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PARENTS' PERSPECTIVES ON CHALLENGES FACED BY HEARING- IMPAIRED IN INCLUSIVE PRIMARY SCHOOLS

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ABSTRACT

The purpose of the study was to explore parents' concerns, challenges and level of satisfaction for successful inclusion of children with hearing impairment in regular primary schools of Pakistan. The study was qualitative in nature. Ten parents of children with hearing impairment studying in inclusive schools were purposively selected as a sample from six districts of the Province Punjab. Semi-structured interviews were conducted for data collection. The analysis came up with six themes: aspects of hearing impairment and integration of learners, manifestations of hearing impairment, adapting content, adapting instructional strategies, adapting assessment, and institutional support. Findings revealed that teachers of inclusive schools had insufficient knowledge about hearing impairment and integration of these learners in inclusive classrooms. Similarly, teachers lack knowledge of manifestations of hearing impairment i.e., cognitive, social and emotional development. Teachers had limited knowledge and training of adapting curriculum content, instruction and assessment for effective inclusion of children with hearing impairment. Inadequate and absence of supportive services in the institutions were revealed as major factors for exclusion, absenteeism, and high dropout rate of these struggling learners. However, parents commented in favor of inclusive schools for their children despite of the current deficiencies reported by them.

INTRODUCTION

An estimated nine million people in Pakistan have some form of hearing loss. Of these, less than 5% out of 1 million Deaf children currently attend school (WHO, 2018). All children have the right to education in a collectively declared agreement in the world (UNESCO, 2005). According to a report by Pakistan Ministry of Finance, the percentage of primary school children is 66%, rest 34% are out of school without education (Farooq, 2013). More than 90% of children with disabilities in developing countries do not attend schools according to UNESCO report of 2018 (Manzoor & Hameed & Nabeel, 2018).

Motivation Of the Study

Children with hearing impairment are getting education in segregated special schools in Pakistan. The regular public primary schools are reluctant to include them in mainstream education settings. The highly reported factors for this exclusion are rigid curriculum, fixed pedagogy, insufficient knowledge on the part of teachers, and lack of teachers' training and resources (Bashir, 2005). A small number of regular schools have accommodated these children, and that too in private sector. Unfortunately, children with disabilities and their parents are not satisfied with learning environments of those schools, which ultimately result in their repeated failures, anxiety, absenteeism, high dropout rates and shifting back to special schools etc. (Awan, 2015). United Nations Guidelines for inclusion endorses that all children may be accommodated in schools irrespective of their social, emotional, intellectual, linguistic or any other condition and curricula should be adapted according to the needs of the children (UNESCO, 2005). Physical isolation of hearing-impaired children has limited all social contact opportunities, and thereby isolate them from the hearing children's everyday educational and social-

emotional interactions (Akram & Bashir, 2012). This exclusion is a continuous source of stress for parents of children with hearing impairment, and subsequently negating SDG-4 which advocates inclusive education. The study was designed to acquire the parents' concerns and challenges in terms of institutional support and role of teachers for making mainstream education possible for their children with hearing impairment in regular schools.

The term hearing impairment covers varying degrees of hearing loss from hard-of-hearing to deafness (O'Mara, 2012). There is a delay in the development of speech and language due to hearing loss, and learning problems accelerate due to this delay in schools. According to Bashir, (2005) all teachers typically believe that children with hearing impairment have poor listening and learning skills, and this conviction is the reason that most standard and traditional schools are hesitant to accept hearing-impaired students. These language delays may be prevented with early interventions to make mainstream education accessible to them (Parveen, 2018). Khan, Hashmi and Khanum, (2018) report that incorporation of specific adaptations in the curriculum, teaching strategies and assessment for students with hearing impairment may serve this purpose. Improved instructional training of teachers is directly related to positive mindsets and attitudes about the integration of children with disabilities (Powers, 2002).

All learning activities which increase the capacity of a school to respond to diversity can be described as support (Mahlo, 2011). Institutional support in the form of teachers' training, resources, and related professionals provide access to curriculum to include children with hearing impairment satisfactorily (Erbas, 2018). In a study conducted in Finland, where majority of hearing-impaired attend regular schools in line with their inclusive policy, teachers reported that main support categories were pedagogical and technical support provided to them for making inclusion successful (Takala & Sume, 2017).

Parents of children with hearing impairment feel helpless, as they perceive that teacher have fixed teaching methods and standardized assessment procedures in regular schools and their children may not be able to meet the criteria, subsequently failing the examinations (Jeynes, 2005). Their concerns include weak measures taken by institutions in enhancing the cognitive skills of their children through insufficient training of teachers, lack of resources and additional support (Mapolisa, 2013). Fear of bullying, labeling and rejection of their hearing- impaired children in inclusive classrooms by teachers and peers also disturbs them (Taller-Azulay, 2015).

Keeping in view the current alarming scenario, the researchers intended to explore the challenges faced by children with hearing impairment in primary inclusive schools through the voices of parents. The research study was aimed at investigating institutional support and role of teachers in adapting content, instruction and assessment for cognitive, social and emotional development of these children in regular schools from parent's perspectives.

Significance Of the Study

The drive of the study was to make the stakeholders aware of the challenges faced by children with hearing impairment in inclusive primary schools. For this purpose, there was a need to obtain parents' feedback, concerns and insights regarding institutional support and role of teachers for effective participation and inclusion of their children with hearing impairment in regular schools. Results of the study would be certainly beneficial for the school administrations to realize and understand the cause of anxiety, exclusion, absenteeism, and repeated failures amongst children with hearing impairment. Findings would identify the gaps in current available supportive services in the institutions (Like provision of assistive devices, teachers' training for adaptations, role of related professionals, use of ICT etc.), leading the school management to take practical measures to make mainstream education possible for these struggling learners. SDG-4 can only be achieved if the real state of inclusion in schools is revealed to the stakeholders and policy makers. The researcher was driven to explore this major aspect through parents' perspectives so that a viable framework should be designed by the schools in order to address the issues of children with hearing impairment to create a welcoming learning environment in regular schools setting.

LITERATURE REVIEW

The parent is a key member of a multidisciplinary team of IEP of a child with a disability. Without parental participation, involvement, insight and satisfaction, the desired academic, emotional, and social outcomes from children with hearing impairment seem unachievable (Leiter & Krauss, 2004). Aziz & Madani, (2007) report that parents were reluctant to send their children to general schools due to negative perceptions of teachers and parents of other children in the past. Mutisya (2015) argues since there is a shift towards inclusion in the 21st century. Researches have indicated that children with hearing impairment perform better socially, emotionally, and academically when they are placed in inclusive schools as compared to isolated special schools. This inclusive movement has gained momentum, and educators' mindset is changing, and so is the mindset of parents (UNICEF, 2017).

Najjingo (2009) established that parents are worried about the level of acceptance by the teachers and classmates in the learning environment towards their children. According to Taller-Azulay (2015), the concerns and fears of parents may include the vulnerability of their children to accidents and injuries, bullying, labeling and rejection of these children by their teachers and peers, and negative attitudes of abled peers and their parents towards disability.

Mahlo (2011) states that parents also fear that their child may be isolated in the classroom and is not engaged in classroom activities due to the unavailability of assistive devices and support of related professionals. According to Hussain, (2003), the availability of testing services and other assistive devices, such as hearing aids, is not sufficient in Pakistan. Purchasing equipment for hearing impaired children and to avail other related services is unaffordable for majority of families in Pakistan (Farooq, 2015). According

to Bamu, (2017), hearing impaired children suffer a lot if they are not diagnosed early, appropriately identified and provided timely interventions in schools. Kožárová (2018) found that parents worry about their participation in various curricular activities and recreation visits as they want to make sure that their children are treated with love and affection in the schools. Parents are concerned that the child's sensory impairment may overshadow the child's abilities in the eyes of teachers (Grigal, Neubert, Moon, & Graham, 2003). According to Jeynes (2005), teachers have fixed teaching methods and standardized assessment procedures, and parents' concern is that their children may not be able to meet the criteria, subsequently failing the examination. Teachers feel helpless if they do not possess the knowledge of dealing with hearing impairment and usage of their preferred communication styles (Ehsan, 2018). Mapolisa & Tshabalala (2013) reported that parents are concerned about the measures taken by the school in enhancing the social, emotional, and cognitive skills of their children with hearing impairment with the help of related professionals. Pomerantz, Moorman, Litwack, & Tauba (2007) reveal that.

regular parents-teachers meeting, counseling of parents, flexibility in curriculum, pedagogy, and assessment practices keeping in view the degree and functioning of hearing loss to be a part of the support program for these children are required for their effective inclusion.

Review of the results revealed in a study conducted by Gulzar and Qureshi (2016) revealed that concerned challenges of hearing-impaired children with abled peers in inclusive education were social difficulties, academic achievement and support from teachers and peers in specific needs areas. Fixed or reduced curricula for these children prevent them to get education in regular schools in Pakistan, assuming that it is the responsibility of special schools (Bashir, 2005). Zimba, (2011), established that administrators and teachers both were found incompetent with an inclusive curriculum because of ineffective and shortage of teacher training. Studies also refer to the significant role parents play in their children's schooling for students with special needs (Pomerantz, Moorman & Litwack., 2005). Leiter & Krauss (2004) revealed the un-availability of provisions, fixed teaching methodologies, insufficient learning resources, the content of the curriculum in deaf education are identified as institutional barriers that are creating hurdles and challenges in hearing-impaired learner's academic performance. Computer-assisted teaching creates an atmosphere feasible for individualized education in the classrooms (Simpson et al., 2015). Lidstrom (2014) established that computer training programs have a beneficial impact on cognitive abilities, mathematics, reading and competency in hearing impaired children, improving attention span and learning performance.

Ahmad and Yousaf (2011), established that regular schools are facing problems in including children with hearing impairment as they lack trained staff, resources and guidelines to adapt curriculum. Removing all examination barriers with the help of diverse accommodations is the responsibility of the teachers (Ugen, Schiltz, Fischbach & Cate, 2021; Watkins, 2007).

Parents fear that their child may be isolated in the classroom and is not engaged in classroom activities due to the unavailability of assistive devices for example hearing aids, and other amplifying devices. They are also anxious about whether the related professionals like audiologists, psychologists, speech therapists are there to support and meet the needs of these learners. They are particularly concerned about their child's abilities to make and keep friends (Sibley, 2004). Children having problems with communication are often rejected and feel lonely. Parents are also concerned that the child's sensory impairment may overshadow the child's abilities in the eyes of teachers (Moon, 2002; Rakow, 2020). Cambra (2003) and Schwab, Zurbriggen and Venetz, (2020) established a positive impact in the personalities of children with hearing impairment as a result of this integration with the hearing learners in inclusive classrooms.

In the schools of Pakistan, lack of skills and tools are reported as obstacles to inclusion by most of the teachers (Fazal, 2014). Parental involvement is just limited to their meeting with the teachers, and that too, not at a regular basis. Parents are not involved and trained in the manner to be a part of the achievement of the academic success of their children. The cognitive, social, and emotional development of these children primarily depends on the way they are dealt with in the schools (Taub, 2006; Kenner, 2018).

If these fears and concerns of parents are not addressed adequately by the school authorities and staff, the move towards inclusion is likely to be affected.

METHODS

In the current research, semi-structured interviews were the strategy chosen by the researcher for qualitative data collection. Semi structured interviews are effective method of data collection. This method “allows the researcher to collect open-ended data, to explore participant thoughts, feelings and beliefs about a particular phenomenon, and to derive deeply into personal and sometimes sensitive issues” (Dejonckheere & Vaughn, 2019). Semi-structured interviews were conducted from the parents of the hearing-impaired learners of regular primary schools. The aim of the study was also to explore the parents’ concerns, level of satisfaction and their feedback about the institutional support, and available services for inclusion of their children with hearing impairment in regular schools. This resulted in a more understanding of the process of inclusion, when the problems faced by the hearing impaired, knowledge and practices of teachers along with institutional support in mainstream primary education were described by the parents through in-depth interviews.

Following research questions directed the study:

1. What type of institutional support is available and required for the integration of hearing-impaired learners in inclusive schools?
2. To what extent the parents of children with hearing impairment are satisfied with the institutional support and role of teachers in the academic progress of their children in mainstream education?

The data was collected from ten parents of children with hearing impairment from inclusive primary schools from six districts of Punjab. A semi-structured interview guide was developed by the researcher to explore the concerns and challenges of parents about institutional support including knowledge and practices of teachers in adapting curriculum for their children with hearing impairment to make mainstream education accessible for them. The interview guide had five questions. The questions were piloted through three interviews. Purposive sampling technique was used to select parents (9 mothers and 1 father) of children with hearing impairment studying in regular primary school. Parents were made aware of the purpose of the study. Institutional ethical research committee approved the proposal. Their consent was taken and ensured of the confidentiality and anonymity of their identities. The interviews were conducted in person and through telephonic conversation.

A variety of methods and approaches are used by qualitative researchers for data analysis. Ary (2010) approach was employed by the researchers, after weighing all the options, to evaluate the interview results. The purpose of choosing this approach by the researchers was that it was a systematic approach and it has also specifically defined stages for evaluating qualitative data. The mechanism of coding and themes were not provided by Ary, et al, (2010) in the form of thorough dialogue, therefore, several methods were used to produce and create codes and themes. These techniques were proposed by Braun and Clarke (2006), Creswell (2014), and Gibson and Brown (2009). This approach comprised of three phases or stages; Organizing and familiarizing, coding and reducing, and interpreting and representing, which were implemented by the researcher to analyze the interview data in this analysis.

The data was organized and familiarized on first stage, however second stage "Coding and Reducing" has a lot of significance and is considered as the fundamental of qualitative analysis (Ary, et al, 2010). Prior to actually going over the procedures expended to code and reduce the raw data from the interviews, it is essential to go through the strategies for coding and categorizing qualitative data.

Conversation analysis, discourse analysis, content analysis, semiotic analysis, grounded theory, the analytic induction method, thematic analysis, and narrative analysis are some of the methods and approaches that can be used for coding and categorizing qualitative data (Braun & Clarke, 2006; Gibson & Brown, 2009). Nevertheless, thematic analysis is the most commonly used technique to code and categorize data in qualitative methods (Boyatzis, 1998).

The method of analyzing data according to commonalities, associations, and disparities within a data set is known as thematic analysis (Gibson & Brown, 2009). According to Tesch's open coding guidelines, the data obtained was coded (Creswell, 2009). The purpose of using it in this research study was that it has the potential to summarize the core features of a wide body of data, provide a detailed summary of the data set, highlight correlations and variations within the data set, and produce important findings and

unanticipated insights (Braun & Clarke, 2006). In the third stage, data was interpreted and represented by the researchers.

The analysis came up with six themes and twenty sub-themes: Aspects of hearing impairment and integration of learners, manifestations of hearing impairment (cognitive, social and emotional development), adapting content, adapting instructional strategies, adapting assessment, and institutional support.

Data Analysis

Following figure illustrates the themes and sub-themes derived from the categories of semi-structured interviews:

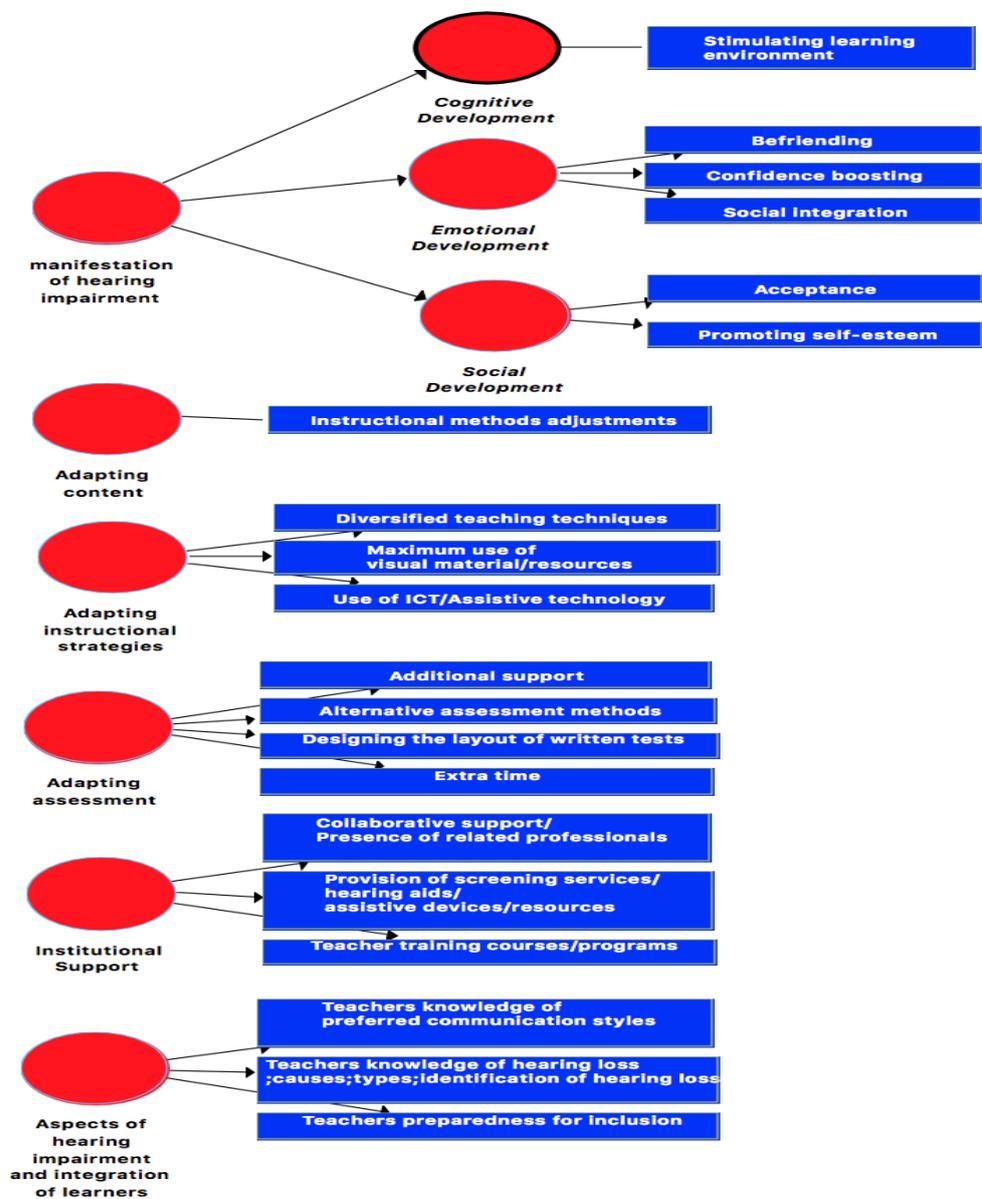


Figure 1: Themes and Sub-Themes Derived from Interviews

This section provides findings first and then elaborate on the findings with proper quotations from the participants. Responses were categorized into six broad thematic topics below:

Aspects Of Hearing Impairment and Integration of Learners

Most of the parents informed that teachers did not have sufficient knowledge regarding hearing loss, and they lack basic knowledge and training about effective teaching styles for inclusion of hearing-impaired learners. They also highlighted the class size as a barrier to inclusion. One of the participants reported:

“Teachers, to some extent, understand the challenges of hearing loss of my child, but due to absence of proper training to work with such learners, I am not satisfied as far as his inclusion in the regular classroom is concerned. His teachers are trying hard to accommodate him, but at the moment I am not happy. Teachers do not make him sit close to him.” (Participant 3).

However, teachers were trying their maximum to integrate their hearing-impaired learners in the learning environment, but still not at a satisfactory level. Hearing peers were more supportive and helpful. Another participant pointed,

“I feel lack of knowledge and training of teachers to handle my hearing-impaired child is a hurdle to include my child, although teachers do try that she should participate (Participant 4).

Another participant stated that

“Teachers of my child ignore his problems in the classroom. They use one teaching method for the whole class, and do not care if information is communicated to my child or not. It may be due to a large class size. The child himself tries to complete his tasks with the cooperation of peers, which is quite frustrating for him (Participant 9).

Another participant reported that

“It took quite some time for teachers to understand the learning style of my hearing-impaired child, but now my child is comparatively comfortable, as teachers are making adaptations according to the requirements of the child. I am waiting for the good outcomes (Participant 8).

Institutional Support

Majority of the parents informed that there were no proper services of related professionals like audiologist, speech therapist and psychologist at a regular basis to facilitate the children. All the respondents reported that the hearing aids were purchased by the parents themselves, although the hearing aids were unaffordable for them. One participant reported:

“There are no supportive services provided by the institution for my child. I have purchased the hearing aid, which is very expensive. There were no provisions of speech therapist, audiologist and psychologist etc. in the school. Due to their absence, my child is suffering a lot. We are poor, so we do not afford all these services from private clinics and hospitals. My child just goes to the school and attends the classes. Nobody bothers about his hearing loss, and how to solve his problems and makes him understand and communicate in the learning environment” (Participant 1)

Another helpless participant conveyed that,

“We are facing a lot of difficulties in order to make our child assessed and provided with hearing aid in public hospitals. The institution does not provide such support to our child. They try to teach the child, but no improvement and facilitation is visible for the hearing loss of the child. Services of audiologist, speech therapist and Psychologist are unavailable in the school.” The school does not provide hearing aid to facilitate the functionality of the child” (Participant 6).

Teachers did not have any diploma of teaching children with special needs, and other services of related professionals were also invisible in most of the schools. One participant said,

“Only free books are available to them from school, but there are least provisions to improve the functionality of my hearing- impaired child, like screening services, free hearing aid and other assistive devices. Presence of audiologist, psychologist, speech therapists etc. is also missing” (Participant 2).

Another participant informed with grief,

“To assess the child’s hearing loss, the audiologist visits the school once a year. No hearing aid is provided to the child from the school. I am poor and I do not afford to buy the expensive hearing aid for my child. Anyways school makes referrals to hospitals and clinics etc. Neither speech therapist nor Psychologist visit the school. I am quite upset about it. My child is in need of such services, as he is suffering a lot and lagging behind other children in the classroom academically” (Participant 10).

MANIFESTATIONS OF HEARING IMPAIRMENT

Cognitive, Social and Emotional Development

Majority of the parents were of the view that their children with hearing impairment were learning social and emotional skills, and the school had played a positive part in developing these skills. Their children were feeling confident, took part in various group and sports activities, and their overall behavior and social interaction had improved at school and home in inclusive settings. One participant reported,

“Teachers of my child give opportunities to the child to work in the group. There are positive changes in the child in regular school. Peers take care of him and provide help and support to him in the classroom. In this school, my child is improving socially and emotionally. I am very happy with this aspect.” (Participant 2).

One of the respondents informed that the child was afraid of being bullied by hearing children; and the other responded that initially the child was bullied by few hearing students initially, but with the passage of time, this issue was resolved and then the child was satisfied.

“Few hearing children used to bully my child, when he got admission in the school. But now they are his friends. Teachers are playing a positive role in his social development. I see an optimistic change in the child as far as his self-esteem and confidence are concerned. At home, he is socially better with the guests, now. The school has taught discipline to the child. I see a slow academic improvement in him, too (Participant 1).

Another participant responded,

“I see a good change in the child in inclusive school, with reference to his social, academic and emotional development. Our child is now more disciplined, offer prayers, and greet and sit with the guests at home (Participant 4). One participant reported, *I am happy that my child is improving in this school. He enjoys with his friends and teachers. Teachers take good care of him. He is fond of sports, and love to be a part of the cricket team. Positive change is visible in his social interaction at home, too* (Participant 7).

Adaptations In Content

Most of the parents were of the view that teachers were not trained enough to adapt the existing curriculum for inclusion of their hearing-impaired learners. They did not have the knowledge of using different communication styles to make them understand. Two of the respondents reported that teachers were adapting the curriculum content, and at the same time they reduced the content, instead of simplifying it according to the requirements of the children. *One of the respondents stated,*

“I feel teachers do not have the knowledge to adapt the curriculum according to the needs of my hearing impaired-child. No doubt, my child is happy in inclusive school with her classmates. But she is not improving in studies, which makes us her and her upset. Teachers are concerned about other children more, but not paying attention to her as per requirement.” (Participant 1).

Another respondent reported,

“My child feels happy in the school, but as far as extra effort in the teaching is concerned, teachers are not serious about it. I feel teachers lack knowledge and skills how to deal with my hearing-impaired child to engage him in

classroom activities. They just do not show any concern to include him. He just wastes time and fails in the assessment tests. My child gets frustrated, at times, and shows destructive behavior as he is unable to understand instructions and lag behind in completing the classroom tasks” (Participant 3).

Few parents informed that this negligence and lack of attention might be due to the large class size which becomes challenging for the teachers.

“There are 50 students in his class. I think it is tiring for the teachers to give additional support to my child. However, the child is happy in the school, and enjoys with abled peers, especially in group activities. My point of concern is his academic improvement, too which needs to be focused by the teachers and the schools. Teachers are just using lecture method, and no diverse method is used to communicate with my child in teaching process. I think it is because of the lack of training of teachers (Participant 9). Another respondent informed, “Teachers of my hearing-impaired child are trying to make adaptations in the content and teaching techniques, but still a lot of effort is required. The child gets disturbed and discouraged when he is not comprehending and understanding what is being taught. Friends of my child are very helpful. I think, large class size and lack of knowledge of teachers do not let the teachers’ pay extra time and additional support to my child with hearing impairment” (Participant 5).

Adaptations In Instruction (Learning Material)

Most of the parents informed that teachers were not trained enough to adapt the teaching strategies for inclusion of their hearing-impaired learners. Computer technology was least used in teaching-learning process, as children with hearing impairment were visual learners and its use could help them a lot in learning. One respondent informed that there were computers in the schools, but his child was not given the opportunity to use it. One of the participants responded,

“I am sorry I am not satisfied with the academic improvement of my child in the school. He can do better, if teachers make some changes in their teaching methods and use more and more visual learning material like flashcards, models, pictures etc. They are not using computers in teaching. The concepts of the child are not clear about certain abstract concepts. Although he enjoys with abled peers in the schools. They involve him in sports and other activities and his confidence is boosted. But a lot of improvement is needed in the studies to cope with the rest of the learners” (Participant 7).

Another participant informed that,

“I am not satisfied with little adaptations in teaching applied by teachers for my hearing-impaired child in classroom activities. Although my child’s confidence and social skills are improved in the school, but in studies, he is behind the rest of the learners in the class. For him, no additional efforts are visible like use of flash cards, models, visual learning material and computer

technology. Teachers seem untrained about the teaching of children with hearing impairment” (Participant 2).

Another participant stated,

“Teachers make my child sit close during the lecture, otherwise extra learning material is not used to teach. There are computers in the school, but the child is not given much opportunity to use it, otherwise he loves to learn through computer. My child is unable to complete his classroom tasks in time, since he cannot understand the instructions well, and same method is used to teach him, which the teacher uses for hearing peers. He gets so confused when there is lack of communication between him and teacher” (Participant 6).

One of the respondents reported,

“Teachers are not making efforts to accommodate my child. Teaching method is not changed for him. He gets upset when he is unable to complete his tasks in time. He fights with us, when he fails in some classroom activity when he returns from school. He needs extra attention by the teachers to make him learn. Use of computer is not there. Other learning resources are rarely used for him in teaching-learning process” (Participant 10).

Adaptations In Assessment

Most of the parents reported that their children with hearing impairment showed a lot of frustration during assessments. Some of them showed reluctance in attending the school during examination time. Despite of the provision of extra time, almost all informants stated, that the academic performance of their children was poor, and they were unable to obtain satisfactory grades in written tests. Lack of assistive technology and fixed assessment procedures were major factors of their failures. Teachers made slight adjustments in the assessment tests and provided additional support, but that was insufficient to assess learning and to meet the required standard.

One of the participants reported,

“My child with hearing loss is the most frustrated during the time of assessments. He makes excuses not to attend the school and tries to miss the examinations. He tells us that the teachers are not making additional efforts in the presentation of written tests. The child is scared of failing. Extra time is not allocated to him, and alternative assessment procedure is not used as per his degree of impairment and requirement” (Participant 9).

Another participant stated,

“I get disturbed during assessments of our child with hearing loss. His stress level increases as he is unable to perform satisfactory in the examination due to teachers’ negligence. His teachers fail to guide him to resolve the test properly. The examination paper is not formatted keeping in view his hearing

impairment and communication style. Moreover, absence of assistive technology in the school makes tasks difficult for him” (Participant 7).

One participant stated,

“Extra time is given to my child during assessment. He gets frustrated when the teacher does not provide him guideline, and do not modify the paper format for him. Sometimes, the teachers design the paper keeping in view his functionality and comprehending of information, but not always. When the teacher does not do so, the child starts crying, as he could not understand few things. Computer and assistive technology are not used for paper solving” (Participant 2).

Few parents informed that children are reluctant to attend schools during assessment tests. A participant reported,

“Unfortunately, when it comes to assessment tests, my child with hearing loss try not to go to the school. Teachers do not make extra efforts to adapt the assessment procedure. The child feels isolated during the assessment, ultimately fails in few subjects, when proper guidelines are not provided to him during assessment. No assistive technology is available in the school to facilitate them. Teachers do not care if my child has failed. We get very upset to see our disappointed child” (Participant 4).

Comments Of Parents on Inclusive Education

All parents commented in favor of inclusive education for personality development of children with hearing impairment despite of the shortcomings in teaching, training of teachers and institutional support highlighted by them through findings of the interview. According to the opinions of all the respondents, regular school setting is much better for the inclusion, social and emotional development of their children with hearing impairment, if institutions provide full support to them. One participant mentioned,

“In spite of lack of required resources for my child with hearing loss in the school, I feel that inclusive setting is still good for my child. He has improved socially and emotionally in inclusive classrooms” (Participant 4).

Another participant said,

“For my child, regular school is the best educational setting. I am happy that he sits and plays with hearing peers. His confidence level is very high now” (Participant 6).

One participant commented,

“There is an encouraging change in my child in regular school. His self-esteem and confidence are improved. I feel very happy, but wants his academic improvement too, which is very slow. Training of teachers may prove very beneficial if school administration works towards it” (Participant 8).

My child is not improving fast in academics in the inclusive school, due to lack of assistive devices for him and other retarding factors. But I still want my child to study in regular school setting” (Participant 7).

One participant commented,

“No doubt, inclusive education has brought a positive change in my child. I think there are so many students in the class, he is not given enough attention. He still enjoys in the school with his hearing peers” (Participant 3).

DISCUSSION

The purpose of this study was to explore the challenges and level of satisfaction of parents of children with hearing impairment in accessing mainstream education. Moreover, this study investigated the institutional support and role of teachers in adapting content, instruction and assessment for successful inclusion of children with hearing impairment in inclusive primary schools. For this purpose, interview data were analyzed through ten parents purposively selected from inclusive schools of the province Punjab. Majority of the parents were not satisfied with available supportive services in institutions to meet the challenges of children with hearing impairment. Mahlo (2011) states that parents fear that their child may be isolated in the classroom and is not engaged in classroom activities due to the unavailability of assistive devices and support of related professionals. Diversified teaching techniques were not used by teachers, excluding the children in the classroom academically. Leiter and Krauss (2004) and Larriba-Quest Byiers, Beisang, Merbler and Symons, (2020) identified un-availability of provisions, fixed teaching methodologies, insufficient learning resources, the content of the curriculum in deaf education as institutional barriers that are creating hurdles and challenges in hearing-impaired learner's academic performance. Parents highlighted absence of ICT, as an obstacle to learning and inclusion of children with hearing impairment although ICT resources such as internet and mobile phones are available everywhere (Asghar, Barberà, & Younas, 2021). Parents reported lack of teachers' training regarding use of ICT in classrooms. Lindstrom (2014) established that computer training programs have a beneficial impact on cognitive abilities, mathematics, reading and competency in hearing impaired children, improving attention span and learning performance. Children with hearing impairment were failing and getting low grades academically as assessment procedure was not modified according to their requirements.

Removing all examination barriers with the help of diverse accommodations is the responsibility of the teachers (Ugen, Schiltz, Fischbach & Cate, 2020; Watkins, 2007). Reducing the curriculum content for hearing impaired children and huge class size was intimated as barriers to inclusion. Fixed or reduced curricula for these children prevent them to get education in regular schools in Pakistan, assuming that it is the responsibility of special schools (Bashir, 2005). It was highlighted by most of the parents that assistive devices like hearing aids, and collaborative support of professionals like audiologist, speech therapist and psychologist are mostly missing in the schools that is why

their children are lagging behind the rest of the learners. Adaptations in assessments like alternative modes of assessing learning, formatting of assessment tests, and use of assistive technology are missing. (Asghar, Kyrö, & Gul, 2019). Such services are unaffordable for them, leading their children into stressful situations and behavior problems. According to Hussain, (2003), the availability of testing services and other assistive devices, such as hearing aids, is not sufficient in Pakistan. Purchasing equipment for hearing impaired children and to avail other related services is unaffordable for majority of families in Pakistan (Farooq, 2015). Lack of knowledge of teachers about aspects of hearing loss and their interventions have also hindered the full participation and effective inclusion in regular classrooms. Bamu (2017) reported that the hearing-impaired children suffer a lot if they are not early diagnosed, appropriately identified and provided timely interventions in schools. Teachers feel helpless when they do not possess the knowledge of dealing with hearing impairment and using their preferred communication styles (Ehsan, 2018). Getting education in inclusive schools has enhanced the self-esteem, confidence and social skills of the children with hearing impairment reported by almost all parents. Cambra (2003) and Schwab, Zurbriggen and Venetz (2020) established a positive impact in the personalities of children with hearing impairment as a result of integration with the hearing learners in inclusive classrooms. All parents voted in favor of inclusive education for their children despite of flaws highlighted by them. Therefore, it is the need of the hour to facilitate hearing-impaired learners through proper training of teachers and provisions of required resources for their effective inclusion in regular schools.

CONCLUSIONS

It has been concluded through the results of the study that the parents of children with hearing impairment are not satisfied about the supportive services provided by the schools to their hearing-impaired children like provisions of assistive devices, related professionals and teachers' training for inclusion. Absence and inadequacy of these provisions is a hurdle in the academic performance of their hearing-impaired children resulting in absenteeism and failures in regular schools. Regarding the cognitive, social and emotional development of hearing-impaired children, a positive effect of inclusive classrooms on their personalities is revealed. However, there is a threat of being bullied to a least extent. Teachers either do not make adaptations or make a little, and sometimes reduces the curriculum content of hearing-impaired learners, which affect their performance in the assessments. Although ICT resources such as internet and mobile phones are available everywhere but children and their parents are not satisfied as teachers do not have the related training and do not use diverse teaching and learning materials including use of ICT. Huge class size also prevents the process of inclusion, as hearing-impaired are not given due attention and additional support. Unavailability of computers, and in case of availability, the provision is not for the hearing-impaired children. The hearing-impaired children display intensive frustration during assessments, that result in absenteeism and consequent failures. Provision of extra time and limited additional support provided by the teachers have not proved sufficient to make these children qualify in assessment tests in the inclusive settings. Adaptations in

assessments like alternative modes of assessing learning, formatting of assessment tests, and use of assistive technology are missing. Despite of all limitations and drawbacks revealed in the inclusive settings, the parents has expressed a strong stance in the favor of inclusive education as the inclusive schooling has a positive impact in the overall personality development of their hearing-impaired children.

Implications

- The school should make arrangements to conduct in-service teachers training courses for inclusion and special training courses relating to communication techniques of hearing-impaired learners at regular basis.
- The school administration needs to ensure collaborative support available in the form of professional service providers (Audiologist, Speech therapist, Psychologist etc.), since successful inclusion of hearing-impaired students is not possible in the absence of this team of professionals.
- The school should ensure availability of screening services and hearing aids, other assistive devices and resource material (low-cost or high-cost) etc. It would help in supporting teachers for adapting instructional strategies to enhance functioning skills leading to positive academic performance of children with hearing impairment in the schools. It is unaffordable for parents to purchase costly hearing aids in an under-developed country Pakistan.
- The school should make sufficient computers available so that all children get the opportunity to learn and utilize, in particular, children with hearing impairment to benefit in performing their tasks adequately and quickly.

DECLARATIONS

Ethics Approval and Consent to Participate

The data collection in the present study was conducted after the approval of XYZ institute (name removed due to blind review). We confirm that all methods used in this study were carried out in accordance with relevant guidelines and regulations. The participation of students was completely voluntary and informed consent was obtained from all participants or, if participants are under 18, from a parent and/or legal guardian.

Consent for publication

Not applicable.

Availability Of Data and Materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Competing Interest

The authors declare that they have no competing interests.

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