Active Learning Strategies to Develop Cultural Competency and Health Literacy Skills

Lakesha Butler, PharmD, BCPS
Radhika Devraj, PhD
Cathy Santanello, PhD

Objectives

• Describe and demonstrate active learning strategies used to develop student’s cultural competency
• Describe methods used to provide evidence of enhanced cultural competency and health literacy skills
• Provide evidence for achievement of course learning goals
• Describe and demonstrate active learning strategies used to develop student’s ability to assess health literacy and implement literacy interventions for low literate patients

Course Design

• 3 hour required course 3rd professional year
• 6 learning clusters:
  1. Intro/ Cultural Competency Process and Awareness
  2. Health Disparities
  3. Health Beliefs
  4. Cross-Cultural Communication
  5. Health Literacy
  6. Cultural Encounter
Course Design

- **Team-based learning** (Team-Based Learning: A Transformative Use of Small Groups in College Teaching, edited by LK Michaelsen, AB Knight, and LD Fink. Stylus Publishing, Sterling VA)
  - In-class assignments
  - Readiness Assessment Tests (RATs)
  - Summative team project


Readiness Assessment Tests (RATs)

- Assigned readings
- 5-10 multiple choice questions
- Individual test 1st
- Group test
- Immediate Feedback Assessment Technique (IF-AT®)

Immediate Feedback Assessment Technique (IF-AT®)

- Work on this test in groups of 2 to 3.
- When you come to an agreement on an answer, scratch off that letter.
- If a star appears, you are correct! Give your group 4 points. If you are wrong, scratch off your second choice and award your group 2 points if you are right!
Movie/Video Resources Used

• Cluster 1 (Cultural Competency)
  – Scenes from the movie “Crash” - discussion on stereotypes and biases
  – “If These Walls Could Talk 2” Movie

• Cluster 4 - (Cross-Cultural Communication)
  – “Communicating Effectively Through An Interpreter”
  – www.xculture.org

Cultural Competency Live Panel

• GLBT (Gay, Lesbian, Bisexual, Transgender) discussion
• University faculty and pharmacy student
Spanish in Pharmacy and Role-Play Activity

- Hispanics are the fastest growing minority population in US
- "Crash course"- Medical/pharmacy terms in Spanish by Spanish-speaking faculty
- Group role-play with Spanish-speaking students

Sample Spanish Role-Play Scenarios

- Request OTC recommendation, 10 month old daughter has temperature of 101°F
- Patient picking up new prescription for hydrocodone/apap 5/500 q4-6h prn pain, provide patient education

Team Summative Project: Cultural Encounter

- Example Socio-cultural groups:
  
<table>
<thead>
<tr>
<th>Hispanic</th>
<th>Jehovah’s witness</th>
<th>Physical disabilities</th>
<th>Bosnian</th>
<th>Homeless</th>
<th>HIV/AIDS</th>
<th>African Americans</th>
<th>Muslim</th>
<th>Mormons</th>
</tr>
</thead>
</table>

- Project outcomes:
  - Identify differences in health beliefs, community strengths, barriers for healthcare access
  - Recommend appropriate pharmaceutical care
  - Identify knowledge and skills necessary to foster health promotion
Reflective Portfolios

- Assess learning of concepts for each cluster
- Accessed only by instructors
- Sample questions:
  - Discuss the groups of people against whom you were taught biases. What have you done to rectify those biases?
  - Discuss a situation in which you were mistreated as either a patient or a customer. How did this situation affect you?
  - Select a health belief that is contrary to your own and explain how this will change your communication methods?
  - Discuss challenges that you have encountered when communicating with patients/customers whose primary language is not English.
  - As a practicing pharmacist, how will this awareness of the issues related to health literacy affect your interaction with patients?
  - As cultural competency is a journey, how do you feel you have progressed and what do you plan to do in order to further develop your competency?

Sample Responses:

"The two main groups of people against whom I was taught biases were African Americans and "Yankees". By attending public schools, I have interacted with black students who, like myself, were not born into privilege. I learned skin color does not determine ambition. In professional organizations, I work to help all disadvantaged peoples. Regardless of color, all people sometimes need a helping hand."

"I think I have definitely progressed over the course of this class. I have been made aware of a lot of different cultures and groups, and I hope to learn more and dig deeper as I am exposed to different cultures. In order to further develop my competency I am going to keep an open mind and be more willing to accept new ideas and new cultures. I will definitely work hard to make all different kinds of people feel comfortable and welcome wherever I work as a pharmacist, and I will try to ensure that everyone will get the best healthcare that is available."

"In order to become more culturally competent, I will make efforts to research as well as interact with different cultures. I think that the best way to learn about a culture is to immerse oneself in the setting. This is an important part of becoming the most competent healthcare worker possible."

Assessment of Student’s Increase in Cultural Competency-Fall 2007

- IAPCC-R® pre- and post-test
  (Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals—Campinha-Bacote)
- Cultural proficiency-Cultural competence-
  Cultural awareness-Cultural incompetence
Assessment of Student’s Increase in Cultural Competency-Fall 2007

- Pre-test mean score indicate cultural awareness
- Post-test mean score indicate achievement of cultural competence

Health Literacy Skills

Why is Health Literacy an issue?

Low Health Literacy Impairs Patient’s Ability to Fully Engage in the Health care System

What is Low Health Literacy?

- 36% of the US population has Low Health Literacy
- Functional Illiteracy (Below Basic level)
  Reading writing skills below 5th grade level.
- Marginally Literate (Basic level)
  Reading, writing, English speaking skills between 5th to 8th grade levels.
  Functionally + Marginally = Low Health Illiterate Literate Literacy

Health Literacy Cluster

- 6 lecture module on health literacy
- Contents Covered
  - Scope of the problem
  - Identifying low literacy patients
  - Communicating with low literacy patients
  - Assessing the Suitability of Materials
    - Fry Formula
    - SMOG

Active Learning Strategies in Health Literacy

- AMA video
- In class activity (deciphering a passage)
  Ycaretil Htlaeh
- 3 Active Learning Activities
Active Learning Activities

Activity 1: Identifying low literacy patients using currently available instruments

• Students required to administer one of three health literacy instruments (REALM, S-TOFHLA, NVS)

• Data collection sheet
  - Name of the instrument administered
  - Gender
  - Age group
  - Health Literacy score
  - Functional health literacy level/literacy level/grade level

• Discussion Questions

REALM

Raw score: Grade Equivalent

<table>
<thead>
<tr>
<th>Score</th>
<th>Grade Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-18</td>
<td>3rd grade or below</td>
</tr>
<tr>
<td>19-44</td>
<td>4th-6th grade</td>
</tr>
<tr>
<td>45-60</td>
<td>7th-8th grade</td>
</tr>
<tr>
<td>61-66</td>
<td>High School</td>
</tr>
</tbody>
</table>

S-TOFHLA

The X-ray will _______ from 1 to 3 _______ to do.

- take
- view
- talk
- look
- beds
- brains
- hours
- diets

Functional Health Literacy Level

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-16</td>
<td>Inadequate Functional Health Literacy (FHL)</td>
</tr>
<tr>
<td>17-22</td>
<td>Marginal FHL</td>
</tr>
<tr>
<td>23-26</td>
<td>Adequate FHL</td>
</tr>
</tbody>
</table>
Results

- Interviewed equal percent of males (48%) and females (47%).
- Administered
  - REALM: 34.2% (26/76)
  - S-TOFHLA: 34.2% (26/76)
  - NVS: 28.9% (22/76)
- The age group most highly interviewed was 18-30 yrs (47.3%)
- For all three instruments, majority of those interviewed had adequate literacy (NVS), or adequate functional health literacy (STOFHLA), or had high school grade level (REALM):

Discussion Results

- Most groups felt that the REALM was the easiest to administer.
- Some comments
  - If the patient was not good at math, then he/she would score poorly on NVS. This may not mean that the person cannot read.
  - My patient was insulted by the simplicity of the instrument.
  - With REALM, it was necessary to have two copies of the instrument otherwise it is difficult to score.
  - IF English was not first language, REALM was hard.
  - S-TOFHLA was difficult because the answer sheet was numbered but the questions weren’t.
  - S-TOFHLA was confusing to explain to the patient.
- Most students felt that while it was feasible, they felt uncertain about its effectiveness in a busy pharmacy setting.
Active Learning Activities

Activity 2: Identifying behaviors typically displayed by low literacy patients.

- Case format used
- In class discussion

Active Learning Activities

- Activity 3: Role playing Counseling exercise
  - Students asked to answer the following:
  a) What specific strategies do you use to communicate the directions and warnings clearly to the patient?
  b) Do you think it is realistically possible to spend time to ensure patient understanding in today’s busy pharmacy environment.
  c) Was the role playing exercise helpful in teaching you to apply the specific strategies? Why?

Examples

- For Xiating Chen
  Hydrocodone/Acetaminophen 75/500mg tabs
  Take 1 to 2 tabs by mouth every 4-6 hours as needed for pain.
  Warnings:
  - May cause drowsiness. Alcohol may intensify the effect. Use care when operating a car or dangerous machinery.
  - May cause dizziness.
  - Do not drink alcoholic beverages while taking this medicine.
  - This medicine contains Acetaminophen. Taking more Acetaminophen than recommended may cause serious liver problems.

- For Joe the Plumber
  Clindamycin 150 mg capsules
  Take 2 capsules by mouth four times daily for 10 days.
  Warnings:
  - The medicine may be taken with or without food.
  - Important: Finish all of this medication unless otherwise directed by the prescriber.
  - Drink plenty of water while taking this medicine.
Role Playing Counseling Exercise

a) We showed the patient how many pills to take in one day, instead of just letting him read the directions. Told him the medication will help him feel better. We asked him to show how he should take the medicine.

b) We explained all the directions in simple terms. We had the patient explain everything back to us.

c) Explain that acetaminophen is Tylenol and show them where it is on the shelf.

d) Rephrasing was another way we explained the directions to the patient.

e) QID= breakfast, lunch, dinner, bedtime after verifying that they ate three meals a day. Have them show you how many capsules they will be taking each day. They should have 4 in their hand. Also, asking how many they take at those specified time. How many pills should be left after the last day? (none)

f) Emphasized major points multiple times.

g) Talked to the patient in a clear slow voice.

Health Literacy-Assessing Suitability of Patient Education Materials

- Determine understanding of patient information by non-healthcare professionals
- Students assess online patient education materials utilizing literacy readability tools
  - Fry Formula
  - SMOG (Simple Measure of Gobbledygook) Readability Formula
  - SAM (Suitability Assessment Method)
- Revise materials to ensure clarity and simplicity

Learning Activity
Utilizing the SMOG tool
SMOG Instructions

- Count 10 consecutive sentences in beginning, middle and end of text
- From 30 sentence sample, circle words containing 3 or more syllables and total
- Use SMOG conversion table for approximate grade level

SMOG Conversion Table

<table>
<thead>
<tr>
<th>Total Polysyllabic Words</th>
<th>Approximate Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>4</td>
</tr>
<tr>
<td>3-6</td>
<td>5</td>
</tr>
<tr>
<td>7-12</td>
<td>6</td>
</tr>
<tr>
<td>13-20</td>
<td>7</td>
</tr>
<tr>
<td>21-30</td>
<td>8</td>
</tr>
<tr>
<td>31-42</td>
<td>9</td>
</tr>
<tr>
<td>43-56</td>
<td>10</td>
</tr>
<tr>
<td>57-72</td>
<td>11</td>
</tr>
<tr>
<td>73-90</td>
<td>12</td>
</tr>
<tr>
<td>91-110</td>
<td>13</td>
</tr>
</tbody>
</table>

Student Course Evaluations

**What aspects of the course were most effective in helping you learn?**
- Group presentations
- Speakers, panels

**What aspects of the course could be improved to help you learn?**
- More panelists, guest speakers, etc.
- Too much overlapping material
- IFATs too much common sense
Course Obstacles/Challenges

- Topic sensitivity
- Importance to students
- Required textbook not utilized consistently throughout course, will change to recommended text

Questions?

ACCESS CODE: AC6878P