

From Fragile Beginnings to Resilient Futures: Considerations for Infants/Toddlers Born Prematurely

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Prematurity

Prematurity and deafness are two distinct health issues that can profoundly impact an individual's life and communication development (Jones, et al., 2020). Understanding the link between hearing loss and prematurity is essential for early interventionists. While they may seem unrelated, there is a complex connection between these two conditions.

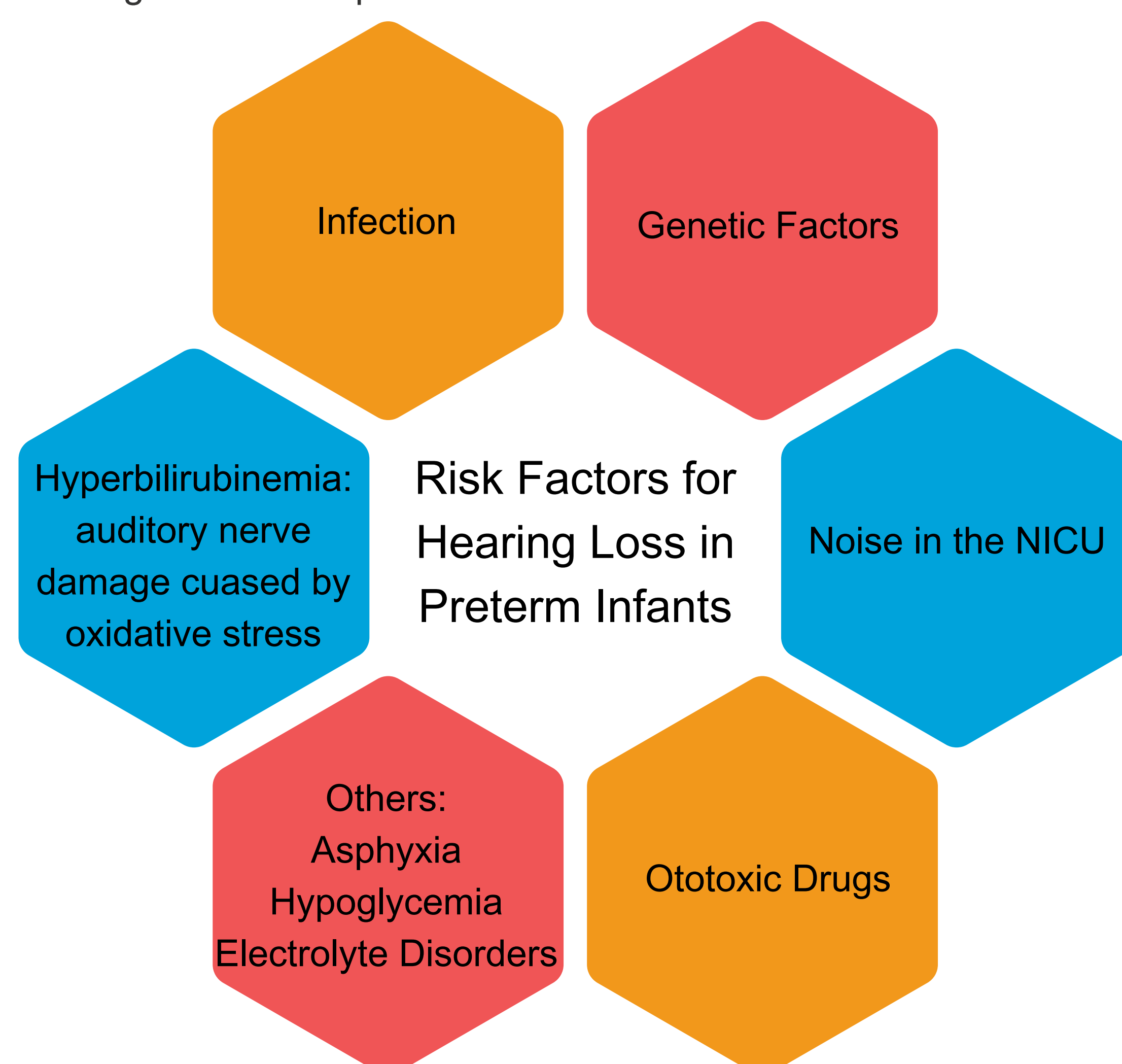
Prematurity refers to birth before 37 weeks of gestation. These early arrivals often require specialized care in neonatal intensive care units (NICUs). Premature infants, especially those born extremely premature, face numerous health risks due to their underdeveloped organs and systems. One such risk is an increased likelihood of experiencing hearing loss.

According to ASHA (n.d.), 1 in 3 per 1000 preterm infants have hearing loss. In 2020, World Health Organization stated that 34 million children have hearing loss worldwide. While practitioners serving DHH children may be aware of the challenges in communication and language development, they may be less familiar with interventions designed to support preterm infants. The use of adjusted/corrected ages when tracking development is one important intervention for preterm DHH infants and toddlers. With a greater understanding of the impact of prematurity on the development of DHH learners, practitioners will feel empowered to support families, by sharing effective resources and findings.

Risk Factors for Hearing Loss and Areas of Concerns

Developmental domains that are affected by prematurity and hearing loss:

- Sensory Processing
- Social-Emotional
- Language and communication skills
- Cognitive development motor skills

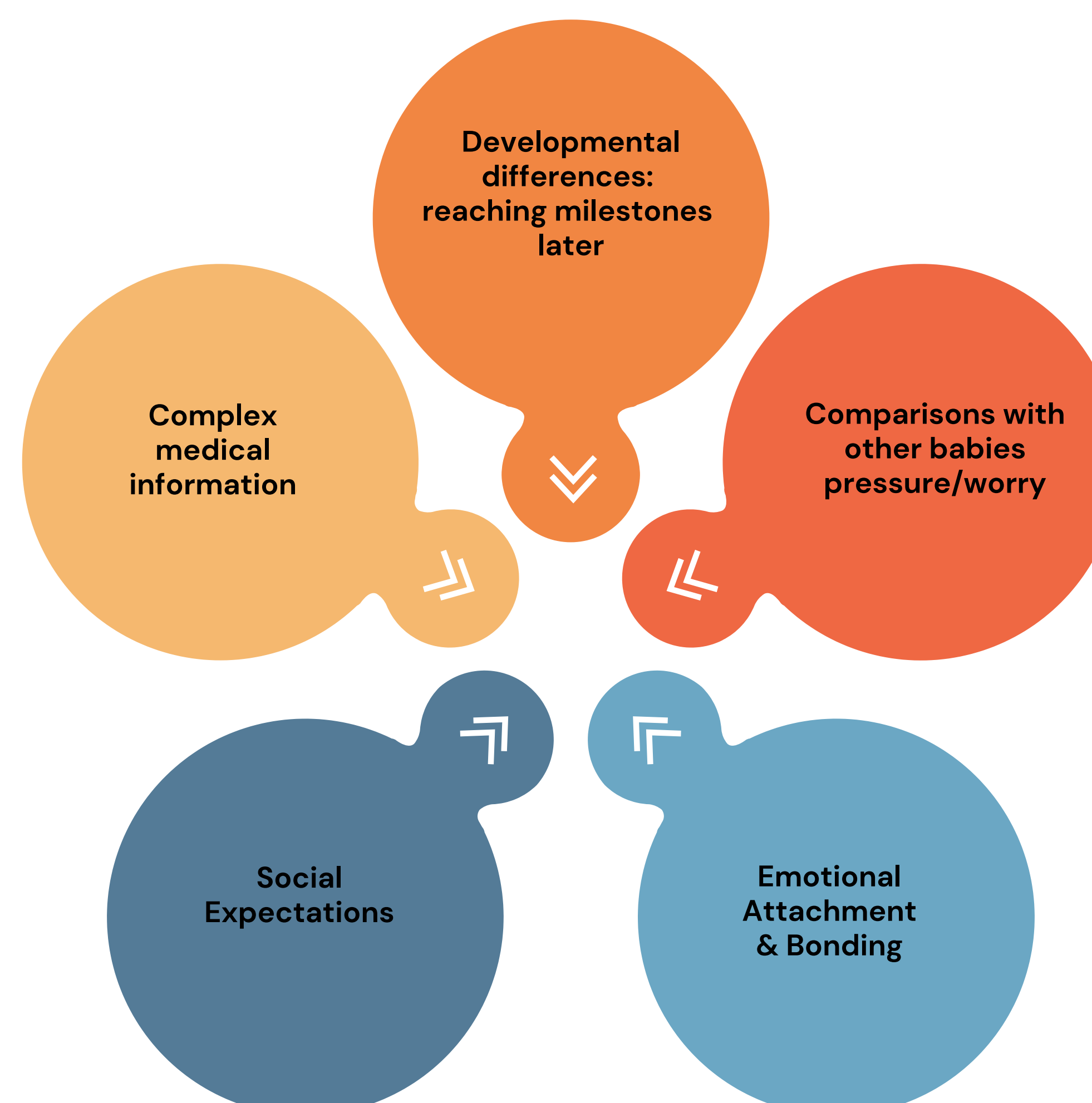


Methodology

- Examination of diverse testimonies from the book *What We Didn't Expect: Personal Stories About Premature Birth* by Melody Schreiber and 6 family interviews were conducted.
- Additional surveys were taken on a social media platform in 3 groups that contained teachers for the Deaf: including early interventionists, itinerant, and classroom teachers. The responses were collected from 118 participants.

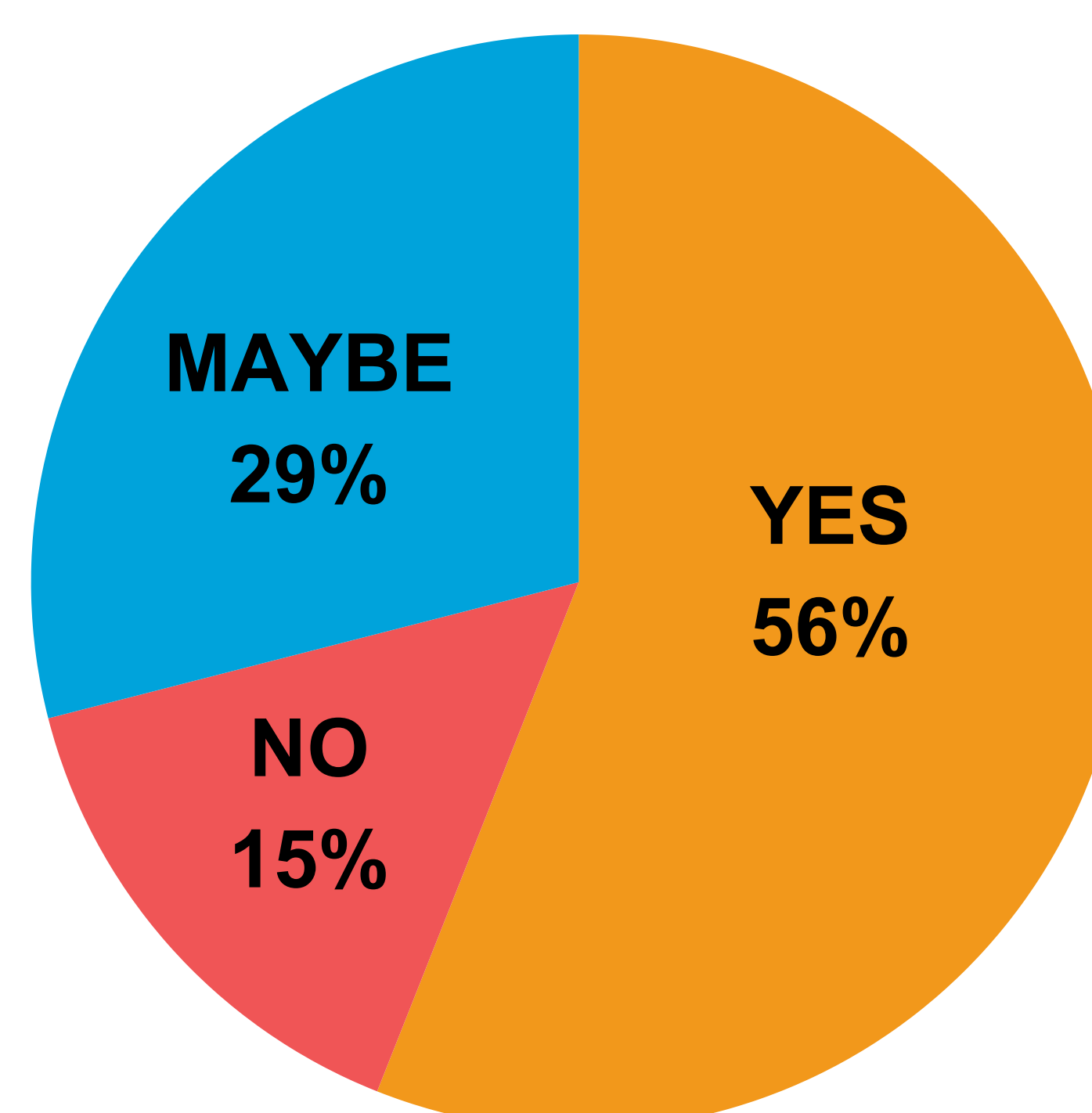
What Families Said

Things that are difficult to understand:



What Providers Said

Do you use the adjusted/corrected age with your DHH students who were born preterm?



Tips for Supporting Families

- Active listening
- Provide detailed information
- Connect them to resources
- Encourage self-care
- Show examples of the corrected age applied to different milestones
- Provide open communication with health care professionals
- Support & community groups

Tips for Providers

- Premature & Deaf Infant and toddlers can:
 - overstimulate easily
 - get fatigued or shut down
 - withdrawal
 - sensory issues
- Pediatricians suggest using the corrected age up to age 3 to give them time to catch up to their typically developmental peers.
- Children born prematurely or with speech impairments, auditory processing delays, physical impairments, hearing impairments, and intellectual disabilities all may have problems processing information.
- When planning prepare multiple activities that are focused on only 1 or 2 sensory inputs at a time.
- Follow the child's signals if overwhelmed/discomfort and allow the child to lead aligned with natural communication goals

References

- Jones, Alisha L. AuD, PhD; Weaver, Aurora J. AuD, PhD. Prematurity and the Auditory System: Considerations for Audiologists. *The Hearing Journal* 73(8):p 40,41,42, August 2020. | DOI: 10.1097/01.HJ.0000695848.24587.a5
- American Speech-Language-Hearing Association. (n.d.). Hearing Loss in Children [Practice Portal]. <https://www.asha.org/Practice-Portal/Clinical-Topics/Permanent-Childhood-Hearing-Loss/>
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