Issues Faced by the Cochlear Implanted Students in the Mainstream Classes: An

Analysis of Perspectival Accounts of Primary School Teachers

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Abstract

Learning to write is developmentally essential for nurturing literate children; its inability creates a huge barrier so is true for cochlear implanted students who face several challenges in terms of literacy and language development proficiency. It is a big challenge for any child with any kind of disability especially a listening disability to cope in the mainstream classroom with their peers and the communities where they live. And so is true for teachers of mainstream classes in their efforts towards classroom learning in a comfortable environment for such students. These papers aim at investigating perceptions and the problems faced by the primary teachers while teaching CI students in the mainstream classes. The study adopted qualitative methodology and the sample was purposively selected comprising of seven primary teachers who had CI students in their respective classes and were teaching them. Semi-structured interviews to determine the perceptions and the problems that were grouped into four major themes of the study. The results highlighted the importance of teachers' awareness, their training, and the use of differentiated instructions to help CI learners to cope in the mainstream classroom to their maximum potential.

Keywords: Cochlear Implanted, Mainstream, Educational Challenges

Introduction

Educational institutions are expected to fulfill the special needs of all the students who are from the different sectors of the society and include learners with diverse backgrounds, with different types of needs, interests, needs, abilities, and learning styles (Krzyżak, 2006). Therefore, the population in schools in the mainstream schools have turned into a differentiated and culturally diverse place due to the increasing number of students every year as reported by Sónia, (2012) and the population in schools tend to be heterogeneous and complex in nature (César 2000; Vieira, 2011). Hence, to make the environment more beneficial for all the stakeholders, it is essential to resolve the challenges that are faced in reality than from what is documented (Sónia, 2012).

In schools, apart from bright students, some students do not come up to the required standard. Such types of students are usually considered lazy and their respective institutions think teaching them is an uphill task. Many of the labeled students encounter problems while processing the information, or else in writing and reading (Krzyżak, 2006).

One of the most important components that all learn from school is to develop the ability to read. However, it is a proven fact that every person is distinct but some out of these are so different that they do not fall into this typical category. In the past, the deaf or hard of hearing children were not admitted to mainstream schooling. However, a change in recent times has been noted in choosing an educational institution ever since the pediatric cochlear implant began. Geers and Hayes (2011) in their study found that teenager students (75%) attended high school, elementary classes were attended by 63% students and about 5% of youngsters were sent to an educational institution for special needs., In another study conducted in Austria, the results showed that 80% of students attended the mainstream classes and research also highlighted the importance of uniformity of educational criteria for CI learners and the normal hearing learners (Huber, Wolfgang & Klaus, 2008). A study conducted in Finland about demographics depicted that 50% of D/HH students were sent to kindergarten and 43% of school-going children studied in the mainstream classes (Lonka, Hasan, & Komulainen, 2011). Keeping the data in view one can deduce although early implantation is an expensive

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procedure CI should study in the mainstream classes. Tobey, Rekart, Buckley, and Geers (2004) stated the improvement was noticed in the language development of the children who got early especially in children aged between 8-9 years as the school provided them the support in oral communication skills. These students studied with normal hearing peers who had higher speech skills.

The Pakistani government has introduced and encouraged mainstream classrooms in its educational policies, for example, the National Education Policy (2009) advocates child-friendly as well as inclusive education (Khan, 2017) yet, there is a need to explore the teachers' perceptions towards this concept. Hodkinson (2006) agrees to the fact that teachers' teaching programs could affect their perceptions and support for mainstream classrooms, and therefore, it is necessary to investigate the experiences of teachers concerning the teaching and facilitation of students with cochlear implantation.

Significance of the study

The current study is designed to investigate teachers' perceptions towards the academic performance of cochlear implant primary level students in the mainstream classrooms within the Pakistani context. This research has significance for educational communities as it highlights special educational needs for CI students, the importance of teachers' training, and the use of differentiated instructions to cater to the needs of the CI learners in the mainstream. To the best of the researchers' knowledge, this is the first study focusing on the perceptions of the teachers of CI students in our context.

Objectives

The objectives of the present research were to:

- 1. Investigate the perceptions of primary school teachers about the academic performance of CI students.
- 2. Identify the problems faced by Pakistani teachers while teaching CI students in mainstream classrooms.
- 3. Identify the strategies employed by the teachers to cater to the need of CI students.

Research Questions

- 1. What are the perceptions of the primary school teachers about the academic performance of CI students?
- 2. What are the problems faced by primary school teachers while teaching CI students in mainstream classrooms?
- 3. What are the various strategies employed by the primary school teachers to cater to the need of CI students?

Methodology

Data Collection Method

A qualitative approach based on the interpretivism/ constructivist paradigm was employed for the present research to provide the researchers with an understanding of how to examine the situation covering contextual circumstances and give an in-depth understanding of it (Yin, 2013).

Data Collection instrument

Data was collected through semi-structured interviews. The semi-structured interviews were conducted to investigate teachers' perceptions about the challenges they face while teaching CI students.

Research Participants

To collect data, semi-structured interviews of seven teachers were conducted by the researcher in person. These teachers were selected through the use of 'purposive sampling' which is a sampling strategy based that the researcher should select a sample from which the most information can be gained to discover, understand, and gain insight (Merriam, 2009:77). Dr. Khan, an audiologist working in a private hospital in Lahore helped in providing information about CI students, and through these students, the researcher was able to identify and approach their respective teachers.

Procedure of Data Collection

The research participants were primary school teachers from three private schools in Lahore. Five of the participants had a Master's degree in English Language Teaching and had more than five years of teaching experience. The rest of the two teachers had done their MPhil in English Language Teaching. All schools were in the central city with a purpose-built building. The participants were assured that their individual responses would remain anonymous. The duration of each interview was thirty to forty minutes. The audio recording of the interviews was done and later on was transcribed by the

researcher. The credibility of the transcribed data was ensured by sending it back to the participant teachers for authentication.

Data Analysis

The transcribed data was then thoroughly reviewed, coded and a thematic analysis was conducted. The verbatim quotes of the participants were used to exemplify certain themes.

Data Finding and Analysis

Teachers' awareness of cochlear implantation

It was deduced from the interviews of the teachers of deaf or hard of hearing that a pivotal role is played by the teachers in their inclusion in the mainstream. The respective teachers of the present research thought that knowledge and awareness regarding the special academic as well as social needs of these students are crucially important. Teachers A, B, C, and E thought that well-versed, qualified and trained teachers should be employed in the primary classes to provide them the required support and guidance is provided to deaf or hard of hearing students. They were of the view that through needs analysis and due appreciation could produce beneficial academic results.

The teacher D who had a hearing-impaired son and during his early years was able to do a correspondence course offered by John Tracy Clinic, California pinpointed the importance of awareness about D/HH needs. The other two teachers A & C had gained some knowledge about C1 through online sources. According to teacher A, this study provided a lot of knowledge about the special needs of these CI. She believed that to help and provide the essential support to CI students to the maximum, they should be provided the necessary training they were going to have CI in their school. The two teachers C and D stated that they could make CI students feel comfortable and learn at their own individual pace when they can identify the common problems they face. Teacher D said that she can make the CI feel at ease in her class and do understand the problems they face but still she cannot be a replacement for a professionally trained and qualified teacher.

General education teachers require appropriate knowledge and experience so that to provide support and their special needs are met (Marschark, Sarchet, Rhoten, & Fabich 2010) whereas no experience, lack of knowledge and minimum support could compromise the abilities of students with hearing impairment show progress in the inclusive classrooms (Eriks-Brophy & Whittingham, 2013; Eriks Brophy, Durieux-Smith, Olds, Fitzpatrick, Duquette, & Whittingham, 2006). Adekemi Ayantoye and Luckner (2016) identified the role played by teachers in the academic success of students.

Mode of instruction

All the teachers thought that the use of native language proves to be beneficial in the understanding of new ideas and concepts and usage and understanding of new words Children with the implant when are given a lot of receptive language exposure tend to develop better language with lexical development (Stalling, Kirk, Chin & Gao, 2000). Similarly, Guiterrez Cullen believed that educationists should take variation in linguistic diversity as an effective means (as cited in Gimberson, 2005). Moreover, apart from guiding in English, the use of the mother tongue may prove beneficial to CI instead of hampering their development in the English language, especially for bilingual learners whether implanted or they use hearing aids. As stated by Bunta, Douglas, Dickson, Cantu, Wickesberg, & Gifford (2016) the use of native language support may prove to be useful in the acquisition of better English language rather than using only English support for CI learners.

Effective Measures

According to Guardino and Antia, (2012) and Trussell (2008) seating arrangement has a significant impact on the learning process of CI students as they can see their own teacher and classmates easily and tend to help them take part in various classroom activities both individual and group and make listening more conveniently. The manipulation of the seating as well as the physical arrangement in the class has a positive impact on their and engagement and involvement as stated by Trussell (2008). The respondent teachers of Trussel's study freely moved around the class and has as a result was able to control class effectively. Since the teachers were able to move around freely through the seats arranged in rows helped the CI students to look at their instructors more conveniently which ultimately resulted in the improved participation of the CI students in the class activities. The findings of the study conducted by Eriks-Brophy et al. (2006) showed the impact of the dynamics of seating and arrangement of the class on the learning of D/HH of students as they could not only see the facial expression of their teachers but could also see their hand gestures. The interviewed teachers A, B, D,

E knew about the need for special seating arrangements away from the fan and other distractions. This kind of seating arrangement can help in cutting down the environmental noise and help in improved listening skills. It can be said that the front seating in the class or the group is essential for them so that they could see their teachers while teaching them and when to pay attention to their teachers as cited in Seaver Creative Service Incorporation (2000).

Although there is an increase in the number of D/HH students in inclusive classrooms at the same time educational environments are not properly equipped to meet their special needs (Berndsen & Luckner, 2012).

Teaching Approach in Writing Classes

In the mainstream class, there is a diversity of learners as a result it has become the need of the hour to consider the special needs of the students when planning the instructional methodology. This aspect controls the modification of instruction specified for the whole class, and it is possible only when teachers use various teaching methods for imparting the content (Cross, Salazar, Dopson-Campuzano, & Batcheldar, 2009). A study conducted on the D/HH students and their respective instructors has depicted that various instructional teaching methods have a positive effect on the vocabulary and educational achievements of the D/HH learners (Adekemi Ayantoye & Luckner, 2016). The participant teachers A, B, C, D, and F also emphasized the use of differentiated assignments, reinforcement of information, and visual teaching aids tend to be the most significant factors in facilitating learning. All the teachers stated that repeating instructions, visual aids, and inquiry helped the CI students to monitor if the topics are undertaken were understood by them or not.

Teaching Aids in Writing Classes

All seven teachers stated that they use various teaching aids like picture with words and a.v aids, worksheets, activities for enhancing listening skills, and the use of word bank which is similar to the teaching methods as mentioned in Deaf Child in the classroom, Australia, (2012). Deaf children tend to be visual learners, so for decorating classrooms, the use of colors, attractive boards, and posters tend to attract students more. The use of visual methods like illustrations, diagrams, and webbing, mind maps help visual learners especially the students with hearing impairment (Deaf child in Classroom, Australia, 2012).

Teachers And D in their interview mentioned the reading specific genres and for further explanation showed related content on multimedia to their students. According to teacher A & C storytelling and making them work on writing tasks in pairs and groups tend to be helpful for their students.

Teacher A mentioned in her interview that she regularly read stories to her students and also showed them fairy tales and sci-fiction content she further added that she also asked her students to work in pairs or groups especially when composing narratives. She also said that reading to writing is appropriate as reading makes students understand the process of writing and results in better writing skills.

The findings of many types of research (Berndsen & Luckner, 2012; Cannon, Frederick, & Easterbrooks, 2010; Schultz, Lieberman, Ellis & Hilgenbrinck, 2013; Reich & Lavay, 2009) have emphasized the importance and use of visual aids in delivering information. According to Schultz et al. (2013) since there is a positive impact of teaching through visuals and tend to help in grasping the delivered instructions to the students so teachers should make good use of visual aids like video clips, whiteboards, tablets, posters, expressions, gestures, body language, and presentation of the teaching content, especially for the D/HH learners

Pace of Delivering Lectures

Teachers B, C, D, F, and G also raised a valid point that the controlled slow pace of delivering instructions or assigning tasks is essential for D/HH students. This helps the students in processing the information like what the teacher has said and can clarify things by asking questions if required (Seaver Creative Service Incorporation, 2000). It advised speaking slowly and nearby after the activation of the implant. The pace can be changed to a normal pace once the implanted child becomes acquainted with the device and listening and processing of different speech sounds however slow pace tends to be effective for children with CIs as they get enough time to process the new information (as cited in Stith, & Erik, 2005). Moreover, Eriks-Brophy et al. (2006) found that facilitative strategies tend to be beneficial in the learning process. For example, apart from students' seating arrangements, teachers' pace of speaking, it is seen that verbal information is essential to

understand the information. Schultz et al. (2013) also stated that while conversing with the CI students, the standing position of the teacher is crucially important. The D/HH students gain information more clearly and effectively because of the due facilitative positions of the teachers.

The two teachers A and F believed that 'peer support' tends to be quite beneficial and effective when CI is paired with considerate and smart classmates. A friend seated next to the CI learner can help by repeating instructions given by the instructors or by providing the missed information which created a hindrance in the comprehension of the CI student. However, care should be taken that the CI does not become dependent on the friend, copy their work, or become too demanding and use most of their time in repeating and filling the missing information (Deaf Child in Classroom, Australia 2012).

Problems faced by the cochlear implanted learner

All the seven teachers pinpointed out the similar kind of problems like incorrect use of tense, minimum usage of adjectives and adverbs, inability to use prepositions and vocabulary correctly and appropriately, structured simple and short sentences, wrote a sketchy piece of writing which was usually descriptive in nature, encountered problems of organizing ideas, creating cohesion and lacking in creativity. The identified problems were in line with the findings of Karasu and Girgin (2007) and Tur-Kaspa and Dromi (2001) that deaf children mostly construct simple and short sentences and lacked the vocabulary and repeated phrases again and again. Marschark, Mouradian, and Halas (1994) noted that the D/HH did not use many adjectives used pronouns and prepositions incorrectly in the function words (Lichtenstein, 1998) as they are unable to acquire syntactical and morphological knowledge of structures (Moores 1996; Paul, 1998).

School Policies

Extra Time

The teachers in their interviews when we're asked about their opinion regarding the school policy for CI learners, stated that there was no special policy for CI students and believed that initially, rigorous support and monitoring is needed to train C1 learners and it is seen that gradually teachers start pulling in their efforts. Teacher A assisted her learner and gave her CI student more time to complete the assigned task. All the teachers mentioned in their responses that there is no policy of giving more time and extra attention to attend to the needs of CI. The CI student is treated like normal hearing peer students. They felt that the administration did not allow them to give extra time. Only one teacher C stated that she tried on her own to fulfill the needs of these students whereas other teachers did not make a special effort for them rather they did not differentiate between CI and normal hearing students. Deaf, hard of hearing and cochlear implanted students usually get tired by the end of the day. It essential to give them short break to reduce fatigue (Davenport & Alber-Morgan, 2016).

Change in Curriculum

All teachers in their interview highlighted that teachers should evaluate the assigned tasks of cochlear implanted students according to the set criteria provided by the school and no special assessment to be designed keeping in view their disability. However, the two teachers stated if deemed necessary curriculum and assessment should be differentiated for them. Whereas other teachers pointed out the limitations of the school curriculum as in a normal classroom setting they are hardly allowed to make changes for their students but believed that exceptions can be made for C1 Learners. The administration did not allow them to make changes according to the special needs of the CI learners. They were assessed like their other normal hearing peer group students. According to Wheeler, Archbold,Gregory, and Skipp (2007) and RNID (2008) when teachers and parents were asked about their experiences of sending their CI children to a mainstream school, they shared that CI students find it difficult to cope with increasingly complex language structures and ideas and number of teachers teaching with different teaching styles young people, their parents and teachers described the challenges of handling increasingly complex language and concepts and ideas. Teachers must work in collaboration with the administration of the school to provide a conducive learning environment to facilitate the teaching-learning process (as cited in Technical Assistance Paper, 2007).

Error Correction

All the teachers corrected their work just like other normal hearing students' work using a red pen and gave written comments and always asked them to do the corrections. Three of these teachers A, B, and G helped their students on the spot and guided them and also employed peer checking method but it was done occasionally. One teacher E stated that she always made an extra effort in not only pointing out the mistakes but also in providing the correct answer to her students while others only

informed the parents to help their child in doing the corrections themselves at home. All agreed that they did not have enough time to sit and work out errors with them. Damen, van-den-Oever, Langereis, Chute, and Mylanus, (2006) and Damen, Langereis, Snik, Chute and Mylanus (2007) have deduced from their findings that CI children need continuous special support in mainstream classes, although the speech delay could be one of the causes, despite the levels of speech sounds provided by the implant.

Conclusion

The study brings out the challenges faced by cochlear implanted learners in language learning, the methods teachers apply to cope with their deficiency and in some cases entirely neglect the D/HH learners' needs. In this regard, the teachers should be able to identify the basic setbacks CIs come across and also probe the root cause of certain problems. Evidence has been found in favor of an exploratory; inquiry-based teaching approach for the D/HH. It has been observed that pre-writing strategies such as picture storytelling and mind mapping certainly accommodated different learners individually, instead of making all students follow the same line of methods. Moreover, the teacher must act as a resourceful person and draw on evidence from multiple resources to teach writing i.e. the cochlear implanted cognitive profile, learner's experience, and an understanding of the cognitive demands of writing. Hence, the teachers will outline their students' strengths and needs and develop need-based strategies to deliver concepts innovatively by doing so both teachers and students will avail the win/win outcomes; students will learn a language and teachers become more confident in their role as facilitators. It is also concluded that on an individual basis educational services should be provided to fulfill their special needs. Parents and educators must work collaboratively to help students to attain their goals. Differentiated instruction for CI students must be taken into consideration as these students need direct instruction to progress academically using their cochlear implants.

In a nutshell, teachers face several challenges, and exciting possibilities, as the number of CI students tend to grow continuously. It will be a continuous challenge for the teachers and administration to revise and modify the programs and curriculum in the light of changing situation Teacher educators will be challenged to review their existing programs and curricula in light of the changing context (Millett & Mayer, 2010), and it will also be essential to provide professional development courses and training for the teachers of CI learners. For further research, interventional studies should be conducted to help CI students to improve their linguistic abilities. As far as narrative intervention studies are concerned, few types of research have been carried out on narrative intervention with deaf children.

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