A comparison of patient, intervention, comparison, outcome (PICO) to a new, alternative clinical question framework for search skills, search results, and self-efficacy: a randomized controlled trial

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APPENDIX A

Question formulation example using each framework

Mrs. Holiday is a sixty-five-year-old female who is living with the effects of a stroke that happened two years ago. Her recovery has allowed her to get back to work and return to leisure activities, albeit in a modified manner. Her stroke was in her left middle cerebral artery and was considered moderate. She is consulting you, the physical therapist, because for the last two months she is having trouble completing her weekly hikes due to difficulty controlling her right leg during the walks. You have determined one of the main contributing factors to this problem is the presence of spasticity in the right leg. You know that transcutaneous electric nerve stimulation is used to address this problem, but you wonder if a combined modality therapy might be more effective for Mrs. Holiday in order to improve her ability to control her right leg during walks.

Patient, intervention, comparison, outcome (PICO) framework

<table>
<thead>
<tr>
<th>Patient</th>
<th>65-year-old female stroke survivor with spasticity in right leg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Combined modality therapy</td>
</tr>
<tr>
<td>Comparison</td>
<td>Transcutaneous electric nerve stimulation alone</td>
</tr>
<tr>
<td>Outcome</td>
<td>Improved motor function</td>
</tr>
<tr>
<td>Type of question</td>
<td>Therapy</td>
</tr>
<tr>
<td>Answerable clinical question</td>
<td>In stroke survivors with lower limb spasticity, is a combined modality therapy more effective than transcutaneous electric nerve stimulation alone to improve motor function?</td>
</tr>
</tbody>
</table>
Alternative framework

<table>
<thead>
<tr>
<th>Problem</th>
<th>Spasticity in right leg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>65-year-old female</td>
</tr>
<tr>
<td>Patient stakeholder</td>
<td></td>
</tr>
<tr>
<td>Professional stakeholder</td>
<td>Physical therapist</td>
</tr>
<tr>
<td>Intervention</td>
<td>Transcutaneous electric nerve stimulation, combined modality therapy</td>
</tr>
<tr>
<td>Context</td>
<td>Leisure activities</td>
</tr>
<tr>
<td>Outcome measure</td>
<td>Improved motor function</td>
</tr>
<tr>
<td>Time</td>
<td>Stroke 2 years ago</td>
</tr>
<tr>
<td>Type of question</td>
<td>Therapy</td>
</tr>
<tr>
<td>Answerable clinical question</td>
<td>In stroke survivors with lower limb spasticity, is a combined modality therapy more effective than transcutaneous electric nerve stimulation alone to improve motor function?</td>
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