Attitudes of adolescents with cerebral palsy towards intensive models of physical therapy

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Background

- Adolescents with cerebral palsy (CP) will soon transition to autonomously steering healthcare decisions
- Strong evidence supports a paradigm shift in pediatrics towards intensive bouts of physical therapy (PT) with high frequency and dosage over a relatively short duration
- Implementing intensive PT into widespread clinical practice will depend on the attitudes of adolescents
- The purpose of this study was to evaluate these unknown adolescent attitudes

Methods

- Conceptual model developed based on available literature and International Classification of Function framework and used to guide semi-structured interview questions
- Participants recruited through flyer postings, public and private group Facebook posts, CP research listservs, and clinician recommendation
- Focus groups conducted using online video conferencing software
- Recordings were transcribed and coded according to the model by two independent team members
- Analysis was performed using Dedoose; saturation was reached

Table 1. Participant demographics

<table>
<thead>
<tr>
<th>Age</th>
<th>14-20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male: 3 Female: 7</td>
</tr>
<tr>
<td>GMFCS</td>
<td>Level I: 5 Level II: 3 Level III: 2</td>
</tr>
</tbody>
</table>

Table 2. Pre-participation survey results

<table>
<thead>
<tr>
<th>Previous experience with intensive</th>
<th>Yes: 9</th>
<th>No: 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial impression of intensive model</td>
<td>Extremely positive: 1 Positive: 4 Indifferent: 4 Negative: 1 Extremely negative: 0</td>
<td></td>
</tr>
<tr>
<td>Satisfaction with movement</td>
<td>“Yes, most of the time”: 5 “Some of the time”: 3 “No, never”: 1 No response: 1</td>
<td></td>
</tr>
</tbody>
</table>

Themes

1. Teens demonstrated an understanding of their CP diagnosis and desired further knowledge about future interventions
2. Relationships with health care providers proved to be formative in teens’ willingness to participate in intensive physical therapy
3. Participants in the focus group had generally positive perceptions of past physical therapy, self-image, and progress toward goals
4. Participants voiced the importance of PT in their past or current lives, but also made clear that PT is only one aspect of their life and who they are
5. Those currently participating in PT were hesitant to change their current model to an intensive approach (concerned about break/time off)
6. Pain, both as a consequence of previous PT intervention and as a reason to seek out PT care, influenced teens’ attitudes on intensive PT

Conclusions and clinical relevance

- Adolescents voiced positive attitudes about PT, but may prioritize other aspects of their lives over improvements in physical mobility
- Clinicians and parents are major influencers in guiding teens towards autonomous healthcare and should ask probing questions and include teens in conversations about future involvement in intensive PT
- Adolescents seek to be empowered by the evidence and should be presented with appropriate resources to help inform their decisions as they transition into adulthood

Acknowledgements

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IFC-based model of factors discussed by adolescents

Themes

1. “If the data shows that intensive physical therapy, as opposed to … just one hour a week, is going to yield better results, then I would find time to do it.”
   - “It only affects your physical health but it affects sometimes your mental health and your social health.”
2. “If it was recommended by a therapist I would be much more likely to partake in it because this therapist knows me and knows my goals and … wants what’s best for me and my body.”
3. “I think physical therapy is important because it really does help with the muscles and strengthening and gaining … everyday mobility.”
   - “As I’ve gotten older … I’ve gotten to a point where I’m comfortable with what I can do and the few things that I can’t do and I think it’s, like it’s okay, that I’m not in therapy anymore.”
4. “I don’t want to cancel all of my extracurricular [activities] just to focus on one aspect of my life.”
5. “It seems kind of redundant to do a large spurt of physical therapy and then to not do any at all.”
6. “I decided that it would be a good idea for me to do a version of intensive physical therapy and I really feel like it helped me get through that spurt of pain.”