Preschool hearing screening is needed to detect all children with hearing loss

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Background: The prevalence of childhood hearing loss doubles from birth to school-age. Risk factor surveillance and preschool hearing screening are two common strategies for detecting hearing loss after the newborn period.

Aim: To explore the modes by which childhood hearing loss is detected after the newborn period.

Method: A retrospective review of medical journals was conducted for children with hearing loss who passed newborn hearing screening, born from 2006 to 2015.

Result: Out of 326 children with hearing loss in the cohort, 38% were detected by preschool hearing screening; 68% of those detected by screening had no reported risk factor for late-onset hearing loss. Sixty-nine percent (69%) of children in the cohort had a mild or unilateral hearing loss, and the severity of the hearing loss in the better ear correlated with the age of referral to the audiology clinic. Parental concern as a reason for referral was observed for children with pure-tone averages significantly higher than children referred for other reasons. In total, only 13% of children had parent or teacher concern reported during the intake to the audiology clinic.

Discussion: The most common method for detecting hearing loss after the newborn period was preschool hearing screening. Most of these children detected by screening did not have risk factors, suggesting that risk factor surveillance alone is not a sufficient strategy for detecting postnatal hearing loss. Parent or teacher concern is also a poor strategy for detection. Most children in the cohort had mild or unilateral hearing loss.