Gender Differences in Patients’ Perceptions of Physicians’ Cultural Competence in Health Care Interactions

Rukhsana Ahmed,1 University of Ottawa
Benjamin R. Bates, Ohio University

KEYWORDS: CULTURAL COMPETENCE IN HEALTH CARE, PATIENTS’ PERCEPTIONS, PATIENT GENDER DIFFERENCES

Cultural competence in health care is gaining support as a useful and necessary strategy for providing quality health care and reducing health disparities. In this paper we ask if patient gender makes a difference in patients’ perceptions of physicians’ cultural competence in health care interactions. Hierarchical regression analysis was employed to assess patient gender differences in patients’ perceptions of physicians’ cultural competence in health care interactions in an Appalachian Ohio context using a newly developed measure for physician’s cultural competence for patient satisfaction. Although there was much variance in the data, there was no patient gender difference in patients’ perceptions of physicians’ cultural competence in health care interactions in an Appalachian Ohio context. Individual differences rather than group differences may account for patients’ perceptions of physicians’ cultural competence.

Cultural competence in health care has garnered support as a useful and necessary strategy for providing quality health care and reducing health disparities (Betancourt, 2006; Betancourt et al., 2003; 2005; Turnbull & Mui, 1995; Wu & Martinez, 2006). Cross et al., (1989) defined cultural competence as “a set of congruent behaviors, attitudes and policies that come together in a system, agency, or amongst professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations” (p. iv). Therefore, for effective and equitable health care, both individuals and institutions should build intercultural communication skills to understand and be responsive to cultural differences. In today’s multicultural world, adjusting health care delivery to accommodate different cultural needs has become even more important (Smedley, Stith & Nelson, 2003).

A plethora of studies have conceptualized cultural competence in health care (Betancourt, 2006; Betancourt, et al., 2003; 2005; Carballeria, 1997; Campinha-Bacote, 1999; Cross, et al., 1989; Davidhizar, Bechtel & Giger, 1998; DHHS, 2001; DHHS, 2003; HRSA, 2001; Leininger, 1993; Perloff et al., 2006; Wu & Martinez, 2006). The growing literature on cultural competence in health care highlights the fact that health care

---

1 An earlier version of this paper was presented at the Toronto Conference (2007). Inquiries about the paper should be directed to Rukhsana Ahmed, Faculty of Arts & Communication, University of Ottawa, 558 King Edward Ave. Room 103, Ottawa, Ontario, Canada K1N 6N5 (E-mail: rahmed@uottawa.ca)
providers should recognize and be receptive to differences in attitudes, behaviors, values, worldviews and communication styles during medical encounters with culturally diverse patients (Betancourt, et al., 2003; 2005; Culhane-Pera et al., 1997; DHHS, 2001; Like, Steiner & Rubel, 1996). Although there are instruments to help healthcare professionals and organizations assess their cultural competence, less attention has been paid to measuring healthcare receivers’ experience of healthcare professionals’ and organizations’ cultural competence. As Wu and Martinez (2006) argued, “while much work has focused on defining cultural competency, there has been considerably less on taking cultural competency from theory to action” (p. 1). Moreover, the Health Resources and Services Administration (HRSA) of the U.S. Department of Health & Human Services (2001) report revealed that the availability of “tested and validated measures of cultural competence is limited” (p. 42). Against such a backdrop, this paper contributes to measuring health care receivers’ perceptions of health care providers’ cultural competence in health care interactions. As Nishimi (2006) argued, “the best way to make significant strides in providing culturally competent care is through measurement and public reporting of performance” (p. 1).

In addition to cultural differences, gender differences play a role in patient satisfaction with health care (Bean-Mayberry et al., 2003; Bendall-Lyon & Powers, 2002; Foss, 2002; Hall et al., 1994; Roter et al., 1999; Schmittdial et al., 2000; Wright et al., 2006). Although research has been conducted to investigate gender differences in the evaluation of health care (Copeland & Scholle, 2000; Foss, 2002; Kolodinsky, 1997), and in doctor-patient communication (Bertakis et al., 1995; Elderkin-Thompson & Waitzkin, 1999; Franks, Calancy & Gold, 1993; Street, 2002), Gabbard-Alley (1995) pointed out that “patient gender was one of the variables first discarded in research designs in studies concerned with communication, compliance, satisfaction and their relation with health care” (p. 36). More strikingly, existing literature has paid little to no attention to examining patient gender differences in patient’s perceptions of cultural competence in health care interactions. Nevertheless, Harvard Medical School’s Center of Excellence in Women’s Health in conjunction with the U.S. Department of Health and Human Services’ (DHHS) Office on Women’s Health developed a curriculum to train health care providers to provide culturally competent care for minority and medically underserved women for who access to and utilization of health care services are inadequate (HRSA (n.d.) Center of Excellence in Women’s Health). Not only are there differences in health care needs between men and women (Tabenkin et al., 2004), but as Fox and Hambleton (1998) claimed almost a decade back, “more than one-fourth of US women belong to minority groups” (p. 139).

Poor socio-economic conditions, especially in rural Appalachia, have had an adverse impact on health generally and on women’s health in particular. Scholars in the area have found elevated tobacco use by
adolescent females (Denham et al., 2004), lesser practice of family health (Denham, 1999), increased cancer incidence (Lengerich et al., 2005), and other negative health indicators. These differences may be due in part to Appalachian culture. For example, Reel’s (2001) study of childbearing among rural Appalachian adolescent women found, “it is not clear why this predominantly white, rural area has different birth pattern from the rest of the nation” (p. 48.). Recognizing the uniqueness of Appalachian culture, scholars have underscored the importance of teaching nursing students culturally competent care (MacAvoy & Lippman, 2001). Denham and Rathbun (2005) argued that “culturally-specific materials appropriate for use with Appalachian or rural populations may be necessary” to attain better health outcomes (p. 5). Studies have identified the rural Appalachian identity as being further complicated by issues of race, sexuality, spirituality and highly differentiated gender roles (Burkhardt, 1993; Dees, 2006; Denham, 1999). For example, in her study of health perceptions of rural, older Appalachian women, Hayes (2006) found that older Appalachian women “defined themselves and their health in terms of their homes and as women who care for themselves informally and value independence and privacy” (p. 282).

The distinctiveness of Appalachian culture bears important implications for health care issues. The Appalachian Ohio region has received little attention from scholarly research endeavors in the area of culturally competent health care. In our knowledge, no studies have examined patient gender differences in patients’ perceptions of physicians’ cultural competence in health care in an Appalachian Ohio context. Cline and McKenzie (1998) argued that “viewing gender, age and ethnicity as cultural phenomena provides guidance for conducting programatic research into each area as a source of difference that influences interaction” (p. 72).

Towards this end, we examine perceptions of cultural competence in health care in Appalachian Ohio, which both is a medically underserved region in the U.S., and has a culturally diverse population (Finerman et al., 2003; HRSA (n.d.); Jones, 1998; Lengerich, et al., 2004; 2005; Governor’s Office of Appalachia, 2003; Pope, Hancock & Sills, 2006). More specifically, using a newly developed measure for physician’s cultural competence for patient satisfaction, the paper will assess patient gender differences in patients’ perceptions of physicians’ cultural competence in health care interactions.

**METHODS**

This study is part of a larger project that examined the role of cultural differences on health care receivers’ perceptions of health care providers’ cultural competence in health care interactions in an Appalachian Ohio context (Ahmed, 2007). The larger project developed
the first instrument for assessing patient satisfaction with cultural competence. This paper will contribute to further testing and validation of the measure of physician’s cultural competence in health care delivery settings with particular focus on patient gender differences in patient’s perceptions in an Appalachian Ohio context. Although the authors note that sex is a biological construction and gender is a social construction, this study uses sex and gender interchangeably because of “the complex links between biological sex, social gender and health” (Doyal, 2001, p. 1062). On a practical level, when physicians treat patients, physicians often do not look into the full range of gendered performances of being. Physicians rather look to see whether the “male” or the “female” box has been checked by the patients. Hence, gender is often operationalized as sex in health care settings.

**Study Variables & Hypotheses**

The dependent variables in this study are the physician’s global cultural competence related to macro cultural issues, the physician’s perceived global cultural competence related to proxemics/chronemics, the physician’s global cultural competence related to language issues, the physician’s patient-centered cultural competence and patient satisfaction with the direct clinical encounter. The independent variables for this study included patients’ demographic variables, such as age, race, ethnicity, education, income, health insurance status and cross-cultural conditions, along with sex.

Street (2002) argued that gender-based perceptions, attitudes and expectations influence provider-patient communication. For example, Schmittdiel, et al., (2000) found differences in patient satisfaction associated with the gender of both the patient and the physician. They claimed their study has been the first one to “have directly examined or adjusted for patients’ underlying health values and beliefs, which may influence both choice of physician and evaluation of the care” (p. 761). Schmittdiel’s research team found that female patients were less satisfied with female physicians, while male patients were more satisfied with female physicians. They argued that female patients may have “‘gender-based’ care ideals such as better communication on social, lifestyle, prevention and emotional concerns” (p. 766). Failure to fulfill these expectations may result in lower satisfaction in gender concordant dyads.

Although gender concordance and patient satisfaction was beyond the scope of this present study, the more interesting variable is cultural concordance and the interactions among patient gender, culture and patient satisfaction. As Street (2002) argued, gender differences in medical encounters have important implications for medical communication processes and outcomes yet “researchers should not focus on gender in isolation of other personal (e.g. age, ethnicity, nationality, SES) and situational attributes that also influence health care provider-patient
interaction” (p. 205). To respond to Street’s call for research, we posited three hypotheses to help assess patient gender differences in patients’ perceptions of physicians’ cultural competence in health care interactions.

Studies have shown that women are more likely to take responsibility for family health care concerns (Muller, 1979; Wallen et al., 1979) and become more knowledgeable about health matters (Buller & Buller, 1987; Coope & Metcalfe, 1979). For example, female patients may be “more conscious of aspects of like lack of hygiene, poor practical skill performance, lack of attention to physical and psychosocial needs” (Foss, 2002, p.23). Consequently, female patients compared with male patients may be more critical of their evaluation of physicians’ culturally competence. As such, we hypothesize the following:

H1: Women will judge physicians to be less culturally competent than will men.

Gabbard-Alley (1995) argued that, although female patients are more active participants in medical encounters, their concerns tend to be considered less important than those of male patients. Wallen et al. (1979) found that, even though female patients request for more information than male patients do, female patients tend to yield shorter and less technical answers from physicians than do questions from male patients. Other studies have also found male patients more likely to present more facts (Stewart, 1983), get more attention from the doctor (Meeuwesen, Schaap & van der Staak, 1991) and be better liked than female patients (Hall et al., 1993). Accordingly, female patients may be more affected by the lack of involvement in decision-making than male patients (Foss, 2002). As such, we hypothesize the following:

H2: Women will judge physicians to be less patient-centered than will men.

Foss (2002) found that female patients assign higher subjective importance to the different aspects of care than did male patients. For example, female patients value more time and explanations from physicians than do male patients (Hall & Roter, 1988). In addition, female patients tend to value technical skills more highly than male patients (Schmittdiel, Grumbach, Selby & Quesenberry, 2000). One study found that female patients are more likely than male patients to change doctors because of dissatisfaction with the quality of communication during the medical encounter (Collins et al., 1999). As such, we hypothesize the following:

H3: Women will be less satisfied with the direct clinical encounter than men.

Research Instrument

The study employed a 57-item (including 9 demographic questions) paper-and-pencil self-administered survey questionnaire to assess gender differences in patients’ perceptions of physicians’ cultural com-
petence in health care interactions. Survey items were composed of a newly developed instrument to measure public perceptions of physicians’ cultural competence (PPPCC) in health care interactions (Ahmed, 2007). The survey consisted of structured, closed-ended questions and employed 5-point Likert-type scales with higher scores indicating higher levels of intercultural incompetence or dissatisfaction (1 = “Strongly agree” to 5 = Strongly disagree” or 1= “Excellent” to 5= “Poor”). Pre-testing indicated that it took about 15 minutes to complete the survey. The PPPCC consists of 5 orthogonal sub-scales.

**Physician’s global cultural competence related to macro cultural issues.** Participants responded to five items that elicited information about perceptions of the doctor’s development of cultural knowledge (e.g., “My doctor wants to know about my nationality,” “My doctor wants to know about my religious practices related to health issues,”). The scale was reliable (alpha = 0.90).

**Physician’s global cultural competence related to proxemics/chronemics.** Participants responded to three items that inquired about perceptions of the doctor’s understanding of the dynamics of cross-cultural differences (e.g., “My doctor asks me if I would feel discomfort if he/she touches me during the physical exam,” “My doctor wants to know if time is a concern for me with regard to medical treatment.”). The scale was reliable (alpha = 0.73).

**Physician’s global cultural competence related to language issues.** Participants responded to three items that reflected perceptions of the doctor’s awareness and recognition of patient’s cultural and linguistic difference (e.g., “My doctor wants to know about my language skills,” “My doctor considers using the help of available translator.”). The scale was reliable (alpha = 0.79).

**Physician’s patient-centered cultural competence.** Participants responded to four items that indicated perceptions of the doctor’s adaptation to patient’s cultural plurality (e.g., “My doctor tries to understand my feelings,” “My doctor wants to know my viewpoint on illness”). The scale was reliable (alpha = 0.90).

**Patient satisfaction with the direct clinical encounter.** Participants responded to five items that revealed their satisfaction with their physicians during their last patient visit. These items were drawn from the direct clinical encounter items of the Visit-Specific Questionnaire (i.e., “The time spent with the doctor you saw,” “Explanation of what was done for you,” “The technical skills of the doctor you saw,” “The personal manner of the doctor you saw,” and “The visit overall.”) (Barr, 2004). The scale was reliable (alpha =0.95).

**Sample**

The study was carried out in three Appalachian Ohio Counties in the U.S., Athens, Jackson and Gallia, all of which are medically underserved regions (HRSA, n.d.). We used a combination of purposive sam-
pling and representative sampling (Kolodinsky & LaBrecque, 1996) to recruit participants \((N = 310)\) from the patient base at a local clinic system in the cities of Athens \((n = 100)\), Jackson \((n = 103)\) and Gallipolis \((n = 103)\) during November, 2006. Using the purposive sampling method, we relied on referrals from personal networks to contact physicians and business administrators at the clinics in Athens, Jackson and Gallipolis to allow us to conduct surveys with patients in their clinics. After securing permission, we used a representative sampling method to select participants to fill out the surveys (Schutt, 2001). The study was approved by a University Institutional Review Board. All participants were over 18 years of age; no other inclusion or exclusion criteria were used. Individuals received a $5 gift card for participating in the survey. Each participant provided informed consent.

**Data Collection & Analysis**

Surveys with patients were conducted in the waiting rooms of the clinics in Athens, Jackson and Gallipolis. After reading the survey, participants evaluated physician behavior on several dimensions. Based on their most recent experience with a physician, the participants were asked to rate 25 items on the PPPCC scale. The participants were also asked three questions to determine if this encounter was cross-cultural in terms of Appalachian background, race/ethnicity and nationality. Participants also completed nine demographic items about themselves.

The survey data was analyzed using the Statistical Package for the Social Sciences (SPSS). Multiple regression analysis was employed to assess gender differences in patients’ perceptions of physicians’ cultural competence in health care interactions. P-values less than .05 were considered significant. A 95% confidence interval was used.

**FINDINGS**

Three hundred ten survey respondents participated in the study, yielding a response rate of 100%. After screening for completeness and missing values, 306 cases were used for the final analyses; four surveys were incomplete. The age of the participants ranged from 18-92 years of age \((M = 44.1; SD = 16.8)\). Among the participants, 26.5% were male and 73.5% were female. The majority of the participants self-identified as European-American/white (83.0%), 2.3% self-identified as African-American/Black, 11.8% as Native American, 1.0% as Hispanic, .3% as Asian American, .6% and 2.6% as Other. Participants who identified themselves as “Other” may include people who are non-Americans, people of two or more racial backgrounds and people who do not identify themselves with any of the given substantive response choices. Sixty four point four percent of the participants self identified as from being Appalachia, twenty nine point four percent self identified as being not from Appalachia and twelve percent self identified as being
<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>81</td>
<td>26.5</td>
</tr>
<tr>
<td>Female</td>
<td>225</td>
<td>73.5</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range: 18-92</td>
<td>Mean: 44.1</td>
<td>SD: 16.8</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European-American/White</td>
<td>254</td>
<td>83.0</td>
</tr>
<tr>
<td>African-American/Black</td>
<td>7</td>
<td>2.3</td>
</tr>
<tr>
<td>Native-American</td>
<td>36</td>
<td>11.8</td>
</tr>
<tr>
<td>Asian-American</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of Hispanic descent</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>Not of Hispanic descent</td>
<td>297</td>
<td>97.1</td>
</tr>
<tr>
<td>Refused</td>
<td>6</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 8th grade</td>
<td>8</td>
<td>2.6</td>
</tr>
<tr>
<td>Some high school</td>
<td>36</td>
<td>11.8</td>
</tr>
<tr>
<td>High school graduate</td>
<td>109</td>
<td>35.6</td>
</tr>
<tr>
<td>Some college</td>
<td>73</td>
<td>23.9</td>
</tr>
<tr>
<td>College degree</td>
<td>53</td>
<td>17.3</td>
</tr>
<tr>
<td>Some graduate school</td>
<td>5</td>
<td>1.6</td>
</tr>
<tr>
<td>Graduate or terminal degree</td>
<td>21</td>
<td>6.9</td>
</tr>
<tr>
<td>Refused</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $10,000</td>
<td>63</td>
<td>20.6</td>
</tr>
<tr>
<td>$10,000-$19,999</td>
<td>52</td>
<td>17.0</td>
</tr>
<tr>
<td>$20,000-$29,999</td>
<td>44</td>
<td>14.4</td>
</tr>
<tr>
<td>$30,000-$39,999</td>
<td>34</td>
<td>11.1</td>
</tr>
<tr>
<td>$40,000-$49,999</td>
<td>25</td>
<td>8.2</td>
</tr>
<tr>
<td>$50,000-$59,999</td>
<td>23</td>
<td>7.5</td>
</tr>
<tr>
<td>$60,000-$69,999</td>
<td>16</td>
<td>5.2</td>
</tr>
<tr>
<td>$70,000-$79,999</td>
<td>15</td>
<td>4.9</td>
</tr>
<tr>
<td>$80,000 or more</td>
<td>25</td>
<td>8.2</td>
</tr>
<tr>
<td>Refused</td>
<td>9</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Health Insurance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>272</td>
<td>88.9</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>9.8</td>
</tr>
<tr>
<td>Refused</td>
<td>4</td>
<td>1.3</td>
</tr>
</tbody>
</table>
from “outside the U.S.” Table 1 reports the full background characteristics of the participants surveyed.

We employed hierarchical regression analysis to test whether any demographic variable predicted patients’ perceptions of physicians’ global cultural competence related to macro cultural issues, physicians’ global cultural competence related to proxemics/chronemics, physician’s global cultural competence related to language issues and physicians’ patient-centered cultural competence and patient satisfaction with the direct clinical encounter. Age, race, ethnicity, education, income, health insurance and cross-cultural conditions (Appalachian physician and Appalachian patient; Appalachian physician and non-Appalachian patient; Non-Appalachian physician and Appalachian patient; Non-Appalachian physician and non-Appalachian patient) were entered into block 1 as control variables. Sex of the patients was entered into block 2. Analysis of the regression coefficients indicated that patients’ sex did not predict patients’ perceptions of physicians’ global cultural competence related to macro cultural issues, physicians’ global cultural competence related to proxemics/chronemics, physician’s global cultural competence related to language issues, physicians’ patient-centered cultural competence or patient satisfaction with the direct clinical encounter (see Table 2). Although the data were widely dispersed ($SD = .95 – 3.83$), indicating substantial variance in individual participant responses, regression results indicated that neither the demographic model nor the sex model significantly predicted patients’ perceptions of physicians’ perceived cultural competence on any dimension or patient satisfaction. Moreover, none of the hypotheses were supported.

The first hypothesis predicted that women would judge physicians to be less culturally competent than would men. However, no significant difference between men and women emerged in perceptions of physicians’ recognition of macro cultural differences, recognition of proxemics/chronemics differences, or adaptation to language issues. The second hypothesis predicted that women would judge physicians to be less patient-centered than would men. Again, no significant difference between men and women emerged in perceptions of patient centeredness. The third hypothesis predicted that women would be less satisfied with the direct clinical encounter than men. No significant difference emerged between men and women in their satisfaction with the direct clinical encounter.

A possible explanation why these hypotheses were not supported by the data might be the fact that gender is a variable inherent in culture in the relationship between perceptions of cultural competence and satisfaction in health care interactions. That is, in the context of health care provider-patient interaction in Appalachian Ohio, gender may become a ‘nonsignificant’ variable when a physician is perceived to adapt to multiple dimensions of culture because cultural accommodation already includes gender accommodation. According to Brink-
<table>
<thead>
<tr>
<th>Variable</th>
<th>Block 1</th>
<th>Block 2</th>
<th>Male</th>
<th>Female</th>
<th>P</th>
<th>SE</th>
<th>P</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCC-Perceived Cultural Competence</td>
<td>0.06</td>
<td>0.08</td>
<td>0.09</td>
<td>0.07</td>
<td>0.11</td>
<td>0.13</td>
<td>0.17</td>
<td>0.15</td>
</tr>
<tr>
<td>PCC-Language Competence</td>
<td>-0.07</td>
<td>0.12</td>
<td>-0.08</td>
<td>0.13</td>
<td>-0.09</td>
<td>0.14</td>
<td>-0.12</td>
<td>0.15</td>
</tr>
<tr>
<td>PCC-Proxemics/Chromosomes</td>
<td>-0.10</td>
<td>0.14</td>
<td>-0.11</td>
<td>0.15</td>
<td>-0.12</td>
<td>0.16</td>
<td>-0.15</td>
<td>0.17</td>
</tr>
<tr>
<td>PCC-Perceived Cultural Competence</td>
<td>-0.08</td>
<td>0.12</td>
<td>-0.09</td>
<td>0.13</td>
<td>-0.10</td>
<td>0.14</td>
<td>-0.14</td>
<td>0.16</td>
</tr>
</tbody>
</table>

Table II. Summary of Hierarchical Regression Analysis for Variables Predicting Patients' Perceptions of Physicians' Cultural Competence in Health Care.
Muinen (2002), gender differences in doctor-patient communication may arise from differences in male-female communication styles that are shaped, to a large degree, by cultural norms. Acknowledging the persistence of gendered roles within hospitals, Foss (2002) argued that there are differences between male and female patient roles. For example, women’s traditional responsibility for care could lead them to have “higher expectations towards being cared for” because of these culturally-performed gender roles (Foss, 2002, p. 23). Having more knowledge about health matters than male patients lead female patients discuss health concerns in more detail and request more information during medical encounters (Gabbard-Alley, 1995). Studies have found female patients to express more emotions (Stewart, 1983) and express preference for emotionally supportive talk compared to men (Hall et al. 1994a; 1994b). Bylund and Makoul (2002) found gender differences in patients’ communication regarding empathic opportunities in medical encounters with female patients likely to create more emotionally intense empathic opportunities than did male patients. Studies have found that female patients tend to present more personal history and symptom information during medical encounter than do male patients (Nathanson, 1975; Wallen, Waitzkin & Stoeckle, 1979; Verbrugge, 1980). Street and Wiemann (1987) and Cartwright (1967) found that female patients prefer health care providers to display nonverbal cues of attentiveness and responsiveness more than male patients do. Eagly (1991) found that women are more sensitive in their response to nonverbal communication than men. Accordingly, Foss (2002) argued that female patients are likely to be more critical in their perception of an act of concern and commitment to be genuine. It is likely that the survey items included in the PPPCC scale (Ahmed, 2007) addressed these gender-based health concerns of the women participants because each of these gendered patterns may be part of and the result of cultural norms regarding how men and women should act in health care settings.

Although no result was statistically significant at the .05 level, so-called ‘marginal effects’ or ‘effects approaching significance’ may also be considered to determine whether there is a clinically noteworthy difference present even if a statistically significant difference is not present (Fagley, 1985; Berry, Coustere & Grover, 1998). Often, researchers fail to attempt to publish research if a significance level of .05 is not found because of an under-emphasis on plain language interpretation of results and on clinical significance, resulting in a form of publications bias named “publication bias in situ” by Phillips (2004; see also Cronin & Sheldon, 2004). To avoid Type II error, in which the researcher accepts the null hypothesis when, in fact, there are differences demonstrated within the data, the researcher should consider three factors: whether the sample size provides sufficient power for the analysis (Cohen, 1977; Berry, Coustere-Yakir & Grover, 1998), the magnitude of the smallest,-weight necessary to detect a potentially interpretable effect (Cohen, 1977;
Ahmed & Bates: GENDER, PERCEIVED CULTURAL COMPETENCE IN HEALTH CARE

Fagley, 1985) and the larger context of the variables under investigation (Collins, 2003). Regarding sample size, using the conventional power value of > .80 (1 - ), such that , = .20, that a medium effect size be obtained, such that \( F^2 = .15 \) and a standard significance level of \( p < .05 \), the estimated sample size to avoid Type II error was 55 participants. Given that the number of participants in the study was 306, or approximately six times the minimum sample size, it is unlikely that Type II error was committed due to insufficient sample size. Regarding necessary \( \beta \)-weights, a high power study, such as the present one, would require , = .20 for a small effect, , = .50 for a medium effect and , = .80 for a large effect if \( p < .05 \) is not obtained for results to be potentially interpretable. An examination of the \( \beta \)-weights reported in Table 2 indicates that only for physicians’ global cultural competence related to language issues (, = .38) was the effect size sufficient to consider the possibility that patient gender differences between men and women were interpretable as a difference that is potentially clinically significant. Of the dependent measures, patient gender may be clinically significant in differences in perceptions of the physician’s global cultural competence related to language issues, but not clinically significant in regard to macro cultural issues, proxemics/chronemics issues, patient-centeredness, or patient satisfaction. The \( \beta : p \) ratio for language exceeds .20-.05, indicating a possibility of Type II error in regard to this outcome measure, but not for any other measure. We, therefore, are reluctant to extract language competence only from the overall dynamic of cultural competence because doing so may obscure the overall operations of gender in and as part of culture in favor of an over-emphasis on main effects. Finally, the larger context of cultural competence, in which gender is an important variable, albeit not the only important variable, indicates that we should be cautious in assigning gender a primary role in understanding patients’ perceptions of cultural competence. It is toward this larger context that we turn in our discussion.

**DISCUSSION**

Results of the hierarchical regression analysis indicated that patients’ sex did not emerge as a statistically significant predictor of patients’ perceptions of physicians’ global cultural competence related to macro cultural issues, physicians’ global cultural competence related to proxemics/chronemics, physician’s global cultural competence related to language issues, physicians’ patient-centered cultural competence, or patient satisfaction with the direct clinical encounter by itself. Moreover, patient gender, in and of itself, appears to have little clinical significance in terms of these outcome variables with the possible exception of language issues. Hence, patient gender differences in and of themselves do not appear to make a significant difference in perceived levels of satisfaction with the direct clinical encounter or to perceptions of cultural
competence in an Appalachian Ohio context. These findings are discordant with studies that found an association between patients’ and physicians’ gender differences and patient satisfaction with care (Bendall-Lyon & Powers, 2002; Foss, 2002; Roter, et al., 1999; Schmittdiel, et al., 2000; Weiss, 1988); studies that identified women reporting higher satisfaction with physicians (Carlson et al., 2000; Schaufler & Rodriguez, 1994; Weiss, 1988; Like & Zyzanski, 1987); studies that found men reporting lower satisfaction (Chisick, 1997; Fox & Storms, 1981; Singh, 1990); and studies that found an association between demographic variables including gender and patient satisfaction (Cleary et al., 1991; Cleary & McNiel, 1988; Hall & Dornan, 1990). The findings, however, are consistent with other studies that did not find any statistical association between patients’ gender and patient satisfaction (Hall & Roter, 1998) and studies that found gender differences and patient satisfaction to be unrelated (Carmel, 1985; Linn, 1982).

However, these seemingly contradictory findings are not new. Extant research on health communication and gender showcase mixed findings on the impact of gender on health communication processes. Recognizing the ongoing debate on gender influences patient satisfaction, Foss (2000) argued that “gender differences on patient satisfaction are not straightforward, but vary according to underlying cultural and social factors” (p. 3283). In their review, Crow et al., (2002) found mixed results of the relation of gender to patient satisfaction with females reporting significantly higher satisfaction in some studies and males reporting significantly higher satisfaction in other studies; still, others reported no significant relationship.

The findings of the present study highlight the fact that cultural competence in health care demands a holistic view of patient care. Regardless of gender, patients are concerned with physicians’ recognition of macro cultural, proxemics/chronemics and language issues and patient-centeredness. Findings of the study show that patients acknowledge the importance of cultural consciousness that goes beyond culture specific knowledge to include the ability for the physician to deliver quality health care to individual patients. Irrespective of gender, the quality of direct encounter with the physician has an impact on how people perceive overall health care interaction. In summary, regardless of gender, patients perceive an association between cultural competence, the interpersonal dynamics of physician-patient interactions and patient satisfaction with care.

At a general level, these findings provide important insights into ways to ameliorate maleficent gender differences in patients’ perception of physicians’ treatment. Physicians at the clinics involved in this study appear to have accounted for gender differences by treating patients in such a way that both the men and the women were equally satisfied with their physicians’ cultural competence and with patient centeredness. These findings also provide important insights into an
Appalachian Ohio context. Based on the survey data collected during this study, it appears that patients in this clinical patient base did not report differences in their perceived levels of satisfaction with the direct physician encounter because of gender. Indeed, no demographic variable made a significant difference in patients’ perceptions of physicians’ cultural competence or their satisfaction with the direct clinical encounter. It also seemed that the patients placed more importance on whether or not their physicians offered them individualized care. The patients were more satisfied when physicians made an attempt to understand their feelings, when physicians made an effort to understand their emotions, when physicians wanted to know about their viewpoint on illness and when physicians inquired about their viewpoint on treatment goals.

**LIMITATIONS**

Certain limitations should be accounted for when considering the generalizability of this research. First, the study sample was limited to patients in an Appalachian context who receive care from the same clinical system. Although this commonality offers more comparability, it restricts generalizability to other health care organizations. Future research should recruit participants from different health care organizations.

A second limitation of the study includes collection of survey data from individuals who have access to health care. Lyttle and Stadelman (2006) found that health care cost and lack of health insurance were barriers to knowledge about and screening for breast cancer among Appalachian women. Thus, if non-respondents in those three Counties have less access to adequate health care, results of this study may overrepresent patients’ perceptions of physicians’ cultural competence and satisfaction with the direct clinical encounter.

A third limitation of the study is that a majority of the respondents were female. Although this representation might skew results, research has shown that compared to men, women have a greater likelihood of seeking more health care, using more health care services and spending more time on medications (Correa-de-Araujo, 2004; Roe, McNamara & Motheral, 2002). Further research should study more men. Street (2002) argued that gender differences are more pronounced among healthcare providers than among patients. Accordingly, we are left with an important question as to whether physician gender would make any difference in patient’s perceptions of physicians’ cultural competence and satisfaction with the direct clinical encounter. However, it is beyond the scope of this study to address this question, thus becoming a fourth limitation of the study. Hence, future research should collect information on physicians’ gender to investigate possible interactions between physician and patient gender.
Finally, this study investigated only the patients’ evaluation of their most recent experience with a physician. The present study did not ask the reason that the patient most recently visited their physician. Because women may be more dissatisfied with their care when seeking treatment for gender-specific matters (e.g., breast or ovarian cancer, reproductive health, or child birth) than for non-gender-specific matters (e.g., broken bones, influenza, or skin cancer) (Khoury & Weisman, 2002), it is possible that gender-specific treatment matters could serve as a possible confounding variable. Therefore, future research should explore whether and, if so, how evaluations of perceptions of cultural competence could be influenced by gender-specific treatment issues as compared to non-gender-specific treatment issues.

**CONCLUSIONS & IMPLICATIONS**

Cultural competence is a transactional process, a communicative act involving both the provider and the receiver. Culturally competent health care demands a commitment from health care providers to recognize and be receptive to the unique values, beliefs, attitudes and communication styles that health care receivers bring to the medical encounter, regardless of gender. Equally, however, culturally competent health care demands awareness from health care receivers to be mindful of the gendered expectations that they bring to the medical visit, which may shape health care delivery and outcome. Because little research has been conducted to examine issues of perceived cultural competence as they intersect with patient gender, this research examined how patient gender differences in patients’ perceptions and expectations may influence the clinical encounter.

An important finding of this study is that cultural competence in health care is not exclusive of gender sensitivity. Meeuwesen, Bensing & Brink-Muinen (2002) argued for a gender-sensitive approach in health care communication research. Weisman, Rich, Rogers, Crawford, Grayson and Henderson (2000) advocated for gender-sensitive patient satisfaction measures. We argue that the items in the PPCCC scale can measure patients’ perceptions of health care providers’ accommodation to patients’ unique needs in health care. Khoury and Weisman (2002) advocated for gender sensitivity in health research, services and policy with a focus both on gender differences and gender-specific needs. In their views, a gender-sensitive approach emphasizes improvement of interpersonal relationships between female patients and their health care providers by highlighting “provider knowledge of women’s health problems, attention to women’s concerns, provision of complete information to women (e.g., treatment options, side effects of treatment, steps to avoid problem in the future) and joint decision making” (p. 62). Because gender is part of and shaped by culture, the findings of this research will be of particular importance to those who are working to
measure the progress towards increasing the quality of health care to best meet the needs of medically underserved and vulnerable women.

Although this study did not find any gender differences in patients’ perceptions of physicians’ cultural competence in health care interactions, this may result from the items on the PPPCC scale being sensitive to both cultural and gender adaptations to providing health care. It appears that patients in an Appalachian context, regardless of gender, recognize the value of cultural awareness, awareness of cross-cultural differences and adapting to cultural plurality in the context of physician-patient interactions. For Appalachian patients, regardless of gender, it is important that the physician be conscious of patients’ national, racial and cultural backgrounds, patients’ religious practices related to health issues and patients’ family decision-making process. The fact that Appalachians share a deep rooted cultural heritage, a common sense of purpose, strong family ties and a deep sense of spirituality likely shape Appalachians’ perception of physicians’ global cultural competence related to macro cultural issues (Bauer & Growick, 2003; Burkhartd, 1993; Jones, 1998; MacAvoy & Lippman, 2001; Stephens, 2005; Weller, 1965). In addition, because rural Appalachian women’s health beliefs matter in relation to health promotion, these cultural adaptations may be useful in health communication beyond the patient-provider context (Brown & May, 2005; Hayes, 2006; Sortet & Banks, 1997).

For all patients, it seems important that physicians take into consideration patients’ notions of time and space related to medical treatment. Patients’ perceptions of physicians’ global cultural competence related to proxemics/chronemics issues speaks to Appalachians’ sense of independence and self-sufficiency and to their desire that their autonomous self be respected (Weller, 1965). Recognizing the diverse background of the people in Appalachia, Lefler (2005) explained that “the differences in Western and tribal values include greatly different perspectives of time, space, property, age and competition, to name a few,” between Appalachians and non-Appalachians (p. 224). Patients in an Appalachian context, regardless of gender, want their physicians to inquire about patients’ language skills and preferences and to consider using translation services when needed. Although translation services seem not to speak to an Appalachian context, since they constitute a homogeneous, English speaking language group, this inclusive outlook preferred by patients highlights the uniqueness of Appalachian culture and, in particular, the Appalachian folk speech (Dial, 1969; Mencken, 1963; Neuliep, 2006).

It appears that patients, in an Appalachian context, regardless of gender, want physicians to treat them as individuals and, at the same time, they want physicians to be empathetic. Similarly, patients in an Appalachian context, regardless of gender, want physicians to be attentive to patients’ needs. For patients in an Appalachian context, regard-
less of gender, it is important that physicians are interpersonally orient-
ed in this multicultural health context.

During the physician visit, patients in an Appalachian context, regardless of gender, achieve patient satisfaction through the time spent with the physician, the explanation of what was done for the patients and the technical skills and the personal manner of the physician, along with the overall visit. This perception of patient satisfaction with the direct clinical encounter reflects other personality traits of Appalachian people, including valuing relationships and being person-oriented (Weller, 1965).

Finally, studying cultural competence in Appalachian Ohio allowed us to expand the scope of cultural competence in health care in three ways, by: 1) expanding the population to include a new sub-cul-
ture, i.e., Appalachian Ohio; 2) examining gender differences to measure patients’ perceptions of physicians’ cultural competence in health care interactions; and 3) not focusing “on gender in isolation of other person-
al (e.g. age, ethnicity, nationality, SES) and situational attributes that also influence health care provider–patient interaction” (Street, 2002, p. 205). Although our findings did not find simple gender differences, the find-
ings offer avenues for future research that treat gender as part of a com-
plex cultural dynamic. A follow-up qualitative approach can be used to complement the quantitative approach undertaken in this study.


Ahmed & Bates: GENDER, PERCEIVED CULTURAL COMPETENCE IN HEALTH CARE


Ahmed & Bates: GENDER, PERCEIVED CULTURAL COMPETENCE IN HEALTH CARE


Hayes, P. A., (2006). Home is where their health is: Rethinking perspectives of informal and for-
mal care by older rural Appalachian women who live alone. *Qualitative Health Research*, 16(4), 282-297.


