Study on the perception of educational material about Tourette syndrome

Estudo de percepção de material educativo sobre a síndrome de Tourette

Estudio sobre la percepción de material educativo sobre el síndrome de Tourette

Bruna Cristina Rocha Soave¹, Amanda Carolina Franciscatto Avezani², Maria Cristina Mazzaia²

Abstract:
Objective: to identify the evaluation of elementary school teachers regarding the Teacher's Guide on Tourette Syndrome in terms of its instructive and identification capabilities. **Methods:** a qualitative study, with interviews of elementary school teachers and content analysis, conducted neighborhood in the city of São Paulo, SP, Brazil, in 2020. **Results:** four teachers from two early childhood schools participated. Six categories were constructed: *Text suitable for reading and comprehension*; *Relevant content*; *Difficulties in using the content*; *Difficulties in meeting the children's needs*; *Contributions of the text to practice*; *Suggestions for the text*. The text was evaluated as suitable for reading and comprehension and relevant content. In turn, difficulties in using the content to meet the needs of students with specific needs were revealed, as well as contributions to classroom practice. **Conclusion:** the educational material was evaluated as sufficient to inform, but there was a perceived lack of readiness for its application, coupled with the number of students per classroom, a lack of support staff, and insufficient training to work with children/adolescents.
Keywords: Health education; Health communication; Evaluation study; Tourette Syndrome.

Resumo:
Objetivo: identificar qual a avaliação de professores do Ensino Fundamental I sobre o *Guia para Professores sobre a Síndrome de Tourette* quanto à sua capacidade de instrução e identificação. **Método**: estudo qualitativo, com entrevista de professores do Ensino Fundamental I e análise de conteúdo, realizado com professores de educação infantil de um bairro da cidade de São Paulo, SP em 2020. **Resultados**: participaram quatro docentes de duas escolas infantis cada. Foram construídas seis categorias: *Texto adequado à leitura e compreensão*; *Conteúdo relevante*; *Dificuldades para utilização do conteúdo*; *Dificuldades para o atendimento das crianças nas suas necessidades*; *Contribuições do texto para a prática*; *Sugestões para o texto.* O texto foi avaliado como adequado à leitura e compreensão e conteúdo relevante. Por sua vez, desvelou-se dificuldades para utilização do conteúdo no atendimento de estudantes com necessidades específicas e, também, contribuições para a prática em sala de aula. **Conclusão**: material educativo avaliado como suficiente para informar, mas com percepção de despreparo para a aplicação somado à quantidade de alunos por sala, falta de profissionais de apoio e capacitação para atuação com crianças/adolescentes.
Palavras-chave: Educação em saúde; Comunicação em saúde; Estudos de avaliação; Síndrome de Tourette.

Resumen:
Objetivo: identificar la valoración que hacen los profesores de Escuela Primaria I de la *Guía para profesores sobre el síndrome de Tourette* en cuanto a su capacidad de instrucción e identificación. **Método**: estudio cualitativo, con entrevistas a profesores de Escuela Primaria, con análisis de contenido, hecho en un un barrio de la ciudad de São Paulo, SP, Brasil, en 2020. **Resultados**: participaron cuatro docentes de dos escuelas infantiles cada. Se construyeron seis categorías: *Texto adecuado para la lectura y la comprensión*; *Contenido relevante*; *Dificultades para utilizar el contenido*; *Dificultades para atender las necesidades de los niños*; *Contribuciones del texto a la práctica*; *Sugerencias para el texto.* El texto fue evaluado como adecuado para la lectura y la comprensión y con contenido relevante. A su vez, se revelaron dificultades para utilizar el contenido en la atención a estudiantes con necesidades específicas y también contribuciones a la práctica en el aula. **Conclusión**: material educativo evaluado como suficiente para informar, pero con una percepción de falta de preparación para su aplicación, sumada a la cantidad de alumnos por aula, la falta de profesionales de apoyo y la falta de formación para trabajar con niños/adolescentes.
Palabras-clave: Educación en salud; Comunicación en salud; Estudio de evaluación; Síndrome de Tourette.

Corresponding Author: Maria Cristina Mazzaia – mcmazzaia@unifesp.br

1. Beneficência Portuguesa Hospital of São Paulo, Mirante Unit. São Paulo/SP, Brazil
2. 2. Escola Paulista de Enfermagem of the Universidade Federal de São Paulo. São Paulo/SP, Brazil

INTRODUCTION

Tourette Syndrome (TS), before having this name, had already been described by doctors in the 19th century, such as Jean Marc Itard, who described, in 1825, the case of a marchioness who, from a very young age, suffered from motor and vocal tics (involuntary movements and vocalizations, without control by the individual) that resembled barking and who also uttered obscenities, which forced her to live secluded from society for a good part of her life. Later, motor tics, bizarre vocalizations and palilalia (involuntary repetition of words or phrases), echolalia (repetition of heard words), and hyperekplexia (exacerbated spasmodic reactions) were described[1].

It was only in 1884 that the Frenchman George Gilles de la Tourette, at the time an intern of the physician Jean-Martin Charcot at the Salpêtrière Hospital, described eight cases of multiple tics, echolalia, and coprolalia (the act of repeatedly and involuntarily uttering obscene words or expressions). Tourette then resumed the studies done by his predecessors, considering them part of the same disease. Charcot then decided to honor his student by giving his name to the syndrome, which from then on was named Gilles de la Tourette Syndrome[2].

Currently, according to the International Statistical Classification of Diseases and Related Health Problems – ICD-11, Tourette Syndrome is "a chronic tic disorder characterized by the presence of chronic motor tics and vocal (phonic) tics, with onset during the developmental period". Motor and vocal tics are defined as abrupt, rapid, non-rhythmic, and recurrent movements or vocalizations, respectively. To be diagnosed as Tourette syndrome, both motor and vocal tics must be present for at least one year, although they may not manifest concurrently or consistently throughout the symptomatic course[3].

Tics are divided into motor and vocal tics, which are further subdivided into two groups: simple and complex. Within the category of simple tics, there is a set of tics characterized by blinking, sudden neck movements, shoulder movements, grimacing, throat clearing, barking, sniffing, and whistling. The most frequent complex tics include hitting oneself, jumping, hopping, uttering obscene or socially reprehensible words compulsively and completely out of context (coprolalia), and the repetition of sounds and words spoken by oneself (echolalia)[3-4].

The onset of the syndrome occurs between 4 and 18 years of age, with its most critical phase between 10 and 12 years. Tics begin to manifest between 4 and 6 years of age, declining during adolescence. It is estimated that only one third of affected individuals experience complete remission of tics. It is a disorder of neurological origin, which, as it develops, also becomes a behavioral/psychological disorder[5-6].

In most affected individuals, Tourette Syndrome (TS) is associated with other disorders, particularly Obsessive-Compulsive Disorder (OCD), a type of Anxiety Disorder. Due to its highly variable clinical presentation, its identification and diagnosis are difficult, often leading to inadequate treatment, frequently resulting from misdiagnosis[7].

Its etiology remains unknown, but imbalances in neurotransmitters of dopaminergic activity have been the main hypothesis, which makes treatment with antidopaminergic drugs very effective[5]. There is also evidence of a strong genetic association, with mutations in specific genes being possible predisposing factors for the development of the syndrome. These studies have shown that TS has an autosomal dominant inheritance pattern, being a disorder caused by monogenic, multigenic, and environmental factors[8].

Behavioral factors have been described as risk factors for the development of TS. As previously mentioned, anxiety exacerbates tics, as does physical and mental excitement/exhaustion. Stressful events worsen the occurrence and frequency of tics. Environmental factors include observing gestures or hearing sounds from other people, which causes the individual to feel the need to reproduce what was perceived, greatly impairing their social interaction, especially when they need to communicate with people who have some authority over them. Some prenatal antecedents have also been reported as risk factors, such as advanced paternal age, low birth weight, maternal smoking during pregnancy, and obstetric complications[3-6].

It is estimated that the prevalence of TS ranges from 3 to 8 per 1,000 school-aged children. It is more common in males, with a ratio ranging from 2:1 to 4:1[3]. A study conducted with the US population, based on the 2020 census, estimated approximately 350,000 to 450,000 people, including children and adults, with TS, and approximately one million people with other persistent tic disorders[9].

Individuals with mild to moderate tics may not experience distress or any impairment during their development and formation. However, individuals with more severe tics often experience significant impairment. Tics disrupt the functioning of daily activities, resulting in social isolation, conflicts in interpersonal relationships, inability to perform professional activities, impairments in the learning process, and a lower quality of life.

Psychological suffering is also present. Injuries to the body may appear as a result of tics in which the individual hits their own head, or joint, muscle and neurological problems due to forced and repetitive movements of the head, neck and limbs[3,7].

Considering all the biological, psychological, and social aspects that encompass TS, it is clear that there is a strong need for knowledge about the disorder, especially among

professionals who constantly deal with the age group where symptoms begin, in this case children and adolescents. Thus, the role of professionals in the fields of education and health stands out.

With the aim of socializing knowledge and also of providing free support to individuals with Obsessive-Compulsive Disorder and Tourette Syndrome, as well as their families, the *Associação Solidária de Transtorno Obsessivo Compulsivo e Síndrome de Tourette* (ASTOC ST) publishes on its website a Guide for Teachers on Tourette Syndrome, translated to Brazilian Portuguese and adapted from the educational material "Educator Guide Tourette Syndrome" of the Tourette Syndrome Association[10].

This ASTOC ST initiative aligns with Brazilian inclusive education policies that advocate for teacher training, aiming to reduce exclusionary attitudes through practices adapted to the needs presented by students, as well as preparing all students to understand and embrace these needs[11-12].

Health professionals can contribute to the implementation of inclusive education policies, as they play a fundamental role in health education, which also applies particularly to TS, especially regarding the guidance of elementary school teachers, who are in close contact with potential TS individuals[11-12].

Considering the age at which the health problem begins, health professionals can act as intermediaries between those involved in education and health knowledge, playing a significant role in both educational and psychosocial development of individuals[11-12].

There are several strategies to inform and train teachers in the primary education system. In order to reach as many teachers as possible, ASTOC ST[10] decided on an informative text that not only contains data on definitions and presentation of TS but also suggestions for approaching students with TS based on possible questions from the teachers themselves.

Given this, the question arises: *Would the text presented by ASTOC ST[10] equip teachers to identify and approach students with Tourette Syndrome in order to enable the student's presence within their group and with the necessary learning conditions?* Thus, this study aims to identify the evaluation of Elementary School teachers regarding the T*eacher's Guide on Tourette Syndrome* in terms of its instructive and identifying capacity.

METHODS

The research is exploratory, qualitative, and descriptive in nature. The study was conducted from January to March 2020 in the city of São Paulo, SP, Brazil, with elementary school teachers from two municipal schools in a neighborhood of São Paulo. The sample was

intentional, with the following inclusion criteria: being over 18 years of age, being a regular elementary school teacher for at least one year, with an employment contract in a public educational institution in the city of São Paulo, having no prior knowledge of Tourette Syndrome, and agreeing to participate in the study.

Data collection was carried out at the teachers' workplace, i.e., at the school itself, after contact and agreement from the regional education board and also from the principals and teachers to be interviewed. On a pre-arranged day, during the pedagogical planning time when the teachers met for joint activities, the researchers presented the study and provided a copy of the guide published by ASTOC ST[10] to each of the teachers who agreed to participate in the study and signed the Informed Consent Form. One week after the delivery of the ASTOC ST guide, a new meeting was held, also by appointment, when the interviews were conducted.

The interview consisted of objective, identification questions and nine open-ended questions, which sought to assess whether the material disseminated by ASTOC ST[10] fulfilled its informative and educational character. The contents of the interviews were transcribed and, afterwards, exploratory and analytical readings were carried out.

A qualitative study was chosen because there was a need to approach the singularities and subjectivities, as well as the realities and experiences, based on the statements of the study subjects, since, through these, the subject contributes with their context, from which they also suffer influences, and thus makes their evaluations and choices[13].

Thus, based on phenomenology, the study aimed to approximate what was lived or experienced by the study participants, which could influence the evaluation to be carried out by the participants regarding the ASTOC Guide. The world of appearance, related to the objective dimension of the phenomenon, was identified in the participants' statements about the ASTOC Guide, and the world of essence, related to the subjective dimension, was revealed in the accounts of the participants' experiences, emotions, ideas, and feelings. The researchers sought to go beyond the text obtained from the interviews to approximate what would be the essence of the phenomenon of interest[14].

As a data analysis strategy, content analysis was chosen, a data processing technique that includes three phases: pre-analysis, exploration of the material, and treatment of the results, with inference and interpretation[15].

In the pre-analysis, the content of the speeches was read individually and compared between the contents obtained from all participants. After that, the material was explored in the search not only for the meaning of the communication, but also for other meanings that are not expressed in the words, but rather in the way they are used, which constitutes the treatment

of the results and the shaping of the categories of analysis, based on inference and interpretation[15].

For the presentation of the results, it was decided to identify the teachers by A and B, each letter referring to an educational establishment. A number was also used after the identification letter to differentiate the participants. For example: A1, B2. To exemplify the categories obtained from the content analysis, literal excerpts from the interviewees' speeches were presented as a result.

The study respected the Consolidated Criteria for Reporting Qualitative Research - COREQ guide, criteria to be respected in the construction and reporting of qualitative studies, so the data were collected by at least one of the authors and analyzed by the three authors individually and then jointly[16].

The study was approved by the Research Ethics Committee of the Universidade Federal de São Paulo under opinion number 3.203.881 and the ethical precepts were respected with guidance from the regional education board, the respective schools and teachers.

RESULTS

Four teachers from two early childhood schools participated, eight in the total. Six categories were constructed from the content of the interviews: *Text suitable for reading and comprehension; Relevant content; Difficulties in using the content; Difficulties in meeting the children's needs; Contributions of the text to practice; Suggestions for the text.*

Text suitable for reading and comprehension

Most respondents reported that the text was suitable for reading, clear, well-structured, and easy to understand:

It's very didactic, isn't it, in the way it presents it, and I think... [pause] *the clear language is what caught my attention the most, there weren't many scientific terms... very objective.* [...]. *It's a logical sequence* [...]. (A1)

It's a good length, I even commented that it was an easy text. [...] *Ah, I think the informative content is very good, and it is, did I already say why? Because it's easy, it's direct... What was technical was explained in parentheses.* [...] *I thought it was good, because when you got to the examples, you already had that background of what it was really about. I liked it.* (B2)

[...] *I didn't find it very long* [...]. *I think... it's easy to read and everything, it's not that difficult and it's also enough for us to get a little familiar with it.* [...] *I think it's well distributed.* (B3)

It's very accessible, it's very well explained, very detailed, I liked it, so maybe it could be shorter but I think it was good that it's long because it becomes very explanatory. (A4)

It shows both the medical and family aspects. So, I found it quite... well... summarized, you know, because it's such a vast subject... (B1)

Relevant content

The interviewees reported that the suggestions contained in the material for managing students with special needs were relevant:

The guide is important because... the school lacks guidance... the content is clarifying, it's enlightening, it talks about a syndrome I didn't know, so it was a guide, really, to awaken awareness of this... this... this syndrome. [...] the tips are invaluable, because sometimes we make mistakes thinking we're doing our best, right, due to a lack of specific knowledge, so the tips were very helpful here. (A1)

So, it seemed very down-to-earth, very realistic, and that things are possible to do, and often simple things, so... and necessary. ... I liked these suggestions and, often, we even use them with other children... (A4)

I thought it was just a warning, because everything they said there is obvious. It's what you should try to do, so it's just a warning for you, look, revisit, change, remove. [...] so this reading only served as a warning, I have to learn more, research more, [...] I think it goes very much in line with inclusive education, because it allows you to think, you know, about this child but without excluding them from the class, you know, in a way of trying to include them. I liked it a lot. (B2)

I think it's very important to follow that approach and I also think it would be good to follow that approach not only for that child with Tourette's, but I think for everyone, right? For all students. I think everyone would learn better if everyone had the same opportunities to, for example, leave the room when necessary, to have that moment when you need to do something alone, so I think we could take advantage of that for other situations in the classroom, not just for the child with Tourette's syndrome. (B3)

That's fine, especially since the suggestions won't conflict with the management of other students. It's nothing you can't do... go in the direction of respect, acceptance, looking at the need... understanding... not "scolding" the child... Very calmly, very calmly. (B4)

Difficulties in using the content

The main difficulty cited for applying the text's content in the classroom is the large number of students:

[...] they bring, you know, good suggestions, but I think they're not always applicable, right? So, for example, you're in a classroom with 32 students, and when you suggest, look, at certain times, removing a student. I remove them, and who does that student stay with, right? In the dynamics of a public school, we don't always have that person... (A2)

That's the thing [laughs]*, the suggestion is commendable, but it has a vision of that classroom with 15, 20 students and one or two problems* [laughs]*, right? So, I liked the suggestion, but it's not something that we... it's going to be very difficult to apply in our reality with 37* [laughs]*, right, in a classroom. [...] Not that it isn't, but you have to have a group and you have to have a small class. I've worked with special needs students in a small class, it's different.* (B1)

The first thing that always comes to mind when we have, you know, issues like this is the number of students... (B3)

The classroom tips are important because you deal specifically with the problem, although in the classroom the reality is different, because there isn't just one child with a certain syndrome, we have other children with other needs, with other issues, both in the physical and biological aspects, and in the aspect of social development... (A1)

Difficulties in meeting the children's needs

The difficulties in managing children with special needs were attributed to a lack of specific knowledge and training:

[...] *I don't really see how to do this treatment, for example, you bring the cause, you bring the symptom, and the treatment? It only stays in the realm of scientific knowledge, you know?* (A1)

[...] *nowadays the younger teacher has an idea of the possible syndromes they will encounter. I studied at a time when there was the ideal student. There wasn't in the book, "look at this unruly student"* [laughs]*... because at that time, these students with any differences... they were removed from the environment and it was a teacher with skill, with their own education, qualifications, their own competencies to deal with this child who didn't have the same recess time, didn't stay with us and there were 12, 12 with them, multiple, you know, so there were autistic children, there was children with Down syndrome, there was... deaf, mute, but with her. They weren't in the classroom, and the books didn't address that either.* (B1)

Usually, when a child arrives, we see that they act differently, that they have greater difficulties than the average child in the group, and we have to go to the family and say, "Look, let's take them to the pediatrician, let's request a psychological evaluation"... many families don't accept this [...] *because it's difficult for us to establish a pathway within the health system for the evaluation... from the pediatrician who refers to the specialist and for the follow-up to happen, so it often takes months until the referral to the specialist, so it's a long process.* [...] *but we know that there are some issues where the treatment is different, and if I don't know what limit I can demand from that child, how far I can scold them to make them be quiet, or know that they are making an effort and I know it's a physiological thing, and that's our difficulty...* (A4)

It becomes very difficult if we don't have that connection with health, right, in this case, to transform the books, all of them, I mean, not just in this syndrome, but in all the others we have, right... the psychiatrist, the psychologist, they will give what is possible for that child to learn, and with this, what is possible, both in the motor part... then I can work. We don't have that, so it's in... "I think this will work, let's try" [laughs] *right...* (A1)

Contributions of the text to practice

Most teachers reported that the guide's text helped them obtain basic information about TS encouraging them to seek further knowledge:

[...] *it encourages research, right,* [laughs] *so I became interested in the topic, within the framework of the proposal given here, which is very difficult to find, right, a psychopediatrician who has these notions... today when I arrived in the classroom I already... the perspective is different, right. So it was like, that student makes noise, did he just do it? Oh, does he usually do that? Right, so it made me want to really look into that, why is he making that noise, right? To talk, to ask, have you been seen by a psychologist before? Does this always happen? Is it affecting you? I did that today with some students, I took them aside and said, what's happening, are you nervous? Right, because I felt you made a*

noise, and what happened? So I liked it, it's a challenge, right, you develop a perspective, I really like this kind of research, it forces you to study, it forces you to review, and it gives hope that I can solve it [laughs] *with some help, right. I liked it.* (B1)

I'm going to be more observant, because I'm not prepared. I didn't even have time to access the link that was being suggested to access on YouTube, but I will access it and I will delve deeper into the reading. [...] *so this reading only served as a warning, I have to know more, search more...* (B2)

I think that beyond the answers, right, that the guide proposes, I think what's best in it is the possibility of you thinking. And I also think, Bruna [referring to the researcher]*, that we can't have this guide as a recipe book, you know? I feel a little better prepared than before.* (B3)

[...] *during the reading the manual will make you reflect on your practice.* (A1)

[...] *so at various times "take it out of the classroom," right, emphasizing that, but I think that, try to work much more with the group of students, right, and the others understand the situation and the teacher still in the classroom try to help, right.* (A2)

Suggestions for the text

The interviewees suggested improvements to be made to the text, with a view to providing better understanding and applicability in classroom practice:

I suggest, I suggest that the text be accompanied by practical cases, real cases, we use a lot of contextualization of practice... (A1)

[...] *so this use of carbon suddenly, you know... I found it somewhat obsolete, but using technology for them is also more attractive, but that's all, it's a detail of the text but I think that... maybe, another one, you know, that just occurred to me, to present more, is... the bibliographic basis, you know, who were these authors, who were these researchers, you know, just that, but it's much more for the sake of curiosity, you know.* (A3)

So, I was just thinking about its format... I was imagining it, a pamphlet, something, some topics well divided, so it's... it's not a heavy read, but in that format it would be, but it's what you said, it was taken from the original support... (A4)

[...] *they are questions like family/teachers, you know, and there isn't a joint part like that, you know? I only ask the family, I only ask the teacher... but what about the part where we answer, right? What was my work and the family's work, you know? This thing about uniting health, family... right? And I think that kind of more "connected" question was missing.* (B1)

I think that perhaps a joint effort with education professionals... Classroom management is very different from clinical management, so I think a partnership would be very interesting in that sense. (B3)

DISCUSSION

Regarding the evaluation of the ASTOC ST text by elementary school teachers, it was observed that only two categories of analysis were directed at the composition of the text, the

other four reported difficulties in applying the content, the contributions it makes possible, and suggestions for improving the text.

The form and sequencing of the text were evaluated positively, contributing to the engagement of the readers. In a review study on the evaluation of educational materials aimed at promoting, preventing, or intervening in the neuro-psychomotor development of children, it was found that educational materials, in general, are evaluated as clear, objective, and efficient[17], while the ASTOC ST text was considered clear and objective.

The respondents pointed out that the text was not sufficient to prepare teachers to work with children with TS. A study by Miskalo, Cirino, and France[18], through interviews, identified that teachers did not have contact with content related to specific needs and inclusive actions during the training process, and with few opportunities for continuing education. In other words, this quote suggests that the difficulties in using the text effectively stem from the teacher training process itself.

It can be inferred that the text disseminated by ASTOC ST contributes to health promotion and prevention actions by considering the description of the needs and behaviors of children with TS, since early identification allows for referrals and the search for care more promptly, which contributes to containing possible suffering as it can prepare family members and teachers.

Although reading the material disseminated by ASTOC ST[10] contributed to the acquisition of knowledge, it is insufficient for managing students, as teachers perceived difficulties in developing the teaching-learning process for students with such needs. The guide served as a guiding tool for the process; however, doubts remained about how to apply this knowledge in practice.

The text was considered clear and coherent, meaning that the themes developed in a way that facilitated understanding of the TS, offering suggestions for teacher action that were considered feasible, with the caveat that teachers face difficulties considering the number of students and the structure of the educational institution itself.

The lack of support teachers was mentioned. In turn, Lopes and Mendes[19] highlighted in their study that support professionals for inclusion have precarious profiles. In this aspect, in their study, Silva and Carvalho[20] also find resource issues as a barrier to the inclusion process, including material and human resources.

Vitaliano[11], in collaborative research, also refers to the absence of specialist teachers to attend to students with special educational needs, as well as the high number of students in the classroom and the lack of adapted teaching materials. The following were identified as

necessary conditions to promote the inclusion of such students: increasing the number of teachers in the classrooms, working on the joint planning of activities in a rotation system, avoiding overburdening the professionals and providing opportunities for all to participate; adapted and appropriate teaching resources; and the presence of support teachers in some more specific cases.

The teachers reported that the text encouraged them to learn more about the topic; it contributed to another perspective on student behavior; it presented suggestions that can help the teacher with other student needs that are not specific to TS, however, they mentioned that they did not feel prepared to attend to a student with such a need.

In this aspect, Lopes and Mendes[19] made important contributions in which they address the challenge faced in the daily lives of teachers in the classroom with the presence of students with specific needs, such as: diverse learning rhythms and abilities, added to different levels of academic and experiential knowledge, cultural background, comprehension, codes of access to knowledge and also communication.

Numerous differences need to be managed simultaneously with students, coupled with the training models of many teachers, which have also failed to integrate innovative practices to address student diversity, can result in incomplete performance[19].

It is also important to consider the need to: promote student participation; support challenging behaviors and motor difficulties; support to ensure that demands do not impede the learning of the entire class, as well as basic personal care such as hygiene, nutrition and mobility[19].

The feeling that the responsibility for educating a student with TS falls solely on the teacher was an important point raised. This is because they believe in an intersectoral approach, involving school, family and health professionals, which corroborates research findings that highlight the importance of an interdisciplinary and intersectoral approach to meet the specific needs of students requiring inclusive approaches[7].

Family involvement is also important, especially regarding their acceptance of their child's needs, because from this family acceptance, acceptance of the planned pedagogical approach follows. For this to happen, the family must be involved in the process and prepared about the limitations and possibilities[7].

Because it is multifactorial nature, TS can trigger secondary disorders, such as depression and anxiety. According to the World Health Organization (WHO)[21], the failure to address mental health conditions of children and adolescents has repercussions in adult life, with damage to physical and mental health, limiting future opportunities. Promoting mental

health and preventing these disorders is necessary to help children and adolescents achieve a prosperous future[22].

Dealing with a student who requires specific needs in a classroom with so many students has been verbalized. Often, the teacher is unable to focus their attention on a specific student who needs more care.

In these situations, one strategy that can be used is collaborative teaching, which consists of mutual contribution between a specialized teacher and a regular classroom teacher. The teacher trained in special education acts by offering support and assisting their colleague in situations that demand specific knowledge and teaching techniques.

A study showed how this partnership effectively works in practice, not only through the participation of the teacher trained in special education, but also through the possibility of a second teacher and the synergy for learning, with the combination of regular and special education, in which students experience new learning possibilities[23].

However, there is still little material on collaborative teaching in Brazil and, moreover, it is not yet established as an educational policy[23]. Considering the number of students in the classroom, the presence of an assistant teacher to provide attention to students with specific needs would be important, but this is not the Brazilian reality.

The lack of teacher training hinders work with students with special needs. The ongoing training of educators is a fundamental part of the teaching-learning process for students with specific needs. In a study aimed at training early childhood education teachers, mainly addressing neuroscience applied to education, it can be observed that the development of skills within the school inclusion process should involve a multidisciplinary network working together with the family, the school, and the community. The same study also highlights the role of nurses in this process, possessing an educational character, acting mainly in the area of preventive care with a broad view of the health situation, which means not only valuing the presented need[22].

The importance of training early childhood education teachers for the process of working with students who need inclusive approaches is also highlighted by Silva and Carvalho[19:20], who observe the lack of "political and philosophical engagement" of teachers, in addition to the scarcity of training courses by the public authorities which, when offered, are often "inadequate and insufficient for effective practice".

The need to define responsibilities among those involved in the teaching-learning process, and the lack of time for planning educational actions in teams were highlighted by

Castro, Cardoso and Teixeira[22] as important challenges for collaborative learning, which is not yet a public policy.

Considering the theme of the approach to children/adolescents by qualified professionals, frequently mentioned among the interviewees, we observe some WHO recommendations to promote and prevent psychological disorders in the child and adolescent population, such as the multi-professional approach and intersectoral collaboration with available educational resources[23].

The action should not be restricted only to the school environment, but should also extend to specialized and trained health teams, with the help of interventions focused on the family and community and prevention programs for children and adolescents at risk for mental health. This relates to the complaint of teachers that the impression is that the responsibility for educating lies solely with the school. According to the WHO, it should not be[23].

However, intersectorality in mental health in Brazil is weak. The demand for mental health care is high, and few professionals feel able to deal with people suffering from psychological distress[24].

Primary care, social assistance, and education are the main sectors that refer patients who make up the child and adolescent population to Child and Adolescent Psychosocial Care Centers (*Centros de Atenção Psicossocial Infanto-juvenil* - CAPSij). However, it is known that CAPSij are insufficient and geographically poorly distributed in the country, a scenario attributed to the lack of investment in the sector, as well as the lack of trained professionals[25].

Given that intersectorality constitutes a main axis of actions in the area of mental health, the reinforcement of pre-existing facilities should be analyzed as a public health agenda, aiming to enhance their action before society, in order to guarantee the right to public and quality access to mental health care institutions in Brazil.

A study conducted with teachers and coordinators, constituting a program in a CAPSij in the municipality of São Paulo, developed focus groups between health professionals and teachers and coordinators of education in the study area, to verify the integration between health and education. The work demonstrated that the support and welcoming of the CAPS professionals, in addition to the possibility of knowledge exchange among the participants, enabled teachers to "care for, listen to and give meaning to the suffering of children and young people" with specific needs, facilitating the teaching-learning process[26].

The teachers also made suggestions regarding the presented text, such as: the use of practical cases, understood as real-life cases to exemplify the contribution of the suggestions presented in the text; the presentation of the references used in the preparation of the guide,

which is in accordance with the dissemination of evidence-based knowledge; the presentation of the text as a leaflet with well-divided topics; the inclusion of content to consider the approach of joint actions between teachers and families; and the elaboration of the text together with teachers so that issues regarding classroom management are considered.

CONCLUSION

The guide was well-received by the teachers interviewed, but they mentioned difficulties in managing the inclusion process of students with specific needs, in this case, TS Some points raised by them, such as the reality of a classroom with a high number of students and the lack of professional training, represent a major challenge for these educators, often leading them to feel overwhelmed and with the sensation that the responsibility falls solely on the school.

Suggestions for intersectoral action, combining education, health, and family, proved very powerful. The desire for more knowledge can be perceived in the words of most interviewees, who reported that they still do not feel completely prepared and confident to deal with the teaching-learning process of students with mental health disorders.

In the context of teacher training and their classroom reality, the importance of increased investment in mental health was highlighted, as well as closer collaboration between health professionals and early childhood education professionals, with a view to improving the teaching and learning process necessary for children/adolescents with specific needs. Properly preparing educators to deal with students who require differentiated attention can have a positive impact and contribute to them achieving a future with greater opportunities.

The school plays a fundamental role as a fertile environment for addressing issues that go far beyond learning. Considering the inclusion of Brazilian children and adolescents and that school is a common space in their lives, it can be affirmed that this place has the potential for practices promoting health and preventing harm, especially in mental health for TS and for the various mental disorders that have early manifestations, intensely impacting the lives of countless individuals in formation.

One limitation is the lack of generalizability of the data, as it was conducted only with teachers in two preschools. This, in itself, makes further studies on the subject important, as well as practices that provide support and guidance to these teachers, and bring them closer to other sectors of childcare and attention for more comprehensive and effective actions.

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Contributions:
Concept – Avezani ACF, Mazzaia MC, Soave BCR
Investigation – Avezani ACF, Mazzaia MC, Soave BCR
Writing – first draft – Avezani ACF, Mazzaia MC, Soave BCR
Writing – revision and editing – Mazzaia MC