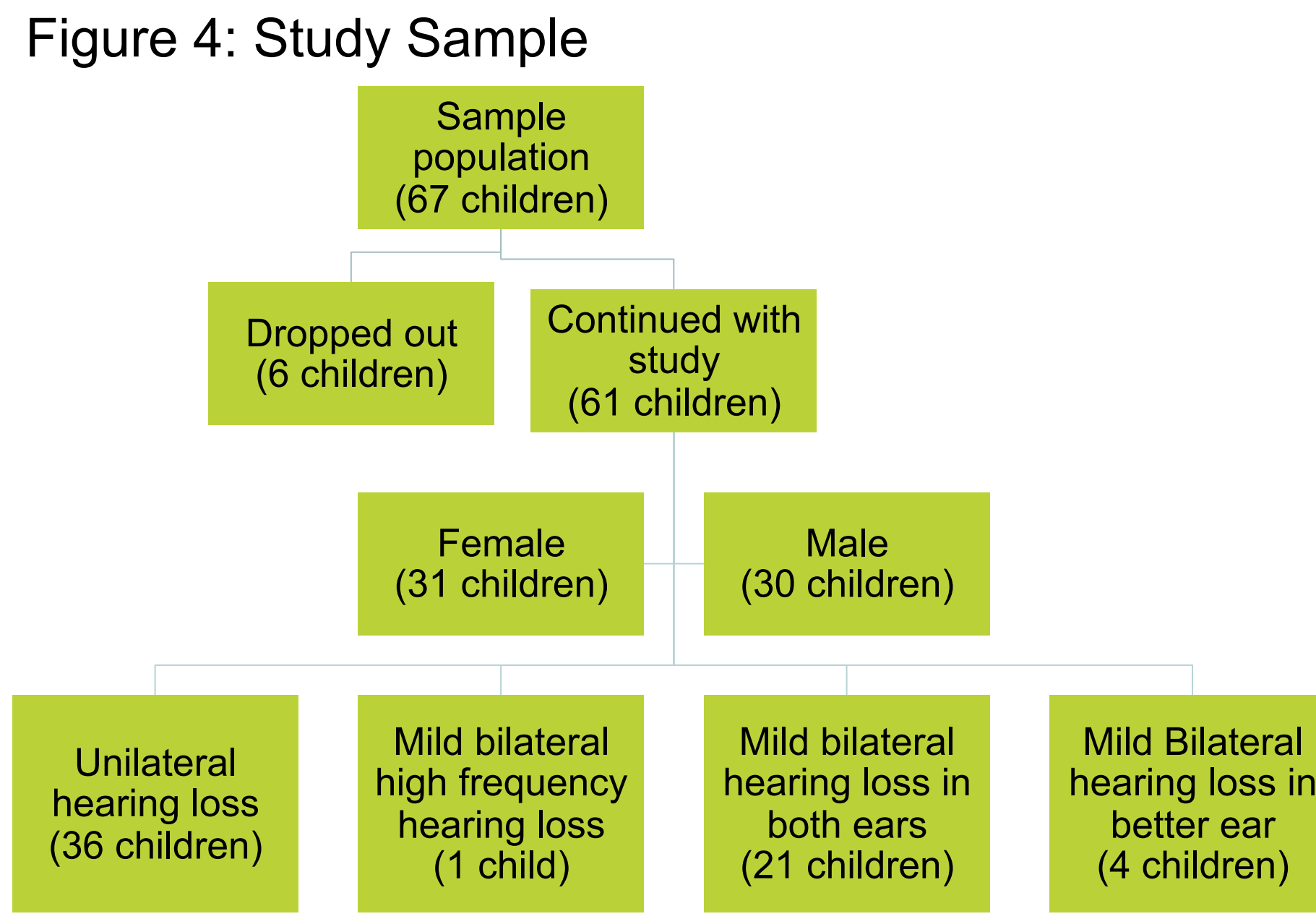


Methodology

Study Sample:
 • Children up to three years of age, who are identified with a permanent mild bilateral or unilateral hearing loss (sensorineural or conductive)
 • Children in homes with one parent who is functional in spoken English. For example, the families' native language is used at home but one parent speaks English as well.



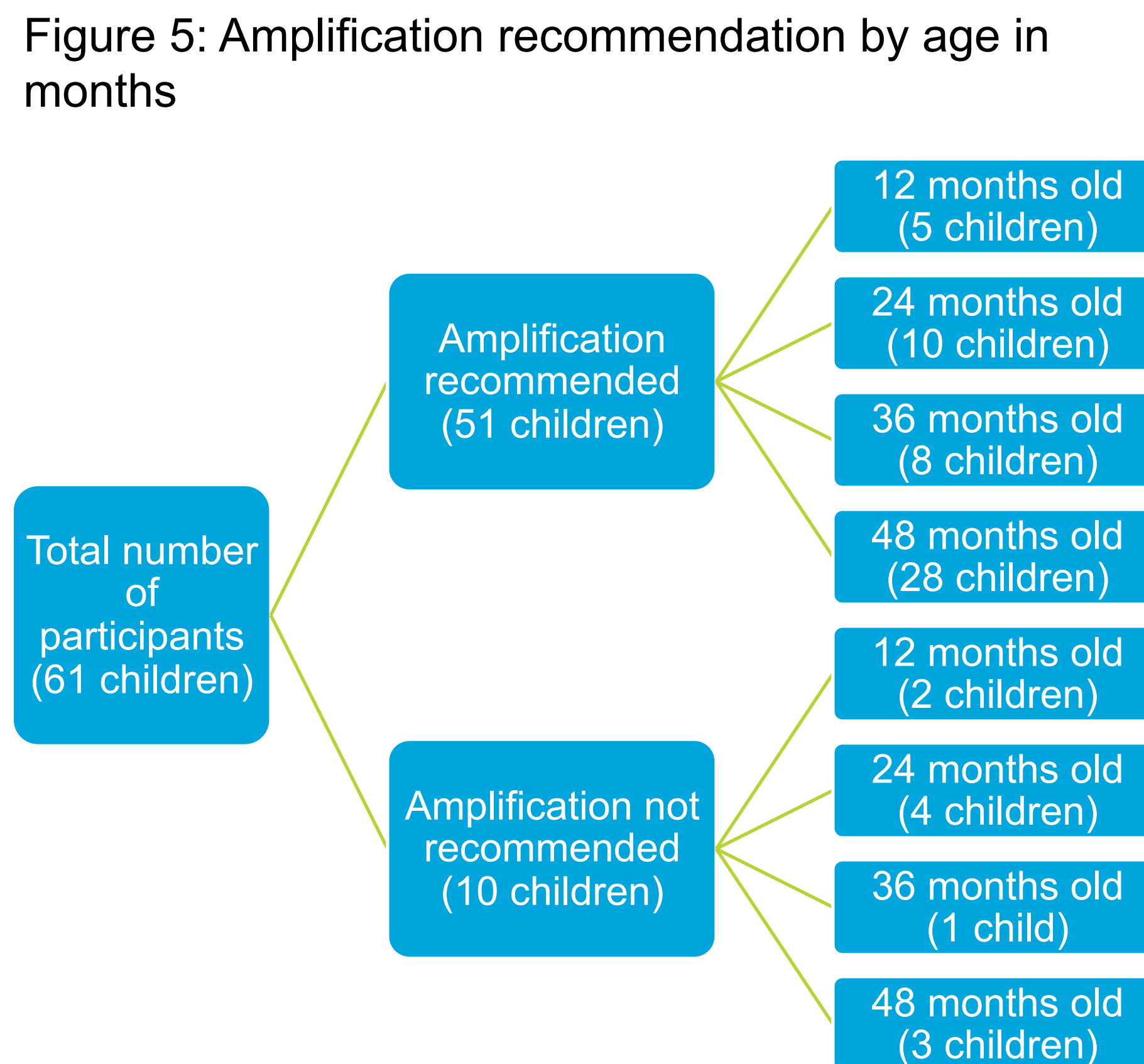
- Intervention questionnaires from 61 participants were collected as part of the annual study assessment. The following information was collected:
 - Was amplification recommended
 - Was the recommended amplification used
 - Hearing health (i.e. ear infections, insertion of tubes, etc.)
 - What therapy services was the child receiving
 - Childcare arrangements
- Data were entered and analyzed using SPSS v. 22

Table 1: Ages of children at their most recent assessment

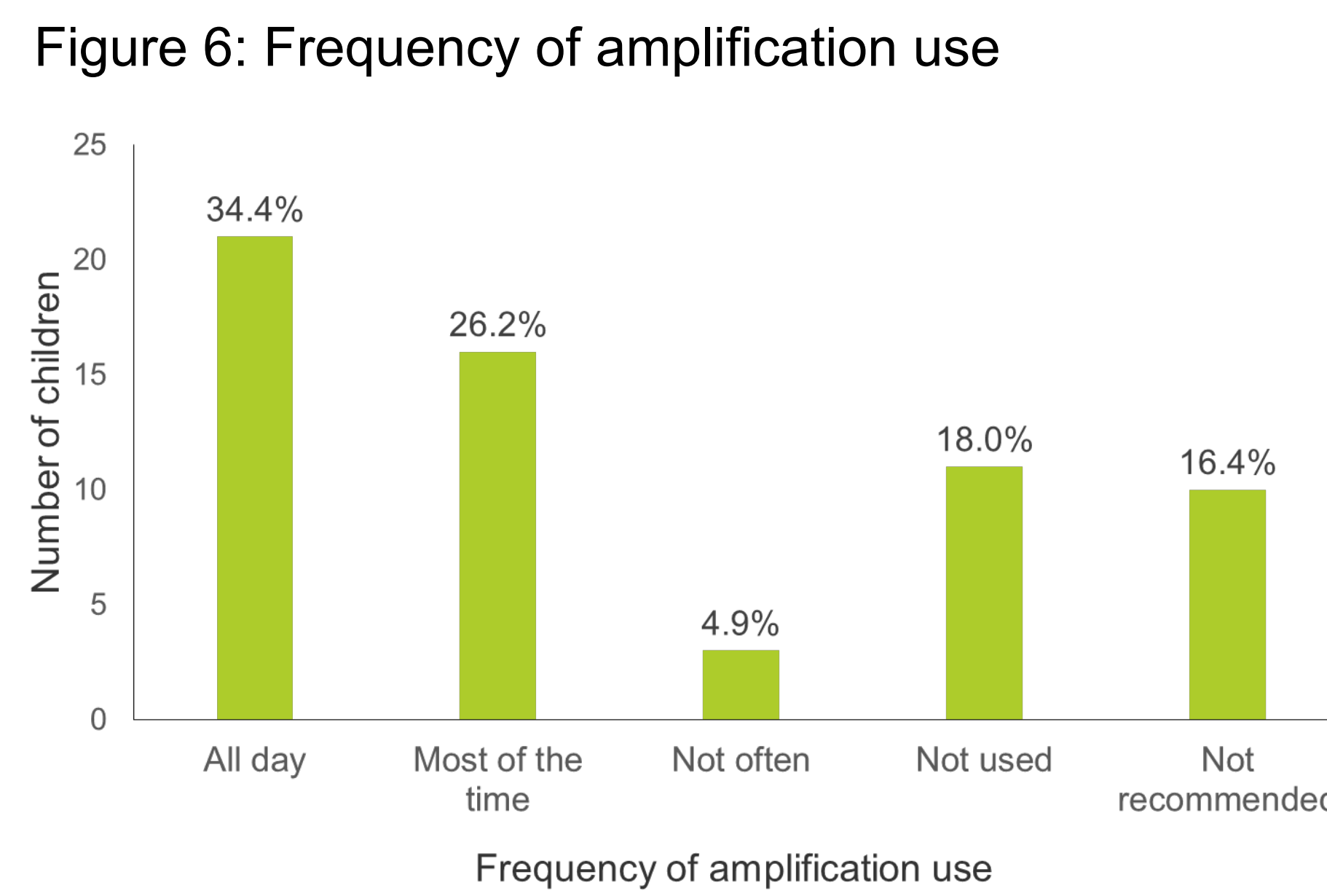
Age (months)	Number of children
12	7
24	14
36	9
48	31
Total	61

Results

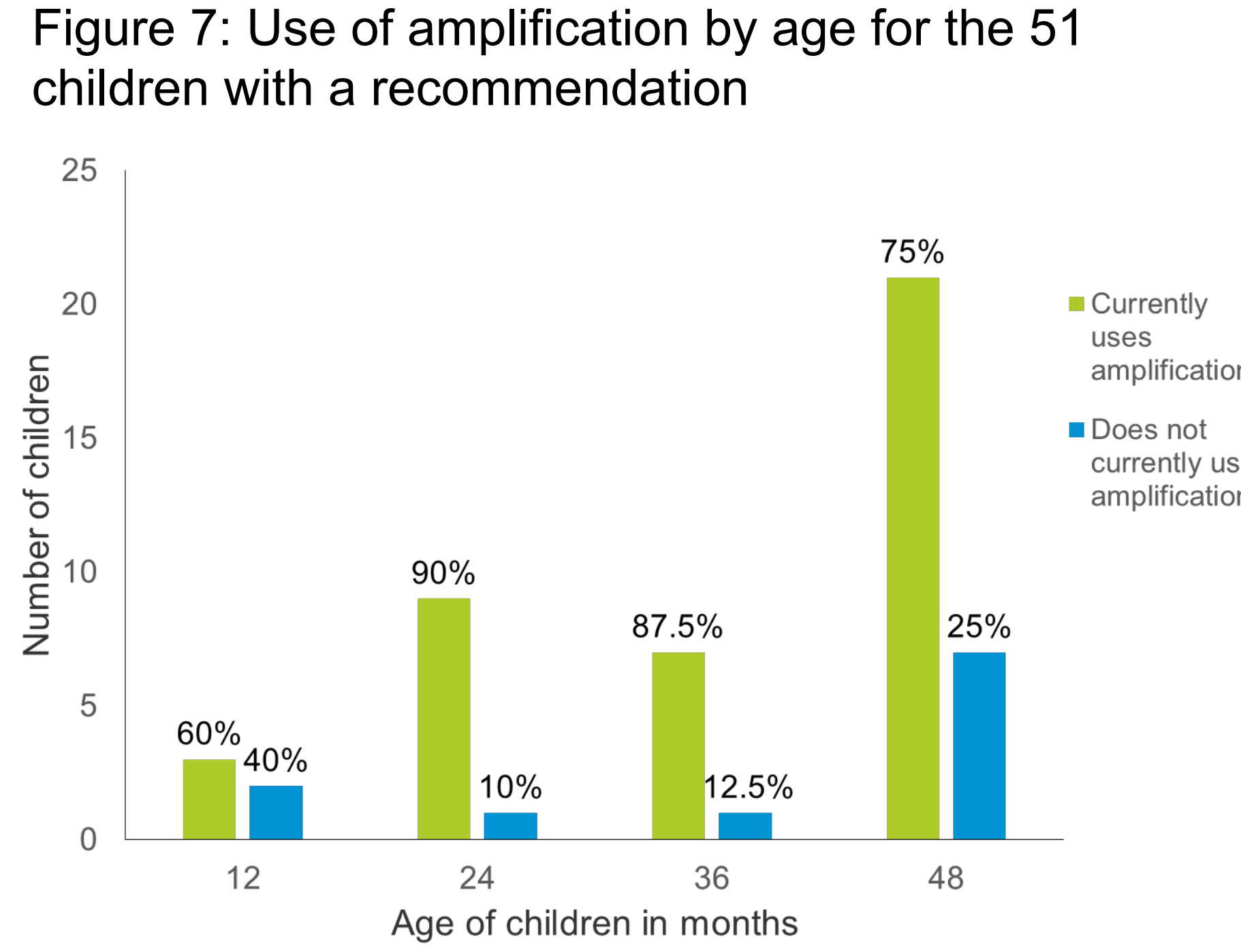
Are children with mild bilateral/unilateral hearing loss using amplification that has been prescribed?



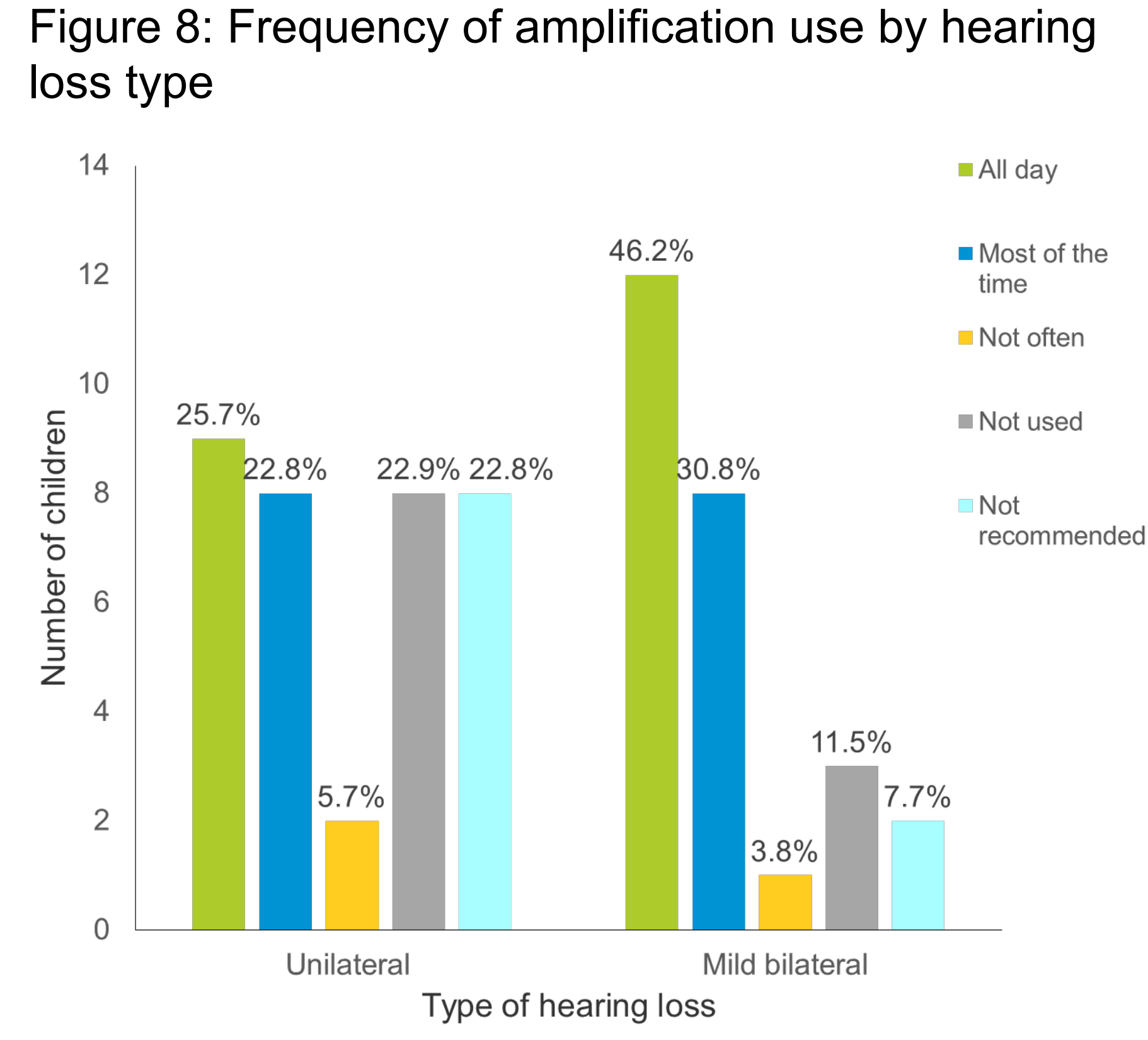
- 51 of the 61 (83.6%) children had a recommendation for amplification
- Recommendations were not associated with unilateral/bilateral HL or age of the child
- 11 of the 51 children (21.6%) do not use recommended amplification
- Of the 40 children who are using their amplification, 37 (92.5%) use amplification regularly



Are there differences in clinical characteristics of children who use/or do not use their amplification?

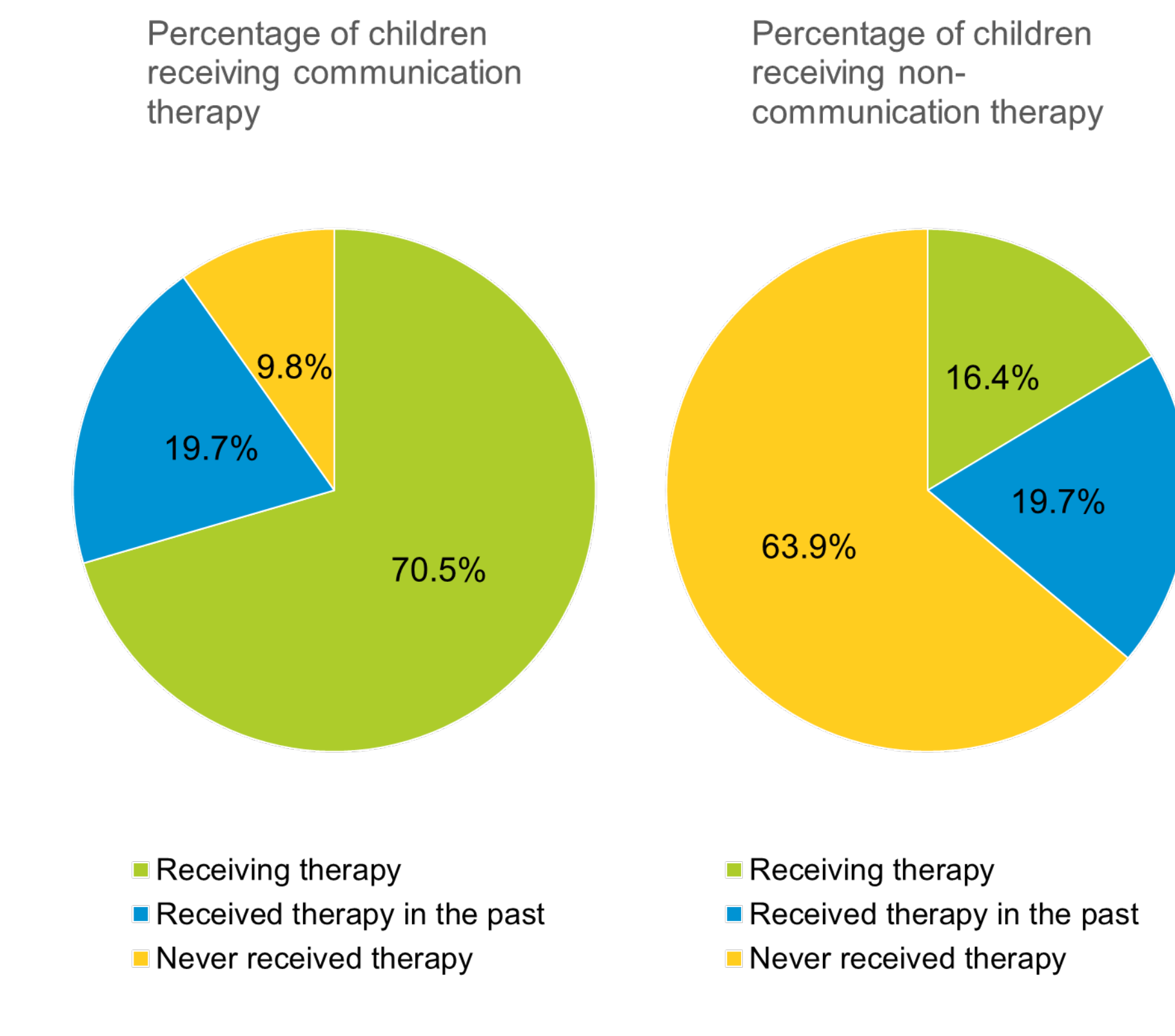


- 81.5% of females and 75.0% of males currently uses amplification
- Of 51 participants that have been recommended with amplification:
 - 27 children have a unilateral hearing loss
 - 24 children have a mild bilateral hearing loss
- 70.4% of children with unilateral hearing loss currently use amplification
- 87.5% of children with mild bilateral hearing loss currently uses amplification



- Age is not a significant factor influencing use of amplification (Cramer's V = .216, P = .498).
- The sex of the child is not a significant factor affecting the use of amplification (Chi² = .316, P = .412).
- More than 75% of mild bilateral hearing loss patients use their amplification regularly in comparison to less than 50% of regular amplification users in unilateral hearing loss children.
- However, there is no significant difference between children with unilateral or bilateral hearing loss in the use of amplification (Chi² = .2204, P = .182).

Are children with MBUHL receiving therapy interventions to support development?



Conclusion

No significant factors influencing the use of amplification in the study sample was found. Also, there were no significant factors influencing the frequency of use found in the study sample. Most MBUHL children in the study sample are receiving or have received therapy interventions to aid in the support of development. However, it is evident that communication rehabilitation is used by a larger group in the study sample.

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Introduction

Mild bilateral and unilateral hearing loss (MBUHL) was previously prone to late-identification in children. However, with the implementation of universal newborn hearing screening (UNHS), MBUHL is now being identified in early childhood. Published evidence suggests that MBUHL affects approximately 0.4 to 1.3 per 1000 newborns (Watkin & Baldwin, 1999; Johnson et al., 2005). Also, a review of children followed at the Children's Hospital of Eastern Ontario Audiology Clinic in 2011 showed that up to 40% of children have MBUHL (Fitzpatrick et al., 2013).

It is agreed upon that these children need to be fitted with amplification. There is also some research that shows that those who consistently use their amplification will have better outcomes, but factors affecting the use of amplification among MBUHL patients are not clear (Walker et al. 2013). While some researchers have concluded that age, degree of hearing loss and socioeconomic status affect the use of amplification (Walker et al., 2013), others conclude that early intervention and the use of therapies are predictors of amplification use (Roush & Harrison, 2010).

This study is a part of a larger project that examines the developmental outcomes of early-identification on children with MBUHL. The objectives of this study are:
 1. To examine the recommendations and use of amplification in children with MBUHL
 2. To explore the differences in characteristics between children who do and do not use amplification
 3. To investigate the usage of therapy interventions for MBUHL children.

