# Occupational risks in the work of hairdressers and possible impacts in the vocal health

Riscos ocupacionais na atuação de cabeleireiros e possíveis impactos na saúde vocal

### Riesgos laborales en el rendimiento de los peluqueros y posibles impactos en la salud vocal

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### Abstract

**Introduction:** The Health Ministry has recently instituted the Work-Related Voice Disorder protocol, which allows professionals from Unified Health System to notify cases of voice change related to several (people) using voice as working tool. The hairdressers use their voice as a work resource. Considering the work constraints they are exposed, they become susceptible to develop Work-Related Voice Disorders. **Objective:** Analyze listeners' knowledge about occupational risks and possible impacts on vocal health. **Method:** Exploratory, descriptive study with qualitative approach. The sample consisted of 13 hairdressers who had professional courses at the Teaching Center from National Commercial Teaching Service (TCNCTS), located at João Pessoa-PB. They responded semi-structured interview script, which approached issues about sociodemographic data, work environment and vocal health of the participants. To analyze the empirical material, foundations of Analysis Content were used, in the thematic modality

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#### Authors' contributions:

BACB: Methodology, data collection and study design and outline; BTLL and LFO: Study outline, critical review and guidance; FLP: Critical review and guidance; JVST: Methodology, data collection, study design and outline and guidance.

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of Bardin. **Results:** Participants were between 24 and 44 years old, of both genders, the majority among them were women. Regarding working time, minimum time mentioned was 5 years and maximum 19 years. Regarding occupational risks, the professionals mentioned knowledge about the presence of physical, chemical, biological, ergonomic and material risks in the work environment. The hairdressers highlighted the importance of the voice to carry out their work and highlighted repercussions on the voice related to the organization of the working day. **Conclusion:** Hairdressers are knowledgeable about occupational risks, however, they neglect prevention practices, becoming susceptible to occupational diseases, especially those that impact vocal health. It is imperative the insertion of Speech Therapy in new sceneries, enabling to contemplate vocal use from the perspective of informal work.

Keywords: Beauty and Aesthetics Centers; Occupational Risks; Voice; Occupational Health; Speech, Language and Hearing Sciences.

### Resumo

Introdução: O Ministério da Saúde recentemente instituiu o protocolo Distúrbio de Voz Relacionado ao Trabalho, possibilitando que os profissionais do Sistema Único de Saúde notifiquem casos de alteração vocal relacionados a diversas profissões que utilizam a voz como instrumento de trabalho. O cabelereiro utiliza a voz como recurso de trabalho, e, considerando os condicionantes ocupacionais aos quais são expostos, tornam-se suscetíveis a desenvolver Distúrbios de Voz Relacionados ao Trabalho. Objetivo: Analisar o conhecimento de cabeleireiros sobre os riscos ocupacionais e seus possíveis impactos na saúde vocal. Método: Estudo exploratório, descritivo, de abordagem qualitativa. A amostra constituiu-se por 13 cabeleireiros que possuíam formação em cursos profissionalizantes na área de cabelereiros pelo Centro de Ensino do Serviço Nacional de Aprendizagem Comercial (SENAC), localizado na cidade de João Pessoa-PB. Os mesmos responderam a um roteiro de entrevista semiestruturado, o qual abordava questionamentos sobre dados sociodemográficos, ambiente de trabalho e saúde vocal dos participantes. Para analisar o material empírico foram utilizados os fundamentos da Análise de Conteúdo, na modalidade temática de Bardin. Resultados: Os participantes possuíam de 24 a 44 anos de idade, de ambos dos gêneros, sendo a maioria mulheres. Referente ao tempo de atuação, o tempo mínimo referido foi de 5 anos e o máximo de 19 anos. Acerca dos riscos ocupacionais, os profissionais referiram conhecimento sobre a presença de riscos físicos, químicos, biológicos, ergonômicos e materiais no ambiente de trabalho. Os cabeleireiros apontaram a importância da voz para realização de seu trabalho e assinalam repercussões na voz relacionadas à organização da jornada laboral. Conclusão: Cabeleireiros possuem conhecimento sobre riscos ocupacionais, contudo, negligenciam as práticas de prevenção tornando-se suscetíveis ao adoecimento laboral, em especial aqueles que impactam na saúde vocal. É imperativa a inserção da Fonoaudiologia em novos cenários, no sentido de contemplar o uso vocal na perspectiva do trabalho informal.

Palavras-chave: Centros de Embelezamento e estética; Riscos Ocupacionais; Voz; Saúde do Trabalhador; Fonoaudiologia.

### Resumen

**Introducción:** El Ministerio de Salud ha instituido recientemente el protocolo Trastorno de la voz relacionado con el trabajo, que permite a los profesionales del Sistema Único de Salud notificar los casos de cambio de voz relacionados con varias profesiones que utilizan la voz como herramienta de trabajo. El peluquero utiliza su voz como recurso de trabajo, considerando las condiciones ocupacionales a las que está expuesto, se vuelve susceptible de desarrollar Trastornos de la Voz Relacionados con el Trabajo. **Objetivo:** Analizar el conocimiento de los oyentes sobre los riesgos laborales y sus posibles impactos en la salud vocal. **Método:** Estudio exploratorio, descriptivo, de enfoque cualitativo. La muestra estuvo constituida por 13 peluqueros que tenían cursos profesionales en el Centro de Docencia del Servicio Nacional de Docencia Comercial (SENAC), ubicado en João Pessoa-PB. Respondieron a un guión de entrevista semiestructurado, que abordaba preguntas sobre los datos sociodemográficos, el entorno laboral y la salud vocal de los participantes. Para analizar el material empírico se utilizaron los fundamentos del



Análisis de Contenido, en la modalidad temática de Bardin. **Resultados:** Los participantes tenían entre 24 y 44 años. De ambos sexos, la mayoría mujeres. En cuanto al tiempo de trabajo, el tiempo mínimo referido fue de 5 años y el máximo de 19 años. En cuanto a los riesgos laborales, los profesionales mencionaron conocimiento sobre la presencia de riesgos físicos, químicos, biológicos, ergonómicos y materiales en el ambiente de trabajo. Los peluqueros destacaron la importancia de la voz para realizar su trabajo y señalar repercusiones en la voz relacionada con la organización de la jornada laboral. **Conclusión:** Los peluqueros tienen conocimiento sobre los riesgos laborales, sin embargo, descuidan las prácticas de prevención volviéndose susceptibles a enfermedades laborales, especialmente aquellas que impactan en la salud vocal. Es imperativa la inserción de la Fonoaudiología en nuevos escenarios, para poder contemplar el uso vocal desde la perspectiva del trabajo informal.

Palabras clave: Centros de Belleza y Estética; Riesgos Laborales; Voz; Salud Laboral; Fonoaudiología.

### Introduction

The history of workers' health developed in parallel with significant political-social milestones. Although the relationship between work and health has been discussed since ancient times, the role of workers was restricted to the workforce and any illness would represent a loss in profits. Consequently, the lack of care for workers led to several diseases resulting from professional activities<sup>1</sup>.

Nowadays, despite the several achievements and advances in the last decades, the welfare vision still remains ingrained in the face of occupational illness. In addition, despite the regulatory apparatus including standards and ordinances, the precarious inspection of working conditions directly impacts the effectiveness of services aimed at the health of workers<sup>2</sup>. Thus, there is a growing need to carry out educational actions on health promotion and disease prevention in the workplace.

From this perspective, discussions about the emergence of diseases and injuries related to the work environment were strengthened after the implementation of the Brazilian National Occupational Safety and Health Policy (PNSST)<sup>3</sup> and, later, the Brazilian National Worker's Health Policy<sup>4</sup>.

However, in contrast to constitutional allowances, the expansion of new ways of working raises awareness of the need for Surveillance actions in Occupational Health addressing new workplaces, such as professional activities developed in the professional's own residence. Regarding the concepts involved with informality, it should be noted that informal workers are all professionals who provide paid services on their own, without an employment relationship<sup>5</sup>. This group includes professionals from different areas, such as artisans, drivers, information technicians and hairdressers.

In order to cover all types of workers and work-related health problems, the Ministry of Health (MS) has created ways to incorporate the Family Health Strategy (ESF) and Community Health Agents (CHA) in the development of a care model for surveillance actions. Recently, the Work-Related Voice Disorder (WRVD) protocol was instituted, enabling professionals from the Brazilian Unified Health System (SUS) to identify and notify cases of voice disorders in workers. Among these professionals, there is a greater concern for teachers, singers, journalists, religious leaders and actors, among others, as well as professionals who use their voice indirectly and are exposed to smoke, chemicals and extreme temperature conditions, such as sheet metal workers, butchers and hairdressers6.

With regard to hairdressers, these workers are increasingly on the rise following the rise of aesthetics, and beauty products and procedures in the world<sup>7</sup>. However, these professionals are excessively exposed to occupational hazards, given the physical, chemical and biological hazards routinely included in their workplaces<sup>8</sup>. Furthermore, authors report that hairdressers are not aware of biosafety, as well as their low adherence to Personal Protective Equipment (PPE)<sup>9</sup>.

In the meantime, after the publication of the DVRT protocol, the field of Speech-Language Pathology has reached a new level of scientific deepening and possibilities for action in the SUS network. As responsible for the general aspects of human communication, the perspective of speechlanguage pathologist should also be directed to hairdressers who, although not dependent on the



voice to perform their work, use it in conversations with their clients, and may inhale chemicals, for example.

Therefore, the development of this study is explained by the need to expand the knowledge available in the literature regarding speech-language pathology activities with regard to workers' health and also to show the need to understand aspects related to the work environment and organization, raising awareness of occupational hazards as possible causes of vocal illness in workers, especially hairdressers.

Thus, within the work context of hairdressers, this study aims to investigate the knowledge involved with the occupational risks that these professionals are exposed to and the possible impacts on their vocal health.

### Method

This is an exploratory, descriptive and qualitative study that was approved by the Research Ethics Committee of the Health Sciences Center of the Universidade Federal da Paraíba (CEP/CCS/ UFPB) under the opinion no. 3.431.914, on July 2, 2019, and CAEE no.: 12831319.3.0000.5188, before the data collection.

Participants signed the Informed Consent Form (ICF) before being interviewed through a semi-structured script that included questions about the sociodemographic and professional data of hairdressers, such as: age, gender, monthly income, marital status, working time as a hairdresser and employment relationship. The questionnaire included open questions that were intended to answer the proposed objectives. Initially, with questions that addressed issues about the work environment and, later, questions about the participants' perception of their vocal health. The questions also addressed the association of vocal problems with the work environment, in the opinion of the professionals.

The study was carried out at the National Service for Commercial Education (SENAC), in João Pessoa (PB), Brazil. The study center was selected for convenience, due to the ease of contact with professionals working in the beauty industry, as it provides professional courses.

The inclusion criteria were as follows: complete professional training course in the last year or in progress; having three years or more working as a hairdresser. The criteria were established due to the possibility of bringing together a significant number of professionals working in the same place. The working time criterion was included due to the importance of the perspective of occupational hazards and their possible impacts over the length of professional experience.

Thirteen professionals met the established criteria and were invited to schedule interviews in advance depending on the availability of each professional, all taking place at SENAC's facilities, in July 2019. Then, the interviews were recorded and later transcribed in full through the Microsoft Word 2007 to systematize the information collected. The fundamentals of Content Analysis, in the thematic modality, as proposed by Bardin, were applied to analyze the obtained data. It should be noted that this analytical procedure is organized into three stages: pre-analysis, material exploration and treatment of results<sup>10</sup>.

Given the regularity of the reports and the diversity of meanings in the reports, three categories were defined, namely: 'Work routine as a trigger for occupational risks'; 'Occupational Risks: conceptions and exposure of hairdressers'; and 'The voice as a reflection of the work context'. The categories will be presented together with excerpts from the interviewees' reports, identified as 'HD' (hairdresser) followed by an Arabic numeral corresponding to the order of the interview, to ensure the anonymity of the participants.

### **Results and Discussion**

The study interviewed 13 professionals who work as hairdressers, most of them (n=9) being female. Participants had a mean age of 32 years (minimum age=24; and maximum age=44 years) and none of them reported having a formal employment contract. As for the working day, the workload of the participants ranged from 6 to 10 hours a day, based on demand. The reported monthly income ranged between 1 to 3 minimum wages. As for the length of work, the average length of work experience reported was 7.2 years (minimum of 5 years and maximum of 19 years). All professionals interviewed had specialization/refresher course related to hairdressing.

According to the defined categories, below are the reports of the participants in relation to the occupational risks and possible impacts on vocal



health, showing the occupational risks inherent to their performance and their perceptions about the use of voice in the work context.

# *Work routine as a trigger for occupational risks*

Based on sociodemographic data, all hairdressers who participated in the study are included in the informal sector. The results of a study carried out with informal workers show that these professionals have the worst perception of their own health and the worst health indicators when compared to formal professionals<sup>11</sup>.

In turn, the organization of the hairdressers' working hours is based on characteristics inherent to informality. The first one concerns the daily workload, in which there is a variation of 6 to 10 hours determined by customer demand. A financial instability regarding the employment relationship was also observed, which directly associates remuneration with production, meaning that the higher the work rate, the better the financial return. In this context, professionals are often exposed to an exhausting and intense routine.

Sometimes there is such a demand that I don't use the bathroom, only when the work is over. (HD03)

I don't have time to eat properly and sometimes it's past working hours, and there's no snack. We can't stop, when there are a lot of customers. (HD04)

Regarding the activities carried out in the work environment, the study found that hairdressers perform organizational tasks concurrently with their profession.

[...] in addition to the role as assistant at the beauty salon, I also work at the reception, answer the phone and talk a lot with clients. (HD02)

From this perspective, the researchers show that hairdressers tend to prioritize the quality of work over their own safety <sup>12</sup>. The reports show and reinforce the negligence regarding the organization of the work routine, due to the aforementioned conditions. It is noteworthy that all professionals have specialized professional courses, which suggests a gap in the acquisition of knowledge associating work overload as a health risk.

[...] the workload is heavy, and the work pace is also very heavy, so I was often physically exhausted. I had to walk or run everywhere, and I had pain in my back, shoulders, and arms, as well as stress. Mental health goes downhill, due to all the movement and activities at my work. (HD02)

As for surveillance and health prevention actions for workers in the informal market, there is a lack of actions with informal professionals, and from unions to identify and support their labor rights<sup>13</sup>. In addition, informal workers are usually self-blaming in the face of adverse workplace situations, such as health problems, reflecting a transfer of legal responsibilities from the Government and employers to workers<sup>14</sup>.

The reports of hairdressers in this category show excessive workload, financial instability, accumulation of functions, in addition to reporting the lack of legal rights that support them, between the lines. The interaction of these factors results in an environment conducive to the development of changes in the worker's mental functioning, leading to stress, pain and voice disorders<sup>15</sup>.

By recognizing the voice as intrinsic to the individual's identity and the development of social relationships, the presence of vocal changes may lead to biopsychosocial effects that can negatively impact the quality of life of the subjects<sup>15</sup>. Vocal disorders are emphasized as possible impacting factors in the hairdressers' work routine.

## *Occupational Risks: conceptions and exposure of hairdressers*

In their daily work, workers are exposed to multiple situations and health risk factors that can result in short, medium or long term injuries, the so-called occupational hazards. These hazards are classified according to their nature, and can be physical, chemical, biological, ergonomic and material<sup>16</sup>.

Given the understanding of hairdressers regarding the definition of occupational risks, it was found that the majority responded adequately.

I believe these are the health hazards or accident risks when I am at my workplace. Whether in actions performed or on in facilities... Some furniture or the floor can cause accidents [...] (HD02)

*I believe these are the health risks related to the work activity* [...] (HD03)

These are problems that we may have as a result of daily activities. (HD10)



In some reports, there was an association between the concept of occupational hazards and the problems that customers are exposed to during chemical procedures. It is possible to notice the lack of knowledge about the topic, which leaves hairdressers vulnerable to exposure to harmful agents present in the work environment.

So, if I understood correctly, it's a question with the client, the person, right? As for the products, we know that they include chemicals and are harmful to health. (HD07)

To perform a job, I believe professionals in my industry must evaluate a client's hair and make sure the hair can receive the chemicals the client wants. (HD05)

When asked about the risks to which they are exposed in the work environment, professionals reported several factors and actions that may affect health, with emphasis on physical risks.

Hair dryers and lots of people talking generate the most noise in the salon. (HD02)

In fact, I have a serious problem with hearing as I always need to speak out loud. I have a client who says I have a hearing problem because the television is always too loud. (HD12)

The presence of noise in beauty salons was reported by professionals as an occupational risk. Noise is known as the most common harmful agent in work environments and hairdressers often do not notice its presence, thus neglecting ways to control or reduce it<sup>17</sup>. Frequent exposure to noise from hair dryers in operation, conversations and environmental sounds can cause a reduction in attention levels, loss of auditory thresholds, psychological stress and, consequently, an increase in the intensity and fundamental frequency of the voice. These actions may lead to long-term damage to vocal quality<sup>18,19</sup>.

Regarding the activities of hairdressers, most of them involve handling objects with high temperatures, which can cause thermal discomfort.

As I work in a climate-controlled environment due to the hot weather, I leave a hot city and enter a climate-controlled environment. Then I have to deal with the hair dryer, which heats and cools all the time. I have allergic rhinitis that sometimes attacks or gets worse during work. (HD03) Reports also showed the ergonomic hazard in workplaces. As the activities associated with the profession are performed with the professional standing, including the manipulation of objects and the repetition of movements that require physical effort, hairdressers are susceptible to injuries, such as Repetitive Strain Injuries (RSI), which are now called of Work-Related Musculoskeletal Disorders (WMSD), in addition to physical discomfort, fatigue, among others<sup>17</sup>. As discussed above, professionals usually do not take breaks, which makes the situation even more worrying.

It is noteworthy that postural habits can negatively impact phonation. Given the relationship between body and voice, inadequate body postures, such as curved back, sunken chest, lowered or excessively raised chin, may result in tension and changes in muscle groups secondary to the phonatory system, reflecting on vocal production and making respiratory control difficult<sup>20</sup>.

[...] I think the muscles most involved with my activities would be the spine, mobility in general. Also, due to my height I have a lot of problems depending on the chair. I usually have pain in my neck, shoulders and lower back. At the beauty salon I work with a high chair, but I know that whenever I have to work at a client's house I will come home in pain. (HD03)

Still from the perspective of the activities performed by hairdressers, the reports show a concern about mechanical risks.

[...] I might get a shock using the hair dryer or straightener. For example, when we are going to do hair cauterization, we ask clients to do it with damp hair, so I hardly ever go barefoot. So if there is a risk like that, we are really exposed to it. In this case, in my beauty salon, the wire broke and caught fire near the socket. (HD12)

The informal employment relationship makes it difficult to inspect and monitor accidents caused by electricity and temperature. Current regulations do not follow the increase in the number of beauty salons, which are generated from informal environments, such as the homes of professionals. Workspaces that are not inspected result in unsafe facilities that are susceptible to risks to the safety of workers<sup>21</sup>.

In addition, there are biological risks that were not frequently reported by professionals, which



alerts to the vulnerability of contagion, since the skin and mucous membranes are the most efficient ways of contamination<sup>9</sup>.

[...] cuts with razor blades and scissors. Bacteria, cough, or clients who have the flu. Something like that. The client can suffer a cut that can infect the professional, for example. (HD08)

In fact, the dissemination of biological agents in the hairdresser's work activities occurs through the use of sharp materials as well as through contact with clients that can transmit microorganisms. The presence of biological hazards is a concern due to the lack of inspections in beauty salons and also due to the weakness in the knowledge and practice of biosafety standards among this specific class of workers<sup>9</sup>. It should be noted that this type of biological exposure exposes hairdressers to flu, colds and respiratory infections, which directly impact the use of voice in the workplace.

With respect to the chemical risk arising from the use of chemical products in beauty procedures, the professionals reported the presence of physical symptoms after such exposure.

I completely lost my voice after using a product (anti-frizz). I had to wear a mask to try and get my voice back, since I had completely lost it. (HD11)

[...] as for the products, we know that they include chemicals and are harmful to health. Hairdressers are exposed and smell many products. For example, in December and June, when there is the greatest demand, we perform procedures with hair formaldehyde almost every day. (HD07)

[...] I don't use formaldehyde because I'm allergic, but the acid is also hurting me, as I keep clearing my throat. I know it is, because I get very short of breath and I feel like I can't breathe. (HD12)

The evidence in the literature shows that exposure to chemical agents in the work of hairdressers makes them susceptible to the development of respiratory problems related to allergies or irritative mechanisms and hearing loss<sup>22</sup>. Furthermore, individuals exposed to chemicals in routine work have voice and speech implications, both due to the likely irritant mechanism and to illnesses that may arise<sup>23</sup>.

Given the circumstances, when asked about the use of Personal Protective Equipment (EPIS), professionals reported that despite recognizing its importance, they do not use it during activities. According to reports, the use of such PPE is forgotten or neglected due to routine work.

[...] I have a mask, but sometimes I get so busy that I forget to wear it. And there are also times when I remember to wear the mask and I wear it. (HD01)

Well, when the product is heavier I wear it, but there are some products that are almost odorless. Sometimes, we feel a little sick when inhaling chemicals, right? (HD07)

In line with the findings, the relevant literature proves that adherence and knowledge about biosafety standards among professionals who work in beauty salons are not efficient and are related to the lack of information on the topic<sup>24</sup>.

Furthermore, some studies show that the socioeconomic factors of workers influence the way they approach daily exposure to occupational hazards. Social vulnerability is a predisposing factor for workers to greater risks of illness and work accidents. Organizational factors also contribute to the emergence and continuity of occupational risks, since informal professionals can assume the roles of boss and employee and, thus, are responsible for the decisions inherent in the execution of their own work and its consequences.

Therefore, occupational health surveillance actions need to include informal workers, through the promotion of prevention actions and awareness of risks in the scope of their actions<sup>21</sup>.

# The voice as a reflection of the work context

This category was developed from the analysis of reports about voice perception and possible harm resulting from the work environment.

As the communicative aspects currently reflect directly on the means of work production, discussions about voice in the occupational context have been highlighted amidst new forms of work. Involved in the work routine of many different professions, the voice becomes susceptible to the individual's environmental, organizational and personal factors, directly reflecting on the performance aspects of their occupational functions<sup>6</sup>.

When asked about the importance of the voice in their work, it was noticed that hairdressers use it as an essential tool.

[...] Customers almost always present their expectations, requests, and questions. And I have to change the tone of voice to be more sympathetic and



pleasant, and I have to listen a lot and be able to respond accordingly. [...] I like to start an icebreaker conversation. (HD03)

The content of the report shows the use of the voice as a working tool among hairdressers, as they directly address the concerns and expectations of their clients. In this industry, the voice of hairdressers as a work tool is exposed to the occupational conditions mentioned above, making these workers susceptible to WRVD.

In addition to professional use, the voice expresses the individual's identity and enables verbal expression. Thus, during their work or in their free time, the study participants noticed vocal changes over the time they worked as hairdressers.

[...] My voice got more hoarse and husky. There are times when we cough a lot during a procedure. (HD07)

*I notice that now my voice cracks when I'm singing, as it gets really high and then low, like out of tune.* (HD05)

[...] When we straighten customers' hair, we inhale the chemicals. So, I believe this might harm my voice. There are some weeks that I perform a hair volume reducer treatment and I don't get so much secretion in the throat. But there are weeks that I do three or four of these, then I get beyond the sore throat, I get a lot of throat clearing. (HD12)

Given the relevance of the use of the voice as a work tool and the perception of vocal changes resulting from acting as a hairdresser reported by the professionals, the topic should be valued. So, in the one hand, this class of workers is exposed to a range of occupational risks that can harm voice quality. However, on the other hand, the literature on these workers is still scarce, which highlights the importance of scientific productions that emphasize the health of hairdressers and guide preventive actions.

The reports also addressed the presence of difficulty in speaking or being heard in noisy environments. As mentioned above, noise in beauty salons is often overlooked among professionals. The reports below are in line with the findings in the literature<sup>18</sup>, which suggest the use of vocal abuse to overcome the noise.

I don't like to talk too loud, so when there's a lot of noise I have a hard time raising my voice. If there are a lot of people working and a lot of customers, I need to speak louder. (HD02)

It's not hard for me because I usually speak out loud. I always raise my voice. (HD09)

I only have difficulty when there is a lot of movement and a lot of people with the hair dryer on. Sometimes I feel tired and my throat is dry at the end of the day. (HD03)

The reports show impacts on the voice related to the organization of the working day. Participants in general report difficulties in speaking on days of greater demand. As previously reported, the exhaustive routine predisposes workers to inappropriate habits, including negligence in relation to water intake and food.

I often get hoarse and then I drink water just to make my voice come back. This is usually what happens when I see many clients, one after the other, with no breaks of 15 to 30 minutes. (HD04)

It should be noted that hydration contributes to the reduction of vocal complaints and, therefore, improves production, especially in professionals with high vocal demand. Furthermore, hydration is seen as essential in the prevention and treatment of vocal disorders<sup>25</sup>.

According to the reports, organizational aspects are determining factors for the perception of impairment in vocal quality. Communicative behavior can be affected by emotions and states of anxiety and stress, with effects on the body, facial expression, speech and vocal quality<sup>26,27</sup>.

At the end of the day, my voice gets a lot more tired and if I could not speak, I would do it for a long time. (HD06)

Sometimes we run so hard at work that I feel like my voice gets really tired. (HD02)

It is noteworthy that occupational stress is a process resulting from the individual's communicative, emotional and motivational aspects<sup>28</sup>. The accumulation of functions and the precariousness of work are reported as conditioning factors of occupational stress, which can have an impact on health, such as vocal disorders<sup>29</sup>.

The interaction between occupational hazards present in the work environment, the use of voice and inadequate hydration and eating habits may predispose hairdressers to the development of WRVD. In addition, the length of work of these



professionals may also have an impact, since the occurrence of vocal problems is higher in workers with longer working hours<sup>2</sup>.

Therefore, it is essential that health actions aimed at workers include hairdressers. The notification of cases through the WRVD Protocol is a significant resource to guide and expand the actions of Speech-Language Pathology and other professionals in the SUS in relation to these workers.

In this context, the team of professionals in Primary Care (PC) can be a means of access to workers in the informal market, since the scope of their actions enables the screening and identification of informal work environments<sup>30</sup>. Health promotion and disease prevention activities aimed at this audience must assess the singularities of each PC core of knowledge in order to use matrix support as an intervention device.

Furthermore, there is a lack of studies investigating hairdressing in the health field, as the studies are focused on other areas, such as materials engineering and administration.

The qualitative nature of this study can be understood as a limitation, as it covered data from professionals from a single professional center, but it may be seen as an introduction to further investigations.

#### Conclusion

The results of the study showed that most hairdressers are aware of occupational hazards. However, professionals neglect prevention practices, becoming susceptible to work-related illnesses, especially those that impact on vocal health. The contributions of this study involve the possible expansion of the discussion on occupational risks and biosafety in the workplaces of hairdressers, as well as on the vocal health of these professionals. Regarding the latter, the study suggests that vocational education centers include some content addressing vocal health care in their curriculum.

It is essential to introduce Speech-Language Pathology in new scenarios involving the use of the voice in the work context. Given that the speechlanguage pathologists can and should act directly or indirectly in the care of workers, the importance of considering the use of the voice from the perspective of informal work is highlighted.

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