Evaluating the Impact of Health Literacy on Change in Physical Function Cardiac Rehabilitation

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Methods

- HL of patients enrolling into CR was evaluated by Rapid Estimate of Adult Literacy in Medicine Short Form (REALM-SF).
- Health literacy was divided into two groups:
  - LHL was <9th grade reading level
  - HHL was ≥9th grade reading level
- Impact of CR was assessed in respect to changes in:
  - 6MWD
  - GS

Results

- 113 patients were included in this assessment that enrolled and completed phase II CR
  - 33 LHL and 80 HHL
  - The mean age was 67.0 (age range 45-85)

The LHL group had lower baseline 6MWD and GS compared to the HHL group (See Table 1).

Both LHL and HHL patients experienced significant and proportional improvements in 6MWD and GS at completion of CR program (See Table 1, Figure 1 and 2).

Table 1. 6MWD and GS scoring Baseline to Follow-Up

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Follow-Up</th>
<th>Change</th>
<th>P-Value (PRE vs POST)</th>
<th>P-Value (BETWEEN GROUPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6MWD (m) LHL</td>
<td>256.06 ± 97.10</td>
<td>303.63 ± 95.74</td>
<td>47.57 ± 9.72</td>
<td>&lt;0.001</td>
<td>0.9079</td>
</tr>
<tr>
<td></td>
<td>335.49 ± 94.69</td>
<td>381.37 ± 86.38</td>
<td>45.88 ± 58.01</td>
<td>&lt;0.001</td>
<td>0.0506</td>
</tr>
<tr>
<td>GS (m/s)  LHL</td>
<td>1.06 ± 0.29</td>
<td>1.17 ± 0.26</td>
<td>0.11 ± 0.21</td>
<td>0.0272</td>
<td>0.7258</td>
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<tr>
<td></td>
<td>1.25 ± 0.34</td>
<td>1.33 ± 0.32</td>
<td>0.09 ± 0.28</td>
<td>0.0506</td>
<td>0.7258</td>
</tr>
</tbody>
</table>

Conclusion

- LHL patients demonstrated lower baseline 6MWD and GS.
- LHL and HHL patients achieved commensurate improvements in 6MWD and GS through CR.

Implications

This work confirms the value of CR for patients across a wide range of HL. Further work regarding long term durability of CR’s clinical benefits in LHL and HHL subgroups is ongoing.

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