EXAMINING SOCIOCULTURAL PERCEPTIONS OF MDD SYMPTOMS THROUGH ONLINE EDUCATION

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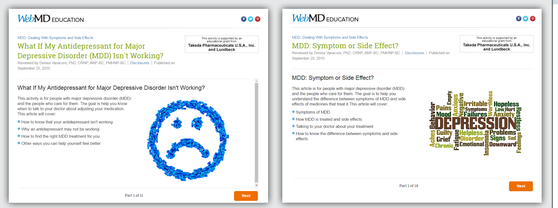
STUDY OBJECTIVES

Major depressive disorder (MDD) is the most prevalent mental disorder in the United States, yet little is known about the sociocultural perception of mental illness.[1] Recent studies have indicated that certain ethnicities are independent predictors of illness severity at hospital presentation, pointing to the possibility of various thresholds for understanding of symptoms.[2] This study sought to examine whether there were differences in understanding of MDD in an ethnically diverse audience of online learners engaged in disease-specific education.[3,4]

METHODS

- Two educational activities, in a text-based format with graphics, on MDD symptoms and side effects of treatment were hosted on WebMD Education, a website dedicated to patient and caregiver/family member education [Figure 1]
- Activities were 5 to 7 minutes in length, written at a fifth to seventh grade reading level, and included actionable next steps to facilitate learning and behavior change
- Activities included demographic questions regarding age, gender, race/ethnicity, and interest (patient or caregiver/family member) [Figure 2]
- A pre-/post-activity assessment question was included to measure impact of the education as defined by improvement in knowledge with results stratified by ethnicity [Figure 3]
- Statistical significance: A chi-square test determined if a statistically significant improvement (P <.05) occurred from pre- to post-activity assessment
- Effect size: Cramer's V determined the change in the proportion of participants who answered questions correctly from pre-/post-activity assessment (small = 0.0.6-0.15; medium = 0.16-0.30; large = >0.30)
- Participant data were collected between September 29, 2015, and July 1, 2016

FIGURE 1. WebMD Patient Education Activities



http://education.webmd.com/viewarticle/847309 http://education.webmd.com/viewarticle/847312

FIGURE 2. Demographic Questions

Help us to better understand your interest in this activity

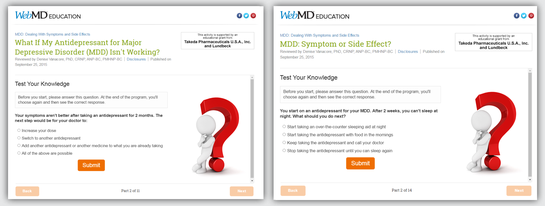
Are you:
Male
Female

How old are you?
Under 25
25–34
35–44
45–54
Over 54

Why are you interested in this? (Select the one that best applies to you)
I have this condition
I am a caregiver for someone with this condition
I am a family member of someone with this condition
I am simply interested in learning more about this condition

What is your race/ethnicity?
American Indian or Alaska Native
Asian
Black or African-American
Native Hawaiian or other Pacific Islander
White, non-Hispanic
Hispanic or Latino
I prefer not to answer

FIGURE 3. Pre-/Post-Activity Assessment Questions



RESULTS

For both activities, differences and improvements in knowledge across ethnicities were seen in recognizing symptoms of MDD, side effects, and therapy options if an antidepressant is not working. Knowledge improvements were as follows:

- White non-Hispanic patients improved from 76% to 83% (P <.05; V=0.08), and these patients answered correctly at a significantly higher rate than other groups (P <.05) [Figure 4]
- Asian patients improved from 59% to 73% (P <.05; V=0.15), however this group answered incorrectly at a significantly higher rate than other ethnic groups (P <0.5) [Figure 4]
- African American patients improved from 65% to 76% (P <.05; V=0.12) [Figure 4]
- Indian patients improved from 53% to 76% (P <.05; V=0.21) [Figure 4]
- Hispanic/Latino patients improved from 67% to 75% (P =.286; V=0.06) [Figure 4]
- Patients of all ethnicities had an average baseline performance of 64% for the pre-assessment question, improving to 76.6% on post-assessment [Figure 4]
- Caregivers/family members of all ethnicities had an average baseline performance of 70.4% for the pre-assessment question, improving to 79% on post-assessment [Figure 5]
- Asian caregiver/family members answered correctly at a significantly higher rate than other groups (P < .05) [Figure 5]

FIGURE 4. Patients Pre-/Post-Activity Assessment Responses

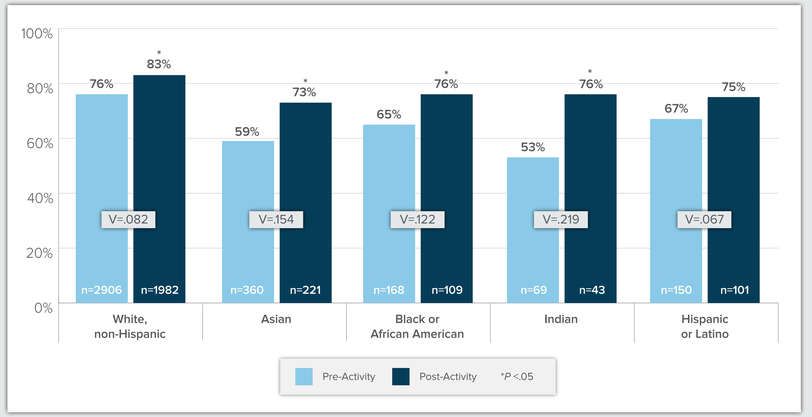
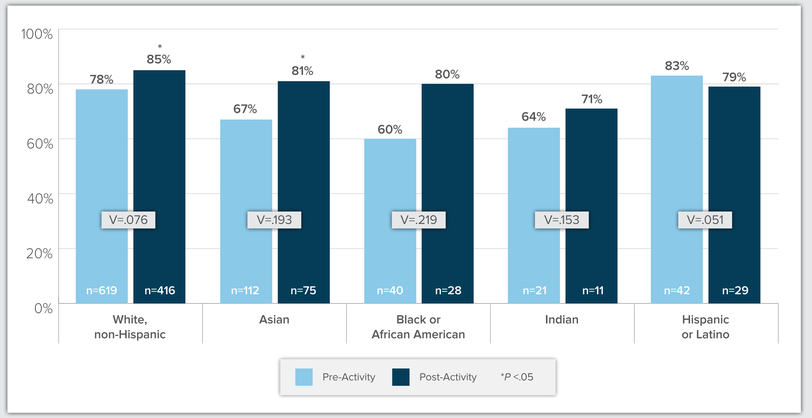


FIGURE 5. Caregiver/Family Member Pre-/Post-Activity Assessment Responses



CONCLUSION

Participation in online patient education led to significant improvements in knowledge on MDD symptoms, side effects, and treatments for most ethnicities examined, with the greatest educational effects observed in Asian and African American patients. Analysis of results demonstrates a need for additional disease-specific education for all groups, with the greatest needs being the in Asian and Hispanic/Latino populations, respectively. This research represents an important step toward informing culturally-specific needs for patient education in mood disorders, in an effort to support improved self-management, enhanced shared decision making, and better patient outcomes.

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