FACTORS ASSOCIATED WITH THE AUDITORY PERFORMANCE OF PEDIATRIC COCHLEAR IMPLANT USERS

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The main objective of this study was to identify several factors that might be associated with the auditory performance of pediatric cochlear implant users. A total of 33 children aged 2 years 10 months to 12 years 3 months who underwent cochlear implant under the Universiti Kebangsaan Malaysia Cochlear Implant Program were involved in this study. The duration of cochlear implant usage ranged from 3 months to 8 years 5 months. The subjects’ auditory performance was evaluated using the Malay version of parents’ questionnaires MAIS and MUSS and speech perception tests using the closed-set ‘Monosyllabic-Trochee-Polysyllabic’ (MTP) words and open-set sentences. There was a significant correlation between the amount of quality time that parents spent with their children per day and the MAIS score post-implantation (p<0.05). However, there was no significant correlation between the total hours of hearing aid usage per day with the MAIS scores post-implantation (p>0.05). It was also found that MAIS score reached more than 90% after approximately four year post-implantation. Other significant factors which were correlated with good auditory performances included age when tested and duration of implant usage (p<0.05). It was found that the primary factor associated with the good auditory performance was the duration of implant usage. To conclude, age when tested, experience with the implant and the amount of quality time that parents spent with their children per day were associated with better auditory performance post implantation.