TEACHING PROFESSION AND HEALTH OF TEACHERS FROM THE MUNICIPAL NETWORK OF TEACHING IN THE CITY OF MANAUS

PROFISSÃO DOCENTE E SAÚDE DE PROFESSORES DA REDE MUNICIPAL DE ENSINO DA CIDADE DE MANAUS

PROFESIÓN DOCENTE Y SALUD DE PROFESORES DE LA RED MUNICIPAL DE ENSEÑANZA DE LA CIUDAD DE MANAOS

Julia Graziela Bernardino de ARAÚJO QUEIROZ¹ Tatiana Andreza da SILVA MARINHO²

ABSTRACT: The teaching profession has been the subject of discussion in recent years due to the growing number of teachers who are getting sick every day, due to exercise of the profession. In this sense, the research was based on analyzing and describing the factors that are related to the triggering of illnesses of basic education teachers in the city of Manaus. The research has a qualitative approach and was conducted in 32 schools with 320 teachers. Regarding stress factors, in general, the main cause pointed out by the professionals was the low salary (62.4%), the lack of family support in the students' school life (19.6%) and the precarious infrastructure of the school grounds (10.9%). Psychosomatic illnesses (24%) were the ones that most affected teachers in the full exercise of their profession. Thus, there is a need to develop public policies aimed at valuing education professionals and improving working conditions.

KEYWORDS: Health. Teacher. Education.

RESUMO: A profissão docente tem sido objeto de discussão nos últimos anos devido ao crescente número de professores que estão adoecendo, a cada dia, em pleno exercício da profissão. Neste sentido, a pesquisa pautou-se em analisar e descrever os fatores que estão relacionados ao desencadeamento de doenças de professores da educação básica na cidade de Manaus. A pesquisa é de abordagem qualitativa e foi conduzida em 32 escolas com 320 professores. Quanto aos fatores de estresse, de forma geral, a maior causa apontada pelos profissionais foram o baixo salário (62.4%), a ausência de acompanhamento familiar na vida escolar dos discentes (19.6%) e a infraestrutura precária do recinto escolar (10.9%). As doenças psicossomáticas (24%) foram as que mais afetaram os professores em pleno exercício da profissão. Com isso, há necessidade do desenvolvimento de políticas púbicas que visem a valorização dos profissionais da educação e a melhoria das condições de trabalho.

PALAVRAS-CHAVE: Saúde. Professor. Formação.

² Municipal Secretary of Education (SEMED), Manaus – AM – Brazil. Science teacher linked to the Manaus Municipal Education Department. PhD in Biology (Ecology) (INPA). ORCID: https://orcid.org/0000-0001-8420-3371. E-mail: tasmarinho@gmail.com



¹ Nilton Lins University (UNINILTONLINS), Manaus - AM - Brazil. Coordinator and Professor of the Pedagogy Course. PhD student in the Postgraduate Program in Education (UFSM). ORCID: https://orcid.org/0000-0002-7812-3014. E-mail: jgaraujo@niltonlins.br

RESUMEN: La profesión docente ha sido objeto de discusión en los últimos años debido al creciente número de profesores que están enfermándose, a cada día, en pleno ejercicio de la profesión. En este sentido, la investigación se basó en analizar y describir los factores que están relacionados al desencadenamiento de enfermedades de profesores de la enseñanza básica en la ciudad de Manaos. La investigación tiene abordaje cualitativo y fue conducida en 32 colegios con 320 profesores. Cuanto a los factores de estrés, de manera general, la mayor causa señalada por los profesionales fueron el salario bajo (62.4%), la ausencia de asistencia familiar en la vida escolar de los discentes (19.6%) y la infraestructura precaria de las áreas escolares (10.9%). Las enfermedades psicosomáticas (24%) fueron las que más afectaron a los profesores en pleno ejercicio de la profesión. Con eso, hay la necesidad del desarrollo de políticas públicas destinadas a la valoración de profesionales de la educación y la mejoría de las condiciones de trabajo.

PALABRAS CLAVE: Salud. Profesor. Formación.

Introduction

The teaching profession over the years has been highlighted in numerous studies involving the formative process and pedagogical practices, however, the current challenges facing the educational practices developed by educators within the school environment have given rise to research related to teacher health and related factors, in view of a situation of illness of education professionals.

Thus, in the face of social and technological changes that have taken place in society, there is a need for research on teacher health and teaching working conditions (FREITAS; CRUZ, 2008). The teacher in this context of changes started to assume several functions and with that, the entrance of millions of new students in schools and the presence of thousands of new teachers, started to demand changes in practices in schools and constitutes a great challenge for the work of teachers (FERREIRA, 2010, p. 21).

The first news about the teacher's illness, caused by changes in working conditions, were found in European countries such as Sweden, France, Germany and the United Kingdom in the early 1980s. According to Cruz (2010), stress and the syndrome of burnout were identified as the main problems among teachers at that time, with implications for absenteeism due to illness and abandonment of the profession.

In 1987, the reports in the book "O Mal Estar Docente" (Teacher Malaise), by José Manoel Esteve, were considered as main in the area and discussed the negative tensions associated with the teacher's action in the classroom and the environmental conditions in which he teaches (PEREIRA, 2016). According to the author, the negative tensions related to the teacher's health problems include teacher malaise, work distress, professional stress,

emotional exhaustion, depression, frustration and burnout syndrome, which are also evidenced in other research (ESTEVES, 1999; CODO; VASQUES-MENEZES, 1999; CARLOTTO, 2002; CARLOTTO; PALAZZO, 2006).

Therefore, understanding the factors responsible for the onset of occupational diseases and psychological disorders in teachers, such as burnout syndrome, work-related musculoskeletal disorders (PAIN) and repetitive strain injury (RSI), voice disorders, depression at various levels and anxiety and panic crises, makes it possible to discuss the teacher's illness and the factors that can contribute to the worsening of this situation.

Given the above, this research aims to analyze and describe the factors that are related to the onset of diseases in the exercise of the teaching profession of teachers of basic education, elementary education, of the municipal education network of Manaus.

Research path

The research has a qualitative approach, it can also be considered of the exploratory-descriptive type, since the exploratory research corroborates with the descriptive research and prepares the way for the development of the research, seeks its understanding, familiarization with the unknown phenomenon and makes it possible to conduct a complete research. Thus, the data obtained will be transformed into information (HERNANDEZ SAMPIERE; COLADO; LUCIO, 2013).

The study was conducted in 32 schools distributed in seven district zones of the municipal education network in the city of Manaus. Questionnaires were applied to teachers considering the following inclusion criteria: teachers on a 40-hour basis, age range 25 to 60 years, both sexes, teachers who worked from the 1st to the 5th year, teachers who accepted to participate in the research and who signed the ICF (Informed Consent Form). The exclusion criteria included teachers dismissed or exonerated during the research, teachers who were readapted, under the age of 25 and teachers of early childhood education.

The Municipal Department of Education (SEMED) does not use the distribution by zone according to the division of the municipality of Manaus, which contains six zones. Therefore, the district areas of SEMED are: South, which encompasses the Center-South, East I, East II, West, Center-West, North and Rural areas, which also comprise the Bus station and riverside zones.

In each of the schools, 10 teachers were selected, making a total of 320 teachers who would be interviewed from the universe of 1,772 40-hour teachers from SEMED in Manaus.

The number of teachers interviewed followed the sample calculation that comprised: population size, 95% confidence level and 5% margin of error.

Because the research directly involves human beings, the study was submitted to the Research Ethics Committee through Plataforma Brasil, where the National Health Council - CNS 466/2012 resolution was followed up and credited in observation, being approved by the Opinion: 1,982,536. Thus, the research followed all the guidelines, considering the ethical and scientific foundations required in Resolution No. 466/2012 of the CNS.

After authorization by the Ethics Committee, field research was carried out in the selected schools. At the first moment, a meeting was held with the school management and teachers to present the project explaining the purpose and contribution of the work.

In the second moment, after signing the ICF, the questionnaires were delivered to be answered by the teachers and returned to the researchers. The questionnaires contained 10 questions, nine of which were multiple choice questions and one open question. The axes of the questions involved profile, formation, characterization of the school environment and factors that lead to the onset of diseases.

Results and discussion

In this section, we discuss the research findings involving aspects relevant to analysis and sought to articulate the results of the research with the main scientific productions.

Teachers profile

It was found that in the exercise of teaching, the female gender predominates in all district areas of the education network of Manaus. Thus, women have occupied space in the educational and formative fields to work professionally (Figure 1).

Figure 1 – Gender of teachers in the Manaus education network in SEMED District Zones

Source: Devised by the authors

According to Rabelo and Martins (2006), the historical context of the entry of women in the teaching profession occurred with the expansion of capitalism, as there was a need to invest in female education. Thus, the teaching profession started to consist also of women. However, there were different roles for men and women to work in teaching, in which women taught girls and instructed them on household chores and what was necessary to live in society, while men taught boys differently and had different curricula.

Regarding the age group of teachers interviewed in the district areas, it comprises the largest number of teachers in the 36 to 55 age group. Thus, the age of the group of investigated teachers was similar to that of other studies such as Pereira, Teixeira and Lopes (2013) carried out with basic education teachers, as well as that of Penteado (2007) in the municipality of Rio Claro, on the voice of teacher, as well as Costa and Rocha (2013), who investigated about stress factors in the context of teaching work. This age group can also signal, according to Machado (2015), greater experience in pedagogical practices and performance in the classroom.

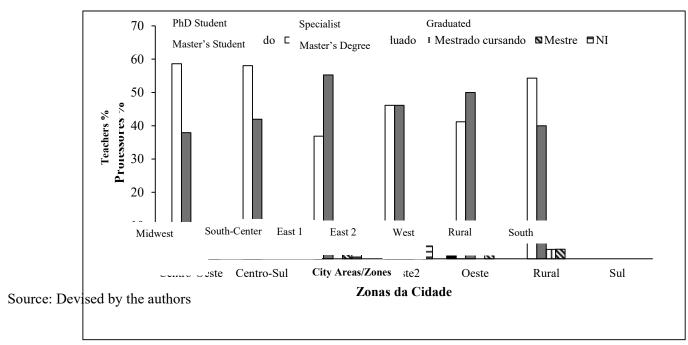
Teacher formation

Considering the level of formation of the total number of participating teachers, 43.7% have a degree and the zone with the highest number of graduates was the East 1 with 55.3% (Figure 2). As for the number of teachers with *latu sensu* specialization, the results showed a percentage of 51.5% of the interviewees, with 66.7% in the south zone being specialists. The

specialties mentioned by the teachers involved the following areas: 7.8% are specialists in Early Childhood Education, 3.0% have specialization in School Management, as well as in psychopedagogy. The others encompass other areas of knowledge such as People Management, Special and Inclusive Education, Teaching Methodology, among others that are not in the educational field.

Regarding professors with *stricto sensu* post-graduation (Master and Doctorate), four master professors were registered, two of whom work in the West, one in the East 1 and one in the Rural. Among the teachers in formation, two were pursuing master's degrees, one in the East 2 and the other in Rural, and only one pursuing a doctorate in the West.

Figure 2 – Level of formation of teachers of the Municipal Education Network of Manaus in the District Areas of SEMED



The level of formation of teachers in the Municipal Education Network of Manaus according to the District Zones shows that, for the most part, they have higher education and *latu sensu* specialization in the educational area, however there is a reduced number of teachers with master's and doctorate degree. As presented on the training of teachers participating in the research, this fact indicates that they have sought to improve their knowledge in the area of expertise.

According to the Law of Directives and Bases of National Education 9394/96 (LBB) (BRASIL, 1996), in chapter VI, on education professionals, it signals about initial and continuing education:

- 1. The Union, the Federal District, the States and the Municipalities, in a collaborative regime, should promote the initial and continuing formation, and qualification of teaching professionals.
- 2. The continuing education and qualification of teaching professionals may use distance education resources and technologies.
- 3. The initial formation of teaching professionals will give preference to face-to-face teaching, in the alternative making use of distance education resources and technologies.
- 4. The Union, the Federal District, the States and the Municipalities shall adopt mechanisms that facilitate access and permanence in teacher formation courses at a higher level to act in public basic education (our translation).

For Ibernóm (2006), changes happen with a certain length of time in education, where aspects such as the lack of teachers' working conditions and professional devaluation need to be rethought, according to the author, bringing a new conception inherent to the profession, in which the teacher participates in an active, dynamic and critical way, collaborating for a curriculum that works the subjective aspects, values and attitudes collectively, developing it in the environment they are inserted. The educational institution, in the view of the aforementioned author, has an important role in fostering these innovations and the professionalization of teachers through a wealth of actions that permeate pedagogical practice.

For Nóvoa (1997), teacher formation enables professional development, in the context of the autonomy of their profession. With that, teachers seek and take responsibility for their own formation and become subjects in the implementation of educational policies. Therefore, the aspects that involve the teacher education process involve the implementation of public policies that contemplate the development of their education, as well as the search for knowledge, the articulation between theory and practice, that is, making the relationship between the knowledge of educational practice and scientific knowledge, contributing to quality education.

Characterization of the school environment

When describing the characteristics of the school environment that directly influence the performance of activities in the school grounds, the factors noise and inefficiency and/or absence of refrigeration in the classroom were the most cited by teachers (Table 1).

Table 1 – Characterization of the school environment in different areas of the city of Manaus. N = 229.

School Environment	City Zones											
	Midwest	South- Center	East 1	East 2	West	Rural	South	Total	Total %			
MI	2	4	5	0	2	0	3	16	6.9			
PI	0	0	0	2	0	1	1	4	1.7			
REF	9	15	14	14	14	8	8	82	35.8			
RU	16	11	18	6	18	23	24	116	50.6			
NI	2	1	1	4	0	3	0	11	4.8			

Caption: MI: Inadequate furniture; NI: Didn't report; PI: Graffiti; REF: Refrigeration; RU: Noise.

Source: Devised by the authors

The results show that schools are precarious in their physical structure, as they do not have equipment that allows the best development of classes such as refrigerators and soundproofed rooms, since the absence of these structural conditions hinders the development of teachers' work as well as interfering in the student learning.

This corroborates with the results of the research by Gomes and Brito (2006), the precariousness of teaching work that involves the physical structure of schools, the demand for work and the lowering of wages is part of the difficulties mentioned by teachers in the southeastern region of the country.

According to Farias (2009) it is necessary to design spaces that provide thermal, acoustic and lighting comfort, in order to create decent conditions for teachers, as they dedicate a large part of their life to teaching to promote a healthy environment.

According to Hans (2001), some studies have shown that noise in the classroom is above the values recommended by the Brazilian Association of Technical Standards (ABNT) and the World Health Organization (WHO). This fact is worrying because these noises include internal factors such as conversations, furniture, equipment and the external factors make up traffic, close to urban centers and the movement of people.

Factors that lead to the onset of diseases

As for stress factors, in general, the main causes pointed out by professionals were the salary factor (62.4%), the lack of family support in the students' school life (19.6%) and the precarious infrastructure of the school grounds (10.9%), according to Table 2.

Table 2 - Stress factors in schools in the city of Manaus. N = 229.

Stress	Zones									
Factors	Midwest	South-Center	East 1	East 2	West	Rural	South	Total	Total %	
AFA	3	11	3	9	9	6	4	45	19.6	
IND	1	0	1	1	0	1	0	4	1.8	
INF	3	6	7	0	4	1	4	25	10.9	
SAL	21	12	25	12	21	25	27	143	62.4	
VIO	0	0	0	2	0	1	0	3	1.4	
NI	1	2	2	2	0	1	1	9	3.9	

Caption: AFA: Family absence; IND: Indiscipline: INF: Infrastructure; VIO: Violence; SAL: Salary;

NI: Didn't report.

Source: Devised by the authors

The professional valorization policies, the National Education Plan (PNE), which was in force from 2014 to 2024, brings in Goal 17 "to value professionals in the teaching of public basic education networks in order to match their average income to that of other professionals with equivalent education, until the end of the sixth year of validity of this PNE" (our translation).

With this, this goal aims to match the salary of teachers, as their income is lower than that of other professions, with this decrease being observed regardless of the level of education, because the difference between the average salary of education professionals, with high school education compared to other professionals with the same level of education, it is 9%. Among the teaching professionals with higher education or more and the other professionals with the same education there is a gap of 57% (BRASIL, 2014, p. 53).

In the public policies related to this valorization, Law no. 11,738/2008 (BRASIL, 2008), which approved the National Professional Salary Floor for Professionals of the Public Teaching of Basic Education (PSPN), started to present a gradual advance for this valorization, establishing the salary floor for these professionals.

However, teachers in research, regarding the item salary, are dissatisfied. In the research carried out by Landini (2006), the factors that cause strain on the teaching profession are related to an overload of work, the lack of support from students' parents, a feeling of uselessness in relation to the work they do, competition with others means of transmitting information and culture and low wages.

As Paschoalino (2007, p. 48, our translation) affirms, "the mismatch in the valorization of teaching work in the capitalist system is one of the aspects of suffering of the teacher who struggles to be recognized for the work he does [...]". Furthermore, according to

the author, this directly affects the relationship between the teacher and the student, directly influencing the teaching and learning process.

With regard to family accompaniment in the student's school life, Villa (2003) reports that school and family are one of the main spaces where preparation for life takes place in its various aspects, a priori this preparation was in relegated to the family who guided the learning that took place at home, in the twentieth century this role started to be shared with the school, with the school responsible for the formal content and the family responsible for the child's moral, cultural and religious education.

The partnership between the school and the family is important, as the involvement of the family enables a better performance in the student's school life, the absence of this involvement can cause the lack of interest and the devaluation of education.

As for the debate on the role of parents in schooling their children and its implications for learning, at school, there are aspects to be highlighted. The family as a driver of school productivity and academic achievement and distancing from the family, which can cause school disinterest and the devaluation of education, especially in the less favored classes (POLONIA; DESSEN, 2005, p. 2).

The absence of family accompaniment in the student's school life, mentioned by the teachers surveyed, is also common in the research carried out by Oliveira and Andreu (2015). According to the aforementioned authors, the absence of family support in the student's school life is associated with social and political situations and interferes with the teacher's health, such as indiscipline, devaluation and violence.

The student's lack of interest in teaching and problems of indiscipline are often associated with another problem mentioned by teachers and that deserves to be highlighted: the absence of family at school. This absence compromises the teaching work, as there is an understanding among teachers that parents or guardians should contribute to their children's school education. To the extent that this partnership does not work, the entire task of educating is passed on directly to the school, multiplying the work of the teacher (OLIVEIRA; ANDREU, 2015, p. 9).

An important aspect was highlighted by Ananias (2000) and Nunes Sobrinho (2003), in which the school needs to contemplate in its Political Pedagogical Project the integration of family and school through joint actions, in which they can exercise their role in order to complement student development.

Another relevant factor, causing stress pointed out by the teachers in the research, refers to the working conditions in the schools' infrastructure. Working conditions involve a

set of resources that are constituted as physical structure, materials and means for carrying out pedagogical activities, the absence of these conditions has a negative impact on the performance of teachers and teaching (SILVA; GUILLO, 2015).

The precariousness of this structure has negatively influenced the work of the teacher. According to Silva and Guillo (2015), the relationship between the teaching work process and the conditions in which it is carried out deserves to be highlighted, as this relationship is a factor of possible physical and mental illness of teachers.

According to Veodato and Monteiro (2008), the issue of students' indiscipline in the classroom can be one of the main stressors of the teacher and causes problems that interfere in the teaching and learning process, because in an environment where there is noise, movement, undisciplined students, overcrowded rooms and without physical space, the teacher will have difficulty performing a good job, considering that he does not, in most cases, feel prepared to deal with these students.

The researches that involve the analysis of the professor's illness in the survey carried out by Oliveira (2015), present data from a high rate of teachers and cases of illness through statistical data and a large number of teachers with licenses and medical certificates due to illness issues.

In the present study, the highest percentages of sick leave were recorded in the South (55.5%), Rural (45.7%) and Midwest (37.9%) zones. The South and Midwest zones are part of the urban perimeter of the city, while the Rural zone which comprises the bus station and riverside zone and is located far from the city center, and in this sense, there was no difference regarding the licenses of teachers who operate in urban and rural areas.

Regarding the time of sick leave, teachers who were on sick leave varied from 3 (three) days to two years, with 44% of the interviewed teachers remaining on leave for a period longer than 30 days, 28% of 7 to 14 days and 10.7% from 3 to 6 days (Table 3).

Table 3 – Time on sick leave from the Municipal Education Network of Manaus according to District Zones. N = 75 teachers

Time on	City zones											
sick leave (days)	Midwest	South-Center	East 1	East 2	West	Rural	South	Total	Total %			
3 a 6	1	0	1	0	0	1	5	8	10.7			
7 a 14	2	2	4	0	1	5	7	21	28.0			
$\geq 15 \leq 30$	1	0	0	0	1	1	1	4	5.3			

≥ 30	6	2		2	3	6	7		7	33	44.0
Did not informed	1	1	0	0		5	2	0		9	12.0

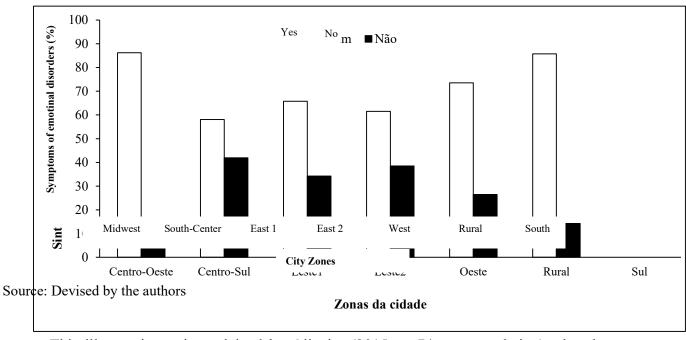
Source: Devised by the authors

The various functions that the teacher needs to perform at school, and for which he is charged, have directly influenced his health, with the increase in medical leave prevailing, which indicates the need for monitoring to maintain the health of these teachers.

The teacher, exhausted in the process of intensifying work, would have his health weakened and would be more susceptible to illness. It can also be assumed that being constantly solicited in an emergency regime would have led him to exceed or fail to recognize his own limit, exposing him to the risks of becoming ill (ASSUNÇÃO; OLIVEIRA, 2008, p. 363).

In relation to the percentage of teachers on leave due to illness due to work with the consequent triggering of emotional disorders, all areas had an illness profile greater than 50%. The South zone stood out (94.4%), followed by the Midwest zone (86.6%) and the Rural area (85.7%) (Figure 3).

Figure 3 – Teachers from the Municipal Education Network of Manaus who presented illness according to the District Zones



This illness picture is explained by Oliveira (2015, p. 74, our translation) when he states that:

[...] the daily working conditions generate an expectation in the worker and the absence of these conditions added to the intensification of work, the teacher may have his work impeded, which can also generate risks of illness.

The results corroborate with the statement by Oliveira (2015) and Vasconcelos (2005) who portray in their study with elementary school teachers that among the reasons of illness and suffering are working conditions. As a result, the absence of working conditions has affected the health of these professionals and, consequently, their absence from work through sick leave.

The precariousness of the teacher's work in relation to the conditions that are available, whether structural or functional, has favored his illness and directly influences the quality of education. Thus, there is a need to rethink about better conditions and investment for the exercise of the teaching profession in the schools surveyed.

The health problems presented by the teachers of the aforementioned education network while working in the classroom are shown in Table 4, of which psychosomatic diseases are the highest percentage with 24%, followed by musculoskeletal diseases (18.7%) and problems in voice (11.3%).

Table 4 – Diseases presented by the teachers of the Municipal Education Network of Manaus according to the District Zones. N = 229 teachers

Diseases		City Zones										
	Midwest	South- Center	East 1	East 2	West	Rural	South	Total	Total%			
Psychosomatics	7	9	5	10	7	6	11	55	24.0			
Gastric	0	0	6	0	4	3	1	14	6.1			
Arterial hypertension	1	1	1	1	1	1	2	8	3.5			
Musculoskeletal	7	4	4	1	4	8	15	43	18.8			
Voice	4	2	5	1	6	4	4	26	11.4			
Did not inform	5	2	3	3	3	6	0	22	9.6			
Others	1	0	1	0	0	1	1	4	1.7			
Did not have any disease	5	13	13	10	9	7	2	57	24.9			

Caption: Psychosomatics: anxiety, depression, burnout, panic syndrome; Gastric: gastritis; Musculoskeletal: low back pain, herniated disc, knee pain; Voice: nodules in the vocal cords and hoarseness; Others: calf rupture and rhinitis.

Source: Devised by the authors

Psychosomatic diseases are part of a set of symptoms that were presented by the surveyed teachers. In this way, they have developed a picture of physical and psychological illness.

For Freitas (2007), these psychosomatic illnesses are frequent among teachers of all levels and work environments such as gastritis, tachycardia, hypertension, irritability, insomnia, depression and panic syndrome and are among the most diagnosed illnesses. Conforming the results found in this research.

Psychosomatic diseases are manifested, especially in people who live or work in tense environments, which demand a lot from the individual's psychosocial state, thus the working conditions and situations to which the teacher is exposed favor this illness (SILVA; GUILO, 2015).

The exercise of the teaching profession is inserted in the context in which the teacher is instilled, in addition to the activity of mediating knowledge, other situations that the school starts to assume and he becomes one of the main articulators of this demand. For Oliveira (2006, p. 2012), teachers are generally considered to be primarily responsible for the performance of students, the school and the system, in the current context of educational reforms and a new educational regulation. In view of the varied functions that the public school assumes, teachers are often faced with the need to respond to the demands that go beyond their formation.

Regarding research that reports on the diseases that teachers are affected with, Oliveira and Andreu (2015) report that psychosomatic diseases make up 55%, voice problems and musculoskeletal diseases (60% and 30%, respectively). Another study, that of Gasparini, Barreto and Assunção (2005), which involved the causes of absence from work for teaching professionals in Belo Horizonte, demonstrated that they are linked to psychic disorders, with 15%, diseases of the respiratory system that comprise 12%, and diseases of the musculoskeletal system with 11%. The knowledge about the illness of teachers is present in the research of the referred authors, as well as the diseases that are common to most teachers in the exercise of the profession.

With regard to musculoskeletal diseases such as low back pain, herniated disc, knee pain, they are present in the daily lives of teachers, as they spend long periods explaining content or writing on the board, ergonomics are inadequate, such as tables and chairs, light, acoustics among others.

Many organizations, including the school environment, do not offer adequate ergonomic conditions, which are in compliance with labor legislation and, in particular, with the provisions of regulatory rule 17 (NR 17), which recommends establishing adaptive parameters that guarantee adequate conditions of work. Given this, musculoskeletal symptoms have been a concern of researchers, as it is a matter of health and work, due to the

costs and the impact on the quality of life of workers (ALVES; ARAÚJO; AGUIAR, 2014, p. 28).

The teachers surveyed also mentioned voice problems, the voice being one of the main instruments to guarantee communication or information, thus, "it appears that teachers are, effectively, professionals with greater vocal risk due to vocal wear resulting from professional performance, associated in most situations to the lack of voice training and information" (GUIMARÃES, 2004, p. 33, our translation). According to Medeiros, Barreto and Assunção (2006), dysphonia has become a frequent cause of absence from work, causing negative effects on the teacher's life, resulting in a decrease in the vocal quality of this professional.

Final considerations

The discussions that involve teaching are latent, among the nuances found, draws attention the sickening of the teacher and working conditions. In this sense, it was evidenced by the teachers that the schools present precariousness in their physical structure, as they do not have equipment that allows the best development of the classes, such as air-conditioners and soundproof rooms, and the absence of these structural conditions hinder the development of work teachers, but they can also interfere in students' learning.

With regard to the diseases presented by teachers as a result of situations of vulnerability at work, the study made it possible to identify them, among the pathologies, psychosomatics were the most cited, followed by musculoskeletal and vocal cord diseases. In relation to this illness situation mentioned by the teachers, there is a need to monitor the health of the teachers for a better quality of professional life.

With regard to factors that cause stress in teachers, the absence of family in the student's school life, indiscipline and the salary factor were the most cited, so it is essential to foster partnership between the school and the family, as the involvement of the family enables a better performance in the student's school life, and the absence of this involvement can cause the lack of interest and devaluation of education.

As for indiscipline, there is a need to work on this issue with the participation of the family, as indiscipline is not conceived in isolation, given that it is linked to economic, political and social factors.

Therefore, in the midst of the evidence found in the research, there is a need to provide teachers with adequate structural conditions in the school environment, for the exercise of the profession, as well as investments in professional valorization and foster actions or partnerships with public or private institutions, among professionals. health and the school to monitor health and support teachers.

REFERENCES

ALVES, C. S.; ARAÚJO, M. M.; AGUIAR, C. A. postura ergonômica do profissional docente: um estudo de caso do centro de atenção integrada à criança e ao adolescente (CAIC) Senador Carlos Jereissati, em Russas-CE. **Tecnologia & Informação**, v. 1, n. 3, p. 20-32, 2014.

ANANIAS, M. Propostas de educação popular em Campinas: "as aulas noturnas". **Cadernos do CEDES**, n. 51, p. 66-77, 2000.

BRASIL. Lei n. 11.738, de 16 de julho 2008. Regulamenta a alínea "e" do inciso III do caput do art. 60 do Ato das Disposições Constitucionais Transitórias, para instituir o piso salarial profissional nacional para os profissionais do magistério público da educação básica. **Diário Oficial da União**: Seção 1, Brasília, DF, p. 1, 17 jul. 2008. PL 7431/2006

CARLOTTO, M. S. A síndrome de burnout e o trabalho docente. **Psicologia em estudo**, v. 7, n. 1, p. 21-29, 2002.

CARLOTTO, M. S.; PALAZZO, L. S. Síndrome de burnout e fatores associados: um estudo epidemiológico com professores. **Caderno Saúde Pública**, v. 22, p. 1017-1026, 2006.

CODO, W.; VASQUES-MENEZES, I. O que é burnout? Educação: carinho e trabalho. *In*: CODO, W. (Org.) **Educação**: carinho e trabalho. Rio de Janeiro: Vozes, 1999. p. 237-255.

COSTA, F. R. C. P.; ROCHA, R. Fatores estressores no contexto de trabalho docente. **Revista Ciências Humanas**, v. 6, n.1, p. 18-43, 2013.

CRUZ, R. M. *et al.* Saúde docente, condições e carga de trabalho. **Revista Electrónica de Investigación y Docência (REID)**, n. 4, 2010. Available: http://www.revistareid.net/revista/n4/REID4art8.pdf. Access: 8 Oct. 2015.

ESTEVE, J. M. **O mal-estar docente**: a sala de aula e a saúde dos professores. Bauru, SP: EDUSC, 1999.

FARIAS, P. M. Condições do ambiente de trabalho do professor: avaliação em uma escola municipal. 2009. 225 f. Dissertação (Mestrado em Saúde, Ambiente e Trabalho) — Universidade Federal da Bahia, Salvador, 2009.

FERREIRA, L. Relações entre trabalho e a saúde de professores na educação básica no Brasil. **Fundacentro**, São Paulo, abr. 2010. Available: https://fasul.edu.br/portal/files/biblioteca virtual/7/relaciestrabalho.pdf. Access: 8 Oct. 2015.

FREITAS, M. E. A carne e os ossos do ofício acadêmico. **Organizações & Sociedade**, v. 14, n. 42, 2007.



FREITAS, C. R.; CRUZ, R. M. Saúde e trabalho docente. *In*: ENCONTRO NACIONAL DE ENGENHARIA DE PRODUÇÃO, 28., 2008, Rio de Janeiro. **Anais** [...] Rio de Janeiro, 2008. p. 1-15.

GASPARINI, S. M.; BARRETO, S. M.; ASSUNÇÃO, A. A. O professor, as condições de trabalho e os efeitos sobre sua saúde. **Educação e Pesquisa**, São Paulo, v. 31, n. 2, p. 189-199, 2005.

GOMES, L.; BRITO, J. Desafios e posibilidades ao trabalho docente e a sua relação com a saúde. **Revista Estudos e Pesquisas em Psicologia**, Rio de Janeiro, v. 6, n.1, p. 1-14, 2006.

GUIMARÃES, I. Os problemas de voz nos professores: prevalência, causas, efeitos e formas de prevenção. **Revista Portuguesa de saúde pública**, v. 22, n. 2, 2004.

HANS, R. F. Avaliação de ruído em escolas. Rio Grande do Sul: UFRSPROMEC, 2001.

HERNANDEZ SAMPIERI, R. H. COLLADO, C. F.; LUCIO, P. B. **Metodologia de Pesquisa**. Porto Alegre: Penso, 2013.

IMBERNÓN, F. **Formação docente e profissional**: formar-se para a mudança e a incerteza. 6. ed. São Paulo: Cortez, 2006.

LANDINI, S. R. Professor, trabalho e saúde: as políticas educacionais, a materialidade histórica e as consequencias para a saúde do trabalhador professor. *In*: SEMINÁRIO DA REDESTRADO – REGULAÇÃO EDUCACIONAL E TRABALHO DOCENTE, 6., 2006. Rio de Janeiro. **Anais** [...]. Rio de Janeiro, RJ: UERJ, 2006. p. 1-15.

MACHADO, J. L. A. **O professor brasileiro do ensino fundamental público e seu perfil**. 2015. Available: https://acervo.plannetaeducacao.com.br/portal/artigo.asp?artigo=2568. Access 20 Aug. 2017.

MEDEIROS, A. M.; BARRETO, S.; ASSUNÇÃO, A. Á. Professores afastados da docência por disfonia: o caso de Belo Horizonte. **Caderno saúde coletiva**, Rio de Janeiro, v. 14, n. 4, p. 615-624, 2006.

NÓVOA. A. (Org). **Os professores e a sua formação**. 3 ed. Lisboa: Publicações Dom Quixote; Instituto de Inovação Educacional, 1997.

NUNES SOBRINHO, F. P. O stress do professor do ensino fundamental: o enfoque da ergonomia. *In*: LIPP, M. N (Org.). **O stress do professor**. Campinas, SP: Papirus, 2003.

OLIVEIRA, E. da S. G. O "mal-estar" docente como fenômeno da modernidade: os professores no país das maravilhas. **Ciências & Cognição**, v. 7, p. 24-41, 2006.

OLIVEIRA, M. F. Trabalho e saúde do professor nas pesquisas em educação. Orientador: Wanderson Ferreira Alves. 2015. 106 f. Dissertação (Mestrado em Educação) — Universidade Federal de Góias, Goiânia, 2015.

OLIVEIRA, R. A. S.; ANDREU, L. G. Condições de trabalho e estresse: um estudo com professores do sexo masculino da educação básica. **Trabalho & Educação**, v. 24, n. 3, p. 153-166, 2015.

PASCHOALINO, J. B. Q. Matizes do mal-estar dos professores do Ensino Médio. 2007. 220 f. Dissertação (Mestrado em Educação) — Universidade Federal de Minas Gerais, Belo Horizonte, 2007.

PENTEADO, R. Z. Relações entre saúde e trabalho docente: percepções de professores sobre saúde vocal. **Rev. soc. bras. Fonoaudiol.**, São Paulo, v. 12, n. 1, p. 18-22, 2007.

PEREIRA, E. F.; TEIXEIRA, C. S.; LOPES, A. D. S. Qualidade de vida de professores de educação básica do município de Florianópolis, SC, Brasil. **Ciência Saúde Coletiva**, Rio de Janeiro, v. 18, n. 7, p. 1963-70, 2013.

POLONIA, A. C.; DESSEN, M. A. Em busca de uma compreensão das relações entre família escola. **Psicol. esc. educ.**, Campinas, v. 9, n. 2, p. 303-312, 2005.

RABELO, A. O.; MARTINS, A. M. A mulher no magistério brasileiro: um histórico sobre a feminização do magistério. *In*: CONGRESSO LUSO BRASILEIRO DE HISTÓRIA DA EDUCAÇÃO, 6., 2006, Minas Gerais. **Anais** [...]. Minas Gerais: UFU, 2006. p. 6167-6176.

SILVA, R. A. O.; GUILLO, L. A. Trabalho docente e saúde: um estudo com professores da educação básica do sudoeste goiano. **Itinerarius Reflectionis**, Goiânia, v. 11, n. 2, 2015.

VASCONCELOS, A. C. L. A situação de trabalho e saúde mental de professoras da primeira fase do Ensino Fundamental em escolas públicas do município de João Pessoa. 2005. 231 f. Dissertação (Mestrado) – Universidade Federal da Paraíba, João Pessoa, 2005.

VEDOVATO, T. G.; MONTEIRO, M. I. Perfil sociodemográfico e condições de saúde e trabalho dos professores de nove escolas estaduais paulistas, **Revista Escola Enfermagem USP**, São Paulo, v. 42, n. 2, 2008.

VILA, I. Familia y escuela: dos contextos y un solo niño. *In*: ALFONSO, C. *et al*. La participación de los padres y madres en la escuela. Barcelona: Editorial GRÀO, 2003. p. 27-38.

How to reference this article

ARAÚJO QUEIROZ, J. G. B.; SILVA MARINHO, T. A. Teaching profession and health of teachers from the municipal network of teaching in the city of Manaus. **Temas em Educ. e Saúde**, Araraquara, v. 16, n. 2, p. 575-593, July/Dec. 2020. e-ISSN 2526-3471. ISSN 1517-7947. DOI: https://doi.org/10.26673/tes.v16i2.13807

Submitted: 16/02/2020

Required revisions: 16/06/2020

Approved: 30/07/2020 **Published**: 27/08/2020

