

# Teachers' perception and action toward the student with hearing loss at school

Percepção e atuação de professores sobre o aluno com perda auditiva na escola

Percepción y desempeño de los maestros sobre los estudiantes con pérdida auditiva en la escuela

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## Abstract

**Introduction:** The student with hearing loss who uses oral communication might need different adaptations at school and appropriate conducts are essential for their development. Since the teachers are important in this process and their training does not enable them to work with these students, the partnership between the areas of Health and Education is relevant. **Objective:** To verify the perception and actions of the teachers towards their students with hearing loss, users of hearing aids (HA) and/or cochlear implant (CI), who use oral communication. **Methods:** Forty-two (42) teachers who taught students with hearing loss in public schools in Marília participated in this study. The data was obtained through the monthly monitoring questionnaire and meetings with school staff. The answers were categorized, and the frequency of occurrence was analyzed. The Two-Proportion Equality Test was applied and assuming a level of significance ( $p < 0.05$ ). **Results:** It was observed that the monthly follow-up questionnaire allowed the recording of information in detail, in relation to meetings, with frequency of statistically

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## Authors' contributions:

FRS: conception of the study; methodology; data collection and article outline.

LTP: methodology; data collection and critical review.

NBFL: article outline and critical review.

EMCDP: conception of the study; methodology; data collection; article outline; orientation.

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significant occurrence for the “Academic” ( $p=0.024$ ), “Communication” ( $p<0.001$ ) and “Participation in the classroom” ( $p=0.034$ ) categories. The teachers presented reports with variable frequency of occurrence for each category. **Conclusion:** The findings of this study in relation to the perception and action of teachers showed responses to the aspects evaluated with substantially different frequency of occurrence, indicating a lack of action focused on the needs of students with hearing loss who use oral communication at school.

**Keywords:** Hearing Loss; Cochlear Implants; Hearing Aids; School Teachers; Inclusive Education.

### Resumo

**Introdução:** O aluno com perda auditiva que utiliza a comunicação oral pode necessitar de diferentes adequações na escola e condutas adequadas são fundamentais para o seu desenvolvimento. Visto que o professor é importante nesse processo e sua formação não o capacita para atuar com esses alunos, torna-se relevante a parceria entre as áreas da Saúde e Educação. **Objetivo:** Verificar a percepção e a atuação dos professores sobre o seu aluno com perda auditiva, usuário de aparelho de amplificação sonora individual (AASI) e/ou implante coclear (IC), que utiliza comunicação oral. **Método:** Participaram 42 professores que atuavam com alunos com perda auditiva em escolas públicas do município de Marília. Os dados foram obtidos por meio do questionário de acompanhamento mensal e de reuniões com a equipe escolar. As respostas foram categorizadas e analisada a frequência de ocorrência. Foi aplicado o Teste de Igualdade de Duas Proporções, admitindo-se como significância ( $p<0,05$ ). **Resultados:** Observou-se que o questionário de acompanhamento mensal permitiu o registro das informações de forma detalhada, em relação às reuniões, com frequência de ocorrência estatisticamente significativa para as categorias “Acadêmica” ( $p=0,024$ ), “Comunicação” ( $p<0,001$ ) e “Participação em sala” ( $p=0,034$ ). Os professores apresentaram relatos com frequência de ocorrência variável, para cada categoria. **Conclusão:** Os achados deste estudo em relação à percepção e à atuação dos professores demonstraram respostas aos aspectos com frequência de ocorrência substancialmente diferentes, as quais não conotam uma atuação focada nas necessidades do aluno com perda auditiva que utiliza comunicação oral, no ambiente escolar.

**Palavras-chave:** Perda Auditiva; Implantes Cocleares; Auxiliares de Audição; Professores Escolares; Inclusão Escolar.

### Resumen

**Introducción:** El estudiante con pérdida auditiva que usa la comunicación oral puede necesitar diferentes adaptaciones en la escuela y los comportamientos adecuados son fundamentales para su desarrollo. Dado que el maestro es importante en este proceso y su formación no le permite trabajar con estos estudiantes, la alianza entre las áreas de Salud y Educación cobra relevancia. **Objetivo:** Verificar la percepción y desempeño de los maestros sobre su estudiante con pérdida auditiva, usuario de audífono y/o implante coclear (IC), que utiliza la comunicación oral. **Metodos:** En este estudio participaron cuarenta y dos maestros que enseñaron a estudiantes con pérdida auditiva en escuelas públicas en Marília. Los datos se obtuvieron a través del cuestionario de seguimiento mensual y reuniones con el equipo escolar. Las respuestas se categorizaron y se analizó la frecuencia de ocurrencia. Se aplicó el Test de Igualdad de Dos Proporciones, asumiendo significancia ( $p < 0.05$ ). **Resultados:** Se observó que el cuestionario de seguimiento mensual permitió registrar información detalladamente, en relación a las reuniones, con una frecuencia de ocurrencia estadísticamente significativa para las categorías “Académico” ( $p = 0.024$ ), “Comunicación” ( $p < 0.001$ ) y “Participación en el aula” ( $p = 0,034$ ). Los maestros presentaron informes con frecuencia variable de ocurrencia, para cada categoría. **Conclusión:** Los hallazgos de este estudio en relación a la percepción y desempeño de los maestros evidenciaron respuestas a aspectos con frecuencia de ocurrencia sustancialmente diferente, que no connotan una acción enfocada en las necesidades de los estudiantes con pérdida auditiva que utilizan la comunicación oral en el ámbito escolar.

**Palabras clave:** Pérdida Auditiva; Implantes Cocleares; Audífonos; Maestros; Integración Escolar.

## Introduction

Students with hearing loss form a heterogeneous group and may present different educational needs. In the last decade there have been changes in legislation in the areas of Health and Education which have gradually transformed the scenario of the professionals' action directly linked to these areas<sup>1-9</sup>.

In this sense, the Ordinance No. 793 of April 2012<sup>1</sup>, which is part of the Rede de Cuidados à Pessoa com Deficiência (Network of Care for Persons with Disabilities) and was evolved from the Plano Nacional dos Direitos da Pessoa com Deficiência - Plano Viver sem Limites (National Plan for the Rights of Persons with Disabilities – Living without Limits Plan)<sup>2</sup> is an organization of the health care model based on inclusive services and actions, comprehensive, interdisciplinary and humanized care, which aims to expand access and qualify care in the Sistema Único de Saúde (Unified Health System) for people with disabilities, which covers hearing loss<sup>1</sup>.

Other advances in the implementation of legislation in the health area have brought possibilities for actions aimed at the diagnosis of hearing loss and early intervention, using devices for access to speech sounds (hearing aids - HA and cochlear implant - CI) and hearing accessibility (frequency modulation system - FM System), as well as rehabilitation, reinforcing these directions<sup>3-6</sup>.

Regarding Education, legislation was implemented to put into effect the inclusion of students with hearing loss in regular education<sup>7</sup>. Children and adolescents with hearing loss who use oral communication are included in this group<sup>8,9</sup>.

It is known that, at school, factors such as noise, the distance between the teacher and the student, the reverberation in the classroom, the knowledge of teachers regarding the use of technological devices (HA, CI and FM System), the degree of hearing loss of their student and communication strategies impact the academic development of children and adolescents with hearing loss<sup>9-11</sup>.

In addition, the teacher is an extremely important agent, because it is in school that the child and adolescent with hearing loss spend much of their time and these professionals are the ones mainly responsible for ensuring the effectiveness of the inclusion of this student<sup>8,12,13</sup>. It is also important to emphasize that the school is an environment in

which the first social involvements of the child occur<sup>14</sup>.

In this context, the teacher is decisive in ensuring appropriate adaptations are possible in relation to the issues involving the student with hearing loss at school, as well as actions in the educational scenario so that they may be constantly redimensioned<sup>8,9,15,16</sup>.

It is in this perspective that the partnership between the areas of Health and Education should be continuously put into practice, aiming at integration, permanent articulation between the policies of these areas and the inclusion of these students<sup>8,15-18</sup>.

The objective of this study was to verify the perception and action of teachers toward their student with hearing loss, who uses hearing aids and/or cochlear implant and communicates orally.

## Method

This study was submitted to the Research Ethics Committee of the School of Philosophy and Sciences of the Universidade Estadual Paulista (Paulista State University) "Júlio de Mesquita Filho" - UNESP, Marília Campus, being approved (CAAE: 55494916.2.0000.5406) and obeying resolution 466/12 of the National Health Council of 12/12/2012. This is a cohort study.

The study was carried out in a medium-sized city in the interior of the state of São Paulo (232,000 inhabitants). During the data collection period, 20 students with hearing loss were enrolled in Pre-school and Elementary School, and 12 students in Middle School and of these, 20 used oral communication.

The criteria adopted for inclusion were teachers who had taught children who used HA or CI, who communicated orally and were attending or had attended the same speech-language rehabilitation program, whereas teachers who taught students who used only the Brazilian Sign Language (LIBRAS) or had multiple disabilities were excluded.

After analyzing the inclusion and exclusion criteria, 42 teachers who worked with 16 students with hearing loss participated in this study. This group consisted of teachers who taught in the second semester of the school year and in the first semester of the following year. There were 7 Pre-school teachers, 11 Elementary School teachers and 24 Middle School teachers in municipal and state schools in the municipality of Marília, SP. The par-

ticipants were included in the sample after agreeing to participate in the study by signing the Free and Informed Consent Form and with authorization from the Municipal Department of Education and the Board of Education.

The data were obtained through a monthly follow-up questionnaire elaborated for this study as well as meetings held with the teacher and the pedagogical staff responsible for the municipal and state schools.

The questionnaire consisted of four topics: teachers' facilities and difficulties when teaching to students with hearing loss, strategies used in the classroom and information that teachers needed for the development of their work. In addition, the questionnaire contained a question related to the use of the FM System and observations, serving as an open register for some topic or event not contemplated in the previous items. The teachers recorded their responses in writing and in a discursive manner.

The meetings were previously scheduled and took place in the participating schools or in the Municipal Department of Education, in which the most appropriate practices for students and aspects such as technological devices for access to sounds, noise impact, distance and reverberation and hearing and language of their student with hearing loss were discussed. The content of the discussions of each meeting was transcribed simultaneously.

The monthly follow-up questionnaires were given at these meetings by the researchers. In the event of the teacher being unable to attend, a new meeting was scheduled, and the questionnaires were forwarded to these schools.

The answers to the questionnaires and meetings were categorized by two researchers, based on the categories of the Educational Risk Identification Instrument (ERII), adapted from the Screening instrument for targeting educational risk in secondary students/SIFTER<sup>19</sup>. Answers that were not related to the scope of the questionnaire and meetings were excluded.

The categorization of the answers followed criteria proposed by Omote<sup>20</sup>: not contain vastly different occurrences within the same category; exhaustive categories to cover the entire discourse under review; categories sufficiently exclusive so as to not include the same occurrence in two or more categories; sufficiently objective categories to ensure good reliability; and relative categories

in order to be adapted to the content and purpose of the analysis.

The analysis was based on the percentage of the frequency of occurrence from both the reports of the questionnaires, as well as from the reports of the meetings for the following categories: "Academics", "Attention", "Communication", "School Behavior", "Device" and "Class Participation". For the monthly follow-up questionnaire, the categories were also divided into the topics: "facilities", "difficulties", "strategies" and "information". For the meetings, this division was not considered since the dynamic character generated demands by teachers spontaneously. The following examples are considered in each category:

- Academics: Facilities: more fluent reading; identifies letters of the alphabet; greater autonomy for writing; Difficulties: vocabulary comprehension; teaching literacy; difficulty in interpreting mathematical problems; Strategies: visual resources, textual production, story reading; Information: how to teach the use of connectives in writing, which pedagogical resources would facilitate the student's learning, which strategies help in literacy.
- Attention: Facilities: more attentive student in the classroom, student more attentive during the performance of activities, student focuses on activities; Difficulties: dispersed student, difficulty in focusing on the proposed activity, student has no concentration; Strategies: no strategies were mentioned for this category; Information: How to help one focus in the classroom.
- Communication: this category addresses communication in two aspects, the expression of the student, that is, how he communicates, as well as the reception of the same, that is, how he receives the information. Facilities: greater interaction with friends, improves pronunciation, understands what is asked; Difficulties: noise, understanding the student's speech, teacher communicating with the student and with the classroom, simultaneously; Strategies: student close to the teacher, speaking slowly, help of colleagues; Information: about hearing (what you hear and understand), how to improve communication with the student, how to facilitate the student's communication with the other students.
- School Behavior: Facilities: interested student, active student, student improves their autonomy; Difficulties: disinterested student, resistance in

doing the activities, many absences; Strategies: remember rules and agreements; Information: knowing the relationship between the irritability of the student with the difficulty of communication.

- Device: Facilities: student is adapted with the device, student always uses the device, the use of the FM System provided improved communication with the student; Difficulties: lack of FM, difficulty in my adaptation with FM, student has already attended school without the device; Strategies: be aware of the device battery, better positioning of the FM microphone, use of the FM microphone by classmates during group activities; Information: Know how your device works, how to handle your device, what to do when your device stops working.
- Class Participation: Facilities: participative student, student is involved in the proposed

activities, student questions when he/she has doubts; Difficulties, Strategies and Information were not mentioned.

The statistical analysis was performed, using the Two-Proportion Equality Test and admitting it as a significance level ( $p < 0.05$ ).

## Results

The results will be presented highlighting the data referring to the categories that presented the topics with higher and/or lower frequency of occurrence.

Table 1 shows the comparison of the frequency of occurrence from the reports obtained by the monthly follow-up questionnaire with the reports from the meetings.

**Table 1.** Comparison between the frequency of occurrence of the reports obtained by the monthly follow-up questionnaire with the reports of the meetings

Category	Questionnaire		Meetings		p-value
	n	%	n	%	
ACADEMICS	495	35.6%	105	43.2%	0.024*
ATTENTION	35	2.5%	10	4.1%	0.161
COMMUNICATION	452	32.5%	43	17.7%	<0.001*
SCHOOL BEHAVIOR	143	10.3%	20	8.2%	0.322
DEVICE	94	6.8%	21	8.6%	0.292
CALSS PARTICIPATION	46	3.3%	2	0.8%	0.034*
Total	1389		243		

Legend: \* Significant values: Two-Proportion Equality Test ( $p < 0.05$ ).

The results showed that the reports referring to the categories presented in Table 1 were observed both in the meetings and in the monthly follow-up questionnaires. The highest occurrence of reports was verified in the “Academics” (43.2%) and “Communication” (32.5%) categories.

In the analysis between the frequency of occurrence in reports obtained from the questionnaires and those meetings, there was a statistically significant difference for the “Academics” ( $p = 0.024$ ),

“Communication” ( $p < 0.001$ ) and “Class Participation” ( $p = 0.034$ ) categories.

Table 2 shows the frequency of occurrence in the “facilities”, “difficulties”, “strategies” and “information” topics, for the categories analyzed (“Academics”, “Attention”, “Communication”, “School Behavior”, “Device” and “Class Participation”) at the three levels of teaching, Pre-School, Elementary School and Middle School.

**Table 2.** Frequency of occurrence of the topics: “facilities”, “difficulties”, “strategies” and “information” for the categories analyzed in the three levels of education

Category	Topic	Pre-School			Elementary School			Middle School		
		n	%	p-value	n	%	p-value	n	%	p-value
ACADEMICS	Facilities	21	35.60%	Ref.	49	23.00%	<0.001*	85	38.10%	0.013*
	Difficulties	18	30.50%	0.557	39	18.30%	<0.001*	27	12.10%	<0.001*
	Strategies	16	27.10%	0.321	104	48.80%	Ref.	111	49.80%	Ref.
	Information	4	6.80%	<0.001*	21	9.90%	<0.001*	0	0.00%	<0.001*
ATTENTION	Facilities	2	66.70%	Ref.	6	22.20%	<0.001*	3	60.00%	Ref.
	Difficulties	1	33.30%	0.414	19	70.40%	Ref.	2	40.00%	0.527
	Strategies	0	0.00%	0.083	0	0.00%	<0.001*	0	0.00%	0.038*
	Information	0	0.00%	0.083	2	7.40%	<0.001*	0	0.00%	0.038*
COMMUNICATION	Facilities	33	32.40%	0.045*	35	26.50%	0.001*	60	27.50%	<0.001*
	Difficulties	17	16.70%	<0.001*	21	15.90%	<0.001*	27	12.40%	<0.001*
	Strategies	47	46.10%	Ref.	60	45.50%	Ref.	117	53.70%	Ref.
	Information	5	4.90%	<0.001*	16	12.10%	<0.001*	14	6.40%	<0.001*
SCHOOL BEHAVIOR	Facilities	20	57.10%	Ref.	26	92.90%	Ref.	37	46.30%	0.527
	Difficulties	12	34.30%	0.055	2	7.10%	<0.001*	41	51.30%	Ref.
	Strategies	1	2.90%	<0.001*	0	0.00%	<0.001*	2	2.50%	<0.001*
	Information	2	5.70%	<0.001*	0	0.00%	<0.001*	0	0.00%	<0.001*
DEVICE	Facilities	2	10.00%	0.028*	3	14.30%	0.079	5	9.40%	<0.001*
	Difficulties	8	40.00%	Ref.	8	38.10%	Ref.	11	20.80%	<0.001*
	Strategies	4	20.00%	0.168	5	23.80%	0.317	6	11.30%	<0.001*
	Information	6	30.00%	0.507	5	23.80%	0.317	31	58.50%	Ref.
CLASS PARTICIPATION	Facilities	6	100%	Ref.	14	100%	Ref.	24	92.30%	Ref.
	Difficulties	0	0.00%	<0.001*	0	0.00%	<0.001*	0	0.00%	<0.001*
	Strategies	0	0.00%	<0.001*	0	0.00%	<0.001*	2	7.70%	<0.001*
	Information	0	0.00%	<0.001*	0	0.00%	<0.001*	0	0.00%	<0.001*

Legend: \* Significant values: Two-Proportion Equality Test ( $p < 0.05$ ).  
Ref: Reference values.

The data showed that in relation to the “Academics” category, it was found that the Pre-school level indicated “facilities” with a higher frequency of occurrence (35.6%) and there was no statistically significant difference between this and the other topics, such as “difficulties” ( $p=0.557$ ). “Strategies” were frequently mentioned by the three levels, with percentages of 27.1% for Pre-School, 48.8% and 49.8% for Elementary and Middle School, respectively. The three levels of education did not request specific information for this category, where 6.8% ( $p < 0.001$ ) of reports for Pre-School, 9.9% ( $p < 0.001$ ) for Elementary School and 0% ( $p < 0.001$ ) for Middle School was observed.

Regarding the “Attention” category, the Pre-School and Middle School teachers presented 66.7% and 60.0%, respectively, of reports corresponding to the “facilities” topic. For Elementary School, there was a predominance of “difficulties” (70.4%). Pre-School and Middle School teachers did not report “strategies” (0%) and “information” (0%), for this category and Elementary School

teachers did not present reports for “strategies” and requested 7.4% of “information”.

With regard to the “Communication” category, the “strategies” topic was predominant, with percentages of 46.1% for Pre-School, 45.5% for Elementary School and 53.7% for Middle School. While for the “information” topic, 4.9% ( $p < 0.001$ ) for Pre-School, 12.1% ( $p < 0.001$ ) for Elementary School and 6.4% ( $p < 0.001$ ) for Middle School were found.

Regarding the “School Behavior” category, Pre-School and Elementary School teachers reported 57.1% and 92.9%, respectively, of reports for “facilities”. On the other hand, Middle School teachers highlighted “difficulties” (51.3%). For “strategies”, 2.9% ( $p < 0.001$ ) of reports for Pre-School and 2.5% ( $p < 0.001$ ) for Elementary School and was not mentioned by Middle School. For “information”, 5.7% ( $p < 0.001$ ) for Pre-School and Elementary and Middle School did not request.

In relation to the “Device” category, predominantly reports for “difficulties” were presented,



at the Pre-School (40%) and Elementary School (38.1%) levels and “information” at Middle School (58.5%). In addition, at the three levels of education, the “facilities” topic presented a lower frequency of occurrence, where there were 10% of reports for Pre-School, 14.30% for Elementary School and 9.40% for Middle School.

As with regard to the “Class Participation” category, 100% of reports for Pre-School, 100% for Elementary School and 92.3% for Middle School, for the “facilities” topic.

## Discussion

The objective of this study was to verify the teachers' perception and action toward the student with hearing loss, who uses a hearing aid and/or cochlear implant and communicates orally.

Regarding the way of data collection, it was verified that the reports of the categories addressed were obtained through both the meetings and the monthly follow-up questionnaires, where the “Academics” and “Communication” categories are prevalent. The emphasis on academic issues expresses the central aspect of these professionals' activities and communication, the main challenge of the teacher's performance with students with hearing loss at school<sup>10,21</sup>.

When analyzing the frequency of occurrence of the reports obtained by the questionnaires and meetings, it was observed that there was a statistically significant difference for the “Academics”, “Communication” and “Class Participation” categories. This means that the questionnaire allowed the recording of the information in detail. Similar studies use the questionnaire as a viable tool for obtaining information from the school context<sup>8,12</sup>.

In reference to the “Academics” category there was a predominance of reports for the topic of “facilities” at the level of Pre-School, not statistically different from the other topics. In addition, the three levels of education often cited strategies and did not request specific information for this category.

The analysis of these results converges to a common denominator, in which the dynamics of the teaching context in the classroom does not guarantee that the teacher knows the specific needs of the student with hearing loss who uses oral communication. For example, the strategies mentioned by the group had the objective of providing dynamic classes that arouse the interest of all students, not

necessarily being strategies that would meet the needs of students with hearing loss.

It is necessary to remember that evaluating the academic issues of students with hearing loss is of the utmost importance, verifying whether appropriate strategies are used in a constant and sufficient way by the teacher to enable the academic development of this group in view of its heterogeneity<sup>8,9,22</sup>.

Regarding the “Attention” category, the Pre-School teachers emphasized the facilities. This aspect can be justified by the dynamic nature of the activities performed and by the type of attention required for this level of education, which are provided for by the pedagogical proposals of educational work in this age group<sup>23</sup>. In addition, children in this school phase can simply imitate their peers, without understanding the teacher's speech, regarding the execution of activities.

On the other hand, for Elementary School, the difficulties in the “Attention” category were predominant. At this level of teaching, the child begins to have direct contact with the same teacher in the classroom environment and for a prolonged period of time, which facilitates the perception of the student's attention by this professional<sup>10</sup>.

It is noted that although children and adolescents with hearing loss have access to speech sounds through technological devices, they may lose auditory information and, consequently, attention, because attention-sensitive aspects are influenced by several factors related to communication, such as noise, distance between the student and the teacher, reverberation in the classroom, the importance of providing communication opportunities for the child, the use of the Frequency Modulated System and the use of appropriate communication strategies by the teacher<sup>9,11,24</sup>.

The group of Middle School teachers indicated answers regarding the facilities, with greater frequency of occurrence, in the “Attention” category. However, the examples were described in a generalized way and did not express behaviors indicative of the student's attention, citing “attentive student”. The activities at this level of teaching occur with teacher rotation, reducing the contact time between teacher and student, which can hinder the teacher's perception of the needs regarding attention of the student with hearing loss.

The Pre-School and Middle School teachers did not report strategies nor request information for the “Attention” category. Elementary School



teachers did not mention the use of strategies to maintain the student's attention and pointed to 7.4% of reports requesting information. Considering that attention is a precursor aspect for learning, it is important that the teacher know if his/her student is attentive, because the loss of information can generate a cognitive overload resulting from the effort that is required of this student to listen in an unfavorable environment<sup>11,25</sup>.

Regarding the "Communication" category, there was a predominance of reports for the topic of "strategies" in the three levels of education, that is, these teachers reported that they use communication strategies to talk to their student with hearing loss. Studies emphasize that the communication strategies mentioned by teachers may not be appropriate for their student<sup>8-10</sup>.

The request for information to communicate with the student with hearing loss was mentioned less frequently. This information consisted of one of the themes addressed in the meetings held with the school staff, in which the use of communication strategies was discussed, since the sample profile of this study consists of children and adolescents who use oral communication.

It is important to note the use of communication strategies in the school context, such as adapting speech speed to the student's understanding, speaking close to the student, and positioning their desk close to the teacher in the classroom<sup>9,11</sup>.

With regard to the "School Behavior" category, Pre-School and Elementary School teachers highlighted facilities. While Middle School teachers predominantly indicated difficulties, describing reports of behavior characteristics of the adolescence phase (Examples: "student does not comply with school rules", "student refuses to perform activities" "student is not dedicated") and behavior observed in adolescents with hearing loss (Examples: "student gets angry with noise", "student gets nervous when he does not understand"). The use of different strategies and the need for information on behavior were not frequently mentioned.

It is important to emphasize that hearing loss is not a condition that affects the behavioral aspects and the behavior of individuals who present this should be understood as that of an individual with normal hearing<sup>26</sup>. However, it is necessary that children and adolescents with hearing loss be inserted in favorable environments for the effectiveness of communication<sup>8,10,22</sup>.

Regarding the "Device" category, the difficulties for Pre-School and Elementary School and the need for information for Middle School were predominant. These results corroborate the literature regarding teachers' ignorance of technological devices (HA, CI and FM System) used by children and adolescents with hearing loss and the need for information about them, especially regarding the complications that these devices may present in the school routine<sup>8-10</sup>.

In relation to the "Class Participation" category there was a predominance of responses to the topic of "facilities" in the three levels of education, that is, teachers emphasize that their students with hearing loss are participative, engage in activities and ask for the teacher when facing difficulties.

The findings of this study reinforce the importance of teachers' actions focusing on the needs of students with hearing loss who use oral communication in the school environment, since the aspects were reported by these professionals with variable frequency of occurrence, for each category.

Considering that the categories addressed in this research are equally important and through the knowledge of the educational needs of students with hearing loss, it is emphasized that the search for effective ways of monitoring this student is indispensable for the effective performance of the teacher and demands the partnership between the areas of Health and Education.

The development of instruments that allow forms of communication between the health team and the school is suggested to enable the monitoring of students with hearing loss in a systematic way. Thus, favoring the perception of teachers and the partnership between the professionals involved, because it is from the dialogue between speech therapists and teachers that actions in the educational scenario can be constantly redimensioned<sup>15-17</sup>.

## Conclusion

The findings of this study in relation to the teachers' perception and performance demonstrated responses to the aspects evaluated with substantially different frequency of occurrence, indicating a lack of action focused on the needs of the student with hearing loss that uses oral communication in the school environment.



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