ISSN (print): 2548-8619; ISSN (online): 2548-8600

Volume 7 Number 1; DOI: http://dx.doi.org/10.17977/um005v7i12023p59

The Perception of Special Education Teachers Towards the Involvement of Audiologist in Special Education School

Mohd Hanafi Mohd Yasin¹, Mohd Mokhtar Tahar¹, Suziyani Mohamad¹, Nurul Ezza Aleyza Binti Rasilah², Rabaishah Azirun²

¹ Universiti Kebangsaan Malaysia

*Corresponding Author e-mail: mhmy6365@ukm.my

Abstract: Audiologists is an individual that has close connection with deaf and hearing impairment students. This research is done to study the perception of the special education teachers on the involvement of audiologists in special education school. In this research, quantitative data which is questionnaire is used as the research instrument. The data obtained were analyzed using Microsoft Excel XLstat. The total of 165 teachers that are included in this research through snow-balling sampling. Results shown that 149 (90.8%) of the teachers agreed that the role of audiologists is vital to improve the special education quality in Malaysia. In general, the teachers have high comprehency toward the common function of the audiologists but a very worrying understanding on their specific role. It is proven when special education teachers are unsure about whether audiologists only work in hospitals (56 teachers (33.9%)), involved in balance problems (65 teachers (39.4%)) and vestibular problems (88 teachers (53.3%)). The research shown that having an audiologist helps to reduce the impact of hearing loss for the deaf students when 152 (83.8%) special education teachers agreed that the involvement of audiologists in the education system benefits many teachers and students thus prepares a better and more condusive environment for them.

Keywords: audiologists, special education teacher, perception.

INTRODUCTION

Audiologist have important roles for individual with deaf and hard of hearing (DHH). According to Christina M. Border (2015), individual DHI always deal with both clinical audiologist and educational audiologist. Clinical audiologists are not only focused on childhood care but also provides lifelong services for the survival of individual. Based on Christina M. Border's writing (2015), clinical audiologist usually will work in hospital and have main responsibility which is to diagnose or detect the degree of hearing loss, set the programme of the hearing aids and evaluate individual's ear health. Usually, individual DHH have an appointment with clinical audiologist at least once a year.

Educational audiologist is a person chosen by school to provide audiologist services and hearing screening for individual between 3 to 21 years old (Christina M. Borders, 2015). Hearing screening usually done with big number of pupils in one time. Educational audiologist work at school and involve in proving maximal conducive environment to ease hearing problems. In order to provide maximal conducive environment, direct involvement of educational audiologist is a must. They involve in helping to put up and prepare tools in classes, share the correct way of using the tools and advise teachers on any improvement needed to reduce environment noises.

² IPG Kampus Pendidikan Islam

Clinical audiologists and educational audiologists play important roles for DHH individual. Christina M. Borders (2015) said collaboration between both group of audiologists give hopes for life and better education for individual with hearing problems. In Malaysia, educational audiologists are still not well known yet their duty indirectly implanted by teachers.

Everyone plays an important role in helping to provide quality education for individual with hearing problems. Audiologists are included in the team (Yahya Don, 2007). In general, audiologists are responsible in helping identify an individual's hearing level and assisting in providing better quality lifestyle opportunities (Cheryl DeConde Johnson, 2021). Children with hearing loss have communication issues that affect their ability to read, write, socialize, and thrive academically (Rifnurrohma, 2017; Agusliati & Aprilia, 2022). They need full communication, which includes writing, writing motions, and signs. Students who are deaf cannot hear words or sounds; instead, they use lipreading to understand conversation (Widyahety et al., 2022).

In international level, there is a job introduced as an educational audiologist where it is a unique position in assisting the educational management of individual DHH. They specifically provide a conducive classroom environment for DHH (Cheryl DeConde Johnson, 2021). Other than identifying the degree of hearing loss, educational audiologists have knowledge and skills about the impact of hearing loss in education, relevant educational goals and experience with strategies and technologies that support students and teachers in the classroom.

In Malaysia, the involvement of audiologists in school is still not considered as an important job and the task is still held by special education teachers. According to Cynthia McCormick Richburg (2011), many schools in almost 50 different counties in Indiana PA provide educational audiologist services. However, in Malaysia, the job of a teacher is not only to teach but be a counsellor, caregiver and facilitator which the preparation of conducive environment for individual with hearing problems must also include in their working scope (Siti Muhibah binti Hj. Nor, 2018).

Law enforcement

Educational audiology services are not one of the legal services. There are several rules in the IDEA state that special services such as audiology services involved in helping individual with hearing problems are important and legitimate (Kym Meyer, 2019).

IDEA: Section 300.34 (Related services)

Related services such as the transportation and development of services, corrections and support needed to help individual with hearing problems. The services include the services of occupational therapists, limb therapist, speech therapists, audiology services and more. If an individual with hearing problems requires related services to access the Free Appropriate Public Education (FAPE) curriculum, the school must list the services required by the individual. Even though the act covers all types of disabilities, audiology involvement also covers the services mentioned above.

IDEA: Section 300.5 (Assistive technology)

Assistive technology is any equipment or product to improve the function of individual with hearing problems. This act is also open to all types of disabilities. For individual with hearing problems, FM system and microphone are hearing aid technology (HAT) that are often used to help smooth the learning process. Audiology is the only profession that has the right to make decisions, choose hearing aid technology (HAT) and choosing the suitable teaching aids because it fits their working scope. Teachers and speech therapists are not taught

to do such things in their studies. Collaboration is the key to provide quality education. Collaboration between educational audiologists, special education teachers and speech therapists are important to ensure individual DHH get a quality education. Even though there are some overlap between their works, each profession has a specific job. If the cooperation is not so good, even the existing technological advances are not very helpful to students in education. For example, even if a student has modern hearing aids, the learning process will not effective if the teacher uses inappropriate teaching aids.

IDEA: Section 300.113 (Routine inspection)

In a research conducted in schools showed on every school day, half of the hearingimpaired students who use hearing aids have a device that does not work well. Therefore, routine inspections have been included in the IDEA regulations and these routine inspections need to be performed to ensure that hearing aids and external components of medical devices implanted are in good condition and functioning. When hearing aids work well, DHH students can access learning much easier. Anyone with knowledge of how to inspect hearing aids can make these routine inspections including teachers as well as educational audiologists. Permanent hearing-impaired students who are not eligible for educational services under IDEA will not be ignored and can still receive educational audiology services and hearing aid technology (HAT) through plan 504. In periodic monitoring, educational audiology can support residential facilities including the use of assistive technology.

METHOD

Participants and procedure

The participants consisted of 165 individuals working as special education teachers across the country. These special education teachers must have experience in handling and teaching students with hearing problems regardless age or location. These teachers should be honest in answering questions and willingly to answer the questionnaire. In selecting participants, nonrandom sampling used where not all individuals in the population could be selected. The snow-balling sampling technique have been used where the researcher communicates with a representative who have contacts that meet the criteria the researcher has set. Then, the individual represented me to connect with his contact. Therefore, 165 special educations obtained as participants.

Measures

In this research, questionnaire is used as research instrument. Questionnaire forms were selected because it is easier to distribute to special education teachers regardless places. The questionnaire is divided into three section.

The first section is to identify the background of the participant which are special education teachers. Their backgrounds were taken to ensure the period of being a special education teacher and their experience in handling students in hearing problems. The second section is to measure the level of understanding of the participant about the role of educational audiology in schools and to identify the level of knowledge of the participant about the impact of hearing loss with the environment. In this section, other than questions about the actual roles of educational audiologist, several questions about the impact of hearing loss with the environment are also included. Section three to evaluate the perception of participant on the importance of educational audiology involvement in schools. In this section, questions on teachers' opinions if the educational audiologist services introduced and held in Malaysia are asked to find out teachers' perceptions about the involvement of educational audiology in schools. In line with the objectives of the research, the questionnaire was divided by three sections to achieve each of the objectives namely to identify special education teachers'

perceptions of the importance of audiologists' involvement in schools, measuring their understanding of the role of the audiologists in schools and knowing their knowledge of the impact of hearing loss with the school environment.

Data analysis

Based on the feedback that has been provided by the participant, the data will be analyze. Since the data obtained are data in form of variety of answers, data analyze using descriptive statistics. Descriptive statistics will provide techniques that help to infer and explain data in variety of answers. Descriptive statistics can be used in pie chart, frequency and bar chart data. So, even though there are a variety of chart forms resulting from the research, the data still can be analyze.

RESULT AND DISCUSSION

Result(s)

Analysis of the perception of special education teachers on the importance of the involvement of audiologists in schools.

In line with the main objectives of the research, special education teachers' perceptions of the importance of audiologist involvement in schools were obtained in the second section of the questionnaire. Teachers' perceptions were assessed using Likert Scale. The results of the study were recorded in tabular form as follows.

Table 1. Result of special education teachers' perceptions of the importance of audiologist involvement in schools

Statement	Statement Strongly Disagree		Not sure	Agree	Strongly	
I loren and other other	disagree	8	44	69	agree 42	
I know exactly who the	0	_				
audiologist is.	(0%)	(4.9%)	(27%)	(42.3%)	(25.8%)	
Audiologists only work in	30	34	56	33	12	
hospitals.	(18.2%)	(20.6%)	(33.9%)	(20%)	(7.3%)	
An audiologist will diagnose a	0	2	21	71	71	
person's hearing loss.	(0%)	(1.2%)	(12.7%)	(43%)	(43%)	
An audiologist will help	0	14	39	61	50	
reduce the impact of a	(0%)	(8.5%)	(23.8%)	(37.2%)	(30.5%)	
person's hearing loss.						
Audiologists assist in the	0	1	14	66	83	
selection, use and care of	(0%)	(0.6%)	(8.5%)	(40.2%)	(50.6%)	
hearing aids.						
An audiologist will eliminate a	42	50	49	17	7	
person's hearing problems.	(25.5%)	(30.3%)	(29.7%)	(10.3%)	(4.2%)	
Individuals who do not have	14	13	47	53	38	
hearing problems can seek the	(8.5%)	(7.9%)	(28.5%)	(32.1%)	(23%)	
services of an audiologist.						
The expertise of audiologists	20	36	65	27	17	
does not cover balance	(12.1%)	(21.8%)	(39.4%)	(16.4%)	(10.3%)	
problems.	, ,	,	` ,	` '	, ,	
The audiologist's expertise	3	6	88	45	23	
covers vestibular problems.	(1.8%)	(3.6%)	(53.3%)	(27.3%)	(13.9%)	
The expertise of an audiologist	7	16	39	69	34	
depends on the advancement	(4.2%)	(9.7%)	(23.6%)	(41.8%)	(20.6%)	
of the instruments used.	(11=71)	(511,11)	(==::,,)	(1-10/1)	(====,=)	
Audiologists' expertise	0	1	24	76	64	
includes providing	(0%)	(0.6%)	(14.5%)	(46.1%)	(38.8%)	
rehabilitation training for	(-,-)	(/	(= : , 0)	()	(====,0)	
individuals wearing hearing						
morrisans woming noming						

aids.			·		
The expertise of an audiologist	1	3	22	62	77
is needed in educating	(0.6%)	(1.8%)	(13.3%)	(37.6%)	(46.7%)
individuals with hearing					
problems.					
The audiologist's expertise	0	0	30	62	73
includes coordinators in infant	(0%)	(0%)	(18.2%)	(37.6%)	(44.2%)
hearing screening programs.					
The services of an audiologist	1	4	32	57	71
are needed in schools.	(0.6%)	(2.4%)	(19.4%)	(34.5%)	(43%)
Audiology services focus on	7	26	55	53	24
hearing only.	(4.2%)	(15.8%)	(33.3%)	(32.1%)	(14.5%)
The services of audiologists	0	1	15	72	77
are needed in various walks of life.	(0%)	(0.6%)	(9.1%)	(43.6%)	(46.7%)

The result of the research found that most participants were aware of the role of audiologists in general this can be seen when 142 (86%) participants agreed and strongly agreed that an audiologist is an individual who diagnoses a person's hearing loss. In addition, 149 (90.8%) respondents agreed and strongly agreed that audiologists assist in the selection, use and care of hearing aids.

Based on table 1, although 111 (68.1%) respondents stated that they clearly know who an audiologist is, they are still unsure about the role of an audiologist in particular. Based on table 1, 88 (53.3%) respondents were unsure about the role of audiology covering vestibular problems and 65 (39.4%) balance problems. 56 (33.9%) respondents were not sure whether audiologists only work in hospitals while 55 (33.3%) respondents were unsure about audiology services whether they only focus on hearing or vice versa. This proves that the exact role of the audiologist is still unclear to the respondents. Respondents 'understanding of the audiologist's actual perceptions will to some extent influence respondents' perceptions of the importance of audiologist involvement in school.

In conclusion, most respondents welcomed the involvement of audiologists in the school. Table 1 shows that a total of 71 (43%) respondents strongly agreed and 57 (34.5%) participants agreed that the services of audiologists are needed in schools. 77 (46.7%) strongly agreed and 63 (37.6%) agreed that the expertise of audiologists is needed in educating individuals with hearing problems. The services of audiologists needed in various walks of life were agreed and strongly agreed by 149 (90.8%) participants.

Analysis does special education teachers understand the role of audiologist in schools

An understanding of the actual role of an audiologist is close to the authenticity of individual's perception about how important the involvement of audiologist in schools. The level of understanding of the participant about the roles of audiologists in school had been study in the second section of the questionnaire. Table below shows the understanding of special education teachers about the roles of audiologists in schools.

Table 2. Result of special education teachers understandable to the role of audiologist in schools

Statement	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
Hearing loss have significant impact to	1	4	10	42	108
student's achievement.	(0.6%)	(2.4%)	(6.1%)	(25.5%)	(65.5%)
Hearing loss have significant impact to	1	0	9	48	107
student's level of social and	(0.6%)	(0%)	(5.5%)	(29.1%)	(64.8%)
communication.					

Hearing loss make impact in the	1	4	18	52	90
arrangement of the classroom.	(0.6%)	(2.4%)	(10.9%)	(31.5%)	(54.5%)
Hearing loss make impact in choosing	1	2	7	53	101
teaching aids.	(0.6%)	(1.2%)	(4.3%)	(32.3%)	(61.6%)
Hearing loss make impact for a special	5	7	18	54	81
education teacher.	(3%)	(4.2%)	(10.9%)	(32.7%)	(49.1%)
The use of soft things such as curtain	3	15	59	50	38
and carpet help reduce the impact of	(1.8%)	(9.1%)	(35.8%)	(30.3%)	(23%)
hearing loss faced by the student.					
Student's arrangement in the classroom	2	5	21	73	64
based on the level of student's hearing	(1.2%)	(3%)	(12.7%)	(44.2%)	(38.8%)
loss help reduce the impact of hearing					
loss faced by the student.					
Excessive lighting exposure are helpful	13	32	64	36	18
for learning process for the student	(8%)	(19.6%)	(39%)	(22.1%)	(11%)
with hearing loss.					
Wider classrooms are helpful for	18	36	54	37	18
learning process for the student with	(11%)	(22.1%)	(33.1%)	(22.7%)	(11%)
hearing loss.					
The impact of hearing loss in school	0	13	60	66	25
environment can be control.	(0%)	(7.9%)	(36.6%)	(40.2%)	(15.2%)
Reduce the impact of the hearing loss	63	37	29	26	10
in school environment are teacher's	(38.2%)	(22.4%)	(17.6%)	(15.8%)	(6.1%)
responsibility only.					
I know about FM System.	24	35	59	30	15
•	(14.7%)	(21.5%)	(36.2%)	(18.4%)	(9.2%)
FM System have been used in my	No -73.2%		Maybe -16.5%	Y	es -10.4%
school.			•		
Hearing aids help student to focus	0	4	15	65	79
during classes.	(0%)	(2.5%)	(9.2%)	(39.9%)	(48.5%)
I know how to maintain hearing aids.	51	37	48	15	13
5	(31.1%)	(22.6%)	(29.3%)	(9.1%)	(7.9%)
I will check my student's hearing aids	27	34	46	37	21
before the class started.	(16.4%)	(20.6%)	(27.9%)	(22.4%)	(12.7%)
	` '		` ′		

Based on table 2, research tells most of the participants have high understanding about the roles of audiologists in school. 63 (38.2%) participants strongly disagree and 37 (22.4%) participants disagree that reducing the hearing loss impact in school environment are teacher's responsibility only. Other than that, only 28 (17%) participant agree and strongly agree that they know how to maintain hearing aids. It shows that the roles of audiologist in school are needed.

The roles of audiologist in school are important when most participant not sure about certain statements. Based on table 2, 59 (35.8%) participants are not sure that the use of soft things such as curtain and carpet help reduce the impact of hearing loss faced by the student. Other than that, 64 (39%) participants not sure about excessive lighting exposure are helpful for learning process for the student with hearing loss and 54 (33.1%) participants are not sure about the statement wider classroom are helpful for learning process for the student with hearing loss. The selection of soft things, the selection of suitable lighting exposure and the selection of suitable size of the classroom are audiologists' specialities. So, it shows that the involvement of audiologist in school are very important to help special education teachers in providing the best medium for students with hearing loss in study.

As a conclusion, the roles of audiologists in school are very important because 59 (36.2%) participants are not sure about FM system. FM system is one of the hearing aids technology that helps students with hearing loss to study in class. Due to 73.2% participants are not using FM system in school, the roles of audiologist in school are very important to help

special education teachers to use FM system which are very useful for student with hearing loss. Even though 144 (82.4%) participants agree and strongly agree that hearing aids helps student with hearing loss more focus when teachers teaching but only 58 (35.1%) participant that will check the hearing aids of the students before teaching. It shows that the roles of audiologist in school are very importance to helps special education teachers.

Analysis Are Special Education Teachers Have Knowledge About The Impact Of Hearing Loss With School Environment

Every hearing loss will give impacts towards an individual. The impact of hearing loss related with school environment. The school environment gives huge impact of learning process for student with hearing loss. The result of the research can be seen in table 3.

Table 3. Result of are Special Education Teachers have Knowledge About the Impact of **Hearing Loss with School Environment**

Statement	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
Hearing loss makes difficult for students with	8	4	16	49	87
hearing problems to learn.	(4.9%)	(2.45)	(9.8%)	(29.9%)	(53%)
Teachers need to be creative in engaging	1	0	6	49	108
students with hearing problems in learning	(0.6%)	(0%)	(3.7%)	(29.9%)	(65.9%)
sessions.					
Teachers need the expertise of audiologists as a	1	1	8	54	99
reference for students' hearing conditions.	(0.6%)	(0.6%)	(4.9%)	(33.1%)	(60.7%)
The use of aids such as FM systems, hearing	1	1	15	61	86
aids and loudspeakers help make learning	(0.6%)	(0.6%)	(9.1%)	(37.2%)	(52.4%)
process easier.	1	1	0	40	105
The involvement of audiologists in the	1	1	8	48	105
education system provides many benefits for teachers and students.	(0.6%)	(0.6%)	(4.9%)	(29.4%)	(64.4%)
The involvement of audiologists in special	1	1	15	44	104
education schools are needed in selecting	(0.6%)	(0.6%)	(9.1%)	(26.7%)	(63%)
suitable teaching aids for student with hearing problems.					
The involvement of audiologists in special	1	2	13	41	108
education schools are important in helping	(0.6%)	(1.2%)	(7.9%)	(24.8%)	(65.5%)
special education teachers to ensure students'	(0.070)	(1.2/0)	(1.570)	(2.1.070)	(00.070)
hearing aids in good condition.					
The involvement of audiologists in special	34	51	22	15	42
education schools will delay learning process.	(20.7%)	(31.1%)	(13.4%)	(9.1%)	(25.6%)
The involvement of audiologists in special	2	6	31	58	67
education schools are needed to reduce the	(1.2%)	(3.7%)	(18.9%)	(35.4%)	(40.9%)
impact of hearing loss with school	,	,	,	` /	` ,
environment.					
The involvement of audiologists in special	38	59	27	18	23
education schools will increase the burden of	(23%)	(35.8%)	(16.4%)	(10.9%)	(13.9%)
teachers.					
The involvement of audiologists in special	2	3	25	53	81
education schools save the teachers' time to	(1.2%)	(1.8%)	(15.2%)	(32.2%)	(49.4%)
refer audiologist.					
The involvement of audiologists in special	13	19	72	26	35
education schools are consuming a lot of	(7.9%)	(11.5%)	(43.6%)	(15.8%)	(21.2%)
expense.					
The involvement of audiologists in special	1	2	12	55	94
education schools helps increase the quality of	(0.6%)	(1.2%)	(7.3%)	(33.5%)	(57.3%)
special education in Malaysia.					
The involvement of audiologists in special	1	1	16	55	92
education schools ease students to directly refer	(0.6%)	(0.6%)	(9.7%)	(33.3%)	(55.8%)
to the audiologists.					

The involvement of audiologists in special	1	2	24	58	79
education schools helps in maintaining hearing	(0.6%)	(1.2%)	(14.6%)	(35.4%)	(48.2%)
aids technology such as FM System and					
speaker.					
The scheduled involvement of audiologists in	2	3	17	53	87
special education schools (weekly/monthly) are	(1.2%)	(1.9%)	(32.7%)	(32.7%)	(53.7%)
more suitable than the daily involvement.					

The research shown 125 (76.9%) participants agree and strongly agree that the involvement of audiologist in special education are needed to reduce the impact of hearing loss with the school environment. It is also proved when 153 (93.8%) participants agree and strongly agree that teachers need the expertise of audiologists as a reference of students' hearing condition.

Based on table 3, 157 (95.8%) participants agree that teachers need to be creative in engaging students with hearing problems in learning process. However, the need of the involvement of audiologists in special education schools in choosing the suitable learning aids for students with hearing problems agreed by 148 (89.7%) participants. 85 (58.8%) participants strongly disagree and disagree that the involvement of audiologists in special education will delay the learning process. 152 (83.8%) participants agree and strongly agree that the involvement that the involvement of audiologists in special education school give many benefits for students and teachers.

As conclusion, the involvement of audiologists in special education schools ease students with hearing problems to refer to audiologists are agreed by 147 (89.1%) participants. 149 (90.8%) participants agree and strongly agree that the involvement of audiologist in special education schools helps increase the quality of special education in Malaysia. However, 140 (86.4%) participants agree and strongly agree if the involvement of audiologists in special education schools is done weekly or monthly than is done daily because 72 (43.6%) participants not sure about the involvement of audiologists in special education schools are consuming high cost.

Discussion(s)

In Malaysia, the roles of audiologists in special education schools is not well known yet. It shows that the awareness of the importance of the involvement of audiologists in special education schools are still low. In fact, the roles that should audiologists are included in teachers' job scope which burden teachers with multiple works and mix of job scope. Other than that, less skilled teachers in managing and maintaining hearing aids is one of the factors the involvement of audiologists in special education schools needed to be emphasized. Hearing aids are important to student with hearing problems. If the exposure, awareness and skilled teachers are still low, students with hearing problems will having discomfort which cause the school environment not conducive for them to learn.

This research is one of the efforts to identify the perception of special education teachers about the importance of the involvement of audiologists in special education schools. In this research, 165 special education teachers are the participants. The perception of special education teachers towards educational audiologists is very important to evaluate because special education teachers are one of the members that closely involved with educational audiologists.

What are the perceptions of the special education teachers on the importance of the involvement of audiologists in schools?

The research shows even most of special education teachers only understand the role of audiologist in general but most of the teachers agreed that audiologists have their own roles in

schools. The involvement of audiologists not only can reduce special education teachers' work but also helps in increasing the quality of special education system in Malaysia. The specific roles of audiologists are still not clear for special education teachers. Most of the teachers are not sure about the involvement of audiologists' expertise such as balancing and vestibular problems. It shows that the exposure of audiologists' specific roles among special education teachers are still low. Low exposure of audiologists' specific roles among special education teachers will cause the importance of audiologists' involvement in special education schools not too clear for special education teachers.

Are special education teachers understand about the roles of audiologist in school?

The research shows that most of special education teachers have high understanding of the roles of audiologists in school. Educational audiologists not only need to help in maintenance of hearing aids but also individual that need to ensure that classroom's condition is suitable and conducive for students with hearing problems to study. Make sure that the class has suitable lighting, the correct use of FM System and evaluate the suitable learning aids are educational audiologists' expertise which are needed in school. So, the roles of audiologists in schools helps teachers in preparing and providing conducive classroom that are suitable for students with hearing problems.

Are special education teachers have knowledge about the impact of hearing loss with school environment?

The research show that special education teachers strongly agree that the involvement of audiologists in special education schools are needed to reduce the impact of hearing loss with school environment. The involvement of audiologist ease special education teachers to get reference about the suitable environment for students with hearing problems. Special education teachers that can't see the involvement of audiologists in school will delay learning process yet give many benefits for special education teachers and students with hearing problems. The impact of hearing loss necessarily exists among students with hearing problems. So, audiologists' expertise are needed to minimalize the impact to provide conducive environment for student with hearing problems.

Based on the research, it can be concluded that less skill in reducing the impact of hearing loss in school are one of the factors why special education teachers agreed that the involvement of audiologists in schools are important. It is shows when most of special education teachers do not know how to do maintenance of hearing aids even thought hearing aids are one of the main mediums for students with hearing problems to communicate with teachers. Other than that, most of special education teachers do not know that the use of oft things such as curtain and carpets can absorb sound and minimize echo in classroom. So, students with hearing problems can hear teachers voice clearly.

Less exposure about the roles of audiologists in special education schools can be detected in this research which most special education teachers not sure whether audiologists work only at hospital. Like overseas, the exposure of audiologists' involvement in special education school widely known. So, they more understand that the services of audiologists not only at hospital but also in special education schools.

CONCLUSSION

The research shows special education teachers agree that the involvement of audiologists in special education schools are very important and can help reducing teachers' workload. The exposure of audiologists' roles in special education schools to special education teachers are very important to be enhanced because this research shows that audiologists give many benefits for teachers and students with hearing problems. It is undeniable that special education teachers do have their own expertise in providing the best education for students with hearing problems, but schools also need the expertise of audiologists in providing a comfortable and conducive environment for students with hearing problems.

Good collaboration between various parties will create good awareness towards community. So, special education teachers, special education schools, audiologists and government need to make a good collaboration to increase awareness so that the importance of audiologists' involvement in special education schools can be seen clearly. Government need to provide medium for audiologists to give services in special education schools while schools need to welcoming audiologists' services in the schools. Special education teachers need to cooperate with audiologists to give the best environment for student with hearing problems to learn.

The involvement of audiologists in special education schools not only can act as reference for special education teachers in choosing the suitable learning aids for students with hearing loss but also act as one of the services that helps in increasing the quality of special education in Malaysia.

REFERENCES

- Abuor, N. J., Oracha, A. P., & Odeck, A. (2015). Existence Of Learners With Hearing Impairment Who Can Benefit From Audiological Rehabilitation For Improvement Of Oral/Aural Communication In Primary Schools For The Deaf In Western Region Of Kenya. International Journal of Information Research and Review, 2(11), 1397-1403.
- Agusliati, E., & Aprilia, I. D. (2022). Somatic, Auditory, Visual, Intellectual Learning Model in Improving Vowel Pronunciation for 3rd Class Deaf Students. Proceeding of International Conference on Special Education in South East Asia Region, 1(1), 118–125.
- Allen, S., & Mayo, R. (2020). Speech-language pathologists' perceptions of school-based services for children with hearing loss. Language, Speech, and Hearing Services in Schools, 51(2), 469-478.
- Alpiner, J. G., & McCarthy, P. A. (Eds.). (2000). Rehabilitative audiology: Children and adults. Lippincott Williams & Wilkins.
- Che' Rozaniza Azizan. (2019). Hubungan Keselarasan Individu- Persekitaran dengan Penyesuaian, Kepuasan dan Pencapaian Akademik Pelajar Kurang Upaya Pendengaran di Politeknik . Serdang : Universiti Putra Malaysia
- DeConde Johnson, C. & Seaton, J. B. (2021). Educational Audiology Handbook . 3rd edition. Amerika Syarikat : Plural Publishing Inc.
- DeConde Johnson, C., Benson, P. V. and Seaton, J. B. (1997). Educational Audiology Handbook . Amerika Syarikat: Singular Publishing Group.
- Don, Y. (2007). Kepimpinan Pendidikan di Malaysia . Batu Caves : PTS Professional Publishing Sdn. Bhd.
- Guardino, C. & Antia, S. D. (2012). Modifying the Classroom Environment to Increase Engagement and Decrease Disruption with Students Who Are Deaf or Hard of Hearing, The Journal of Deaf Studies and Deaf Education . 17(4): 518–533.
- Harene Tay Ai Hwa & Manisah Mohd Ali. (2017). Kesihatan Mental dalam Kalangan Murid Kurang Upaya Pendengaran di Sebuah Sekolah Menengah Malaysia. Jurnal Penelitian Dan Pengembangan Pendidikan Luar Biasa . 4(1): 45-48
- Johnson, C. E. (1999). Dimensions of multiskilling: Considerations for educational audiology. Language, speech, and hearing services in schools . 30(1): 4-10.
- Johnson, L., & Chmela, K. (2018). How Can We Overcome the Challenges of Providing School-Based Fluency Services? . Seminars in Speech and Language, 39(4): 371–381.
- Kym Meyer. (2017). Children with Hearing Loss Need an Educational Audiologist on their Education Team How to Advocate for Educational Audiology . Audiology Online.
- Kym Meyer. (2019). How to Advocate for Educational Audiology. AudiologyOnline. Article 26090, 25 November .
- Malek Muhamat Said. (2007). Mengurus khidmat bimbingan & kaunseling sekolah . Kuala Lumpur : PTS Professional Publishing Sdn. Bhd.
- Mastura Badzis & Rabiu Garba Idris. (2019). Parenting Children with Hearing Impairment: The Milieu of Parents' Practices and Experiences. Intellectual Discourse, Special Issue . 27: 899–921
- McCormick Richburg, C. & Smiley, D. F. (2012). School-Based Audiology . Amerika Syarikat : Plural Publishing Inc.

- McCormick Richburg, C., & Goldberg, L. R. (2005). Teachers' Perceptions About Minimal Hearing Loss. Communication Disorders Quarterly . 27(1): 4-19.
- Miles, S., Khairul Farhah Khairuddin & McCracken, W.Y. (2018). Deaf learners' experiences in Malaysian schools: access, equality and communication. Social Inclusion . 6(2):46-55
- Mohamad, Armanurah, Syahrina Abdullah and Lili Julienti Abu Bakar. (2015). Transformasi pemikiran keusahawanan bagi dimensi mengenal peluang keusahawanan dalam kalangan OKU. Journal of Global business and Sosial Entrepreneurship, 1(1): 68-76
- Mohd Hanafi Mohd Yasin, Hasnah Toran, Mohd Mokhtar Tahar, Safani Bari, Siti Nur Nadirah Ibrahim and Roszniza Zaharudin. (2013). Bilik Darjah Pendidikan Khas Pada Masa Kini Dan Kekangannya Terhadap Proses Pengajaran . Asia Pacific Journal of Educators and Education . 28:1-9
- Muhammad, J. K.A. (2007). Special Education For Special Children: Panduan Pendidikan Khusus Anak-anak Dengan Ketunaan dan Learning Disabilities . Jakarta : Penerbit Hikmah (PT Mizan Publika).
- Ng, S. L. (2013). Theory and Research in Audiology Education: Understanding and Representing Complexity through Informed Methodological Decisions. 24(5): 344-353
- Obiakor, F. E. & Bakken, J. P. (2015). Interdisciplinary Connections to Special Education: Key related professionals involved. United Kingdom: Emerald Group Publishing Limited
- Page, T.A., Harrison, M., Moeller, M.P., Oleson, J., Arenas, R. M. and Spartford, M. (2018). Service Provision for Children Who Are Hard of Hearing at Preschool and Elementary School Ages. Language Speech and Hearing Services in Schools: 1-17
- Rifnurrohma, A. Q., Efendi, M., & Praherdhiono, H. (2017). Effect of Word Processing Applications to Improving Spelling for Ability Deaf Children in Elementry School. Journal of ICSAR, 1(1), 55-59. Razhiyah, K.A. 2005 . Menjadi Guru Pendidikan Khas . Kuala Lumpur : PTS Professional Publishing Sdn Bhd .
- Rea L. M. & Parker, R. A. (2012). Designing & conducting survey research: A Compherensive Guide . Third edition . Amerika Syarikat : Willey Publisher
- Richburg, C. M., & Knickelbein, B. A. (2011) . Educational Audiologists: Their Access, Benefit, and Collaborative Assistance to Speech-Language Pathologists in Schools, Language Speech and Hearing Services in Schools . 42(4) : 444-460.
- Safani Bari, Manisah Mohd Ali, Norani Mohd Salleh and Aliza Alias. (2003). Penggunaan Alat Bantuan Pendengaran Di Kalangan Murid-Murid Bermasalah Pendengaran
- Simkiss, D. (2013). Education of children with hearing impairment. Paediatrics and Child Health . 23(10): 434-437.
- Siti Muhibah Hj Nor & Zetty Nurzuliana Rashed . 2018 . Peranan Dan Cabaran Guru-Guru Pendidikan Khas Membentuk Kemenjadian Murid-Murid Masalah Pendengaran Dalam Abad Ke 21 . Journal of Quran Sunnah Education and Special Needs . 1 (1): 1-8
- Tang Hoe Ching & Hasheran Mohd Ibrahim . (2018). Persepsi Pelajar Tingkatan Lima terhadap Kerjaya dalam Bidang Sains Kesihatan . Jurnal Sains Kesihatan Malaysia . 16(1): 115-123
- Tiel, J. M. V. (2011). Pendidikan Anakku Terlambat Bicara . Jakarta: PRENADA .
- Van Dijk, C. A. (2005). An Educational Audiology Service Delivery Model: Needs Of Teachers Of Children With Hearing Loss. Doctoral dissertation. University of Pretoria.
- Vannette, D. L. & Krosnick, J. A. (2018). The Palgrave Handbook of Survey Research . Switzerland: Springer International Publishing AG
- Widyahety, I., Sunardi, S., & Yuwono, J. (2022). Analysis of Media Needs for Dance Learning for Deaf Students Based on Interactive Multimedia. Proceeding of International Conference on Special Education in South East Asia Region, 1(1), 146–153.
- Zaliza Hanapi, et al. (2018). Tinjauan awal keperluan kajian kebolehpasaran graduan OKU bermasalah pendengaran. Online Journal for TVET Practitioners 3(2): 1-8.