Pharmacy Students' Perceptions About the Need for Multicultural Education

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This study examined pharmacy students' perceptions for the need for multicultural education and its relevance to pharmacy practice. The specific objectives were: (i) to assess pharmacy students' perceptions of the importance of learning about health beliefs and behaviors of ethnic-minority groups; (ii) to determine pharmacy students' opinions about the mechanism(s) in which such cultural information should be conveyed; and (iii) to evaluate if pharmacy students' perceptions differed based on their demographics. One hundred thirty-eight first-professional year pharmacy students responded to a questionnaire administered during a Pharmacy Administration course. Pharmacy students believed it was important for them to learn information regarding the health beliefs and behaviors of different ethnic groups through didactic and experiential training. However, they apparently could not make the association between having this knowledge and positively impacting patient outcomes. Pharmacy students' perceptions differed based on gender and ethnic background.

INTRODUCTION

With the increasing number of ethnic minorities in the United States population, pharmacists and other healthcare professionals must be able to effectively interact with people of diverse ethnic backgrounds. In 1995, ethnic minorities accounted for nearly 70 million Americans, or almost 25 percent of the population(1). These ethnic-minority groups include African-Americans, Hispanics, Native Americans, and Asians. As the largest ethnic-minority group in the United States, approximately 32 million African-Americans live in the United States. However, the number of Hispanics in the United States is increasing at such a fast rate that Hispanics are expected to outnumber African-Americans within the next 15 years. Asians are another ethnic-minority group that is increasing dramatically in number. With such a population growth of ethnic minorities, the number of people in ethnic-minority groups should be equal to the non-Hispanic white population by the mid-21st century. It is estimated that there will be 115 million Americans of ethnic decent by the year 2020. This shift in the demographic picture of the United States has a significant impact on the changing needs for the delivery of healthcare services.

MULTICULTURAL EDUCATION FOR HEALTHCARE PROFESSIONALS

For many years, healthcare professionals have educated ethnic-minority patients in ways that encourage patients' acceptance of the American healthcare system and its practices. Despite such efforts, some patients still have been unable or unwilling to adapt to western medicine and technology. Some of this difficulty in adaptation arises because of differences in cultural beliefs and values. For instance, even after accounting for socioeconomic factors, some ethnic-minority patients have views about health and illness that are not consistent with Western-oriented health beliefs. Thus, they may not be motivated to take Western-influenced measures to prevent diseases or to comply with medication regimens, but be perfectly willing to engage in health practices that are consistent with their cultural models of illness(2). Different beliefs such as these can and often do affect patients' perceptions of health and behavior. Patients who are unfamiliar with the American healthcare system are further alienated from receiving healthcare services due to access barriers, language and attitudinal barriers, and differences in interpersonal communication techniques, body language, and gender roles(2-5). Furthermore, some people may refuse to seek treatment for their illnesses when their cultural norms place stigmas with certain diseases (e.g., mental health illnesses)(2).

With the growing population of ethnic minorities in the United States, healthcare professionals have had to change their approaches to treating patients in order to deliver healthcare services to this segment of the population. Even the Joint Commission on Accreditation of Health Care Organizations (JCAHO) has recognized the need to incorporate cultural beliefs and values into patient education. The 1995 JCAHO standard PF.2.1.1 states that "when indicated, the assessment includes cultural and religious practices, emotional barriers, desire and motivation to learn, physical and/or cognitive limitations, and language barriers."(6) Consequently, in recent years, a paradigm shift has occurred in the provision of education for healthcare professionals. Healthcare practitioners now are encouraged to learn about the different cultures of their patients(2,3). During this education process, practitioners do not need to

have the same beliefs as their culturally-diverse patients but they should be willing to acknowledge and respect the beliefs of other cultures without being judgmental or stereotypical. With an understanding of their patients' cultural beliefs and values, practitioners can incorporate this knowledge into their practices and treatment considerations and thereby allowing their patients to have a more active role in the treatment decision processes. Thus, various healthcare professional programs have added multicultural information to their curricula.

Nursing Programs

In 1983, only 18 percent of the baccalaureate-accredited nursing schools included cultural education as part of their curriculum(7). Since 1992, the American Academy of Nursing Expert Panel on Cultural Diversity has advocated the need for multicultural education in nursing(8). However, the lack of knowledge about cultures is still prevalent among nursing students regardless of this recognition for the need for multicultural education. Despite the vast amount of literature regarding the differences in cultural beliefs and values of various ethnic groups, many nursing students still do not perceive the need to treat culturally-diverse patients any differently than patients of their own ethnic background(9). Furthermore, this lack of knowledge that nursing students have about ethnic-minority groups is reflected in their perceptions and stereotypes of those groups(7). Nursing studies have shown that students' and practitioners' knowledge of cultures and opinions toward people of various cultures are related to their level and type of education(10,11). Senior nursing students had more knowledge and exhibited less biased opinions about other cultures compared to freshman nursing students. Diploma-educated and associate degree nurses had more knowledge and exhibited less biased opinions about other cultures compared to bachelor's degree nurses. Although these findings appear to be contradictory, it may be that there is an interaction between type and level of education on knowledge and opinions about different cultures. However, multicultural education is still needed to attempt to combat the lack of knowledge and inaccurate perceptions that some nursing students have about ethnic-minority groups.

Numerous teaching techniques have been employed in an effort to educate nursing students about the cultural beliefs and values of their ethnically-diverse patients. Examples of these strategies include identifying and evaluating stereotypes of ethnic-minority groups and developing patient care plans for patients of other nationalities(7,9). The central theme of many of these teaching strategies has been to allow students to assess their own culture and evaluate its differences from the beliefs and values of other cultures. Through the education process, students are taught to respect and understand other cultures even if they do not agree with the beliefs and values of these other cultures. Additionally, the curriculum of elective and required courses have been changed to include didactic information about ethnic cultures, guest lecturers from other nationalities, and discussions about the healthcare delivery system in other nations(12). Nursing students have also been encouraged to participate in study abroad programs.

Psychology Programs

Much of the evidence showing the need for multicultural education has been written in the psychology literature. According to a literature review by Yutrzenka(13), positive patient outcomes have been correlated with patients being treated by professional psychologists of the same ethnicity as the patients. Psychologists who have been trained to treat ethnically-diverse clients have better relationships with their clients because they tend to be more sensitive to their clients' needs and have a better understanding of the clients' experiences. Consequently, their clients have a higher level of satisfaction with the therapy and more trust in their psychologist.

Despite the data in the literature showing support for multicultural education, the American Psychological Association (APA) has done little in terms of research, education, accreditation, and publication to encourage psychologists to train in treating culturally-diverse patients(14). None of the states requires competency testing or curriculum requirements for dealing with culturally-diverse clients. However, in 1993, the APA did develop "Guidelines for Providers of Psychological Services to Ethnic, Linguistic, and Culturally Diverse Population" to give practitioners guidance when providing therapy to culturally-diverse clients so that improper actions or suggestions would not occur(15).

Pharmacy Programs

Pharmacy has recognized the necessity of multicultural education in achieving optimal patient care(3,16,17). However, pharmacy seems to be lagging behind regarding any explicit emphasis on curriculum guidelines and research issues involving multicultural education and pharmacy practice. Consequently, the current literature involving multicultural education programs at colleges of pharmacy is limited. The College of Pharmacy at St. John's University in New York offered an elective course allowing undergraduate pharmacy students an opportunity to evaluate the relationship between cultural diversity and people's use of over-the-counter medications(18). Additionally, the students assessed differences in the delivery of pharmacy services to clientele of different ethnic groups. This experiential learning process was achieved through interviews with patrons of community pharmacies located throughout New York City and its surrounding areas. The students enrolled in the course had favorable opinions about the course because it allowed them to gain practice and self-confidence in communication and interpersonal skills in real-life settings.

Significance of the Study

With the increasing diversity of the United States population and its impact on the changing needs for the delivery of healthcare services, pharmacists will have to learn more about the health beliefs and subsequent health behaviors of their patients. With this knowledge, pharmacists can encourage more effective patient participation in treatment decisions that may lead to enhanced patient compliance and improved therapeutic outcomes. Yet, the literature shows insufficient support for multicultural education in the pharmacy curriculum. And even if such information was offered in colleges of pharmacy, there is a lack of information available regarding students' perceptions of the need for multicultural education. Such data would provide necessary information for the design and delivery of multicultural information to pharmacy students. This study serves to provide such information.

Table I. Characteristics of pharmacy student participants (N=138)

Characteristic	Frequency[a] (Percent)	Mean (SD)
Gender		
Female	90 (65.7)	
Male	47 (34.3)	
Ethnicity		
Non-Hispanic White	63 (47.0)	
Asian American	40 (29.9)	
Hispanic or Mexican American	22 (16.4)	
African American	6 (4.5)	
Other	3 (2.2)	
Age (in years)		23.10 (3.83)[b]
Pharmacy work experience (in years)		1.10 (1.56)[b]
Cultural diversity of hometown		2.90 (0.86)c
Rating of knowledge of health beliefs and behaviors of different ethnic groups		2.08 (0.72)d

[a]Frequencies do not total 138 because of missing responses.
[b]Range for age was 19 to 42 years and range for pharmacy work experience was 0 to 9 years.
[c]1= no diversity; 2 = minimal diversity; 3 = moderate diversity; 4 = extreme diversity.
[d]1 = poor; 2 = fair; 3 = good; 4 = excellent.

Objectives

The purpose of this study was to assess pharmacy students' opinions about the relevance of ethnically-related health beliefs and behaviors to pharmacy education and pharmacy practice. The specific objectives were as follows:

- to assess pharmacy students' perceptions of the importance of learning about health beliefs and behaviors of ethnic-minority groups;
- to determine pharmacy students' opinions about the mechanism(s) in which such cultural information should be conveyed; and
- to evaluate if pharmacy students' perceptions differed based on their demographics.

METHODS

Questionnaire

A questionnaire was developed to assess pharmacy students' opinions about the relevance of ethnically-related health beliefs and behaviors to pharmacy education and pharmacy practice. Questionnaire items were developed to assess pharmacy students' perspectives on the importance of teaching health information of ethnic groups in pharmacy school and the perceived need for this type of knowledge in pharmacy practice. The questionnaire consisted of three sections and each questionnaire item required a response to a Likert-type scale ranging from 1 "Strongly Disagree" to 5 "Strongly Agree" unless otherwise noted. In the first section, two items were used to assess their opinions about the need for ethnically-related health information to be taught in pharmacy school. Those who agreed or strongly agreed that ethnically-related health information should be taught in pharmacy school were asked to respond to an additional item which assessed the type of mechanism in which the information should be conveyed, using response categories of "part of a required course," "part of an elective course," "entire required course," and "entire elective course." One item was intended to measure their feelings about the necessity of ethnically-related health knowledge for effectively practicing pharmacy. The second section, consisting of three items, measured pharmacy students' perceived importance of and willingness to be exposed to different ethnic groups other than their own during their clinical rotations. One item assessed their perceived likelihood of working after graduation in a pharmacy setting that served predominantly ethnic-minority patients, with responses ranging from 1 "Extremely unlikely" to 5 "Extremely likely." The last section of the questionnaire consisted of demographic items and background variables.

Study Population and Data Collection

A total of 140 questionnaires were distributed to first-professional year pharmacy students at a large, public university located in a metropolitan area in the southwestern region of the United States. Only first-year students were recruited since they had not yet received instruction about the social and behavioral aspects of pharmacy which include the role of culture and ethnicity in pharmacy practice. It was believed that their exposure to this material would have biased their responses to questionnaire items.

The questionnaire was administered and completed at the beginning of the first class of the social and behavioral section of Pharmacy Administration I, which is a required course in the pharmacy curriculum. Pharmacy students' participation in the survey was voluntary and they did not receive extra credit for completing the questionnaire.

Data Analysis

Data were analyzed descriptively using means and frequencies. Bivariate correlational analyses, t-tests, and analysis of variance (ANOVA) techniques were used to examine the relationships between students' opinions about the importance of and need for ethnically-related health information and to assess if participants' responses differed based on demographic variables. All analyses were evaluated for statistical significance at a level of $P < 0.05$.

RESULTS

Characteristics of Respondents

Of the total of 140 questionnaires that were distributed, two were not completed. Thus, a total of 138 first-professional year pharmacy students participated in this study. Characteristics of this study's respondents are shown in Table I. The mean age of the respondents was 23.1 years. Forty-seven percent of the respondents were white and 65.7 percent were female. Their mean level of pharmacy work experience was 1.1 years. On average, respondents came from moderately diverse hometowns (mean = 2.90) and they rated their own knowledge of ethnically-related health beliefs and behaviors as fair (mean = 2.08).

First-Professional Year Pharmacy Students' Mean Responses to Questionnaire Items

A list of questionnaire items and pharmacy students' mean responses to these items are shown in Table II. On average, the respondents believed that it was important for pharmacy students to know about and be taught information regarding health beliefs and behaviors of different ethnic groups. Of the 123 students who agreed or strongly agreed that the information should be taught in pharmacy school, 62.6 percent thought this information should be part

Table II. Pharmacy students' mean responses to questionnaire items (N=138)

Item	Mean[a] (SD)
It is important for pharmacy students to know about health beliefs and behaviors of different ethnic groups.	4.33 (0.73)
Pharmacy students should be taught information about health beliefs and behaviors of different ethnic groups.	4.23 (0.80)
Pharmacists need to know about health beliefs and behaviors of different ethnic groups in order to effectively practice pharmacy and have a positive impact on patient outcomes.	3.95 (0.85)
I would be willing to be exposed to different ethnic groups (other than my own) during clinical rotations.	4.25 (0.69)
It is important to be exposed to different ethnic groups (other than my own) during clinical rotations.	4.15 (0.68)
Upon graduation, how likely is it that you will work in a pharmacy that served mostly ethnic-minority patients?	3.21 (0.87)[b]

[a]1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree.
[b]l = extremely unlikely; 2 = unlikely; 3 = neither likely nor unlikely; 4 = likely; 5 = extremely likely.

of a required course, 12.2 percent indicated part of an elective course, 15.4 percent indicated an entire elective course, and 4.1 percent indicated an entire required course. However, students were slightly less agreeable that pharmacists needed to know about health beliefs and behaviors of different ethnic groups in order to effectively practice pharmacy and to positively impact patient outcomes.

Pharmacy student respondents indicated that they would be willing to be exposed to different ethnic groups other than their own during clinical rotations and that this exposure is important. They were fairly neutral about the likelihood of their practicing in pharmacy settings that served predominantly ethnic-minority patients.

Differences in Responses Based on Student Demographics and Other Background Factors

Several analyses were employed to examine if there were any differences in first-year pharmacy students' responses based on their demographics. Compared to male students, female students were significantly more favorable about the importance of pharmacy students knowing about the health beliefs and behaviors of different ethnic groups (females 4.44 ± 0.60; males 4.15 ± 0.83; t = -2.15, df = 72, P = 0.03), about the need for teaching this information to pharmacy students (females 4.36 ± 0.68; males 4.00 ± 0.98; t = -2.23, df = 70, P = 0.03), and about the need for pharmacists to have this type of knowledge in order to effectively practice pharmacy and to positively impact patient outcomes (females 4.11 ± 0.77; males 3.66 ± 0.92; t = -3.05, df = 135, P < 0.01). Results of the ANOVA indicated that the ethnic background of students was significantly associated with the likelihood of working in a pharmacy setting that served predominantly ethnic-minority clientele (F = 7.96, df = 4, P = 0.00). Least square means snowed that Mexican Americans (mean = 3.95) and African Americans (mean = 3.83) reported the highest likelihood of working in a pharmacy setting that served predominantly ethnic-minority patients and that probability was lowest among white students (mean = 2.92). Furthermore, the likelihood of working in a pharmacy setting that served predominantly ethnic-minority patients had a modest but significantly positive association with students' rating of the importance of knowing about the health beliefs and behaviors of different ethnic groups (r = 0.18, P = 0.03) and their rating of the importance of being exposed to different ethnic groups other than their own during clinical rotations (r = 0.21, P = 0.02). There were no statistically significant differences in students' responses based on age, pharmacy work experience, knowledge of ethnically-related health beliefs and behaviors, or cultural diversity of hometown.

DISCUSSION

This study examined pharmacy students' beliefs about the relevance of people's ethnically-related health beliefs and behaviors to pharmacy education and practice. The findings show that pharmacy students believed it was important for them to have knowledge about and be taught information regarding the health beliefs and behaviors of different ethnic groups, with most favorable opinions being expressed by female pharmacy students. Most (66.7 percent) of the 123 students who agreed that ethnically-related health information should be taught in pharmacy school thought this information should at least be part of a required course. In addition, pharmacy students deemed it important and were quite willing to be exposed to ethnic groups other than their own during clinical rotations. These views are echoed in other healthcare professional programs where the trend is to add a multicultural education course to the curriculum(7,12,19). However, these courses are usually taught as independent classes and are not fully integrated throughout the curriculum(19).

Apparently, pharmacy students recognize the need to acquire cultural knowledge and skills during their didactic and experiential training. Such findings certainly support the position of many who maintain that healthcare practitioners including pharmacists must be prepared to address the diverse health and medical care needs of an increasingly diverse society(3,4,8,13,l9,20). Constantine et al.(19) pointed out that cultural competence represents not only knowledge and awareness of cultural issues, but also the skills needed to effectively work with multicultural populations. It is generally accepted that such skills can be acquired in a healthcare practice setting and also through observations in a real world community setting (e.g., churches, social events)(21); however, future research could address the development of valid measurements of multicultural competency skills for healthcare professionals. At least in pharmacy, previous research has shown that exposure to various ethnic groups in a community setting had a positive effect on pharmacy students' sensitization to cultural issues regarding medication use and on their communication and interaction skills with different ethnic groups(18).

Compared to pharmacy students in general, ethnic-minority pharmacy students, particularly Mexican Americans and African Americans, anticipated working in a predominantly ethnic-minority setting. It could be speculated that they anticipated working in such settings because they are more likely to be familiar with the language and cultural norms of ethnic-minority communities and perhaps more likely to be an accepted and effective practitioner in such

communities. In addition, it was found that the anticipated likelihood of serving ethnic-minority clients was modestly related to favorable opinions toward acquiring ethnically-related health knowledge and being exposed to different ethnic groups. Indeed, it makes sense that students who thought it likely they would serve ethnic-minority clients would think it quite relevant to be educated about and have exposure to such clients while in training. These findings are consistent with extant research among physicians which shows that, compared to white physicians, ethnic-minority physicians are more likely to practice in ethnic-minority communities and that ethnic-minority patients are more likely to be treated by physicians of similar ethnic backgrounds(22,23). Such studies are lacking among practicing pharmacists but should be addressed in future research. Future findings among practicing pharmacists could not only have implications for diversity issues in pharmacy curricula but also have implications for the enrollment of ethnic-minority students in pharmacy schools.

Despite their favorable opinions toward learning about ethnically-related health issues, students were not as convinced that pharmacists needed this information in order to effectively practice pharmaceutical care, particularly so among male students. Similar findings have been reported in nursing studies where nursing students tend not to believe that culturally-diverse patients required any differences in care(9). The implication is that pharmacy and other health educators need to make sure that, when teaching students, the connection is made between culturally-competent care and patient outcomes. Although the evidence is limited, current research shows a positive trend towards better patient outcomes when patients are treated by practitioners of similar ethnic origins primarily because culturally competent practitioners had better relationships with their clients(13). Thus, it is essential that pharmacy educators earnestly address ethnic and cultural issues in pharmacy curricula so that students can become competent and effective practitioners for all of society.

Limitations

The results of this study should be considered within some limitations. Ethnicity was used to represent one aspect of culture and it is unknown if other indicators of culture would have produced different results. Future research could examine other aspects of culture and evaluate its impact on pharmacy students' opinions about pharmacy education and practice. A second limitation is that this cross-sectional study represented one point in time and did not reflect possible changes in pharmacy students' opinions over time. Future research could include a longitudinal study that examines how pharmacy students' beliefs change as they move through the curriculum and into their practice settings. A third limitation was that pharmacy students could have given socially desirable responses. It is believed that the effects of social desirability were limited since all responses were anonymous. A final limitation involved external validity. The study was conducted among first-professional year pharmacy students at one pharmacy school and cannot be generalized to other pharmacy students. Similarly, there was a limited number of ethnic-minority students in the sample and their responses might not be indicative of ethnic-minority pharmacy students in general. Future research could be conducted using a representative, nationwide sample of pharmacy students to evaluate the validity of the current findings.

CONCLUSIONS

As with other healthcare professionals, pharmacists should be knowledgeable about the differences in health beliefs and behaviors of diverse ethnic groups. The current literature is deficient in information relevant to pharmacists' need for multicultural education. However, the results of this study indicated that pharmacy students perceived the need to learn about the health beliefs and behaviors of different ethnic groups. Most thought ethnically-related health information should be taught as part of a required course. Students were quite willing to be exposed to ethnic groups other than their own during clinical rotations and they indicated that this exposure was important. Pharmacy students' perceptions differed based on gender and ethnic background. The information obtained from this study can be applied to the development of multicultural education programs for pharmacy students.

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