

Adapting Constraint-Induced Movement Therapy for Young Children: A Culturally Responsive Case Study

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BACKGROUND

- Constraint-Induced Movement Therapy (CIMT) is a rehabilitation approach that limits use of a stronger limb to promote increased use and functional improvement of a weaker or impaired limb, typically used with clients who have experienced a stroke affecting motor function on one side of the body (e.g., hemiplegia; Sakzewski et al. 2009).
- Although CIMT was originally developed for adults, modified versions have been adapted for pediatric populations (Charles & Gordon, 2005; Moore et al., 2025).
- This case study describes the application of CIMT with a 29-month-old male child with suspected hemiplegia, from an Old Order Amish family.
- CIMT was modified to meet the child's developmental needs and to align with the family's cultural values and practices, while adhering to the core principles outlined in the training program.

METHODS

- The parents had concerns that the child had limited use of the left upper extremity.
- In collaboration with the child's mother, a culturally sensitive, modified CIMT program was developed. The plan considered appropriate dosage, safe methods of limb restriction (i.e., use of an oven mitt), and choosing materials that respected cultural practices (e.g., toys without mirrors or electronic music).
- Using the Baby CIMT manual as a guide, the intervention was adapted by reducing the intensity to 5 days per week, limiting sessions to up to 30 minutes, and setting the total duration of treatment at 4 weeks.
- The therapist provided a home visit once a week during the program to adjust the activities and materials, according to the client's progress.

CONTACT INFORMATION

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Early application of modified CIMT within a culturally respectful, family-centered home program supported meaningful functional change in an infant with suspected hemiplegia.



Note: Image has been AI generated to protect the identity of the child in the case report.

CONCLUSIONS

- Using an evidence-based training program provided a structured framework for applying the core principles of CIMT and achieving positive outcomes for both the child and family.
- The family found the intervention rewarding and were able to carry over strategies into daily routines outside of therapy sessions.
- Developing a strong therapeutic relationship supported engagement and strengthened interactions between the child and parent.
- Adapting the protocol to meet the unique needs and values of the family enhanced their experience and contributed to meaningful improvements for the child.

IMPLICATIONS FOR CLINICAL PRACTICE

- In this case study, adapting the dose, intensity, and duration of therapy, along with accommodating cultural practices, contributed to successful outcomes for both the client and family.
- Collaborating with the family to design the CIMT program supported their engagement and commitment

REFERENCES

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