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American College of Clinical Pharmacy White Paper: Cultural Competency in Health Care and Its Implications for Pharmacy Part 3A: Emphasis on Pharmacy Education, Curriculums, and Future Directions

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ACCP WHITE PAPER

Cultural Competency in Health Care and Its Implications for Pharmacy Part 3A: Emphasis on Pharmacy Education Curriculums and Future Directions

American College of Clinical Pharmacy

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Abstract

Culture influences patient's beliefs and behaviors towards health and illness. As the population of the United States becomes more diverse, a critical need exists for pharmacy education to incorporate patient-centered culturally sensitive health care knowledge and skills in the curriculum. Nursing was the first profession to incorporate this type of learning and training in their curriculums followed by medicine. Pharmacy has made great progress to also revise curriculums but inconsistency exists in depth, breathe, and methods across pharmacy colleges. This article addresses important aspects of pharmacy education such as curricular development, incorporation of teaching innovations and techniques to teach patient-centered culturally sensitive health care across the curriculum from didactic to experiential learning, assessment tools, and global education. A preliminary model curriculum with objectives and examples of teaching methodologies is proposed. Future directions in pharmacy education, teaching and learning scholarship, post graduate education, licensure and continuing education also are presented.

Introduction

Culture is a critical element in most facets of life, especially in health care behaviors, decision making, and approaches to wellness and healing. Health care practitioners need to understand their own beliefs and the beliefs of their patients to provide individualized care to achieve the best health care outcomes in a patient-centered culturally sensitive manner.[1-3] To assist practitioners and student pharmacists in becoming more culturally sensitive, the American College of Clinical Pharmacy created a Task Force on Cultural Competency that proposed a series of articles on culture and pharmacy. The first article provided definitions and described health disparities and policies related to culture or culturally incompetent care, as well as models and frameworks to become more culturally competent as a provider and health care system.[1] The second article discussed the seven components of a culturally competent practitioner and health care system and included information on health literacy, cultural competency assessment tools, and cultural competency resources.[2]

This third article focuses on culture and education and has been divided into two parts. The purpose of this first part is to provide background and history about the importance of culture education and training for health care students, educators, and practitioners; propose a template for a patient-centered culturally sensitive health care didactic and experiential curriculum along with examples of successful culture education and training programs; and discuss future needs in education and research about patient-centered culturally sensitive health care. Although the article primarily focuses on student pharmacists and academic centers, the information is applicable to other health care disciplines, preceptors, practitioners, and practice sites. The second part focuses on culture and education policy, procedures and climates.

Terminology

As the area of cultural competency continues to develop, so does the terminology, philosophies, frameworks, and techniques. Current thought suggests the goal for health care professionals should be cultural sensitivity because one most likely will not be competent in all cultures.[4] Since learning and practice occur with other cultures, the term cross-cultural education is being used.[5] Also with the focus of health care on patients, the most recent term is patient-centered culturally sensitive health care.[3] These terms will be used somewhat synonymously throughout the paper. In addition, cultural humility is the new term used to describe the need for practitioners to include this area in their lifelong learning.[6]

Background/Need

Significant health disparities exist between various groups across the United States[7] underscoring the need for culturally sensitive health care practitioners.[8,9] Being culturally sensitive is an essential characteristic for health care practitioners due to its impact on improving health outcomes and decreasing health disparities.[10] Patients from a variety of cultural groups have traditionally viewed health care practitioners as being unaware or lacking consideration for their cultural differences.[11] Patients want health care providers that value and respect their cultural views and beliefs, communicate effectively, and take an individualistic approach to their health.[9,12-21] Patients have greater satisfaction with health care practitioners

who are motivated to learn about other cultures as well as those who demonstrate knowledge, skills, and attitudes regarding cultural sensitivity.[10,22,23]

Various organizations have called for health care providers and students to understand the intersectional framework of diversity and multiculturalism to improve health outcomes of the populations served.[8,11,17,24-28] In order to fulfill these recommendations, educators and practitioners must educate and train students and themselves to become culturally competent and sensitive.

Although pharmacy students, educators and practitioners perceive the importance of cultural awareness,[29-31] many do not fully realize the implications of culture on outcomes and the pharmacist-patient relationship, and do not provide culturally sensitive care.[32-35] Little information is available about the cultural competency of pharmacy faculty. Most faculty members (94%) feel cultural competency/sensitivity should be integrated into the required curriculum.[36] The ability of faculty to teach and practice patient centered culturally sensitive care is unknown.

History

Although pharmacy is making progress in culture education, further advances can come from reviewing progress other professions, especially nursing and medicine, have made in their efforts in making patient-centered culturally sensitive curriculum revisions and developing knowledge and skill assessments. The history of nursing and medicine will be briefly reviewed followed by pharmacy.

Nursing

Nursing professionals have been the pioneers in cultural competency education. Beginning in the 1950s, terms such as transcultural nursing emerged, and training and theories were included in curricula.[37] The Campinha-Bacote model for cultural competence[33] (i.e. cultural awareness, cultural knowledge, cultural skill, cultural encounter, and cultural desire) and the transcultural nursing model for areas unique to patients from various cultures (i.e. communication, space, social orientation, time, environmental control, and biological variations) were published and disseminated.[38]

As early as 1983, the National League of Nursing discussed race, ethnic, culture, and diversity criteria for nursing curriculums.[39] The first cultural diversity guideline for nursing education was proposed in 1986 by the American Nurses Association.[40] In 2006, five cultural competencies were included in the American Association of Colleges of Nursing (AACN) requirements for a baccalaureate nursing degree.[41] They related to applying cultural knowledge to various situations, evaluating and using cultural competency care data, minimizing health disparities, engaging in social justice advocacy, and becoming a lifelong learner in cultural competency. The AACN also developed six core cultural competency guidelines for graduate nursing education.[42] These competencies relate to socio-cultural factors and care, cultural knowledge, leadership in cultural competency health services, health disparities and social justice, continuous cultural competency development, and cultural competency scholarship. To facilitate achievements of these competencies, the AACN developed toolkits for undergraduate and graduate nursing education, which are comprehensive and extensively referenced.[38,42] Nursing college accreditation bodies began

requiring cultural competency curriculum components as early as 1977[39] and cultural knowledge is now included in nursing licensing examination. Additionally, nurses can become certified in transcultural nursing since 1988. Some specialized nursing organizations and journals were devoted to cultural competency.

Medicine

Although cultural competency in medical education was described as early as 1970,[43] medical accreditation standards in cultural competency were created by the Liaison Committee on Medical Education (LCME) in 1999 to enhance the adoption of cultural competency training in all medical schools and residencies.[43,44] Today, these standards include requirements for assessment and documentation. The cultural competency standards included understanding the impact of culture on health and illness (ED-21) as well as recognizing and addressing gender and cultural biases (ED-22). The LCME now also has a standard related to ensuring a diverse faculty, student body, and academic community (IS-16).

Other agencies such as the Accreditation Council of Graduate Medical Education (ACGME) established guidelines in this area. Cultural competency also was added to board examinations by the National Board of Medical Education. The ACGME, which sets standards for residencies, also adopted culture-related competencies in 1999 regarding cultural differences.[45] These are now expanded to include knowledge of the interrelationships between culture and health.

Policies outside of academic accreditation boards have also influenced the uptake of cultural competency for doctors.[46] The American Medical Association (AMA) passed a policy to encourage cultural competency electives to increase awareness and acceptance between provider and patient in terms of culture.[45] Some states require practicing physicians to receive cultural competency training.[45,46] Many online resources provide continuing medical education related to cultural competency.[46]

Medical organizations assisted colleges with these new curriculum requirements. Around 1999, the American Medical Student Association (AMSA) encouraged colleges to implement cultural competency education. The Association of American Medical Colleges (AAMC) published the *Cultural Competence Compendium*, an extensive resource book on culture and health in 1999,[47] and added cultural competency items to the annual medical school questionnaire to measure curriculum changes. In 2005, the AAMC also created the Tool for the Assessment of Cultural Competence Training (TACCT) to assist schools in planning their cultural competency curriculums.[45]

Pharmacy

The profession of pharmacy began recognizing the need for culturally sensitive health care practitioners in the early 1990s, but the movement towards incorporating cultural sensitivity into the curriculum did not gain momentum until nearly 10 years later. Although greater emphasis on cultural competency/sensitivity has been incorporated into pharmacy curriculums in recent years, the extent of cultural sensitivity content within pharmacy schools' curriculum remains difficult to elucidate and is inconsistent. Information on content depth and breathe as well as impact on learning and practice of such programs is just beginning to be published. The first pharmacy textbook on culturally competency was published in 2008.[48]

Many developments in pharmacy education have resulted from gap analyses, standards and passionate educators about the topic. About 20 years ago, 50% of pharmacy schools did not include minority health issues in their curriculum[49] and educational standards were beginning to include cultural competency. The 1994 and subsequent revisions of the American Association of Colleges of Pharmacy (AACP) Center for the Advancement of Pharmaceutical Education (CAPE) outcomes included cultural competency, which resulted in educators examining curricular efforts related to cultural competency.[35,50]

Some of the more recent educational efforts to address cultural competency/sensitivity are the result of the incorporation of cultural competency into the 2006 and subsequent American Council on Pharmaceutical Education (ACPE) guidelines for accreditation standards in professional degree programs.[51] The ACPE standards and guidelines highlight student learning areas focused on "cultural competence, health literacy and health disparities and competencies needed to work as a member of or on an interprofessional team" in standard 9, activities that "promote health improvement, wellness, and disease prevention" in standard 12, and assess whether colleges are selecting students who can "practice in culturally diverse environments" in standard 17. Several components of cultural competency also are recommended for the science foundation of the curriculum. Curricular efforts related to cultural competency have resulted in some improvement in cultural competency/sensitivity amongst student pharmacists.[29-31, 52-63]

At this time, an "ideal" and standardized pharmacy curriculum that is consistently used in all colleges of pharmacy to prepare student pharmacists to deliver patient centered culturally sensitive health care is needed. Furthermore, since the cultural competency of practicing pharmacists is documented to need improvement, programs for improving their patient-centered culturally sensitive health care skills also are required. The next section begins to address student pharmacist curricular needs with some aspects transferable to pharmacist education.

Pharmacy Curriculum

Curricular Needs

In an attempt to meet the growing needs of more diverse patients[68] and recent revisions in accreditation standards,[51] pharmacy educators are faced with the educational challenge of addressing curricular needs regarding cultural sensitivity. In a 2007 survey to assess cultural competency content in pharmacy curriculums, only 61% of respondents stated cultural competency was mentioned in their college's mission statement.[36] About 51% of respondents had made recent curricular changes to introduce cultural competency and 49% planned to implement new topics or courses on cultural competency. Most respondents (94%) perceived the need to add topics into required courses, but only 43% perceived the need to add a specific required course. In 2007, an AACP-Pharmaceutical Services Support Center (AACP-PSSC) Task Force identified gaps in addressing the needs of diverse populations including the underserved.[66] Less than 10% of pharmacy colleges' websites mentioned addressing the need to serve diverse communities. The Task Force provided recommendations for a curriculum framework for meeting the needs of culturally diverse communities[67] and identified grant programs supporting initiatives for underserved populations.[66] In 2009, the AACP Curricular Change Summit recommended incorporating cultural competency throughout the curriculum

to engage students in a variety of situations and not just in experiential education or elective courses. Considering that achieving cultural sensitivity is an ongoing process that will not be achieved by students at graduation, they also recommended developing training for practitioners.[68]

With progress in culture education, new teaching and learning theories and frameworks are being developed that could be integrated into pharmacy curriculums. Some educators advocate for a critical culturalism curriculum, which goes beyond the cultural competency didactic curriculum to actively engage students more in the resolving health care disparities and contains more social justice aspects. [5] Furthermore, utilizing engagement activities is suggested to prevent stereotypes from developing from well-intended cultural competency education programs.[69] An intersectional framework also has been proposed for this type of education.[70] The intersectional framework suggests that culture education and training needs to include the overlap of multiple cultures within one person as well as the influences of socioeconomics, education, sexuality, disability, disparities, marginalization, and politics on actions, health outcomes and health delivery. Since many pharmacy curriculums and pharmacy student organizations utilize service learning for underserved populations, improvement of foundational knowledge and frameworks might be needed to improve skills and outcomes from these activities.

Special Patient Populations

As curriculums, programs, and systems begin to advance patient-centered culturally sensitive health care, some educators advocate for a curriculum that goes beyond the initial focus on race, ethnicity, and underserved populations. Examples of additional topics needed include health disparities, social justice, disabilities, religion and sexual orientation.

Inclusion of disability as a diverse culture, including a critical examination of disabled individuals' barriers to health care and health disparities experienced, should be incorporated into the cultural competency framework.[71] Competencies that are critical for providing effective health care to patients with disabilities include using receptive and expressive communication skills, being adaptable, avoiding a "one-size-fits-all" approach, understanding values, emphasizing interdependence versus independence, and encouraging self-advocacy skills.[71,72] Descriptions of curriculums about patients with disabilities are limited. An example is a role-reversal exercise (students participated as patients with deafness and the community volunteers who were deaf served as the medical providers) to increase awareness of communication challenges with hearing deficits and understand the importance of interpreters.[73]

Religion and spirituality also should be incorporated into the cultural sensitivity pharmacy curriculum. Attention to religion during patient care aids in the development of culturally sensitive and assessable services.[74] Students could become more culturally sensitive if they are motivated to study world religions; organize, attend, or participate in a religious event; or attend religious services, lectures, or celebrations of spiritual traditions different from their own. Eighty percent of student leaders responding to a questionnaire believed they would benefit from a course, seminar, or presentation about spiritual aspect of patient care, and an equal number were interested in addressing spiritual aspect of patient care in case studies and or readings.[75] A clear majority (91%) were interested in addressing the beliefs and practices of

religious groups as they affect the provision of health care to that group. Some pharmacy colleges (e.g., Creighton University) expose their faculty, staff, and students to Jesuit/Ignatian values, which promote *cura personalis* or care of the whole person, and highlight the importance of reflection.[76]

Sexual orientation and gender identification also should be incorporated into the cultural sensitivity pharmacy curriculum. Proposed methods for including lesbian, gay, bisexual, transgender and questioning (LGBTQ) cultures and health issues in curricula include exposure to LGBTQ individuals, the use of standardized patient scenarios, didactic lectures and seminars, guest panel discussions, poster presentations, and student reflections.[77] The LGBTQ curricular content and primary literature analysis that focus on HIV/AIDS and other sexually-transmitted infections as the predominant or exclusive topic of study are not reflective of the overall health care needs of the LGBTQ community and can reinforce stereotypes of sexual risk behavior.[77, 78] Pharmacy faculty should consider adding LGBTQ case scenarios and curricular content to examine and increase student awareness of other health concerns besides HIV/AIDS and sexually transmitted illnesses that affect the LGBTQ community such as smoking, alcohol and substance abuse, obesity, physical abuse, depression, and suicide; and issues related to their health care such as reasons for avoidance of health care providers, consequences of culturally incompetent care, and appropriate terminology and communications.[79]

Pharmacy Cultural Sensitivity Education and Training Examples

Although cultural competency/sensitivity education and training is not universal or standardized across pharmacy curriculums, many colleges integrate cultural sensitivity in their curriculum, which results in new theories, frameworks, assessment tools and educational resources. While some schools have implemented isolated courses in cultural sensitivity, others are working on an integrated curriculum along the entire academic program. The following information reviews a selection of diverse experiences on implementing cultural sensitivity education in required and elective courses, experiential and service learning, an integrated curriculum, and interprofessional learning experiences. These and other publications also include a variety of instructional strategies to teach cultural sensitivity concepts and skills (Table 1).[29,30,52-55,57-60,67,73,80-94]

Patient-centered cultural sensitive health care should be incorporated into required coursework and experiential training. At the University of Minnesota students read, discuss and write reflections about the book "The Spirit Catches You and You Fall Down" that describes health care issues in the Hmong culture.[59] Students also participated in activities to explore concepts of ethnocentrism, prejudice and stereotype, and patients' health beliefs and disease explanatory models. As part of the activities, students participated in the BaFa' BaFa' cultural simulation game to role play specific cultures; viewed and discussed the *Worlds Apart* video series about cross-culture conflicts in health care; and participated in cultural book clubs. At Southern Illinois University Edwardsville, a team-based learning approach was used in a required cultural competency and health literacy course to address differences in health beliefs among various socio-cultural groups including various religious and ethnic groups, persons with disabilities and HIV/AIDS.[29] At the University of Toledo, cultural competency activities exist in a number of required pharmacy courses to increase awareness of and confidence in addressing cultural diversity.[55] The students viewed videos consisting of case studies, participated in case

discussions completed reflective writings, and wrote a paper after participating in a community project with interactions with culturally-diverse groups.

Elective courses can provide greater depth of understanding regarding an area of cultural sensitivity. At University of California San Francisco, an 8-hour elective course led to student learning in various areas of cultural competency.[52] The course consisted of didactic lectures, class discussions and various class activities, many of which are listed in their toolkit.[85] At South University, a cultural competence elective course enhanced students learning through case studies, cross-cultural simulation game, classroom discussion, community interviews, readings, and reflective writings.[54] At Wayne State University, a 2-credit elective course focused on race, ethnicity, religion, physical disability, sexual orientation, complementary and alternative forms of healing, and various chronic illness cultures.[63] The course included different readings and movies followed with small group discussions and reflections, a field trip to a Native American integrated clinic incorporating Western Medicine along with Native American therapies such as herbs, sweat lodge, and medicine man care, and in-class interactive presentations from people from diverse cultures. Students also role played patients from different cultures and identified important cultural issues affecting health care decisions and outcomes, and interviewed alternative healing practitioners with findings presented to the class.

Experiential and service learning are other venues to provide greater depth and develop skills. At Butler University, a multi-faceted, elective curricular strategy to enhance Spanish language and culture included five curricular elements: three medical Spanish courses including a service-learning course, a Spanish language immersion trip to Mexico, and an advanced practice pharmacy experience (APPE) at a predominantly Spanish-speaking patient clinic site. The experiential learning was perceived to be more effective in developing language skills than the didactic courses.[82] At the University of Cincinnati, pharmacy students rotated at a charitable pharmacy as part of a service learning elective designed to develop awareness and communication skills while interacting with the underserved population, which resulted in a positive change in students' attitudes and perceptions.[53] At the University of Missouri-Kansas City, a six-week cultural competency series is part of the introductory pharmacy practice experiences (IPPE) where students discussed patient care scenarios, role played communication models, participated in religious forums, counseled patients in Medicare Part D and assistance programs for medications, and gave presentations on health disparities.[58] Assessment results showed positive changes in students' attitudes toward need for cultural competency. At Drake University, during an advanced pharmacy practice experiences (APPE), pharmacy students were exposed to diverse patient populations at the Community Access Pharmacy.[30] This experience included students interviewing Hispanic patients, evaluating nontraditional medicine practices in a Hispanic community, visiting a Mexican grocery store, serving on a health care team at a homeless shelter, and participating in an HIV/AIDS clinic experience.

Integration of cultural sensitivity across the curriculum and along the entire academic program allows the connection between didactic knowledge and the application of the concepts and skills. Drake University implemented cultural competency active learning experiences, including a service learning experience at a free clinic or community health center, over the first three years of the pharmacy program.[30] During the fourth year of the curriculum, students were required to complete one diversity APPE. Xavier University of Louisiana College of Pharmacy and Tulane University School of Medicine implemented a cross-institutional

curriculum in cultural competency across all 4 professional years.[86] The curriculum includes lectures and discussion of the video series *Unnatural Causes* (year 1), readings of the IOM and AHRQ reports and completion of the HRSA online training *Unified Health Communications* (year 2); team-based learning sessions on working with interpreters, generational diversity, using complementary and alternative medicine and generics, disparities in pharmaceutical therapy, and working with LGBT patients (years 3 and 4). Assessment strategies include pre-posttests, essays and research reports, standardized patients, role play, exams, and learning logs.

Learning and providing patient-centered culturally sensitive health care also can be achieved with interprofessional learning experiences. At Howard University, an interprofessional course included written assignments such as self-heritage assessments and journal reflections, and discussions with case-based and literature-based sessions. [83] Students also viewed the *World Aparts* videos, role-played, practiced interviewing strategies and had a community immersion experience. At the University of Cincinnati, an interprofessional course was designed using patient case discussions.[84] Students were assigned to interprofessional teams to develop interpersonal and small group skills. The student teams discussed cases addressing various cultural topics including Puerto Rican, Lao, Appalachian, Muslim faith, Chinese culture, African-American, Native American and Jewish faith, and use of complementary and alternative medicine. The course also included guest speakers and reflection exercises. The "IDEA" model was developed to achieve interprofessional learning and cultural competence while students from different health care professions communicated and worked together.[95] The 'I" in this acronym stands for interaction where students need the chance to work directly with persons from other health professions and develop an appreciation for the other disciplines in terms of their training and methods of patient care. The "D" stands for data where students need information about other health professions including training, roles and specific information about the person in that role. The "E" stands for expertise, which refers to the ability to communicate clearly and effectively with others regarding the values and processes of patient care associated with one's own profession. The A" stands for attention, this is, self-reflection on one's biases, prejudices, and assumptions about other health care professions. Another successful effort incorporated an interdisciplinary approach with pharmacy and nursing students.[62]

Model Curriculum

Many diverse methods, tools and assessments of achieving patient-centered culturally sensitive health care skills exist, but a consistent core knowledge and skills curriculum and required cultural competencies do not exist. To achieve the knowledge and skills required for health care practitioners, a model curriculum that is adopted by all pharmacy colleges is recommended to ensure consistent cultural competencies of students and practicing pharmacists. A model curriculum would facilitate the implementation of cultural sensitivity within a curriculum and some standardization between different academic programs.[63] However, each college or school would need to adapt the model curriculum to its specific needs, limitations, priorities and resources.

Creating a model curriculum is a long process that implies not only defining the competences students should demonstrate at graduation, mapping these competences against the different modules recommended, and breaking the modules into small lessons, but also

developing learning objectives, instructional strategies, and assessment and evaluation techniques for each learning objective. A comprehensive literature review yielded 581 education and learning outcome statements defining knowledge, skills, attitudes, and other attributes related to cultural competency.[96] After using various content analysis techniques, 102 educational and learning outcome statements were identified, which could be used as a preliminary list to define the core cultural competencies for a model curriculum.[97] Working with various cultural communities within a college's geographical area or state can help develop the patient-centered culturally sensitive health care curriculum.[4]

Considering that a formal process to define the model curriculum is still under development by AACP, the intent in this paper is to present some suggested objectives (Table 2),[30,67,71,73,98] which were gathered from the pharmacy, nursing, and medicine literature reviewed for this article. Below is a curriculum template incorporating cultural awareness, knowledge, attitudes, skills, and values that would be developed and integrated across the curriculum in didactic and elective course work and experiential training. Training also could include interprofessional education activities, and when possible, an international global educational experience. Active learning strategies and assessments of successful performance should also be included.

First and Second Year

The goals during the early part of the curriculum would be to develop cultural awareness, desire, and knowledge. Students need to first understand the different definitions of cultures and explanatory models of illness.[89] Instruction on knowledge of cultures needs to be created that breaks cultural stereotypes and uses knowledge as generalizations to guide individualized interviewing and care. Discussion of health disparities should also include topics like racism and prejudice.[97] Development of cultural humility should also be included.[6]

Content areas recommended in the curriculum could be addressed as a stand-alone course, part of an introductory pharmacy practice course, communication course and or part of the pharmacy practice skills laboratory course. With didactic courses and laboratory experiences, active learning exercises are recommended. These exercises could include role playing, reflection papers and case studies discussions. Literature and media about cultural beliefs, health practices and or health care delivery can be utilized. The IPPE requirements and service learning courses could be used to address the cultural competency goals including development of skills and encounters. A seminar series embedded into a course and or IPPEs also is an option. Elective courses, service learning and a seminar series offer opportunities for interprofessional cultural competency learning.

Third Year

The goals towards the end of the didactic curriculum are to develop cultural sensitivity, patient-centered focus and skills. During the third year coursework should be offered that introduces working with culturally diverse groups. The pharmacotherapeutics courses should discuss patient data and cases where culture affects the treatment plans. Cultural sensitivity electives could be offered to allow greater depth, breadth or focus on various aspect of patient-centered culturally sensitive care. For example, Spanish for health care professionals could be offered or an in-depth exploration of diverse cultures with reflections, interviews, role-playing

and patient encounters. Advanced interprofessional activities focused on care for patients from diverse cultures could be utilized.

Fourth Year

The goal during the last year is to develop opportunities for cultural encounters with diverse patients including patients with disabilities, different race, ethnic, and religious backgrounds and different sexual orientations and gender identities. Students should have at least one APPE that is a diversity experience. This experience can be providing care to the underserved in federally qualified health centers and other clinical sites. Experiences in community centers or HIV/AIDS clinic also are options. A global experience could be a suitable diversity experience. These experiences offer opportunities for patient centered culturally sensitive interprofessional learning.

Assessment

To determine the impact of cultural sensitivity education and training, assessments need to be conducted in relationship to the student body, curriculum, education, and training. Assessments influence college and student commitment to learning and can be both formative and summative. Assessments also can identify gaps and areas for improvement within a program, student, and practitioner. Ideally, assessment of student learning should include both self- and performance-based assessments beginning upon entry into the program and throughout the four years of learning and training. For each cohort of incoming students, students should create a profile that includes their perceived levels of cultural sensitivity.[63] These profiles will allow the identification of training needs for each specific cohort of students and reflect changes in cultural sensitivity training in kindergarten to high school education. Based on the specific cohort, priorities can be established for addressing identified cultural sensitivity needs within that cohort's academic program along with the development of targeted educational interventions for specific subgroups of students to address particular issues. Assessment of cultural sensitivity outcomes should be part of social and administrative sciences educational outcomes[99] and within the other pharmacy education domains as well.

Although the field of cultural competency/sensitivity assessment is growing, with some tools already validated in pharmacy or other health professions (Table 3),[29,37,43,97,100-115] validated tools to measure competency and sensitivity achievements are still limited.[100] The Association of American Medical Colleges developed[114] and revised[115] the *Tool for Assessing Cultural Competence Training (TACCT)* to help medical colleges integrate cultural competency content in the curriculum. This tool could serve as a resource for curricular assessment within pharmacy schools. Most currently available cultural competency assessment tools focus on self-assessment of knowledge and attitudes with few tools for skills assessment. Furthermore, some tools focus only on knowledge regarding one or two cultural issues, usually race and ethnicity, instead of the full spectrum of cultures health care practitioners deliver care in the real world. Culture clinical case vignettes with subsequent cultural competency questions can be utilized to assess knowledge and skills.[116] Observed structured clinical examinations (OSCEs) are useful to assess patient-centered culturally sensitive health care skills with some articles providing recommendations for creation and usage.[89,90] Assessment tools, validated or not, can

be adapted to fit the specific needs of a cultural competency activity, course, experiential experience, curriculum and program, but validated tools used across similar or varied programs facilitate comparison of outcomes.

Global Education

Global health is becoming more important for education, research, and practice. Global health focuses on transnational health issues, determinants, and solutions, emphasizes the equity in health among nations for all people, promotes interdisciplinary collaboration, and embraces population-based prevention with individual-level clinical care.[117] Factors contributing to the need for global health include increasing international travel, growing global markets, climate change, urbanization, rapid transmission of infectious diseases and emerging multinational epidemics.[118]

Pharmacists can play a vital role in promoting health and shaping global health. However, pharmacy students and practitioners must be knowledgeable and competent in the areas of travel medicine, immigrant health, emerging and non-emerging disease, social determinants of health, international nutrition, water, and sanitization; global economics, governance, trade, and politics; global environment changes, human rights, global responsibilities, , public health models, natural and war disaster relief programs, health care system disparities and cost consciousness.[118,119] Therefore, pharmacy faculty must educate and train sufficient numbers of new and practicing pharmacists and other support staff to build such a capable pharmacy workforce.[120,121] Academic administrators and faculty will need to support and allocate appropriate resources to global education, collaborations and exchange programs.[122]

Policy is beginning to influence global health education. The ACPE guideline 14.6 states "the college or school may offer elective advanced pharmacy practice experiences outside the United States and its territories and possessions, provided that they support the development of the competencies required of the graduate, and the college or school implements policies and procedures to ensure the quality of the site(s) and preceptor(s)".[51] The International Pharmaceutical Federation (FIP) has partnered with the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Health Organization (WHO) to establish a Global Pharmacy Education Task Force with an action plan for promoting comprehensive education development and achievement of competencies in global pharmacy practice.[123] The American Association of Colleges of Pharmacy AACP Global Pharmacy Education Special Interest Group was established to provide a forum for the exchange of information, ideas and programs that pertain to pharmacy education, research and healthcare on a global basis. This group has created a website with a list of organizations involved in global health and pharmacy education to facilitate colleges incorporating global health in curriculums.[124] They also drafted student learning objectives (Table 4) and proposed activities and assignments for a global APPE.[125] The AACP is a founding member of the Global Alliance for Pharmacy Education (GAPE), which was established in 2011.[126] Member organizations include national associations of pharmacy educators, regional networks of pharmacy schools and other important stakeholders that are committed to maximizing the contributions of pharmacy education to advance pharmacy practice globally.

Coursework and experiential education can achieve knowledge and competencies in global health. A systematic literature review on the effects of international health electives on medical

students showed that these experiences strengthen the students' existing skills, stimulate clinical reasoning, increase knowledge of tropical disease and immigrant health, increase appreciation of cross-cultural communication and provision of care to the underserved and influence career choices.[127] Examples of pharmacy educational outcomes from courses and experiential activities are beginning to appear. A pharmacy elective in the Peruvian rainforest increased students appreciation of herbal therapy and shaman healing and influenced practice especially in terms of choosing alternative forms of healing, educating about herbal therapies, and care of patients with English as their second language.[128] Three pharmacy colleges are collaborating to provide an APPE in Belize.[129,130] Medical mission directed studies and APPEs also are great educational experiences to expose student pharmacists to global health and direct patient care to underserviced areas of the world that results in professional and personal transformation.[131-135] Global health is even beginning in residency training. The Purdue Pharmacy Kenya Program in collaboration with the Academic Model for Providing Access to Healthcare (AMPATH) offers a global health residency to American and Kenyan pharmacists.[125, 136] The University of Pittsburgh has established an advanced practice residency with emphasis on underserved care and global health where the resident helps select the country or region where he/she will be involved.[137]

Global health experiences require additional resources and preparation than usual education and training. In order to achieve successful global health pharmacy education in international experiences, the home institution delineates the initial goals of the global experience program and supports its mission and works with the host institution to finalize.[119,136] Additional logistics exist such as student accommodations, passports, extra paperwork, VISAs, and liability and health insurance. The preparation and training of students studying abroad can begin up to a year prior to the departure. Comprehensive student orientations need to be held prior to departure to address the paperwork, cultural competence, and site and country attributes. Prior learning of culture, customs, history, and standards of the country to be visited as well some basic communications in the host country's language will assist in immersion experiences. Students should be taught mechanisms for dealing with stress, conflict, and homesickness and maximizing tolerance. Preventive health measures, especially country-specific pre-travel vaccination and/or chemoprophylaxis, need to be conducted prior to travel. During placement, assigned faculty supervisors from the home and host institutions keep regular contact briefing with the students and coordinate their activities. Students are encouraged to keep a reflective journal. Supervisors and students debrief upon return to the home institution about their global experience, review areas of improvement to assess and restructure the program.

Pharmacist, Preceptor and Continuing Education Programs

Health professional standards are beginning to require cultural sensitivity education and or training for practitioners.[8,26] Postgraduate patient-centered culturally sensitive health care education and training can be at the institutional or organizational level, services and programs level, curricular or educational level, and or individual or professional level. The education and training could be done as interprofessional organizational or health systems programs. Future programs in patient-centered culturally sensitive health care will be a "spiral curriculum" where the learning curriculum facilitates learners to revisit and reexamine fundamental ideas over

time, and to return to the basic concepts to build on them, according to new experiences and understanding.[139]

Future Directions

Standardized Evidence and Competency Based Curriculum

Pharmacy colleges are following different approaches when building their patient- centered culturally sensitive health care curriculums. Not all colleges are using active learning strategies or assessing achievement of competencies. Therefore, a standardized curriculum using a competency-based approach that student pharmacists can demonstrate by graduation is needed. [101] More evidence currently is needed to determine the best teaching and learning practices to achieve these competencies.

Comprehensive Integrated Curriculums

The need for patient-centered culturally sensitive health care curriculums to be woven into all four years of the pharmacy curriculum is expressly evident based upon curricular outcomes included by both ACPE and AACP CAPE educational outcomes.[51,96]

Interprofessional and Global Cultural Experiences

Interprofessional care is expanding as the norm for patient care, thus cultural sensitivity should be included within interprofessional education and training. The growth and expansion of global and international health care needs and programs creates a need to emphasize this type of education and training within pharmacy curriculums.

Patient-centered Culturally Sensitive Health Care Curriculum Responsive to Changes

Teaching and learning methods as well as societal health care need change overtime. Multiculturalism, polyculturalism, multilingualism, multiracialism, religious pluralism, multi-sexuality, political coalitions, etc. are issues that continue to increase and evolve in the United States and worldwide. Changes in population, best educational practices, health care provision, policy, and reimbursement, and societal expectations of health care providers will need to be integrated into curricular revisions. Assessments of what incoming students know and perceive about diversity and cultural sensitivity and their experiences, beliefs and expectations also will need to be conducted to adapt patient-centered culturally sensitive health care content and training to the needs of these upcoming students and patient needs.

Utilization of Active Learning and Information Technology

Patient-centered culturally sensitive health care is not a topic to “learn,” but a topic to “live.” The virtual environment, mobile devices, social systems, E-learning, online communities, wikis, blogs, etc. bring enormous opportunities for rich and interactive resources to create a “live” curriculum that encourages dialog and constructive learning. A dynamic curriculum should be built on engaged learning where participants are engaged not only with the learning process but also with the object of study, the contexts, and the human conditions that are so relevant when becoming culturally competent, instead of decontextualized and rote learning.[136] The new curriculum should not only taught in the classroom or using simulations but also in the neighborhood, places of worship, hospitals, pharmacies, and community organizations. A

curriculum that uses new educational technologies to foster discussion and group work, critical thinking, communication skills, and behavioral change is needed to accomplish goals of creating a patient-centered culturally-sensitive health care provider.

Patient-centered Culturally Sensitive Health Care Education Materials

The exchanging of ideas and tools is crucial to addressing and ensuring patient-centered culturally sensitive health care competencies within educational institutions. To assist with consistency across pharmacy curriculums, basic instructional modules and active learning activities could be developed and shared with everyone. Activities can be captured by best practices at the various colleges, especially those with extensive cultural sensitivity programs.

Lifelong Continuous Professional Development Using a "Spiral" Curriculum

Patient-centered culturally sensitive health care education and training are lifelong journeys for faculty, preceptors, staff, and pharmacists. Health care delivery models and clinical practice are constantly changing, and the education and training for culturally sensitive providers therefore need to adapt alongside those changes.

Patient-centered Culturally-Sensitive Health Care Certificate Program

In order to establish basic standards in cultural sensitivity for college graduates, an initial cultural sensitivity certificate that requires didactic and instructive materials, simulation training, self-reflection, and an application opportunity could be created. Thereafter, annually or bi-annually, participants should attend education or training activities related to current topics on patient-centered culturally sensitive health care in order to maintain an active certificate. This would help achieve not only basic competencies, but also incentivize individuals to stay up to date. Institutional centers such as Ohio State University's Multicultural Center and Saint Louis University's Center for Interprofessional Education and Research (CIER) are prime areas to disseminate training programs for patient-centered culturally sensitive health care and serve as research resource centers.

Comprehensive Competency Based Assessment Tools

Assessment is a vital part of any academic pursuit, and can be performed at the individual course, curricular and pedagogical, and campus-wide levels. Assessment of patient-centered culturally-sensitive health care learning and delivery should be conducted throughout one's student and professional life to facilitate continuous reevaluation of skills and patient outcomes and identification of areas requiring further growth. Different assessment tools currently exist from various health care professions but many of them focus on knowledge and awareness and self-assessment versus skills and actual evaluation of patient care provision experiences and outcomes. Better assessments in this area still need to be developed.

Exploration of Cultural Sensitivity Evaluation on Pharmacy Licensure Examinations

Medicine licensure examinations already include cultural competency. Since patient-centered culturally sensitive health care is considered by many as an appropriate means to improve patient encounters, satisfaction, and health outcomes, inclusion on licensure examinations seems to be a logical inclusion. Since patient-centered culturally sensitive health

care is more related to a skill set, OSCE like examinations might be required to assess this competency.

Greater Faculty, Staff, and Preceptor Cultural Sensitivity

Faculty, staff, and preceptors are role models to our students and therefore should also teach and practice patient-centered culturally sensitive health care. To be able to educate students in cultural sensitivity, faculty, staff, and preceptors need to be culturally sensitive themselves. The majority of current pharmacy faculty and preceptors most likely did not receive formal education and or training on patient-centered culturally sensitive health care during their time in pharmacy school , therefore programs and training of this cohort are needed as well. Health care employers and colleges could partner in the creation of on-line training programs for their employees. The creation of college or institutional multicultural centers could aid with interprofessional culturally sensitivity skill development and assessment.

Need for Institutional Commitment and Support

For successful implementation of patient-centered culturally sensitive health care strategies and curricular reform the support of administrators and institutional leaders is critical. In many instances, the inclusion of patient-centered culturally sensitive health care in courses and/or curriculums is the single effort of a dedicated faculty member and/or staff who at times serves as the only advocate for the incorporation of cultural competency in the curriculum. Strategic planning at various levels (department, school and institution) should take into account patient-centered culturally sensitive health care such as University of Maryland Baltimore has done.[135]

More Research on Patient-centered Culturally Sensitive Health Care Education and Health Care Outcomes

Research focusing on educational, patient, and health systems outcomes related to patient-centered culturally sensitive health care is vital to justify time invested and associated costs with this type of teaching and learning, especially the development and procurement of training resources, and recruiting and retaining necessary faculty. Proposed areas of future research are the evaluation of patient-centered culturally-sensitive health care teaching and learning at all academic levels and assessment of the impact of culturally-sensitive health care delivery on patient satisfaction, health literacy, medication adherence, continuity of care, health outcomes, health disparities, and health care expenditures. By exploring quantitative outcomes such as health care cost savings in relation to patient-centered culturally sensitive health care, this might further elevate the urgency and priority of integrating patient-centered culturally sensitive health care into the curriculum, and highlight the need of adequately trained faculty, staff, and preceptors. Additional benefits of demonstrating cost savings could result in more possibilities for grant funding by larger organizations and institutions. Researchers focused on evaluating the impact of patient-centered culturally sensitive health care training and care on patient outcomes also are needed.

Conclusion

With the changing demographics of the United States population, increasing global health needs within the United States and throughout the world, and the value of pharmacists in these

practice areas, the need for improved patient-centered culturally sensitive health care curriculums for both student pharmacists and practicing pharmacists exists. Pharmacy colleges incorporate this type of education and training to various extents from minimal didactic coverage to integrated curriculums across didactic and experiential opportunities. Some colleges incorporate active and service learning and conduct assessment of knowledge and skills competencies in patient-centered culturally sensitive health care. The inconsistencies of education and training in this area call for more standards, a model curriculum based on competencies, and research. Postgraduate education, training, and assessment in patient-centered culturally sensitive health care are also required. The growth and expansion of interprofessional learning and global and international programs create great education and training opportunities. A great need exists to assess the impact of inclusion of patient-centered culturally sensitive health care in the curriculum and what are the most effective ways to teach and assess educational outcomes and competencies.

Table 1. Instructional Strategies and Resources for Cultural Competency/Sensitivity Curriculum[a]

Active learning exercises – UCSF Toolbox[85]
Alternative practice clinic visit[60]
BaFa' BaFA' cultural simulation game[59,87]
Case studies and video case studies[29,30,52-55,57-59,73,80,82-84]
Complementary and alternative healer interview[60]
Cultural book clubs and readings of articles[30,59,60,88]
Cultural competency seminar series[58]
Cultural forum or panels[29,54,58,71,80,81]
Global experience[80]
Human difference paper or presentation, i.e. different cultural group than one's own[29,55]
Online case based course[86,89]
Observed structured clinical examination (OSCE)[90]
Patient and practitioner community interview of person with different cultural profile than own[54]
Patient empathy modeling exercise[80]
Reflective writings[29,30,52-55,57-60,73,80,81,83,84]
Role-reversal exercise[60,73]
Service learning diversity experience[30,53]
Service learning or experiential rotations in FQHC[30,57,80,91]
Spanish curriculum[82,92]
Team-based learning[29,86]
Videos on interpreter use[52,55]
Virtual patients and standardized patients[86,93]

[a]Examples from pharmacy, medicine, and nursing; all strategies can be interprofessional learning

Table 2. Preliminary List of Objectives for a Cultural Competency/Sensitivity Curriculum

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Culture concepts

- Justify need of culturally sensitive health care
- Define culture, characteristics of a culture, race, ethnicity, spirituality, religion, cultural diversity, cultural competence, cultural sensitivity, cultural humility, cross-cultural care, and cultural sensitive health care
- Differentiate stereotypes from generalizations
- Identify and resolve bias, prejudice, and discrimination
- Compare and contrast the various models of cultural competency including critical culturalism and the intersectional framework

Patient aspects and health disparities

- Explain differences between health disparities and health care disparities
- Summarize US demographic changes and their impact on health care in the US
- Provide evidence of health and health care disparities and patient outcomes
- Explain the effects of cultural sensitivity in patients' health outcomes
- Identify health beliefs and perceptions for various culture groups and relate to how these beliefs affects health care for various socio-cultural groups
- Explain the health care needs and health disparities of diverse populations including different characteristics such as race/ethnicity, religion/spirituality, socioeconomic status, sexual orientation, limited English proficiency, low health literacy, chronic illnesses, and disabilities

Practitioner aspects

- Identify the role of the health care practitioners in providing care to diverse populations
- Demonstrate empathy toward patients with different socio-economic challenges
- Determine patients' process for decision making, causes and preferred treatment of illness, and family dynamics
- Assess own biases, stereotypes and level of cultural competence/sensitivity
- Evaluate literature in the area of health disparities, cultural competency, and outcomes of patient-centered culturally sensitive health care

Patient-centered culturally sensitive health care

- Explain the rationale of requiring training in cultural sensitivity
- Utilize culturally sensitive patient interviewing models
- Utilize various methods and resources to improve communications with patients from various cultures and backgrounds, especially those with sight and hearing limitations, low health literacy and or English as second language
- Identify patients who would benefit from an interpreter
- Work efficiently with an interpreter
- Compare and contrast approaches for eliciting health beliefs and a spiritual history
- Use appropriate communication strategies to provide culturally sensitive counseling to patients from various cultures and backgrounds
- Increase awareness of communication barriers for patients who are deaf or hard of hearing
- Evaluate the efficacy and safety of alternative forms of healing

Work with communities to improve cultural sensitivity/diversity policies and health care

Health system aspects

Discuss the health care safety net/systems available for people from different cultures

Explain the role of government and policies in terms of patient-centered culturally sensitive health care

Measure adherence to regulations, standards and accreditations rules and regulations

Evaluate health system mission, policies and procedures related to patient-centered culturally sensitive health care

Assess cultural sensitivity knowledge and skills of workforce and preceptors

Develop and evaluate programs to improve cultural sensitivity in the workforce

Evaluate policies for employment and retention of a culturally diverse workforce

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aCompilation of ideas from different references[30,67,71,73,98] and author additions based on experience and literature review

Table 3. Examples of Various Cultural Competency Education and Training Assessment Tools for Various Learner Groups[37,100]

Name (reference)	Goals	Audience	Description	Validation
Curriculum assessment				
Tool for Assessing Cultural Competence Training (TACCT)[114, 115]	Assess integration of cultural competence content in the curriculum; compare different programs	Curriculum developers	Self-report 42 items (first version 67 items) 6 domains (first version 5 domains): Rationale, context, and definition; Key aspects of cultural competence; Understanding the impact of stereotyping on medical decision-making; Health disparities and factors influencing health; and Cross cultural clinical skills	
Practitioners and administrators				
Cultural Competency Training Outcomes[107]	Evaluate learning after a continuing education program	Practitioners administrators	Self-report post-then-pre of knowledge and skills 29 items (yes/no or Likert scale) Sections: demographics (5 items) knowledge (19 items) skills (5 items)	not validated
Cultural Competence Self-Assessment Questionnaire (CCSAQ)	Assess cross-cultural strengths and weaknesses in child- and family-serving agencies	Two versions: one for direct service providers, the	Self-assessment 79 items (four-point Likert scales Five subscales: knowledge of community; personal involvement,	Not validated

		other for administrators	resources, and linkages; staffing, service delivery, and practice; organizational policies and procedures; and reaching out to communities	
Cultural Capacity Scale[108]	Measure practitioner cultural competence	Practitioners	Self-assessment 20 items Cultural knowledge (6 items) Cultural sensitivity (2 items) Cultural skill (12 items)	Validated in nurses
Quick Discrimination Index (QDI)[100]		Counseling psychology; also intended for general use	30 items. 5-point Likert (strongly disagree to strongly agree). Three subscales: general (cognitive) attitudes about racial diversity, affective attitudes about racial diversity, and general attitudes regarding women's equity issues	
Culture Attitude Scale, or Ethnic Attitude Scale (CAS/EAS) [100]		Nursing	20 items for each of the two vignettes (re: Anglo and African American patients; additional vignettes may be added) 5-point Likert (strongly agree to strongly disagree). Three factors: Nursing care–patient interaction, cultural health behavior; cultural health attitudes and beliefs	
Multicultural Counseling Inventory (MCI)[109]	developed for use in counseling psychology	Practitioners	40 items. Four-point Likert scale (very inaccurate to very accurate) One general multicultural	

			competency factor and four specific factors: multicultural counseling skills, multicultural awareness, multicultural counseling relationship, and multicultural counseling knowledge	
Multicultural Awareness, Knowledge, and Skills Survey (MAKSS and MAKSS-CE-R) [100]		counseling psychology	33 items. Four-point Likert scales (very limited to very aware; very limited to very good; strongly disagree to strongly agree). Three subscales: awareness–revised, knowledge–revised, and skills–revised	
Cross-cultural Counseling Inventory (CCCI and CCCI-R) [100]		counseling psychology	Scored by an observed 20 items. 6-point Likert (strongly disagree to strongly agree). Three factors: cross-cultural counseling skill, sociopolitical awareness, and cultural sensitivity	
Multicultural Counseling Knowledge and Awareness Scale, formerly the Multicultural Counseling Awareness Scale–form B (MCKAS) [100]		counseling psychology	32 items. 7-point Likert (not at all true to totally true). Two subscales: knowledge and awareness	
Practitioners and students				
Tucker-Culturally Sensitive Health Care Inventory Form (T-	Determine if provider practices patient-centered culturally	Practitioners students	Self-report 141 items (Likert scale) Sections:	Validated in medical students

CSHCI)[110]	sensitive health care; Benchmarked to what diverse patients stated important items		patient centeredness (23 items) interpersonal skills (7 items) disrespect/disempowerment (8 items) competence (9 items) cultural knowledge/responsiveness (6 items)	
Clinical Cultural Competency Questionnaire (CCCQ)[101]	Measure the perceived level of pharmacy students' knowledge, skills, attitudes, and encounters in cross-cultural environments	Practitioners students	Self-assessment 63 items (Likert scale = Not at all, a little, somewhat, quite a bit, very) Knowledge (16 items) Skills (15 items) Attitudes (20 items) Encounters (12 items)	Validated in pharmacy students
California Brief Multicultural Competency Scale (CBMCS)[97]	multicultural competence in mental health services	Practitioners students	Self-assessment 22 Items (Likert scale strongly agree, agree, disagree, strongly disagree) Diversity (8 items) Knowledge (7 items) Racial dynamics (3 items) Barriers (4 items) Note: these are the results of the validation with pharmacy students	Validated with mental health providers and pharmacy students
Students				
Blueprint for Integration of Culturally Competence in the Curriculum (BICCC)[102,103]	Assess students about integration of cultural competence in the curriculum (modification of TACCT survey	Students	Self-report 31 items (Likert scale = quite often, sometimes, never) Knowledge (20 items) Key concepts (4 items) Health disparities issues (9	Validated in nursing students

			items) Clinical decision making (4 items) Health disparities research (3 items) Skill (5 items) Attitudinal development (6 items)	
Cross-Cultural Care Survey[111]	Preparedness to provide cross-cultural care	Students	Self-assessment Training Preparedness Cross-cultural experiences Skillfulness Resources Specialty preparedness Demographics	Validated in medical students
Multicultural Assessment Questionnaire[43]	Evaluate achievement of stage 4 of Bennett Model (acceptance, importance)	Students	Self-assessment 16 items (Likert scale) Knowledge (6 items) Skills (6 items) Attitude (4 items)	Evaluated in medical students
Inventory for Assessing the Process of Cultural Competency Among Healthcare Professionals Revised (IAPCC-R)[29,104]	Assess student learning based on the Campinha-Bacote model (cultural incompetence, cultural awareness, cultural competence, cultural proficiency)	Students	Self-assessment 25 items (Likert scale - proficient, competent, aware, incompetent) Cultural awareness (5 items) Cultural knowledge (5 items) Cultural skill (5 items) Cultural encounters (5 items) Cultural desire (5 items) Overall cultural competence score	Validated in nursing students Used in pharmacy students
Transcultural Self-efficacy Tool (TSET)[105,106]	Measure changes in confidence in	Students	Self-assessment 83 items; rating scale (1 not	Validated in nursing

	transcultural care after education	confident to 10 totally confident) 15 20 minutes Cognitive (25 items) Practical (28 items) Affective (30 items) Factors Knowledge and understanding (25 items) Interview (22 items) Awareness, acceptance, and appreciation (12 items) Recognition (10 items)	students
Cultural Self-efficacy Scale (CSES)[112]		26 items. Five-point Likert scale (very little confidence to quite a lot of confidence). Three sections: knowledge of cultural concepts, knowledge of cultural patterns, and skills in performing trans-cultural nursing functions	
Cross-cultural Adaptability Inventory (CCAI)[113]		50 items. Six-point Likert scale (definitely not true to definitely true). Four subscales: emotional resilience, flexibility/openness, perceptual acuity, and personal autonomy	

Table 4. AACP Global Education SIG Suggested Student Learning Objectives for a Global APPE[125]

Student pharmacists participating in a global APPE should be able to

1. Communicate and interact with patients with the highest level of cultural competence.
2. Compare medication distribution systems: management of drug supply, dispensing procedures and medication records.
3. Discuss most common diseases in the country visited (disease state knowledge).
4. Perform drug therapy evaluation: synthesize patient history, lab and physical exam, review treatment options with complementary and alternative medicines, assessment of treatment outcomes.
5. Perform patient education and counseling.
6. Develop educational materials for patients.
7. Develop case studies.
8. Prepare and deliver formal oral presentation and written presentations.
9. Contrast health care system at the APPE site with the U.S. healthcare system.
10. Describe how culture impacts health and health care provided at the APPE site.
11. Discuss various factors that impact pharmacy practice in a country of the APPE site.
12. Develop a country portfolio to include information on pharmacy services, health care system, public health, economy, politics, religious beliefs, etc.

AACP = American Association of Colleges of Pharmacy, SIG = special interest group, APPE = advanced practice pharmacy experience

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