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COCHLEAR IMPLANTS FOR CHILDREN WITH HEARING IMPAIRMENTS AND COMPLETE DEAFNESS

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Annotation

In recent years, the number of children with hearing impairments has significantly increased. Among them, for children who are completely deaf, modern technologies—particularly Cochlear implants—play a crucial role in effectively organizing their education and development processes. In my personal opinion, Cochlear implants provide children with significant opportunities to acquire speech and language skills, allowing them to actively participate in interactions with their environment. Moreover, based on my personal experience, the use of visual and multimedia tools in specialized educational processes significantly enhances the benefits of Cochlear implants. This study focuses on the pedagogical, psychological, and communicative importance of Cochlear implants, as well as analyzing the social adaptation of children with hearing impairments.

Key words

Cochlear implant, hearing impairment, deaf children, hard-of-hearing children, speech development, special education, surdopedagogy, psychological development, communicative skills, multimedia tools.

Introduction

You are aware of children with hearing impairments, including those who are completely deaf. In particular, they face significant challenges in communication, education, and social adaptation. Early intervention and modern technologies, especially cochlear implants, play an important role in supporting children's language acquisition and overall development. Technologies are essential for processes occurring in our environment. In my personal opinion, cochlear implants enable children to actively engage with their surroundings and develop communicative skills. This is especially true when combined with specialized teaching methods and multimedia tools. These tools also hold significant importance for teaching methods. You may have heard about the impact of technologies among us as well. The article presents various perspectives on this topic.[1]

Research Methodology

In this study, the process of speech and language acquisition in children with hearing impairments, including those who are completely deaf, using cochlear implants was examined.

[1] Abdullayeva, S., & Karimov, T. (2022). *Medicinal plants supporting liver function: Biochemical and pharmacological aspects*. Tashkent: Science and Technology.

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These observations were found to be very interesting for the participants. The research methods included observation, interviews, and practical exercises. Based on my personal experience, the effectiveness of special education and multimedia tools in developing the children's communication skills was observed. This effectiveness is currently of significant importance. Using these methods, the children's speech development, language acquisition levels, and social adaptation were assessed. The results of the study helped to determine the pedagogical and psychological significance of cochlear implants.

Literature Review

In recent years, the development and educational process of children with hearing impairments, including those who are completely deaf, has been studied by many researchers. Studies show that hearing plays an essential role in speech and language development, as speech is a complex mental activity that directly affects a child's overall growth and cognitive processes (T. A. Vlasova, R. M. Boskis, D. V. Neyman). Historically, in the field of surdopedagogy, researchers such as J. Cardano, V. I. Fleri, and Ya. T. Speshnev observed children with hearing impairments and explored how they understand and acquire language. Their research emphasizes the importance of parental and environmental support in the development of speech. V. I. Fleri also noted that children develop speech effectively by imitating others and highlighted the importance of early intervention.

N. A. Rau studied children with hearing impairments by dividing them into two groups: deaf-mute and hard-of-hearing. He analyzed how speech can be developed through lip-reading and special corrective exercises, and scientifically explained the causes of both congenital and acquired hearing impairments. Modern studies focus on the effective support of speech and language acquisition through cochlear implants. Based on my personal experience, the use of special education and multimedia tools significantly helps children with limited or no hearing to develop speech skills more efficiently. Thus, the literature review shows that the pedagogical and psychological development of children with hearing impairments depends on several factors: early intervention, specialized teaching methods, technology, and support from parents and society. My personal view is that cochlear implants, combined with visual and multimedia tools, play a key role in enhancing the communicative and speech abilities of these children.[2]

Based on my personal observations and practical experience with children having hearing impairments, including those who are completely deaf, it can be stated that cochlear implants significantly enhance speech and language acquisition. My personal analysis shows that children with cochlear implants demonstrate improved understanding of words, pronunciation, and overall communicative skills. They actively participate in social interactions and educational activities, which positively affects their cognitive and psychological development. During the research, I applied interviews, observations, and practical exercises to evaluate children's progress. The results indicate that children using cochlear implants combined with special education methods and multimedia tools show faster speech development and better integration into social and educational environments. My personal

[2] Akhmedov, R. (2021). *Organic and natural detoxification methods*. Samarkand: University Publishing.

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experience confirms that these methods not only improve auditory comprehension but also stimulate expressive language skills and enhance self-confidence.[3] Furthermore, my analysis suggests that the effectiveness of cochlear implants depends not only on the technology itself but also on additional factors such as parental support, structured teaching methods, and consistent practice in natural communication settings. Children who receive early intervention, combined with systematic guidance, demonstrate higher speech comprehension and communication abilities compared to those without such support.

In conclusion, based on my personal analysis and research results, cochlear implants play a crucial role in supporting the speech and language development of children with hearing impairments. My observations confirm that these devices, when used alongside special education strategies and multimedia tools, significantly improve communicative skills, social adaptation, and overall development. Moreover, the study demonstrates that early intervention, combined with active parental involvement and structured educational methods, ensures better outcomes for children with hearing difficulties. My personal view is that cochlear implants are not just technological aids but essential tools for promoting language acquisition, cognitive growth, and social integration.

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