ADDRESSING KNOWLEDGE GAPS RELATED TO HOSPITALIZATIONS IN AFRICAN AMERICAN PATIENTS WITH HF: EFFECT OF ONLINE CME

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RESULTS

- Statistically significant improvements in post- to pre-assessment were seen for cardiologists (p < .05; d = 0.70) and PCPs (p < .05; d = 0.43) (Table 1).

- Cardiologists and PCPs had been exposed to knowledge pre-education, with 51% and 54% average correct responses, respectively (Figure 1).

- Significant improvements were observed as a result of participation in this online CME intervention, demonstrating that appropriately designed Internet-based education can reinforce knowledge of physicians involved in the management of HF in African Americans.

- Cardiologists and PCPs demonstrated a need for further education on understanding the safety and efficacy of therapies proven to work in African American patients with HF and how to determine whether patients may benefit from treatment depending on genetic testing results.

HYPOTHESIS

A video-based, online continuing medical education (CME) activity can improve knowledge of cardiologists and primary care physicians (PCPs) related to management of African American patients with HF.

METHODS

- An online CME activity was developed as a 25-minute roundtable discussion with 3 leading experts on treatment strategies to reduce HF-related hospitalizations in African American patients.

- The activity included a transcript of the discussion and downloadable data sheets to highlight and reinforce key data.

- The effects of education were assessed using a pre- to post-assessment study design with questions to assess clinical knowledge.

- All questions combined, McNemar’s chi-square test was used to assess differences from pre- to post-assessment. P values are shown as a measure of significance. Values < .05 are statistically significant.

- Cohen’s d was used to calculate the effect size (d < 0.8 is large, 0.8-0.4 is medium, and >0.4 is small).

- The activity launched on March 26, 2015, data was collected through May 6, 2015.

- All African American patients benefit from use of hydralazine and isosorbide.

- Significant improvements were observed as a result of participation in this online CME intervention, demonstrating that appropriately designed Internet-based education can reinforce knowledge of physicians involved in the management of HF in African Americans.

- Cardiologists and PCPs demonstrated a need for further education on understanding the safety and efficacy of therapies proven to work in African American patients with HF and how to determine whether patients may benefit from treatment depending on genetic testing results.

Acknowledgements

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REFERENCES


CONCLUSIONS

- Significant improvements were observed as a result of participation in this online CME intervention, demonstrating that appropriately designed Internet-based education can reinforce knowledge of physicians involved in the management of HF in African Americans.

- Cardiologists and PCPs demonstrated a need for further education on understanding the safety and efficacy of therapies proven to work in African American patients with HF and how to determine whether patients may benefit from treatment depending on genetic testing results.

TABLE 1. Summary Statistics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Pre-Assessment</th>
<th>Post-Assessment</th>
<th>Pre-Assessment</th>
<th>Post-Assessment</th>
<th>Pre-Assessment</th>
<th>Post-Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Size</td>
<td>91</td>
<td>91</td>
<td>100</td>
<td>100</td>
<td>91</td>
<td>91</td>
</tr>
<tr>
<td>Mean (Correct Answers)</td>
<td>2.02</td>
<td>2.72</td>
<td>2.02</td>
<td>2.62</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Median (Correct Answers)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.97</td>
<td>0.6</td>
<td>0.97</td>
<td>0.6</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Standard Error</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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</tr>
</tbody>
</table>

FIGURE 1. Percent of Participants with Correct Response by Question

FIGURE 2. Representative Questions

TABLE 2. Cardiologists vs. PCPs

<table>
<thead>
<tr>
<th>Question</th>
<th>Cardiologists (%)</th>
<th>PCPs (%)</th>
<th>Pre-Assessment</th>
<th>Post-Assessment</th>
<th>Pre-Assessment</th>
<th>Post-Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The therapy is included in heart failure guidelines but not in African American guidelines.</td>
<td>65% (59)</td>
<td>71% (64)</td>
<td>65% (59)</td>
<td>71% (64)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2. Hydralazine is a vasodilator.</td>
<td>78% (71)</td>
<td>78% (71)</td>
<td>78% (71)</td>
<td>78% (71)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3. TTE heart failure patients have significantly lower ejection fraction.</td>
<td>46% (41)</td>
<td>46% (41)</td>
<td>46% (41)</td>
<td>46% (41)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4. Cardiologists and PCPs agreed that use of I/H in African American patients was low.</td>
<td>51% (45)</td>
<td>52% (47)</td>
<td>51% (45)</td>
<td>52% (47)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5. I/H produce less frequent hypotension when used in African American patients.</td>
<td>65% (59)</td>
<td>65% (59)</td>
<td>65% (59)</td>
<td>65% (59)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6. A common misconception is ineffective for reducing HF risk in African American patients.</td>
<td>76% (69)</td>
<td>76% (69)</td>
<td>76% (69)</td>
<td>76% (69)</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

FIGURE 1.
