Levels of Multicultural Competence of Physical Therapy Students from Program Initiation to Completion of the Second Year of the Program

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Overview

• Background
• Purpose
• Methodology
• Limitations
• Risks & Benefits
• Summary
Background

• Largely expanding increase in culturally diverse patient population (Black, 2002)
  – 1990-2000: Hispanic population grew 58%, Native American pop. increased 25%, and Asian pop. increased 48%
  – Non-white pop. expected to rise to 25% by 2050

• Disparities in the prevalence of certain diseases in minority populations (Betancourt, 2003)

• Disparities in the quality of health care to minority groups (Betancourt, 2003)

• Need for health care providers to possess cultural competency skills (Burch, 2008)
Race and Ethnicity Selections, 1980-2000

- Hispanic
- Non-Hispanic White
- Non-Hispanic Black
- Non-Hispanic American Indian
- Non-Hispanic Asian
- Non-Hispanic Hawaiian or Pacific Islander
- Non-Hispanic Other
- Two or More Races

http://www.censusscope.org/us/print_chart_race.html
## Hispanic Population and Race Distribution for Non-Hispanic Population

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
</tr>
<tr>
<td>Total Population</td>
<td>226,545,80</td>
<td>100.00%</td>
<td>248,709,87</td>
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<tr>
<td>Total Hispanics</td>
<td>14,608,673</td>
<td>6.45%</td>
<td>22,354,059</td>
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<tr>
<td>White*</td>
<td>180,256,10</td>
<td>79.57%</td>
<td>188,128,29</td>
</tr>
<tr>
<td>Black*</td>
<td>26,104,285</td>
<td>11.52%</td>
<td>29,216,293</td>
</tr>
<tr>
<td>American Indian and Eskimo*</td>
<td>1,417,110</td>
<td>0.63%</td>
<td>1,793,773</td>
</tr>
<tr>
<td>Asian*</td>
<td>3,489,835</td>
<td>1.54%</td>
<td>6,968,359</td>
</tr>
<tr>
<td>Hawaiian and Pacific Islander*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other*</td>
<td>669,799</td>
<td>0.30%</td>
<td>249,093</td>
</tr>
<tr>
<td>Two or More Races*</td>
<td>-</td>
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</tbody>
</table>

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What is cultural competency?

• “the ability of individuals to establish effective interpersonal and working relationships that supersede cultural differences.” (Beach, 2005)

• “a set of behaviors, attitudes, and policies that come together in a continuum to enable a health care system, agency or individual practitioner to function effectively in transcultural interaction.”
  
  (Leavitt, 2004 as cited in Romanello, 2007)
Why the need for skills in cultural competency?

• Patient Goals
  – Increased motivation to accomplish goals that are culturally meaningful and relevant (Ekelman, 2003)

• Quality of Care
  – Improved effectiveness of interventions that take into account how the patient’s culture effects their perceptions and behaviors about health and treatment (Ekelman, 2003)

• CAPTE requires:
  – Graduates demonstrate cultural competency in practice
  – Graduates possess the ability to "identify, respect, and act with consideration for patients'/clients' differences, values, preferences, and expressed needs in all professional activities” (CAPTE, 2006 as cited in Lazaro, 2007)
Purpose

• To explore whether or not students entering into their first year of physical therapy school at ATSU experience a change as measured by knowledge, attitude and self-efficacy, in their levels of cultural competency from onset of the DPT program to completion of the second year.
Hypothesis

• Participants will demonstrate a change in their levels of cultural competency as measured by an increase in knowledge, a change in attitude and an increase in self-efficacy from the time of program initiation to the end of the second year of the program.
Methodology

Subjects

• Class of 2012/Residential DPT ATSU

• Role of the subjects:
  – Complete a 16-question survey and 4 additional demographic questions
  – Take the same survey (minus the 4 demographic questions) at the end of their second year in the program
Methodology
Measurement Tool

• 16-question survey administered via computer using the Survey Monkey program
  – Includes one open-ended question and 3 demographic questions
  – Participants assigned numerical identifier

• Approximately 10 minutes to complete

• Responses will be entered on a 5-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree”

• Cronbach alpha calculated to determine internal consistency
  – Class of 2010
“Ethnic and cultural diversity, including sexual orientation and disability diversity, is important in the profession of physical therapy.”
Data Analysis

• Each response will be numerically coded according to the Transtheoretical Theory and Stages of Change Model with regard to cultural competence

• Survey responses will be averaged to determine overall stage of change

• Open-ended question that will be analyzed by content analysis

• 3 additional demographic questions to note any trends in cultural backgrounds with relation to their level of change
Transtheoretical Theory and Stages of Change Model

• Prochaska & DiClemente
  – Smoking cessation, weight management, condom use, drug & alcohol abuse

• Integrative model focused on an individual’s intentional behaviors

Stages of Change Model with regard to Cultural Competency

• **Precontemplation:** the individual has never considered changing because he/she does not perceive a lack of cultural competency as a problem

• **Contemplation:** has an interest in learning more about cultural competency but has not taken steps to do so

• **Determination/preparation:** determined to change behavior and has readied himself/herself toward taking action toward becoming culturally competent

• **Action:** has actively taken steps toward becoming culturally competent

• **Maintenance:** stayed with the action process for more than 6 months and remains dedicated to learning more.
Data Analysis Coding

- 1 = Precontemplation
- 2 = Contemplation
- 3 = Determination/Preparation
- 4 = Action
- 5 = Maintenance
Data Analysis
Categorization

• An average of the survey responses will determine whether the subject is overall a:
  – 1) precontemplator
  – 2) a contemplator
  – 3) determined/prepared
  – 4) an action taker
  – 5) a maintainer
Follow-Up

- Follow-up at the end of 2nd year:
  - Subjects will be reminded of their subject number and take the same survey again
  - Survey results from the follow-up will be compared to baseline survey results
  - Analysis by matched pairs t-test
Limitations

• Subjects may answer in a socially desirable manner
  – Questions constructed to minimize this effect

• May not see change on some questions due to the nature of the question itself
  – e.g., “I consider myself to be bilingual.”
Risks

• Minimal

• Anonymity maintained by keeping list with names and numerical identifiers confidential
  – Reminder email will be sent by an individual that is not associated with the study
Benefits

- **Participant:**
  - provide a preliminary self-evaluation
  - awareness of one’s own multicultural competence
  - different ways of thinking

- **ATSU DPT Program:**
  - establishing pilot data about whether or not the current cultural competency curriculum of ATSU’s DPT program results in a change its students

- **Society:**
  - may encourage investigation of other accredited DPT programs throughout the nation
Summary

• Research indicates rapid demographic changes in patient population.
  – For example: Arizona has the fastest growing Latino population in the US (RWJ, 2008)

• The proposed study seeks to obtain pilot data as to whether or not the didactic curriculum of the ATSU DPT program produces culturally competent students as measured by the stages of change model by the end of the 2\textsuperscript{nd} year

• Healthy People 2010 identifies cultural conflicts between patient and provider as a potential risk factor for delivery of quality care across the disciplines (U.S. Department of Health and Human Services, 2000)
References


