Department of Communication Sciences and Disorders

2016 Research Day

Wednesday, April 27th

9:00 am-11:30 pm
(9:00-10:30 am poster session; 10:30-11:30 pm oral presentations)

Laupus Library, Rooms 1504 & 1506
Poster Session

Anderson M, Stuart A, Briley P, Kalinowski J. Speech-Language Pathologists’ Perceptions towards Typical Speakers and People Before and Upon Completion of Therapy.

Abashian C, Kintz S, Wright H. Semantic Knowledge Use in Different Discourse Types.


Boyette L, Ellis C. Aphasia Healthcare Costs and Service Utilization in the NC Stroke Belt.

Boretti KN, Mendez LI. Vocabulary Development in Bilingual Children: Why We Assess Differently.

Colley A, Dinice H, Mason K, Perry JL. Changes in the Level of VP Closure from Birth through Five Years.


Gosnell H, Kennedy J, Ellis C. Speech and Language Outcomes Associated with Collaborations Between Speech-Language Pathologists and Music Therapists.


Hauhuth K, Wells E, Mason M, Perry JL. Cross Sectional Changes in Vocal Tract Volume from School Age through Adolescence.

Herring C, Vermiglio AJ, Post CE. Masking Conditions for HINT Versus Quick SIN.

Mason K, Caison E, Perry JL. Changes in the Velopharyngeal Anatomy and Physiology following the Remediation of the Posterior Nasal Fricative: A single subject case study.
Menninger C, Winslow S, Ellis C. Primary Progressive Aphasia: Management in a University-Based Clinic.
Pfeiffer L, Rangarathnam B. An Evidence based update on dysphagia in individuals with Parkinson’s disease.
Pua E, Perry JL, Ellis, C. Cleft Palate in the U.S.: Sociodemographic Characteristics and Cost of Care.
Radack E, Kollara L, Perry JL. Examining the Musculus Uvulae Using MRI.
Yeager A, Kintz S, Wright H. Discourse Analysis of Adults with Anatomic and Broca’s Aphasia.
Oral Presentations

*First year study as part of PhD requirement
Jordan H, Perry JL, Rangarathnam B, Ellis C, Fang X. Predicting Velopharyngeal Closure Patterns Based on Anatomic Variables.
Kotlarek K, Perry JL. Morphology of the Levator Veli Palatini Muscle in Cleft Palate Using MRI.
*First year study as part of PhD requirement
Pua E, Reading S. The Current Status of Speech Therapy in China.
• **Top Audiology Posters:**
  • Herring C, Vermiglio AJ, Post CE. Masking Conditions for HINT Versus Quick SIN.

• **Top Speech Posters:**
  • Mason K, Pua, E, Caison E, Perry JL. Changes in the Velopharyngeal Anatomy and Physiology following the Remediation of the Posterior Nasal Fricative: A single subject case study.
  • Radack E, Kollara L, Perry JL. Examining the Musculus Uvulae Using MRI.

• **Top Oral Presentations:**
  • Briley P, Kalinowski J. The Prevalence of Vulnerability to Stuttering.
  • Pua E, Reading S. The Current Status of Speech Therapy in China.
Cleft Palate in the United States: Socio-demographic Characteristics and Cost of Care

Eshan Pun, BS; Jamie Perry, PhD CCC-SLP; Charles Ellis, PhD CCC-SLP

Results

Demographic characteristics of children with CLP seen in US hospitals

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Median cost (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>30,000</td>
</tr>
<tr>
<td>3-5</td>
<td>45,000</td>
</tr>
<tr>
<td>6-8</td>
<td>50,000</td>
</tr>
<tr>
<td>9-11</td>
<td>60,000</td>
</tr>
<tr>
<td>12+</td>
<td>70,000</td>
</tr>
</tbody>
</table>

Conclusions

The economic burden of cleft palate is substantial due to the high incidence of CLP and associated health care costs. The cost of care varies by age group, disease and hospital location.

Study Limitations

The study was based on a single center and the results may not be generalizable to other populations.

References

[List of references]

East Carolina University
Department of Communication Sciences and Disorders
INTRODUCTION

- A recent review of research literature currently exists describing the impact of collaborative treatments between speech-language pathologists (SLPs) and music therapists.
- Evidence notes that SLTs and MTs offer collaborative models of care to achieve the desired levels of skills within a wide range of communication disorders.
- Collaborations between SLPs and MTs have been shown to lead to improved language and communication skills in children with a range of development delays.

REVIEW RESULTS

A database search yielded 193 unique articles. Exclusion criteria were applied, resulting in 30 articles for full-text review. The following results were found:

2009

2010

2015

2016

SUMMARY

The project offers evidence of positive communication outcomes following collaborations between SLTs and MTs in children.

Research is needed to understand how best to utilize the collaborations to improve communication outcomes among children, with critical directions in this field.

The evidence reported here will assist in organizing the current literature and offer strategies to utilize these collaborations in achieving optimal outcomes.

REFERENCES


CONTACT

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Bilateral Vocal Fold Nodules in Children: A Clinical Case Study

Bailey Spenski, BS, Lori Kincannon, MS, CCC-SLP

ABSTRACT

This poster will present a clinical case study of a patient referred to the voice therapy clinic at the East Carolina University Department of Communication Sciences and Disorders. The patient presented with bilateral vocal nodules, moderate hoarseness, and a history of frequent colds and allergies. The primary goal of treatment was to promote voice health and improve functional vocal use.

INTRODUCTION

- Bilateral vocal nodules can develop as a result of chronic vocal abuse or misuse.
- In children, vocal nodules commonly occur in vocal behaviors such as increased coughing or yelling.
- The patient in this study was a 5-year-old girl referred for voice therapy. The ENT determined the presence of bilateral nodules.
- Perceptual changes were subjectively noted over a one-week period.

METHODS

The patient received voice therapy for 60 minutes once per week for 6 weeks. Treatment was delivered by a speech-language pathologist at the ECU Department of Communication Sciences and Disorders. Treatment goals were to promote voice health, improve vocal quality, and reduce vocal symptoms.

- Prior to treatment, the patient exhibited dysphonia resulting in moderate hoarseness with frequent periods of aphonia.
- At the end of treatment, the patient demonstrated appropriate loudness with reduced pitch breaks during phonation.
- Subjective measures of perceptual changes revealed that the patient’s voice improved from moderately hoarse to mildly hoarse post-treatment.
- Results of treatment revealed reduced hoarseness when strategies to promote healthy vocal behaviors were used during treatment sessions and at home.

Results

- The patient was dismissed from treatment after seven weeks following perceptual improvement of voice quality and demonstration of knowledge of behaviors associated with good vocal hygiene.
- While the patient reported improved overall vocal quality and carryover of activities practiced in therapy, it was also noted that emotional outbursts often contributed to instances of dysphonia and aphonia.
- Appropriate referrals were provided including a follow-up visit to the ENT for further assessment.

DISCUSSION

- Overall, the techniques used resulted in improved voicing, as measured perceptually by the clinician and the parent.
- It has been established that children with voice disorders often have personality characteristics that contribute to poor vocal behaviors and parents “describe their children as screamers with aggressive hyperactive tendencies.”
- Further research on treatment of vocal nodules in children is needed to provide speech-language pathologists with a stronger level of evidence when planning intervention.

REFERENCES


CONTACT

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Aphasia Healthcare Costs and SLP Service Utilization in the North Carolina Stroke Belt

Lauren Boyette, BS & Charles Ellis, PhD CCC-SLP

INTRODUCTION

- Each year 700,000 adults experience aphasia, a higher order disturbance of language, following a脑血管性卒中 (CVA) or brain injury.
- A substantial body of literature exists related to haematological outcomes, but less is known about the cost of care and SLP service utilization.
- Few studies of aphasia outcomes have been conducted in the context of the southeastern United States, despite the high prevalence of stroke and other neurological conditions in this region.
- The objective of this study was to examine costs of care for persons with aphasia (PWA) and SLP service utilization in the state of North Carolina (NC).

RESULTS

Table 1: Demographic Characteristics of Sample of PWA

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sample 2015</th>
<th>Sample 2016</th>
<th>Sample 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total aphasia stroke patients</td>
<td>4,042</td>
<td>4,068</td>
<td>4,068</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>88.74</td>
<td>89.49</td>
<td>89.20</td>
</tr>
<tr>
<td>Black</td>
<td>5.31</td>
<td>5.38</td>
<td>5.34</td>
</tr>
<tr>
<td>Other</td>
<td>1.22</td>
<td>1.36</td>
<td>1.22</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.95</td>
<td>0.90</td>
<td>0.78</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age ≤ 64</td>
<td>49.54</td>
<td>49.69</td>
<td>49.72</td>
</tr>
<tr>
<td>Age 65-74</td>
<td>31.71</td>
<td>31.74</td>
<td>31.72</td>
</tr>
<tr>
<td>Age ≥ 75</td>
<td>18.75</td>
<td>18.57</td>
<td>18.57</td>
</tr>
<tr>
<td>Female</td>
<td>55.60</td>
<td>55.77</td>
<td>55.14</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>72.70</td>
<td>72.64</td>
<td>72.52</td>
</tr>
<tr>
<td>Single</td>
<td>27.30</td>
<td>27.36</td>
<td>27.48</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>71.96</td>
<td>72.30</td>
<td>72.48</td>
</tr>
<tr>
<td>Some College</td>
<td>25.74</td>
<td>25.64</td>
<td>25.68</td>
</tr>
<tr>
<td>College Grad</td>
<td>2.30</td>
<td>2.04</td>
<td>2.26</td>
</tr>
<tr>
<td>Employment Status</td>
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<td></td>
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</tr>
<tr>
<td>Employed</td>
<td>67.70</td>
<td>67.64</td>
<td>67.52</td>
</tr>
<tr>
<td>Unemployed</td>
<td>32.30</td>
<td>32.36</td>
<td>32.48</td>
</tr>
<tr>
<td>Charges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Charges</td>
<td>$32,411</td>
<td>$32,154</td>
<td>$32,511</td>
</tr>
<tr>
<td>Average Charges</td>
<td>$941</td>
<td>$943</td>
<td>$941</td>
</tr>
</tbody>
</table>

DISCUSSION

- The findings of this study offer insights into the economic aspects of aphasia management in NC:
  - Length of stay, costs and SLP service utilization
  - These findings are important to understanding the complexity of variables that contribute to clinical outcomes observed in this population.
  - Clinicians are required to understand the economic factors that influence service utilization and costs of aphasia management.
  - This information is important for clinicians and patients to make informed decisions about the value of care patients receive and how that care relates to long-term outcomes.

REFERENCES


CONTACT

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Morphology of the Levator Veli Palatini Muscle in Cleft Palate Using Magnetic Resonance Imaging

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Jamie L. Perry, PhD, CCC-SLP

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