed the need to serve in diverse communities.<sup>48</sup>

An article from the University of Minnesota described using books, documentaries, cultural role playing simulations, and case discussions to develop its students' cultural competence.<sup>28</sup> The faculty members included this material in an existing 5-semester course that was dedicated to pharmacy practice and patient-centered care. Specific examples of Puerto Rican, Afghani, and Hmong cultures were presented in the course; however, a majority of the course material appears to have been taught to increase students' sensitivity to the needs of patients without great focus on specific cultures.

The Southern Illinois University Edwardsville School of Pharmacy structured its cultural competency course around a team-based learning strategy with minimal use of lectures.<sup>24</sup> The course uses pre-assigned readings followed by in-class team projects. The faculty members group course material according to 7 critical learning areas referred to as "clusters." The clusters include: "(1) creating a desire for cultural competency; (2) process of cultural competency in the delivery of health care services; (3) cultural awareness; (4) cultural knowledge health beliefs; (5) cultural skills: communicating; (6) knowledge and skills; (7) cultural encounter: team presentations." Notably, the team presentations of the seventh cluster considered an array of specific cultures, including a few disability subcultures (eg, deafness, physical disabilities, and mental disabilities). This constitutes one of the rare mentions of disability in pharmacy cultural competency literature.

Drake University reports incorporating cultural competence topics in all 4 years of its pharmacy curriculum through its Pharmacy Skills and Applications class, which is required each semester and consists of a 1-hour lecture, 2-hour laboratory, and an experiential component.<sup>21</sup> The class introduces cultural competence in stages, beginning in the first year by defining cultural competence and culminating with fourth-year advanced pharmacy practice experiences (APPEs) specifically designed for interaction with diverse populations. One APPE occurs at a community pharmacy primarily serving patients who are Hispanic, have acquired immune deficiency syndrome, or are homeless.

An 8-hour elective course was created at the University of California San Francisco that focused on defining cultural competence, listing how cultural differences affect patient care, and explaining the need for cultural competency education in pharmacy.<sup>23</sup> Their approach is not specific to any single culture; instead, it focuses on learning

general communication strategies and interviewing models that can be applied in all kinds of situations where a patient's culture may be an important consideration. They validated an original self-efficacy questionnaire for measuring the effectiveness of their cultural competence course.<sup>49</sup> Despite the generally favorable reports from self-efficacy tests, questions remain as to whether students can apply cultural competence training in practice.

Faculty members at the University of Missouri-Kansas City School of Pharmacy address cultural competency topics in a 6-week introduction to pharmacy practice experience (IPPE) series.<sup>51</sup> The series includes video examples and live lectures on useful application of communication models when communicating with a patient of a different background; students' ability to apply the communication models effectively during a role-play scenario are then evaluated. The series also highlights how religious and socioeconomic status can affect health care treatment. Finally, the series addresses common health disparities. Students are required to provide a 15-minute presentation on a specific health disparity, which includes discussing the cost to the health care system and proposing ways to reach out to the culture in need. Fourteen project topics are provided by the faculty members and include disparities such as heart disease-related mortality rates among African-Americans, reduced vaccination rates among Hispanic persons, and health care disparities in rural America.

Culturally-related learning objectives can be integrated into courses not specifically designed or designated to teach cultural competence. A Swedish medical school without specific cultural competency courses had cultural competency training that was indeed present yet "hidden," and various learning objectives were scattered throughout the overall curriculum.<sup>52</sup> Colleges and schools of pharmacy have used similar techniques; for example, the University of Pittsburgh School of Pharmacy promotes a service-learning program consisting of required and elective classes throughout the 4 years of the pharmacy curriculum.<sup>53</sup> The faculty members believe that service learning is beneficial in many aspects of professional development, which include "personal and social development, such as improvement in interpersonal skills, development of civic responsibility, increased knowledge and acceptance of different races and cultures, and enhanced cognitive complexity."<sup>53</sup> The course coordinators used a variety of diverse experiential settings, which included children and youth services, homeless shelters, senior services, mental health programs, drug, alcohol, and/or human immunodeficiency virus crisis programs, and services to persons with disabilities and/or chronic illnesses. Colleges and schools of pharmacy may implement cultural learning objectives in other ways, for example by designing patient cases in pharma-

cotherapy sessions that provoke discussion on cultural barriers to health care. The extent of these alternate approaches to teaching cultural material, however, may not have been captured by this review because we searched primarily for pharmacy literature specific to cultural competency. Investigating the teaching of culturally-related learning objectives outside of or without a defined cultural competency curriculum in colleges and schools of pharmacy may be an area for future research.

#### **Disability education in other health professions.**

Articles and studies on disability education from other health professions outnumber those found in pharmacy literature. In fact, enough has been written in medicine to conduct a comprehensive, international review of disability education in medical schools.<sup>41</sup> The reality that other health professions have written more about disability education is not surprising considering that pharmacists are often not the primary caretakers of persons with disabilities. Interestingly, much of what has been written in other professions also has limited discussion of disability as part of cultural competency; only a couple of medical and nursing articles were found that have defined disability as a culture and advocated for its place in cultural competency training.<sup>31,54</sup> Examination of efforts at cultural competency education in other health professions could be used as inspiration for development of disability education in pharmacy curricula.

Although thoroughly reviewing other professions' body of literature is not the purpose of this paper, it may provide pharmacy with valuable insight and additional examples of curriculum development. For example, Tulane University implemented a workshop for fourth-year medical students entitled "Disability Awareness and Skills Training for the Health Care Professional."<sup>55</sup> Arising from a perceived deficiency in the curriculum, the workshop was designed to increase awareness and develop practical skills for managing disability cases. The workshop had 3 sections: an overview of the ADA, panel presentations by persons with disabilities, and a teaching module led by an occupational therapist. The University of South Carolina implemented a disability education session during a family medicine clerkship that included scenarios that focused on disability as a demographic characteristic, medical condition, and secondary consideration in typical primary care visits.<sup>56</sup> The clerkship session focused primarily on mobility and cognitive impairments and specifically addressed complications associated with them.

A study from the UK found value in learning about disability through an interprofessional, community-based strategy.<sup>57</sup> Mixed teams of social work and medical students completed 4-week rotations at community

rehabilitation hospitals. Students learned from a range of persons with disabilities through conversations about their care and important issues in their lives. Drawing a parallel to pharmacy, advanced pharmacy practice experiences could include spending time in community rehabilitation hospitals or similar places where interactions with persons with disabilities occur frequently. Pharmacy students could benefit also from learning about disability topics alongside other professional students.

Through service-learning courses, students from an occupational therapy school in Maine collaborated with a state agency and persons with disabilities to review the ADA and perform accessibility assessments of public venues.<sup>58</sup> The students gained insight to accessibility barriers and presented solutions to overcoming them. Considering the widespread legal implications of the ADA, pharmacy students could similarly benefit from learning about the legislation. As pharmacy students transition into the workforce, especially into administrative and managerial positions, they would be informed of their legal duties to provide reasonable accommodations to persons with disabilities.

An Australian medical school devoted approximately 40 hours to disability-related topics, which included participating in a rehabilitation hospital program, observing persons with disabilities in their homes, visiting community services that support persons with disabilities, and role-playing a disability.<sup>59</sup> Although committing 40 hours to disability education may be excessive in colleges and schools of pharmacy, aspects of this curricular approach could be used. For example, pharmacy students could familiarize themselves with community resources for persons with disabilities as part of a geriatric elective. A broad knowledge of disability resources would be particularly valuable to a community pharmacist who regularly recommends assistance programs to a wide range of people. Pharmacy students also could gain an appreciation for the challenges faced by persons with disabilities by role-playing a disability. The Australian medical school required its students to spend one half day simulating a randomly allocated disability, which included paraplegia, deafness, blindness, and inability to speak or use one's dominant arm. Another university also described using role-playing simulations to increase disability sensitivity and awareness, placing students in wheelchairs to provide perspective on living with a disability.<sup>60</sup>

The diversity of approaches to teaching about the care of persons with disabilities indicates that these issues could be addressed in a number of ways throughout the current professional curriculum. Components of cultural and health care issues of persons with disabilities could be incorporated, for example, into courses or modules on

patient communication, law and ethics, cultural competence, geriatrics, and pharmaceutical skills laboratory sequences. Cases and role playing scenarios can build in challenges that can arise from caring for persons with disabilities. For example, instructors might include a case where a patient must administer eye drops while managing a minor palsy or Parkinson's tremor. This presents an opportunity for pharmacy students to discover ways to communicate effectively with persons with disabilities while providing them with pharmaceutical care.

## DISCUSSION

Pharmacy organizations have acknowledged the need to become more culturally competent. This is evident by initiatives from the ACPE and through publication of several articles and reports, notably the ACCP White Paper series on cultural competence and the Curriculum Recommendations of the AACP-PSSC Task Force on Caring for the Underserved.<sup>20,43,48</sup> The American Pharmacist Association also has published a comprehensive book, the *Essentials of Cultural Competence in Pharmacy Practice*, detailing pharmacist-appropriate interactions with many individual cultures, including disability.<sup>61</sup>

Educational institutions, on the other hand, have not demonstrated the same level of commitment as some professional organizations. The analysis of mission statements and curricula chairs' survey responses suggests that basic principles of cultural competence education, which are essential to improve pharmacist knowledge of and attitudes toward persons with disabilities, are largely underdeveloped and perhaps nonexistent in some pharmacy programs.<sup>26</sup> Furthermore, curricular examples in the literature suggest that colleges and schools are not using similar teaching methods and assessments to evaluate cultural competency educational goals. Simply arguing for disability's place within cultural competence curricula may be putting the cart before the horse. Colleges and schools of pharmacy must first have a stable cultural competency framework before disability concerns even can be incorporated.

Nevertheless, learning about disability through a cultural competency framework is thought to be an effective way to learn general approaches and communication models for working with this specific population. It offers valuable insight to the challenges that must be overcome to ensure that equal access and equivalent health outcomes are achieved between persons with and without disabilities.

When teaching students about the culture of disability, educators must be mindful of its vast diversity. For example, individuals who identify or have been diagnosed as having a cognitive impairment may not share

the same characteristics. One person with a cognitive impairment may have dyslexia, while another may be schizophrenic, and a third may have attention deficit hyperactivity disorder (ADHD). Each of these impairments presents a unique set of challenges to the individual. To appreciate these individual challenges, students must recognize that this culture is not homogenous and understand that a “one-size-fits-all” approach to interacting with persons with disabilities simply will not work.

Providers of health care services, including pharmacists, must be particularly cognizant of the diversity of this culture to tailor the care they give to the needs of individual patients within the culture. Practitioners who rely on checklists or practice “cookie cutter” medicine or pharmacy are likely to be unsuccessful in caring for patients with disabilities; practitioners must remember to treat the whole person. Not only must these professionals be mindful of the clinical effects associated with each disabling condition and how the individual patient’s health is adversely affected, they also must take the time to understand the overall impact the disabling condition has on the patient’s life. The latter involves asking the right questions and listening carefully to patients describing their experiences. Because of a lack of training on communicating with persons with disabilities, pharmacists may be uncomfortable or ineffective when communicating with their patients who have disabilities. By making pharmacists and other health care professionals aware of the diversity within the culture, we are enabling them to be more effective in caring for their patients, one patient at a time.

## SUMMARY

This paper identifies persons with disabilities as constituting a unique culture. The study of disability culture should be included within cultural competence curricula in colleges and schools of pharmacy. Pharmacy organizations have recognized the need to become more culturally competent. Colleges and schools of pharmacy have used a variety of techniques to include cultural competence education in coursework, service learning activities, and APPEs to focus on work with disadvantaged populations. Experiences with persons with disabilities also should be integrated into coursework, cases, and experiential learning throughout the curriculum.

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