

## **Newborn Hearing Screening: Experience from a Center in South part of Iran**

**Authors :** Marzieh Amiri, Zahra Iranpour Mobarakeh, Fatemeh Mehrbakhsh, Mehran Amiri

**Abstract :** Introduction: Early diagnosis and intervention of congenital hearing loss is necessary to minimize the adverse effects of hearing loss. The aim of the present study was to report the results of newborn hearing screening in a center in the south part of Iran, Fasa. Material and methods: In this study, the data related to 6,144 newborns during September 2018 up to September 2021, was analyzed. Hearing screening was performed using transient evoked otoacoustic emissions (TEOAEs) and automated auditory brainstem response (AABR) tests. Results: From all 6144 newborns, 3752 and 2392 referred to the center from urban and rural part of Fasa, respectively. There were 2958 female and 3186 male in this study. Of 6144 newborns, 6098 ones passed the screening tests, and 46 neonates were referred to a diagnostic audiology clinic. Finally, nine neonates were diagnosed with congenital hearing loss (seven with sensorineural hearing loss and two with conductive hearing loss). The severity of all the hearing impaired neonates was moderate and above. The most important risk factors were family history of hearing loss, low gestational age, NICU hospitalization, and hyperbilirubinemia. Conclusion: Our results showed that the prevalence of hearing loss was 1.46 per 1000 infants. Boosting public knowledge by providing families with proper education appears to be helpful in preventing the negative effects of delayed implementation of health screening programs.

**Keywords :** newborn hearing screening, hearing loss, risk factor, prevalence

**Conference Title :** ICONSS 2022 : International Conference on Otolaryngology, Neurotology and Skull Based Surgery

**Conference Location :** Vienna, Austria

**Conference Dates :** December 29-30, 2022