PHYSIOTHERAPY AND HEALTH PROMOTION: A SYSTEMATIZATION OF EXPERIENCE WITH 4TH YEAR ELEMENTARY SCHOOLCHILDREN

FISIOTERAPIA E A PROMOÇÃO DA SAÚDE: UMA SISTEMATIZAÇÃO DE EXPERIÊNCIA COM ESCOLARES DO 4º ANO DO ENSINO FUNDAMENTAL

FISIOTERAPIA Y PROMOCIÓN DE LA SALUD: UNA SISTEMATIZACIÓN DE LA EXPERIENCIA CON ESTUDIANTES DEL CUARTO AÑO DE ESCUELA PRIMARIA

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ABSTRACT: Postural changes and back pain are a public health problem due to the high worldwide prevalence. Thus, integrating physiotherapy/school can address health promotion to schoolchildren. It aimed to analyze the previous knowledge of schoolchildren about the theme and understand their practice, in addition to identifying, from the dialogues, knowledge from experience. Qualitative study by systematization of experience with students in the 4th year of elementary school in a school in the State of São Paulo. Data were verified by Bardin's content analysis and theoretical framework Jorge Larrosa Bondia and Paulo Freire. We apply playful activities and conversation circles about healthy habits and spine self-care. It was identified that students brought knowledge but did not always practice it. Listening showed that the school and the family are essential for the orientation to guide care practices, and the physical therapist must approach to extract from the dialogues the experienced reality.


RESUMO: Alterações posturais e dor nas costas são problemas de saúde coletiva devido à alta prevalência mundial. Assim, a promoção da saúde pode ser trabalhada com escolares, integrando a atuação fisioterapeuta-escola. Buscou-se refletir sobre o conhecimento prévio dos escolares sobre o tema e compreender sua prática, além de identificar, a partir dos diálogos, o saber da experiência. Estudo qualitativo por sistematização de experiência com escolares do 4º ano do ensino fundamental de uma escola do estado de São Paulo. Os dados foram verificados por análise de conteúdo de Bardin e referencial teórico Jorge Larrosa Bondia e Paulo Freire. Foram aplicadas atividades lúdicas e rodas de conversas sobre hábitos saudáveis e autocuidado da coluna. Identificou-se que os estudantes traziam conhecimento, mas nem sempre o praticavam. A escuta mostrou que a escola e a família são fundamentais para a orientação das práticas de cuidado e o fisioterapeuta deve se aproximar, para extrair dos diálogos, a realidade vivida.


RESUMEN: Los cambios posturales y el dolor de espalda son un problema de salud pública debido a la alta prevalencia a nivel mundial. Así, la promoción de la salud puede dirigirse a los escolares integrando la fisioterapia/escuela. Tuvo como objetivo analizar el conocimiento previo de los escolares sobre el tema y comprender su práctica y identificar a partir de los diálogos, el saber de la experiencia. Estudio cualitativo por sistematización de la experiencia con alumnos del 4º año de una escuela primaria del Estado de São Paulo. Los datos fueron verificados por el análisis de contenido de Bardin y marco teórico de Jorge Larrosa Bondía y Paulo Freire. Aplicamos actividades lúdicas y círculos de conversación sobre hábitos saludables y autocuidado de la columna. Se identificó que los estudiantes traían conocimientos previos, pero no siempre los practicaban. La audiencia mostró que la escuela y la familia son esenciales para la orientación de las prácticas de cuidado y que el fisioterapeuta debe acercarse para extraer de los diálogos, la realidad vivida.

Introduction

The school environment, throughout its context, has great potential for work aimed at Health Promotion, with the bringing together of the areas of Health and Education being a fundamental strategy for improving the population’s quality of life. In view of this, two important challenges stand out: the pedagogical practices adopted by health professionals who enter school spaces and the school’s commitment as a trainer/disseminator of knowledge about health practices.

Studies focused on the area of care for the spine and posture sometimes appear disconnected from students' needs and prior knowledge and their potential to take care of their bodies. There is a consensus that health actions that take place in schools are important, but they need to be linked to reality and consistent with the best pedagogical practices, seeking strategies that go beyond superficiality, promoting health, and elevating individuals to an active role in controlling their health conditions.

A school is a place where we can hear children’s voices and understand reality based on the information they bring, in addition to the fact that the school environment can influence students’ body postures. We understand the importance of actions to promote health in this environment, requiring greater integration of the Family Health Support Centers (NASF) work with intersectoral actions, with the participation of physiotherapists working in this phase of development of children and adolescents.

Theoretical foundation

According to Lima Filho et al. (2015, p. 52, our translation), posture is a “biomechanical condition in which a body finds itself during the execution of activities”. In the literature, the presence of osteoarticular balance in a static position or during a movement is identified as a qualitative standard for posture, using minimal energy and ensuring that structures and circulation remain intact (LONGO, 2008; BACK; LIMA, 2009; BATISTÃO et al., 2019).

Bad postural habits can generate an overload on the body's support structures, which potentially triggers injuries to the musculoskeletal system, causing discomfort (PENHA et al., 2008; SOUZA JUNIOR et al., 2011) and deviations in posture with multi-determined factors (CALVO-MUÑOZ; GÓMEZ-CONESA; SÁNCHEZ-MECA, 2012; BUENO; RECH, 2013; VIDAL et al., 2013; NASCIMENTO; COSTA, 2015; NOLL et al., 2016). Posture is a manifestation of the body that we develop, and from this perspective, a significant part of the
literature is observed with concepts without considering that posture is influenced by several factors and, above all, that it is intrinsic to the individual (SOMEKAWA et al., 2013). Cruz and Nunes (2012, p. 144) categorize such factors as related to physical, psychosocial, lifestyle and school environment.

At school, it is possible to identify factors that contribute to the development of possible postural changes. At this stage when students are developing physically, the way they carry their backpacks, the time they remain seated, the way they stand up, write and carry out other activities, in addition to the time they remain at school, can result in incorrect postures, generating irreversible repercussions (BENINI; KAROLCZAK, 2010).

In the 1920s, health approaches were dominated by hygiene, following the medical elite. Later, the health movement, led by health professionals, adopted a more horizontal approach, centered on popular education. With the evolution of the National Health System and the advent of the Unified Health System, a new perspective of health care emerged, focusing on humanization and health promotion (CECCIM, 1992; VIEIRA, 2011). Although some Health Promotion initiatives in schools are already aligned with this approach, they often remain disconnected, especially for certain age groups, such as children over 5 years old (CECCIM, 1992; VIEIRA, 2011).

Pedagogical conceptions

Through practical methodological approaches in the school environment, we seek not only to transmit knowledge, but also to promote the ability to make conscious and responsible decisions in relation to students' own health. With the development of this research, we understand the need to apply interventions with practices based on Paulo Freire's dialogical perspective.

Through critical pedagogy, Paulo Freire proposes a dialogical and critical relationship between teacher, student and society. This approach promotes a problematizing and liberating education, in which reflection is transformed into practical action. However, educational programs in the school environment have no real effects when based on cultural invasion or imposition. It is necessary to adopt a participatory approach, which respects diversity and values student autonomy (FREIRE, 1987).

Another author who guided us in this research was Jorge Larrosa Bondía, and he brings the idea of individual experience and the importance of attributing meaning to these
experiences. He shows us that experience is not just something that happens to us but is the starting point for building our knowledge and understanding of the world. Each experience is unique and particular to the individual, carrying with it transformative potential. It is through reflection and interpretation of these experiences that we can attribute meaning and build personal and authentic knowledge. By recognizing the uniqueness of experiences, we are challenged to value the diversity of perspectives and explore the multiple layers of meaning that permeate the fabric of human existence (BONDÍA, 2002).

In this entire context, the question of our work arises: do students know about postural issues and how to take care of their spine? If so, do they practice it? To this end, we sought to develop practices from Paulo Freire’s dialogic perspective and, through the findings, discuss the relationship between “knowledge and doing” by Jorge Larrosa Bondia.

Therefore, the objective of this article was to reflect on the prior knowledge of students in the 4th year of elementary school about body posture and care of the spine before carrying out interventions on the subject. From this, identify how this knowledge was created in students' daily practice, that is, how knowledge was created through experience.

Method

The qualitative study uses the technique of systematization of experience, which is characterized by being conducted through a critical interpretation of the lived experience, and with this, it is possible to reflect and reformulate the process to put it into practice again. Through systematization, it is possible to reconduct knowledge and establish new structures for knowledge, with the difference being experience/practice as the object of research, i.e., the objectified is alive and in constant movement (HOLLIDAY, 2006).

The guidelines for systematization were followed in five moments, according to Holliday (2006):

A) Starting point

I am the one who systematizes the experience, a physiotherapist and researcher bringing previous experiences since graduation with work focused on postural care for schoolchildren, and due to the importance of this topic for health promotion, my dissertation was conducted. I participated in this research throughout the elaboration and execution process, combining what
I brought with the new experience. Another point to highlight is the records, which used the field diary and were prepared immediately after each intervention.

**B) The initial questions**

The objective of systematization and the choice of experience to be systematized are elaborated. The experience was determined to be the intervention carried out in 10 weekly meetings, lasting 1 hour each, with 22 students in the 4th year of elementary school I, aged between 9 and 10 years old, of both sexes, enrolled in a municipal school in the interior of the state of São Paulo in 2019, with approval from the management and municipal education department.

When choosing students in this age group, the fact that they were in the process of learning to read and write was taken into consideration. This was important so that they could express in writing what they knew about the topics discussed. The class was selected by the school director and to participate in the research, inclusion criteria were established, such as being a student in the 4th year of elementary school I, being between 9 and 10 years old, and having the authorization of parents or guardians.

The class teacher monitored the interventions indirectly, remaining in the classroom. At the end of the interventions, a semi-structured interview was carried out, seeking to identify what the teacher recognized about the topic and how she observed the students on a daily basis.

As the axis of systematization, leads the entire process, “Postural care for schoolchildren was conceived, envisioning autonomy based on what they knew about the subject and seeking the reasons for applying or not applying the knowledge”.

**C) Recovery of the process experienced**

At this stage, we sought to reconstruct the history and organize the information using the Postural Schools methodology, following Paulo Freire's educational approach. It highlights the importance of reflecting on what we have learned and implementing this knowledge. Through this process, we sought to promote participatory education, where everyone could contribute and apply what was learned.

The interventions were prepared through lesson plans with proposed objectives for each intervention, aiming for playfulness. For each meeting, a different topic was covered:
1. 08/22/2019: presentation of the research and observation of the class for the first insights in the field diary.
2. 08/30/2019: what is health.
3. 09/05/2019: formation, development of the spine and its main functions; anatomy of the hip and lower limbs; main injuries and deviations of the spine.
4. 09/12/2019: standing and sitting postures.
5. 09/19/2019: backpack (model, weight, and transport) and suitable shoes.
6. 09/26/2019: school furniture, heavy lifting and transferring objects.
7. 10/03/2019: adequate posture in front of the computer/cell phone; correct way of walking, getting in/getting out of bed.
8. 10/10/2019: body awareness and physical activity.
9. 10/17/2019: content review.
10. 10/24/2019: administration of the post-intervention questionnaire, student feedback and concluding fun activity.

During the interventions, various activities were carried out, such as games, manual work, physical exercises, and conversation circles, to rescue the students' experience with the topic. These activities provided students with practice and learning about healthy postures to experience knowledge.

D) Background reflection: why did what happened happen?

In the most important phase of systematization, a critical interpretation of the process experienced was sought through the analysis of the field diary, the interview with the teacher and activities with the students, using Bardin's thematic content analysis methodology (BARDIN, 1977; MINAYO, 2016). For this moment, it was necessary to go through a series of steps, such as: pre-analysis; exploration of the material and treatment of results/inference/interpretation (BARDIN, 1977; MINAYO, 2016).

After the initial analysis of data processing and elaboration of thematic axes, two thematic categories were developed: “The knowledge they brought” and “Knowing is not doing”, in which the field diary was the guiding document, and later there was the triangulation of all collected materials.

The categories were developed through the premises of previously established theoretical references, and through inferences bring discussions and dialogue between the
interpretation of the data and the authors, bringing to light the raw data for the theoretical discussion (BARDIN, 1977; MINAYO, 2016).

In the excerpts extracted from the materials, we chose to replace the real names of those involved. The researcher was designated as Maria Eduarda, while the children were assigned a number (for example, Child 1, Child 2...).

In addition to reflecting on individual experiences in the learning process, interventions were questioned and how they occurred: were there changes in objectives? How did the children interact? Have there been changes to the process? What are the main difficulties and contradictions found in the statements of children, families, and schools? How did the relationship between the physiotherapist, students and teacher develop? Was there a change in the conceptions of those involved?

E) Arrival points

We returned to the objectives and formulated conclusions, expressing the main answers and new questions that arose, with communication of learning being of fundamental importance, with this article being the result of this intention to share learning with other people.

Ethical aspects

This article is part of the dissertation carried out in the Postgraduate Program in Public Health at the Faculty of Medicine of Botucatu, UNESP, from 2019 to 2020. The study received financial support from the Dean of Postgraduate Studies at UNESP and later from CAPES. All procedures performed were approved by the Research Ethics Committee of FMB, UNESP, under protocol number CAAE: 10035219.9.0000.5411.

Results and discussions

From reading the collected material, the analysis of its contents revealed meanings for the elaboration of two thematic categories: “The knowledge they brought” and “Knowing is not doing”.
The knowledge they brought

From the researcher's field diary and the activities carried out by the students, it was observed that they already had knowledge and experiences about posture care, even before contact with the intervention. Through the strategies adopted, it was possible to recognize that students had already had prior contact with many topics covered in this research, such as, for example, the anatomy of the spine and its functionality, and even possible ways of getting injured, as well as its prevention.

What everyone brings from their experiences and their context is very important so that through exchanges and the possibility of expressing themselves, they can practice free exercise as a practice of freedom (FREIRE, 1987). Therefore, the educator needs to establish bridges of exchange, making the content accessible to everyone and not the exclusive object of a few.

From this perspective, we identified that in the third intervention, the theme developed was making the students express what they knew about the spine, showing that the children had prior knowledge, and through the methodology adopted, they felt free to talk and exchange information with colleagues, making the dialogue fluid. We observe this collective construction in the following excerpt:

[...] I introduced questions about the column and asked if they knew what it was? Where was it? What is it for? And very quickly, the answers came. They wanted to respond and show that they knew; they even knew about the existence of curvatures and about them being normal, one student commented that it looks like a 'U' in the lumbar and cervical region (she didn't know the names she showed it) and that it inverted in the region of the thoracic. Then I told them the names of the curvatures, and they already knew the names but couldn't pinpoint the location (POSSETTI, 2021, p. 158-159, our translation).

During a discussion about spinal injuries, one of the topics covered was herniated discs. It was noted that many participants did not know the subject. To provide a better understanding, a lumbar spine model was used as a study resource. It can be identified that as the information was shared, the students began to make connections and understand the meanings: “...I showed what happens in the spine and the possible pinching of the nerve, and I asked if they knew what the pain was like in the back nerve, and it's not like a student responded!!! A voice said it was like tingling, numbing” (POSSETTI, 2021, p. 159, our translation).
On the penultimate day, the children carried out a content review activity and answered a questionnaire. The 3rd question prepared by author Possetti (2021, p. 66, our translation) was the following: “You already knew about some guidelines, did you learn something new?” Below is the response from one of them, showing the family's participation in the formation of prior knowledge about the posture:

Paulo Freire (1987, p. 44, our translation) defends liberating education, which transcends the dichotomy between educator and student, establishing a bilateral learning process, and positions himself as follows, “No one educates anyone, no one educates themselves, men they educate each other, mediated by the world”. Here, it is crucial to understand the importance of valuing and recognizing the essence of others not just for their mere presence, but for the uniqueness of who they are. Everyone brings life to the content and extinguishes the idea that knowledge belongs to or is worthy of a few (CYRINO, 2005, our translation).

Silva et al. (2008, p. 1168, our translation) address the role of nursing in facilitating human interaction, which can be applied to physiotherapy. In this sense, the relationship of care with others extends to self-care: “The hand that touches are also touched”. This approach can
and should be developed by this health professional, as by developing their work focused on
movement and body functions, they can contribute to the promotion of health at both an
individual and collective level (PEREIRA NETO et al., 2016).

In the intervention, we proposed to the students that they would be a “physiotherapist”
for a day to carry out a consultation with their colleague to evaluate their sitting posture:

[...] we returned to our circle, and they shared what they saw and wrote down,
most found errors, such as hunched posture, crooked head, sitting on top of
the leg, not using the footrest, knee touching the top of the desk, back not
touching the chair support (POSSETTI, 2021, p. 162, our translation).

Another task for them as physiotherapists was to carry out an ergonomic analysis of the
classroom environment, recording on a sheet the positive and negative points of the school
furniture in an excerpt from the field diary, the result appeared: “Another positive point is the
iron for support feet, and when this item appeared I asked if they thought it was good, and they
said it was good for those who are small [...]” (POSSETTI, 2021, p. 168, our translation).

The activity proposal places children at the center of the discussion, establishing a
relationship that is not generally found in the practice of health professionals. When entering
the school environment to promote health education, these professionals often forget that they
are not the only knowledge holders. It is essential to recognize that children also have valuable
knowledge and experiences, and by actively including them in the educational process, we can
broaden and enrich health perspectives. In this way, dialogue between professionals and
children becomes a two-way street, where both learn and contribute to health promotion,
strengthening a more inclusive and participatory approach (FREIRE, 1987).

The Family Health Support Center (NASF), established in 2008 and extinguished in
2020 and now re-established as eMulti, is developed to strengthen multidisciplinary activities
in primary health care (BRASIL, 2023). The physiotherapist is part of this team, and their role
is fundamental in fostering discussions and enhancing integrative activities between health and
education. These strengthen activities in territories, bringing individuals closer to health actions
and favoring the leading role of users in their health (VITTA et al., 2012).

Seeing this important role of the physiotherapist in interventions, this professional can
understand the reality studied and that children know about the ideal weight and the appropriate
way to carry a backpack on their back.

I asked if they knew what we must notice about the backpack besides the
weight and one student replied that they had to put the two straps on each
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shoulder, and I asked what else? Another student said: “mine is down on my tush”, so I asked everyone if it was correct, and they said no, and another student wanted to show how he carried it. He showed and said that he was holding the string to keep it close to his back (POSSETTI, 2021, p. 165, our translation).

They also showed that you should squat and bend your knees when picking up objects from the floor, avoiding overloading your spine. Furthermore, they were able to make connections between precautions in the school environment and apply them in other situations, such as distributing the load when carrying objects in the hands or on the back. It was possible to observe this in two other excerpts: “[...] I realized that they knew that the correct way to pick up an object on the floor would be by squatting (bending the knees), but to pick up the object and transfer it, they didn't understand how it should be done [...]” (POSSETTI, 2021, p. 168). “...a student talked about carrying grocery bags, and I asked if they knew how to carry them, and she answered correctly that she had to put half in each hand [...]” (POSSETTI, 2021, p. 171).

Based on these findings, it was identified that numerous studies have shown the association between weight, type, and way of carrying a backpack and the emergence of low back pain. Furthermore, such factors can cause changes in the natural curvatures of the spine, affecting balance, gait and standing position (VIDAL et al., 2013).

According to the study conducted by Adeyemi et al. (2017), a high prevalence of back pain and postural changes was observed in children associated with the use of school backpacks. Backpack volume had a direct and indirect effect on these problems. The literature recommends that the backpack load does not exceed 10% to 20% of body weight, and a weight of 4kg can reduce the height of the L5-S1 intervertebral disc by up to 13%. Another finding is that carrying the backpack inadequately can increase the trunk's anterior inclination, excessive muscle activation, and postural deviations (SURI; SHOJAEI; BAZRGARI, 2020).

A study in Spain involving around 5,000 students revealed the relationship between back pain and the weight of backpacks, showing that 65% of them were carrying weights above ideal (RODRÍGUEZ-OVIEDO et al., 2018). In Poland, a study conducted in 2016 managed to reduce the weight of backpacks through joint actions with schools (BRZEK; PLINTA, 2016).

Fernandes et al. (2008, p. 450) defend the need to guide children on the proper use of backpacks, and their study in Brazil showed a significant increase in children using backpacks with two straps, bilateral transport, and a reduction in average weight. Santos et al. (2017, p.
205) observed that children carried their backpacks appropriately, and these results are in line with other studies that highlight students' prior knowledge on the subject.

Although there are many studies that consider the backpack as a “villain”, there are other lines of study that question the excessive focus on school backpacks, which is still a very controversial issue that needs to be clarified (BARBOSA; VIDAL; TAMBELLINI, 2006; VIEIRA, 2011; BUENO; RECH, 2013). According to Barbosa, Vidal, and Tambellini (2006, p. 245), it is important to debate not only reducing the weight of backpacks but also highlight that prolonged time in a sitting position has an even greater influence and emphasize the importance of addressing this aspect to promote postural health in students.

In this research, movement was adopted as a form of self-knowledge, independence, and prevention and when carrying out a stretching practice, students demonstrated that they had knowledge about a simple movement for everyday life:

I wanted to know if they knew some stretches, so we stood and, one at a time, showed what they knew, and once again, they surprised me because they knew several stretches, some showed strengthening; then I explained the difference between the two and that today the proposal it was stretching (POSSETTI, 2021, p. 175, our translation).

The students showed that they knew many movements that help with self-care for their bodies. We identified that few studies highlight remaining in a sitting position for a prolonged period as harmful and may interfere with the body structure. It is important to highlight that students are subjected to this posture because of the traditional teaching system, which restricts their mobility and imposes a standardized and static body posture (BARBOSA; VIDAL; TAMBELLINI, 2006; VIEIRA, 2011; BUENO; RECH, 2013).

In the context of the imposed school culture, Michel Foucault raises intriguing discussions about Biopower, which refers to the exercise of power over life as a means of governing (AZEVEDO; RODRIGUES, 2018). However, when it comes to holding students accountable for their actions about health, there is a need for them to know each other, promoting the exchange of experiences.

Unfortunately, the standards established by postural education often lack the empowerment of subjects, which prevents them from realizing their own limits (SOMEKAWA et al., 2013). Faced with this reality, we ask ourselves: How can we challenge this system of control and create an environment that allows students to discover their potential and capacity for “self-management” in relation to their health?
Knowing is not doing

This thematic category reflects what the students expressed as previous experiences, but the daily repetition did not happen, did not make sense or had not yet been incorporated. Therefore, health professionals in the school environment need to raise questions about what schoolchildren bring with them. Often, these professionals assume that children have little knowledge about the topics covered and hope that, through their interventions, they will be able to change their behavior. However, it is important to rethink this approach, valuing other knowledge and considering other perspectives that allow for true transformation.

An excerpt from the field diary shows how close the physiotherapist was to the students when they felt safe to express themselves, even though they knew they didn't sit "properly". They told their stories, and their motivations came to light, bringing to light an important fact about prolonged sitting, even if it's done properly, which causes pain and discomfort:

[...] I asked if they knew the correct way to sit, I even imagined that they did, because they answered correctly in the questionnaire, and they really knew, but then the big question came: “do you do it correctly?” The majority answered no, and there was a phrase that caught my attention: “it’s difficult to maintain the correct posture, it hurts” (POSSETTI, 2021, p. 161, our translation).

In the traditional educational system, certain motor behaviors are standardized, such as prolonged sitting (BARBOSA; VIDAL; TAMBELLINI, 2006). However, Drzal-grabiec et al. (2015, p. 855) reveal a correlation between back pain and prolonged sitting, resulting in possible future problems, such as disc protrusions. Furthermore, it can cause immediate effects, such as muscle contractures, nerve irritation and decreased blood circulation, which, in turn, can cause pain and discomfort in the neck, lower limbs, as well as edema in the feet and ankles (ZAPATER et al., 2004).

The lumbar spine has a physiological curvature that is altered when we sit, taking it to a position of neutrality, generating stress, increased reflex activity and muscle contraction, resulting in fatigue, triggering a vicious cycle (FETTWWEIS et al., 2018).

Yes, "correct posture hurts"! The child's speech brings a simple aspect to observe, but little is considered when postural education work is carried out with schoolchildren. When we approach the topic involving the body, it is understood that it is dynamic and that it has its needs. Therefore, it is insufficient to present the right thing to do, it is necessary that the actions are precise and that the movement happens, through physical activities, as well as better daily
school dynamics, there is a need for a project in which the health professional can act directly with the promotion of health, bringing the entire school community together (VIEIRA, 2011). In another excerpt from the diary, the researcher shows the reality of these students: “...despite the little mess at the end, it was really cool, especially the analyses they made of correct posture. I realized that they really know about the subject, but they don’t practice it” (POSSETTI, 2021, p. 163, our translation).

Through the above, it is necessary to contemplate knowledge and understand the concepts and how they occur. Knowledge is woven into the fabric of everyday life, intertwining in the different spaces we inhabit. From families to school circles, from workdays to many other scenarios, knowledge flourishes during human interactions. Would we be discarding the professional’s knowledge? No, here, the mediating role is discussed, the intention is to problematize the professional's performance and how he accesses individuals, turning what is lived into a real experience (CYRINO, 2005).

For knowledge to become experiential wisdom, an openness to events is necessary, a space capable of revealing the individual's singularity and subjectivity that exists in each of us. Therefore, in addition to practice, it is necessary to cultivate a conducive environment that allows interaction between acquired knowledge and personal experience, enhancing the assimilation and internalization of knowledge (BONDÍA, 2002).

During the interview with the teacher, it was identified that the students were not sitting correctly, in addition to expressing concern and demanding attitudes to improve the students' positioning:

**Interviewer:** Can you see if the children are in the classroom with the right posture? **Teacher:** No, they don’t have the right posture, even before Maria Eduarda came, you know. Since the beginning of the year, I’ve been checking on their posture, but they don’t have good posture, they sit on their legs. Especially the children who lean against the wall, you know, who sit at the desks next to the wall, they lean against it, they turn sideways, like this, they leave the table far from the chair, so, all the time I’m drawing the children’s attention to this, but they don’t have good posture (POSSETTI, 2021, p. 73, our translation).

In the exercise of political power, we observe control over individual conduct, directly influencing relationships and the environment in which we live. This dynamic is also reflected in the school context, where remnants of hygiene practices from the 19th century are still present (AZEVEDO; RODRIGUES, 2018). In this scenario, it is common for parents, teachers, and other professionals to adopt normative and prescriptive approaches, dictating how
individuals should behave. Expressions such as “to nag someone”, “to scold,” or even demanding that someone “sit up straight” are reflections of this controlling profile, which disregards the complexity surrounding postural issues, neglecting the importance of flexibility and movement for maintenance of health (SOMÉKAWA et al., 2013).

In addition to the above, some situations affect children’s/youth’s imagination, causing students to adopt certain practices. During the conversation circles, it was possible to identify, as already mentioned, that the students carried an excess of material in their backpacks, including expendable objectives, but they liked this practice, especially the girls, who expressed that they had the habit of coloring their notebooks and needed material for this:

I asked them if they thought they had things in their backpack that they didn’t need, and there was a big “YES”, and several students said that they carried more than one eraser, or lots of colored pens to make their notebooks look pretty. The teacher also spoke up, saying that they took a lot of “junk”. I asked them if they thought they needed to change this, to reduce the weight of their backpacks, and if it would be possible. I honestly felt that they wouldn’t want to change this habit, especially the girls, who, according to our conversation, were carrying more material. One student made a comment with sparkling eyes: “I have so many beautiful pens, how am I going to leave them at home?” (POSSETTI, 2021, p. 164, our translation).

Still on the excess weight in the backpack: “[...] what I had at the time was that the students knew that their backpack was heavy, and the question was are they willing to change? (POSSETTI, 2021, p. 164, our translation).

Immersed in this context in which children carry excess material and face a reality that transcends the simple care of their bodies, Theodor Adorno's reflections bring to light deep questions about individuals who are dominated and oppressed by the pillars of society, disseminated by advertising and for consumer goods aimed at massification. In a subtle way, these values infiltrate people's minds, who, deceived by the appearance of freedom of choice, become submissive objects of this psychological oppression (FIANCO, 2010). Thus, subjects go through experiences without being truly touched by them, as if they experienced them in a depersonalized way, as mere commodities to be sold (LARROSA, 2003).

To understand what the intervention experience was like for the students and its relationship with their daily lives, they expressed their difficulty in adapting to postural issues in daily activities, revealing the need to be reminded and guided by somebody. It was possible to identify in the excerpts taken from the questionnaire they filled out: “I remembered that everyone must sit with posture. And it also doesn’t go through the posture, I only remember
when someone corrects me (Child 8)”; and “It’s been really cool. But it’s hard to get used to it” (Child 13). I forget about the spine at home (Child 21)” (POSSETTI, 2021, p. 74, our translation).

The experience transcends mere objectification and cannot be reduced to a simple experiment. Knowledge is not limited to information, as its true essence lies in resonating with who we are and what we experience (BONDÍA, 2002). Body posture is an expression of our development throughout life, and health professionals have the responsibility to promote work that empowers and grants autonomy to individuals in the care of their bodies, recognizing the historical influences and social determinations involved (SOMEKAWA et al., 2013).

Final considerations

With this work, we brought research closer to the object of study, with schoolchildren being the axis we chose to follow. Listening was the main means of connecting and exploring the voices that raised important reflections, determining how each stage of the interventions would take place.

Through their speeches and attitudes, the children showed that they knew a lot about taking care of their posture and entire body structure, but in practice, they didn't do it. However, it was evident that the knowledge acquired so far did not translate into lived experience, and at the same time, several external factors negatively influenced self-care.

In the school environment, health practices aimed at children and adolescents play a crucial role in articulating different sectors and promoting the empowerment of subjects. In this sense, it is essential to rethink the traditional biomedical model, which still permeates the work of many health professionals, and seek approaches that value collaboration and transformation.

The experience in the practice of this research made me, the researcher and physiotherapist, leave my usual environment. It provided an opportunity to meet and learn about the reality of children beyond the knowledge provided in books and articles. What they knew and their experiences became part of the knowledge of my experiences because, with each intervention, new knowledge about that reality was integrated into my research. Bonds were also created, listening provided moments in which information was exposed more easily and naturally.

This meeting also made it possible to see how challenging working with schoolchildren is and to question: Why aren't physiotherapists at school? Where is the health-promoting
physiotherapist? How do we broaden our perspective beyond the professional who rehabilitates but also contributes greatly to prevention and health promotion in primary care?

REFERENCES


Physiotherapy and health promotion: A systematization of experience with 4th year elementary schoolchildren


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**Data and material availability:** The data and materials used in the study are available for access in the institutional repository of the *Universidade Estadual Paulista "Júlio de Mesquita Filho" (UNESP) - Faculdade de Medicina de Botucatu (FMB).*

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