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ACADEMIC CHALLENGES FACED BY HEARING IMPAIRED STUDENTS IN INCLUSIVE EDUCATION UNIVERSITIES OF LAHORE

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ABSTRACT

Aim: To investigate the academic challenges faced by hearing impaired students in inclusive education universities of Lahore.

Methodology: This was an observational cross-sectional Study. Study was completed in the duration of 6 months November 2022- May 2023 after approval of synopsis. Data was collected from public and private universities having inclusive education system for students with hearing impairment in Lahore. Sample size of 50 students with hearing impairment was taken. Non- probability convenient sampling technique was used. Both male and female were included in the study. Students with age 18-30 years were involved. Only students belong to inclusive universities in Lahore with hearing loss severity level mild to profound were taken. Pupils of undergraduate, graduate, post graduate level were included in this study. Students with co morbid medical condition with hearing impairment was excluded from the study. Validated questionnaire was used, and data was analyzed by using SPSS version 21. Descriptive statistics of variables were calculated as frequencies and percentages.

Results: Result showed that, 2(4%) Strongly disagreed with teachers from other department show cooperation according to their needs and 15(30%) agreed with that their classrooms are not well designed for prevention of background noise. 6(12%) disagreed with SWHI learn the same concept in the inclusive classroom as they learn in the segregated group. 2(4%) strongly disagreed that Classmates discriminate SWHI in conducting any group activity.

Conclusion: It was concluded that, inclusive education system at university level is very comfortable place for adult students with hearing impairment to learn and grasp knowledge. Only few students faced challenges, in very low percentages which could be minimized by individually understanding their challenges.

Keywords; inclusive education, hearing impairment, universities, academic challenges

INTRODUCTION

According to the World Health Organization's 2024 study More than 5% of the global population, equivalent to 430 million individuals, need rehabilitation to manage their hearing impairment, including 34 million children. Projections indicate that by 2050, this number will rise to over 700 million people, affecting 1 in every 10 individuals worldwide. There were an estimated 120 million people globally with hearing impairment in 2012 survey. WHO defines hearing loss as the inability of an individual to hear adequately(1). In low and middle-income countries such as Pakistan, approximately 80% of the population affected by hearing loss is prevalent. The prevalence of profound bilateral hearing loss is 1.6 per 1000 people in Pakistan. (2)

Hearing loss is a sensory discrepancy in humans that can result in partial or complete inability to hear sounds, affecting both ears (bilateral) or one ear (unilateral). Despite being a chronic condition, its subtle nature often leads to it being overlooked during childhood. Children with hearing loss may encounter delays in speech and language development, as well as difficulties in communication, which can impact their mental and physical well-being. Late diagnosis and delayed intervention can also hinder their social integration and adaptation to their surroundings and peers. To mitigate these communication barriers and academic setbacks, students with varying degrees of

hearing loss require services that enhance their residual hearing abilities and minimize the secondary effects of their impairment.(3)

Education is a fundamental human right that every nation strives to ensure for its citizens. Hearing-impaired students often do not feel fully integrated into their university community due to various barriers they encounter. Some students may not seek specialized services within inclusive higher education settings simply because they are unaware of the challenges they could encounter at this level, where the teaching and learning environment differs significantly from secondary schools. (4)

In Pakistan, the inclusive education movement promotes the enrollment of deaf students in mainstream classes, focusing on addressing their specific needs. Research in inclusive education has highlighted the importance of attitudes in fostering successful social interactions among students and engaging them effectively in educational methods. Negative attitudes hinder students with special needs from taking control of their own achievements. (5, 6)

Inclusive education acts as an inclusive opportunity for everyone regardless of disability, gender, age, or any other characteristic. The concept of inclusive education emphasizes participation and mainstreaming over segregation, moving away from categorizing students based on their abilities. Essentially, inclusion advocates that every child and student can learn in the same way. (7, 8)

Inclusive education appears straightforward and beneficial in theory, but its practical implementation requires substantial effort and dedicated support services to be effective. Challenges include the high costs associated with equipping classrooms with special equipment, the necessity of hiring sign language interpreters for translation, and a lack of social preparation and awareness among both students and teachers regarding students with disabilities. Studies have identified that hearing-impaired students face difficulties within educational institutions where adequate support for their needs is often lacking. These students' hearing impairments can hinder their academic progress, with some issues remaining unnoticed until they significantly impact their studies.(9)

Studies indicate that students with hearing impairment face numerous challenges within inclusive learning environments, particularly due to academic barriers such as limited communication between teachers and students. The attitude of teachers plays a crucial role in shaping inclusive education. Classroom educators not only require specific skills but also need to be innovative, adaptable, and open to learning from their students for successful inclusive education. However, in some schools, regular teachers are expected to teach students with special needs without adequate administrative support or training. This lack of foundational knowledge in special education poses a significant challenge. Research emphasizes the need for inclusive educational policies, clear curricula, and comprehensive teacher preparation programs aimed at ensuring the effectiveness and benefits of inclusive education for students with disabilities.(10)

Ghazala Ishrat et al., (2021) used quantitative methods to explore how 50 hearing-impaired university students perceive inclusive education in Pakistan. The findings indicate overall satisfaction with inclusive education and comfort in learning new concepts. Students advocate for starting inclusive education at primary and secondary levels. Academic success depends on understanding concepts, educational background, and proficiency in sign language. Acceptance is higher among special education teachers compared to those from other backgrounds.(7)

Case study in Nairobi, Lynette W. Kigotho (2016) investigated barriers faced by ten hearing-impaired students at the University of Nairobi within an inclusive learning environment. Using semi-structured interviews and key informant interviews, the study identified several significant barriers: reliance on lecture-based instruction and the formulation of examination questions, the

competence of sign language interpreters, adequacy of classroom adjustments and furniture, availability of resources like overhead projectors, and the challenge of social integration due to communication barriers, leading to feelings of loneliness and isolation among hearing-impaired students.(11)

Krishnan et al., (2020) conducted a study on challenges faced by hearing impairment students during covid-19. The data was collected from ten hearing impairments students and analyzed qualitatively. The participants were interviewed by using interview questions. The findings reveal that the hearing impaired students hampered their social interactions skills towards others during the pandemic, social distancing and other protocols required during the COVID-19, duration have been difficult for students who are disabled, especially hearing impaired students.(12)

MATERIALS AND METHODS

Cross sectional study was conducted. Data was collected from public and private universities having inclusive education system for students with hearing impairment in Lahore. Study was completed in the duration of 6 months from November 2022- May 2023 after approval of synopsis. A group of 50 students was selected, mirroring the sample size mentioned in the parent article.(7) Nonprobability convenience sampling technique was used. Both male and female were included in the study. Students with age 18-30 years were involved. Only students belong to inclusive universities in Lahore with hearing loss severity level mild to profound were taken. Pupils of undergraduate, graduate, post graduate level were included in this study. Students with co morbid medical condition with hearing impairment was excluded from the study.

To collect the data for this study, self-designed, validated Questionnaire was applied. After content validation of questionnaire (Content validity index 0.9) it was filled by the students with hearing impairment enrolled in inclusive education universities of Lahore. Five categories of questions were

filled by students with hearing impairment, with the help of sign language interpreter. The data was analyzed by using statistical software SPSS 21

RESULTS

1- Gender		
	Frequency	Percent%
Female	26	52.0%
Male	24	48.0%
2- Age		
18-21y	14	28.0%
21-25y	29	58.0%
25-30y	7	14.0%
3- Assistive devices		
hearing aid	32	64.0%
cochlear implant	18	36.0%

4- Education level		
BS	39	78.0%
B. A	7	14.0%
MA	2	4.0%
MS\MPHil	1	2.0%
Graduated student	1	2.0%
5- Intensity of hearing loss		
Mild(26-40db)	16	32.0%
Moderate(41-55db)	9	18.0%
Severe(56-90db)	15	30.0%
Profound(91-onward)	10	20.0%
6- Data collection institutes		
Private universities	33	66.0%
Government universities	17	34.0%

Data was taken from 50 hearing impaired students enrolled in inclusive universities of Lahore, out of these, 26(52%) were female and 24(48%) were male. 14(28%) students fall in 18-21y of age range, 29(58%) students in 21-25y, and only 7(14%) students in 25-30y of age range. 32(64%) students were using hearing aids while 18(36%) were cochlear implanted. 39(78%) students were studying in BS program, 7(14%) in B.A, 2(4%) in M.A, 1(2%) in M.Phil., and 1(2%) student were graduated. 16(32%) students were in mild (20-40dB) hearing loss category, 9(18%) in moderate (40-60dB), 15(30%) in severe (61-80dB), while 10(20%) in profound (81-onward) hearing loss. 33(66%) students were studying in Private universities and 17(34%) in public universities of Lahore.

Tayyaba Usman /Afr.J.Bio.Sc. 6(14) (2024)	strongly agree	agree	Neutral	disagree	strongly disagree
1- About curriculum					
Course curriculum is out come based	11 (22%)	25 (50%)	12 (24%)	2 (4%)	
I am satisfied with the content of the curriculum	11 (22%)	27 (54%)	12 (24%)		
Learning goals of your course are achievable for hearing impaired students	18 (36%)	21 (42%)	9 (18%)	2 (4%)	
SWHI feel too much burdened with the assignments and projects	13 (26%)	22 (44%)	13 (26%)	2 (4%)	
2- About lecture understanding					
SWHI learn the same concept in the inclusive classroom as they learn in the segregated group	10 (20%)	21 (42%)	12 (24%)	6 (12%)	1 (2%)
Sign language interpreter communicate academic queries/questions to relevant teacher during class	24 (48%)	18 (36%)	7 (14%)	1 (2%)	
Teachers use visual aids for associate ideas and concepts to make learning effective along with verbal Instructions	25 (50%)	19 (38%)	6 (12%)		
Classrooms are well designed for prevention of background noise	17 (34%)	15 (30%)	13 (26%)	5 (10%)	
SWHI absorb major concept of lecture during class	7(14%)	22(44 %)	20(40%)	1(2%)	
Teachers repeat the same thing if not understood even by single student	12 (24%)	25 (50%)	12 (24%)	1 (2%)	
3- About teacher's attitude					

Teachers exhibit a positive attitude in the inclusive classroom towards students with hearing impairment	16 (32%)	25 (50%)	8 (16%)	1 (2%)	
Teachers provide assistance during exams according to the special needs of SWHI	14 (28%)	26 (52%)	9 (18%)	1 (2%)	
Teachers from other departments show cooperation according to the need of SWHI?	7 (14%)	29 (58%)	7 (14%)	5 (10%)	2 (4%)
4- About student's satisfaction level regarding their degree					
SWHI acquire valuable skills through your degree program.	16 (32%)	26 (52%)	7 (14%)	1 (2%)	
The degree will enhance the knowledge level of students with hearing impairment (SWHI).	17 (34%)	25 (50%)	8 (16%)		
The degree will assist you in securing financial support in the future	19 (38%)	21 (42%)	10 (20%)		
5- About peer fellow's involvement					
Classmates help SWHI when they stuck in class activities	12 (24%)	27 (54%)	9 (18%)	1 (2%)	1 (2%)
SWHI prefer to go to your teacher with your hearing fellows for academic queries	8 (16%)	30 (60%)	12 (24%)		
Classmates help SWHI in completion of group assignments and projects	13 (26%)	24 (48%)	10 (20%)	3 (6%)	
Classmates discriminate SWHI in conducting any group activity	10 (20%)	18 (36%)	12 (24%)	8 (16%)	2 (4%)

Summary of Results

Result showed that, 2(4%) Strongly disagreed with teachers from other department show cooperation according to their needs and 15(30%) agreed with that their classrooms are not well designed for prevention of background noise. 6(12%) disagreed with SWHI learn the same concept in the inclusive classroom as they learn in the segregated group. 2(4%) strongly disagreed that Classmates discriminate SWHI in conducting any group activity.

Discussion.

The results concluded; different academic challenges faced by students with hearing impairment of inclusive universities of Lahore. Results revealed different frequencies and percentages of different challenges faced by hearing impaired students in inclusive university environment. Likert scale was used in questionnaire, data was analyzed through SPPSS. Research was aimed to find out different academic challenges faced by hearing impaired students during study in an inclusive university setup. Academic challenges were described in a comprehensive questionnaire with different categories of questions consisting of sub questions, For example, challenges about curriculum, lecture, teacher's attitude, satisfaction level about degree, peer group involvement etc.

Results concluded that only few students were experiencing academic challenges in inclusive university environment. Majority of hearing-impaired students were satisfied with their inclusive education in university environment. Only 10 students (20%) faced that their classmates discriminate them while conducting any group activity. 30 students (60%) agreed that they prefer to go with hearing fellows for any query when they need to go towards their teacher. 29(58%) students agreed that teacher from other departments show cooperation according to their special need. Only 6(12%) students think that they learn the same concept in the inclusive classroom as they learn in the segregated group. 24 (48%) students strongly agree that their sign language interpreter communicate their questions to relevant teacher during class. 5(10%) students disagreed that their classrooms are well designed for prevention of background noise.

ISHRAT et al., concluded in Perceptions of Students with Hearing Impairment about Inclusive Education, that 2(4%) Disagree, 12(24%) responded as to some extents and 36(72%) showed agreement when asked about their hearing fellows assist you during regular class tasks when needed. Teachers modify their teaching method according to their special needs, 6(12%) responded as Disagree, 9(18%) responded as to some extents and 35(70%) showed agreement, out of 50 students. Are Sign Language interpreters guide you for completing your assignments after class, 1(2%) responded as Disagree, 6(12%) responded as to some extents and 43(86%) showed agreement.(7)

Study findings of Hatiye et al., showed that students are disagreed with the statement disagreement that instructional language of teachers in regular class was easy to understand and it is challenging, 87.5% showed strongly disagreement with this statement, 12.5% disagreed.(13)

Authors Abdul Hameed and Qurrat-ul-Ain, explored in their study that average mean score 2.23 & 2.48 (about 50%) student with hearing impairment were not satisfied with their teacher's method of teaching as they reported teachers lecture pace is fast, but teachers use visual aids. They also complained that their teachers use to take rounds in the classroom during lecture as a result they are not able to learn lessons through lip reading.(14)

Study of Mahwish Safder et al., (2012) indicated poor perception of teachers' instruction by hearing impaired students, poor satisfaction with sign language interpreter. Researchers also reported that students claimed that teachers are not concerned towards hearing impaired students in the class. Study also explored that hearing impaired students are not satisfied with the behavior of their hearing class fellows.(15)

Conclusions

It was concluded that, inclusive education system at university level is very comfortable place for adult students with hearing impairment to learn and grasp knowledge. This study also concluded that maximum students are satisfied with their education in inclusive universities in all aspects either with teaching method, lecture concepts, teacher's attitudes or with peer group behaviors etc. Only few students faced challenges, in very low percentages. These few challenges could be minimized by individually understanding their challenges.

Recommendations

Future recommendations for enhancing support for hearing-impaired students in Lahore's inclusive universities include conducting longitudinal studies to assess academic progress and support measures' effectiveness. Expand inclusive practices beyond academics to include extracurriculars and career development, ensuring equitable access. Foster international collaboration to exchange best practices in supporting hearing-impaired students, incorporating innovative strategies and policies. These efforts aim to create inclusive environments where all students can excel academically and socially.

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