

Freed to Function: Occupational Therapy's Role in Pre- and Post-Frenectomy Care

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Introduction

Background: Tethered oral tissues (TOTs) are increasingly recognized as having a significant impact on feeding, oral motor function, airway development, and overall participation in daily activities. As surgical release of these tissues, commonly referred to as a frenectomy, becomes more prevalent, there is a growing need for clear, evidence-informed guidance and coordinated interdisciplinary care (Baxter et al., 2023).

Occupational therapists (OTs) play an important role within this team, supporting infants and families pre- and post-procedure to optimize functional outcomes, facilitate feeding and oral motor integration, and reduce the risk of tissue reattachment (Carnino et al., 2023). Despite this, the contribution of occupational therapy in the management of TOTs remains underutilized and often underrecognized within current care models (Merkel- Walsh & Overland, 2024)

Problem & Gap: Caregivers and providers often receive inconsistent and unclear guidance throughout the frenectomy process (Smart et al., 2024). Existing literature emphasizes the relationship between tethered oral tissues (TOTs) and functional outcomes, but primarily focuses on medical and surgical management, with limited attention to standardized, interdisciplinary care before and after intervention (Overland & Merkel-Walsh, 2019). While the importance of therapy is well recognized, there remains a critical gap in practical, accessible tools to support caregivers in implementing these recommendations.

Aim: Develop *Freed to Function*, a comprehensive, evidence-based, OT-informed caregiver resource designed to provide clear, accessible guidance for pre- and post-frenectomy care with the goal of improving functional outcomes and supporting optimal healing.

Method

Freed to Function used a program development design, emphasizing knowledge translation and family-centered care. A needs assessment was conducted to identify gaps in education from both caregivers and providers within the field. Recruitment occurred through convenience sampling via clinical partnerships, social media and professional networking. Participation was both voluntary and anonymous. Data was collected from the needs assessment to assess current level of knowledge and understanding of tethered oral tissues, perceived usefulness of an educational resource and other gaps in care.



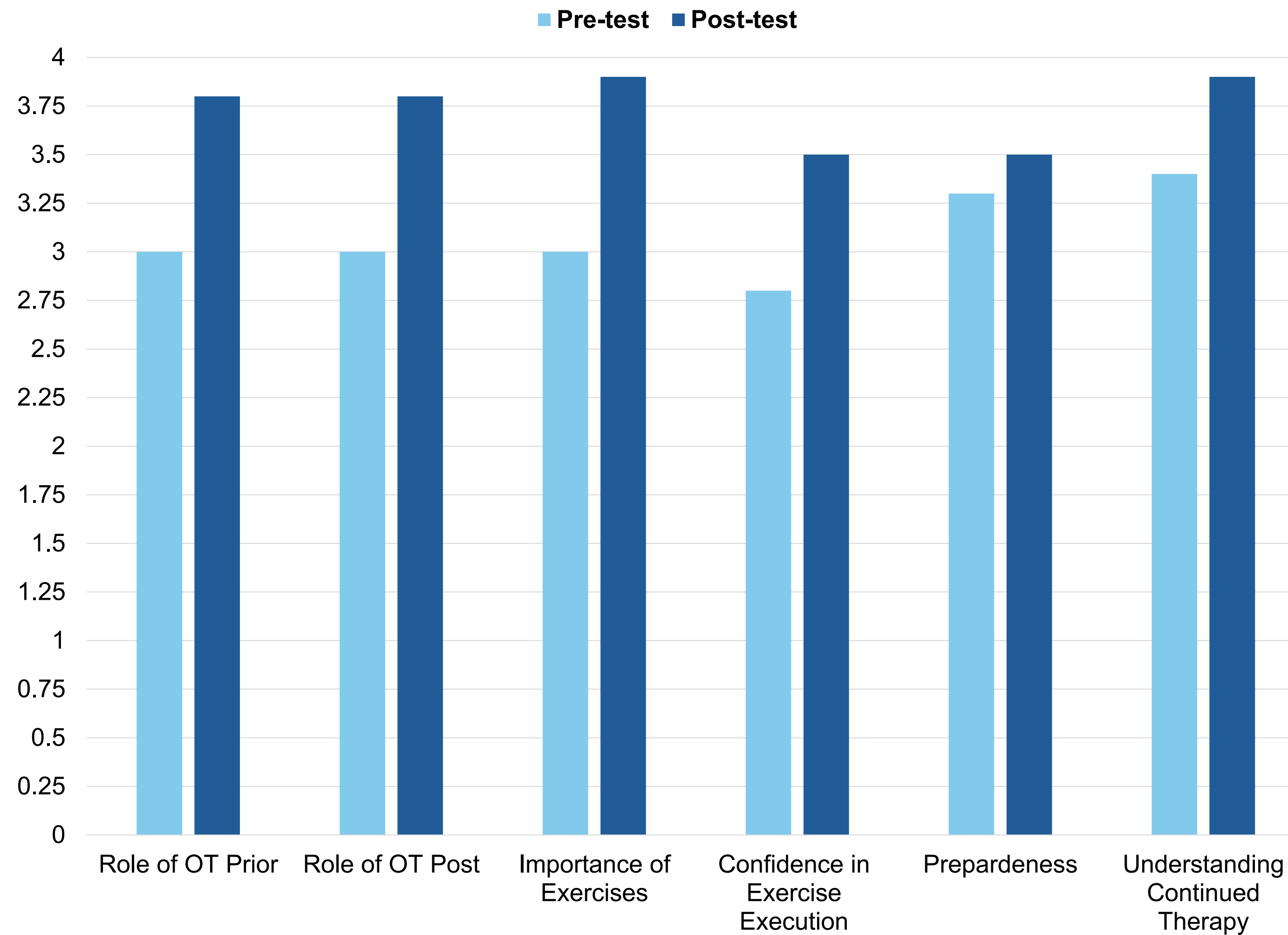
Data from needs assessment was organized using thematic analysis coding and grouped into five recurring themes, including inconsistency in care, need for expectation management, demand for visual resources, financial barriers, and challenges in interdisciplinary collaboration. Findings from the data collection informed the development of the guidebook.

Following completion of the guidebook, 300+ anonymous participants completed pre- and post-intervention surveys to determine knowledge acquisition.

Results

- Pre-test survey data demonstrated limited baseline knowledge among participants' perception of occupational therapy's role in pre- and post-frenectomy care.
- Post-test survey responses showed improved understanding of the key concepts following review of the guidebook, including purpose of exercises, healing expectations, and the importance of continued therapy.
- Participants also reported an increase in general confidence when implementing recommended strategies at home. Overall, findings suggest that the guidebook was an effective tool for improving caregiver knowledge and perceived preparedness.

Average Survey Responses Pre and Post Guidebook Review



This image depicts ankyloglossia, a tethered tongue, prior to a frenectomy.



This image demonstrates the healing process following a frenectomy, as the child is engaging in passive tongue elevation.

Discussion

These findings support the importance of an OT-informed educational resource for caregivers addressing the gaps in knowledge and confidence related to tethered oral tissue management.

The improvements in post-test knowledge suggest that accessible and visually guided materials may increase understanding and promote carryover at home. This reinforces the need for occupational therapy in both pre- and post-frenectomy care for its impact on functional outcomes.

Continued data collection will strengthen these findings as the initial results are promising and support continued use and expansion of this resource.

Conclusions

Findings from this study supported the need for a family-centered educational resource helping families navigate the frenectomy process. The *Freed to Function* survey results directly addressed the gaps in literature and participant knowledge and demonstrated OT's can play a meaningful role in TOT management.

Limitations of this research include the small sample size and use of convenience sampling. Future research should include a larger and more diverse sample size while evaluating the long-term impacts of adherence and functional outcomes.

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References

