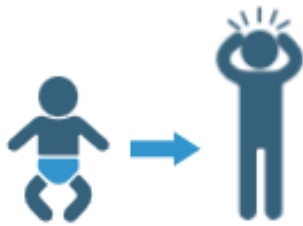


Long-Term Speech Outcomes in Moderate-to-Severe Childhood Speech Sound Disorder: A Systematic Review

Key terms

Severe speech sound disorder, speech, language, communication, systematic review

What is this research about?



Many parents of children with moderate-to-severe speech sound disorder want to **understand how their child's speech will change over time**, and if their speech disorder will **resolve**. However, there is unclear evidence about the long-term speech outcomes in this group.

People with moderate-to-severe speech sound disorder may have one or more speech subtypes including phonological speech disorder and motor speech disorders (e.g., Childhood Apraxia of Speech).

This study aimed to systematically review the current research examining long-term speech outcomes in children with moderate-to-severe speech sound disorder.

What did the research involve?

- Identified 3697 papers from **4 research databases**
- Inclusion criteria required studies:
 - include participants with a **confirmed diagnosis** of moderate-to-severe speech sound disorder and
 - have at least one **follow-up speech assessment**.
- **21 papers containing 15 unique studies** reached inclusion criteria (six had overlapping data)
- The review included 9 cohort and 6 case studies, with data available for **children aged 2y3m-11y9m** at the **initial assessment**
- Studies were appraised for **evidence quality**

What did the researchers find?

- **11/15** studies used two-to-three follow-up speech assessments
- **12/15** studies specified speech diagnosis or subtype, with most looking at Childhood Apraxia of Speech
- **Case studies** (a sample size <5 participants) examined many **specific speech outcomes** including word and syllable accuracy, consistency, and intelligibility
- **Cohort studies** reported **overall improvement in speech ability**, rather than specific changes



What does this mean for children with moderate-to-severe speech sound disorders and their families?

- Case studies found that children with moderate-to-severe speech sound disorder have **improved overall intelligibility over time** but can have **persistent difficulties and error types**.
- Case studies had more specific and detailed data on how speech changes over time
- **More rigorous cohort studies** are needed to confirm findings from case studies



Want to learn more?

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