Who Walks In and Who Walks Out: an Analysis of Voice Therapy Attendance

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Voice therapy is an effective treatment for dysphonia

Multiple studies have demonstrated the effectiveness of direct voice therapy in reducing dysphonia, regardless of the specific technique.

Initial studies

1. How many patients follow through with the Otolaryngologist’s recommendation to initiate voice therapy?
2. What is the dropout rate for voice therapy?
3. Can we predict who will drop out?

The findings:

1. 38% of patients did not attend a speech-language pathology voice evaluation after referral by the Otolaryngologist.
2. 47% of patients who attended a voice evaluation did not return for therapy. Of the remaining patients, 65% did not complete voice therapy.
3. Age, gender, diagnosis, CAPE-V, and VHI do not predict dropout.

References:

What next? Temporal Variables

- Publications describe extraordinary variation regarding frequency, duration, and timing of voice therapy (1 session to 36 sessions)
- Therefore, the purpose of this paper was to examine these temporal variables and their relationship to voice therapy completion.

Methods

- Retrospective chart review of 294 consecutive patients seen for voice therapy
- 197 charts were complete and used for analysis

Participants:

- Male and Female participants
- Varied voice diagnoses established after visit to an Otolaryngologist
- Laryngeal cancer cases excluded
- Able to complete a voice QOL measure independently
- Must have attended a voice evaluation + at least one voice therapy session

Data collected:

- Days between Otolaryngology referral and the initial voice therapy (evaluation) session
- Days between the voice evaluation and the first follow-up therapy session
- Number of sessions attended
- Number of cancellations
- Duration from the initial to the final therapy session (length of therapy)
- Completed or dropped out of therapy?
Analysis

- Correlation coefficients between dependent variable (completion) and temporal variables.
- Difference measures were calculated between the groups (completers and dropouts)
- Post-hoc data exploration

Results

<table>
<thead>
<tr>
<th></th>
<th>Delay between referral and evaluation (days)</th>
<th>Number of Sessions Attended</th>
<th>Number of Cancellations</th>
<th>Duration of therapy (days)</th>
<th>Completer or Dropout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay between referral and evaluation (days)</td>
<td>1</td>
<td>-0.001</td>
<td>.193(**)</td>
<td>0.088</td>
<td>.164(*)</td>
</tr>
<tr>
<td>Number of sessions attended</td>
<td>-0.001</td>
<td>1</td>
<td>0.117</td>
<td>.689(**)</td>
<td>.447(**)</td>
</tr>
<tr>
<td>Number of cancellations</td>
<td>.193(**)</td>
<td>0.117</td>
<td>1</td>
<td>.165(*)</td>
<td>.212(**)</td>
</tr>
<tr>
<td>Duration of therapy (days)</td>
<td>0.088</td>
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<td>.293(**)</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Discussion

- Completers demonstrated:
  - Higher number of sessions attended
  - Lower number of sessions cancelled
  - Length of therapy
  - Fewer days between Otolaryngology referral and Speech-Language Pathology evaluation

**Turning point at session 4**

- The mode for completers was 4 sessions
- The completion rate reversed at session 4.
  - Those who attended EXACTLY 4 sessions had a 61.9% completion rate
  - Those who attended more than 4 sessions increased the completion rate by only 2.7% to 64.6%
  - In contrast, a 36.6% completion rate for exactly 3 sessions
  - And a 22.5% completion rate for 3 or fewer sessions

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**Dropout is not the same as failure!**

"Successful" dropouts possess social-cognitive characteristics that may enable them to resume their exercise participation at some later date”

--Shields et al., 2003

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**References**