What Predicts Student Performance of Culturally Competent Care of Immigrant Patients?

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Background and Hypothesis

Educators frequently use self assessment of comfort as a measure of competence for learners, particularly with topics for which acquisition of skills is difficult to measure such as cultural competence. However, self assessment may not always reflect competence, particularly among U.S. medical students. In the family medicine and pediatric clerkships, we do not currently have a method to assess competence in providing culturally appropriate care for patients who do not speak English (ESL patients) or who use an interpreter.

The purpose of this study is to determine whether self assessment is truly an accurate predictor of the performance of cultural competent care among 3rd year medical students. Students will perform self assessments before and after their clinical rotations, and will monitor the number of interactions with ESL patients and patients that use an interpreter. Students will then complete four clinical vignettes which will be scored. If performance on clinical vignettes will not predict performance to student self-assessment in improvement of cultural competence, vignettes may be used as part of the assessment process in the Patients Within Populations Ring in the LSI Curriculum.

Hypothesis #1: A small educational intervention (didactic) focusing on the use of interpreters and increased exposure to ESL patients and families will positively affect student self assessment of cultural competency.

Hypothesis #2: Student self assessment of cultural competency during their Pediatric and Family Medicine rotations will not predict performance on standardized clinical vignettes of immigrant patients.

Hypothesis #3: Increased exposure to ESL patients and families will independently predict performance on standardized clinical vignettes of immigrant patients.

Methods

Demographics, Prior Exposure to ESL Patients and Experiences and Baseline Cultural Competency Self Assessment Obtained From All Students During Orientation

Cohort A (Intervention): Students on Pediatric Rotation

• Students receive instruction from Interpreter Services at Nationwide Children’s Hospital about working with ESL families during orientation at the beginning of the 8 week rotation.

Cohort B (Control): Students on Family Medicine Rotation

• Students do not receive ESL focused education until the second 8 weeks.

Students will track the number of patients they encountered during the first 8 weeks that were ESL patients and/or required interpreters.

At the end of the 8 weeks, students will complete four standardized clinical vignettes regarding the care of immigrant populations, which will be scored.

Students will also complete a follow up self assessment of cultural competency at the end of 8 weeks.

Initial Results and Discussion

For statistical purposes, the four tier scoring on the cultural competence inventory (IAPCC-SVc) were clustered into two tiers: low competency (culturally incompetent and culturally aware) and high competency (culturally competent and culturally proficient). The baseline scores from this group of 3rd year students stratified the line between culturally aware and culturally competent, basically at the point between low and high competency. Although there was no gender or age difference in scores, there were other predictors of higher competency self assessments.

Students who had traveled to a country where English is not the native language or who were multilingual were more likely to rate themselves as more culturally competent. Participation in a medical mission in a non-English speaking country was highly predictive of higher cultural competence ratings. The second half of this study will look to answer whether or not these students also perform better on clinical vignettes. In addition, the second phase will assess if experiences with diverse patients improves self assessment and performance of cultural competency.

Table 1: Baseline Cultural Competence Self Assessment, by age and gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Cultural Competence Score (Mean + SD)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>32.7 (± 6.7)</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>28.7 (± 6.6)</td>
<td>0.016</td>
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</tbody>
</table>

Table 2: Predictors of Self Assessment of High Cultural Competency

<table>
<thead>
<tr>
<th>Predictor</th>
<th>LR for High Competency</th>
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<tbody>
<tr>
<td>Travel to ESL country</td>
<td>1.7</td>
</tr>
<tr>
<td>Participation in Medical Mission</td>
<td>6.5</td>
</tr>
<tr>
<td>Multilingual</td>
<td>2.9</td>
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Clinical Vignettes

TB: The doctor sees a patient from North Africa who complains of a cough, weight loss, and fatigue for the last 3 months. After conducting a medical history and physical exam, the doctor explains that he needs to do a chest x-ray to exclude possible TB. He organizes the x-ray, and asks the patient to return for a follow-up appointment once the X-ray has been taken. However, the patient misses his next appointment. What might explain why the patient missed his appointment?

HTN: A young, South Asian Muslim patient is briefly hospitalized for newly diagnosed severe hypertension. The day before the patient is to leave the hospital, the ward doctor organizes an interview with the patient to explain his treatment. He begins by exploring the patient’s illness perspectives. What particular issues should the doctor explore with the patient?

Back Pain: An East European man presents to the emergency room with acute back pain. He speaks little French, but mentions that he works in construction. The doctor prescribes anti-inflammatory medicines, physiotherapy, and 10-day sick leave from work. He explains to the patient the importance of following his treatment recommendations to insure a speedy recovery. What factors might prevent the patient from following the doctor’s advice?

Diabetes: The doctor receives a female diabetic patient from the Balkans. He explains in detail the diet plan the patient should follow and provides her with a brochure on diabetes and its treatment, especially dietary aspects. A month later, the doctor sees the patient again, and asks her if she has followed the diet plan they discussed. The patient, visibly uncomfortable, says no. What factors may have prevented this patient from following the doctor’s dietary plan?

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References