

## Health and Labour from the Perspective of Railway Dock workers in Rio Grande do Sul, Brazil

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**Abstract** *The main goal of this study is to understand and analyse the perspective of dockworkers on health and labour at the Railway Dry Port of the Municipality of Uruguaiana in the State of Rio Grande do Sul (RS), Brazil. Sixteen dockworkers participated in the study under the methodological approach of qualitative research. The fieldwork was conducted through individual interviews by applying a semi-structured research script with open-ended questions. For the data analysis, the “discourse analysis” method was adopted, leading to the definition of five thematic categories of interpretation. From the perspective of dockworkers, dock work differs in both the weight of toil, which is hard and intense, and the sense of satisfaction regarding the collaborative and collective aspect of labour, emphasising the human side of labour. Several reports on work accidents and the identification of hazards that may be avoided by implementing changes in the organisation and work conditions were also noted.*

**Key words** *Dock work, Occupational health, Working conditions, Railway Dry Port*

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## Introduction

The existence of a heterogeneous labour structure integrating work characteristics that could be regarded as archaic and modern may be found in the recent Brazilian economic environment<sup>1</sup>. Mechanisms of capital exploitation, which are naturalised, as an inherent part of human labour processes, have persisted, throughout history, despite the introduction of new technologies and new production standards. Indeed, dock work differs because of the difficult work conditions, which were reported by historians in records from the nineteenth century: Hobsbawn<sup>2</sup> noted that no mechanical equipment, including cranes or hoists, was available in the dock work of London ports at the end of the 1880s and that dock work consisted of primitive practices<sup>2</sup>. The author also observed that the technical revolution of dock work mechanisation, particularly involving loading and unloading, progressed very slowly. Indeed, contemporary studies on dock work show the predominance of manual labour, especially in manual cargo lifting<sup>3,4</sup>. Furthermore, studies like those of Soares et al.<sup>5</sup> enable us to state that some “archaic” and “modern” labour mechanisms co-exist in dock work, expressed by the notorious interaction between the old ergonomic hazards, including excessive use of muscle strength, and new technological hazards arising from the modernisation of ports, which require greater worker agility in port operations.

Currently, countries whose cargo-handling work maintains the same characteristics that have been used for many decades are still commonly found and include Brazil. Places where loads exceeding one hundred kilograms are manually transported may be found<sup>3</sup>.

History shows that mechanisms of exploitation of the human body result in occupational health problems corresponding to their labour processes, according to Pena and Gomes<sup>6</sup>. Changes in dock work to promote occupational health would imply technical and cultural changes in labour to establish the precedent of human dignity and health before private and economic interests.

It is worth remembering that the port process was driven by the world order of globalisation, expanding international trade and thrusting markets towards increasing imports and exports. Accordingly, cargo transportation becomes a key tool in the logistics composition of countries to achieve their development and growth.

The contract of dry dock workers is governed by the Consolidation of Labor Laws (*Consolidação das Leis do Trabalho—CLT*)<sup>7</sup>, which differs from the labour laws of the other ports. The activities developed therein consist of transportation, storage and handling of bonded goods intended for import or export because those ports are located in tax regions and may constitute customs or bonded warehouses that are internalised by the country. Those activities provide tax benefits to importers and exporters, storage services and handling of goods, or even related services regarding the movement of goods<sup>8</sup>.

The Regulatory Standard for Dock Work Safety and Health (*Norma Regulamentadora de Segurança e Saúde no Trabalho Portuário, NR-29*) is also referenced when the subject is hazardous situations and work conditions in Ports. However, the persistence of poor work conditions is empirically observed despite the existence of specific laws regarding dock work activities. The scarcity of research studies published on the subject is also highlighted<sup>3</sup>. Notwithstanding, we understand that dock work processes must gain visibility and critical analysis, emphasising their human side and the effects on occupational health. Thus, this study mainly aims to understand and analyse the perspective of dockworkers on health and labour in the Railway Dry Port of the Municipality of Uruguaiana, in the State of Rio Grande do Sul.

This study adopts the critical approach of the occupational health field as an analytical perspective on the relationship between labour and health. Accordingly, the production of field knowledge is focused on the workers themselves, which are considered a collective political subject and bearer of knowledge derived from work experience. Thus, we may state that the actual work situations, so well known by workers, are an essential part of scientific knowledge, corroborating Oddone<sup>9</sup>.

## Method

This research study is qualitative in nature, whose epistemological and methodological approach is based on an interpretive assessment of the reality and materials derived from the field of study<sup>10</sup>. The qualitative approach broadens the assessments of reality, which encompasses the dimensions of objectivity and subjectivity, reaching other realms of life, including the economic,

political, religious and symbolic, according to Minayo<sup>11</sup>.

The context of this research study is the Railway Dry Port located at the Osvaldo Aranha Highway (BR 290) of the Municipality of Uruguai, in the State of Rio Grande do Sul/RS, Brazil. Sixteen of a total of 24 dockworkers performing dock work services of cargo loading into train cars agreed to participate in the study. Five (05) of a total of 24 workers were absent because of illness, and three (03) refused to participate in the study.

Fieldwork was performed through individual interviews by applying a semi-structured research script with open-ended questions. Data collection was performed during July and August 2010, and the interview scheduling was conducted by the Railway Dry Port Operations Manager. The data collection itself was conducted during the workday breaks, in train repositioning periods.

The project was submitted to the Health Research Ethics Committee of the Federal University of Pampa (*Comitê de Ética em Pesquisa na Área da Saúde da Universidade Federal do Pampa-UNIPAMPA*) to assess the ethical aspects of the research and in compliance with Resolution No. 196/96 of the National Health Council of Brazil<sup>12</sup>. The Project was also approved by the Research Ethics Committee of the National School of Public Health – Oswaldo Cruz Foundation.

We adopted “discourse analysis”<sup>13</sup> as the data analysis method, using the thematic classification method<sup>11</sup>. First, we conducted a thorough assessment of the data collected from the transcripts of the interviews, subsequently highlighting the most significant statements regarding the purpose of this study, that is, to understand aspects related to health and labour from the perspective of dockworkers. We classified those statements into thematic groups, adopting the following criteria: frequency, similarity and relevance of the data. Therefore, after organising the statements according to the similarity of meaning, we defined five thematic categories of interpretation, including the following: the meanings of dock work; work process aspects; dockworker health; occupational hazards; and work accidents.

We also designed a device to protect the identity of respondents by numbering the interviews according to their order. Thus, the first worker interviewed was named E1, the second E2 and so forth.

## Results and Discussion

### The meanings of dock work

*It is heavy work, but we have to do it. For now, they have not found another way to do it. For now, it must be done this way. [...] It is manual work (E1).*

*Labour here is truly manual. Thus, strictly speaking, rough work, hard labour (E3).*

*Manually [...]. They usually carry loads on their shoulders [...] some carry loads in hand, as they say, in the big hand, sometimes it's a little more difficult but faster (E16).*

The meanings of work given from the standpoint of the interviewed dockworkers, regarding their own labour activity included “rough”, “heavy” and “manual” work. Those adjectives lead us to qualify the labour performed in docks as essentially draining, whose conditions expose workers to excessive use of muscle strength and wear. It is hard and intense labour, with exhausting and repetitive activity. A sense of social devaluation also noticeably transpires in the meaning the respondents attributed to their own labour activity, in addition to the meaning physical strength. The separation between manual and intellectual activity from the workers’ viewpoint is noted. Indeed, the requirement of physical attributes in dock work organization is striking. However, the traditional division between “conceptual work” and “implementation work” must be refuted, as advocated by the principles of ergonomics and work psychodynamics. “All work is always conceptual work” because workers plan their operations beforehand, according to Dejours<sup>14</sup>. Thus, all labour activities require cognitive mobilization, demanding inventiveness and creativity.

The dominant understanding according to which dock work exclusively requires the performance of manual labour and physical strength instead of intellectual work contributes to impoverishing the assessment of this activity and therefore to the social devaluation of this work, highlighting its vulnerability against capital.

The workers commonly reported indispensable physical fitness as a natural quality required to perform cargo-handling work. The workers’ discourse reveals the naturalization and trivialization of the intensely used physical strength, which is demanded by dock work. The workers

mentioned body overload, especially the shoulders, legs and arms, when describing the work development momentum they perform. Respondents used a colloquial work language in the reports, including the term “in the big hand”, which metaphorically and superlatively constructs the worker’s image about their own body in performing work tasks. Guérin et al.<sup>15</sup> stated that the use of jargon refers to codes that expose both the context and engagement of individuals in the operations. These terms are ways of interpreting their own work activity.

Accordingly, the workers used playful jargon in the way they address each other, which translates the image and self-image of dock work as a caricature. We heard the following terms: “rooster”, “athlete”, “ironwood” and “farm worker”. Furthermore, they used the word “mate”, meaning the explicit cooperation and complicity in performing dock work collaboratively.

The expression “rough work” indicates a repeated reference to an activity with rudimentary and rough characteristics, in opposition to the sense of a sensitive and fragile worker. Gender in dock work is something remarkable, and the brutality of the labour apparently relates to a strong symbolism of masculinity, which consists of social values and the workers’ own values<sup>16</sup>. Thus, the gender division of the labour may justify rough work that only the strong can do, and courage is a key moral value guiding social relationships and the male ethos of dock work<sup>17</sup>.

We also highlight the following expression stated during the interviews: “no other way to do it has been found, thus far”. Once again, it is worth remembering the records of the historian Hobsbaw<sup>2</sup> regarding the primitiveness of dock work, showing the human limitations in performing its tasks. Furthermore, the literature on the subject regarding the improvement of dock work conditions brings up a key controversy based on the relationships between labour and capital: studies on dockworkers conducted by Gomes and Junqueira<sup>4</sup>, in the port of Santos, Brazil, assessed that dock work changes highlight the conflict dimensions resulting from the rendering processes and the introduction of new technologies. It should be noted that the introduction of technologies tends to generate decreased job openings, increased unemployment and increased job uncertainty<sup>18</sup>, which may lead workers to fight to keep their jobs, resisting the supposed threat of new technologies. However, Gomes and Junqueira<sup>4</sup> show that the resistance of dockworkers to the modernisation process is

related not only to economic or technical issues but also to cultural elements, which should be further examined with new research studies.

Another key issue mentioned by dockworkers concerns their viewpoint on the work motivation:

*My motivation is knowing that the money will be in my account at the end of every month, and my family will have something to eat, drink and wear (E5).*

*Nowadays, work is bad out there, we need this job, not just me but everyone. They would not be there all those hours if they could avoid doing it (E1).*

Labour may be identified in this group of statements as an element of human and social need, in opposition to the notion of freedom. The actual realm of freedom is realised in the workplace of the socialised man; that is, subjecting work to his control and achieving it with the least expenditure of energy and under the most favourable and dignified conditions for fulfilling his human nature, according to Marx<sup>19</sup>. In other words, the free choice of work is a condition required for people to develop as individuals and social subjects<sup>20,21</sup>. However, unemployment subjugates labour, forcing workers to accept low wages and all sorts of precarious work conditions, under the aegis of capitalism<sup>22</sup>.

Gomes and Junqueira<sup>4</sup> highlight some peculiarities of dock work, detected by relationships of strong authoritarianism, extensive use of a non-skilled workforce and adoption of remuneration structures aimed at establishing the social and collective division of labour and controlling workers. Indeed, vulnerability and precariousness, in times of “liquid modernity”, are the hallmark of labour relations, and survival in terms of work and employment is exceedingly fragile<sup>18</sup>. Therefore, the context of the world of work significantly contributes to the increased number of workers who begin to seek their livelihood through casual work, mostly under completely unhealthy and unsafe conditions, performing hazardous and dangerous tasks<sup>22</sup>.

Family noticeably emerges as a centre of discourse for dockworkers regarding the statement of respondents on the relationship between work motivation and the livelihood of their family. Work is perceived as a responsibility and mission because the family will be supported through it<sup>17</sup>.

However, the category “I like to work in this activity” is present in the dockworkers’ reports, apparently contradicting that understanding of the requirement to work necessarily.

*What I like the most is to hang out with everyone, humble people, who have become my friends, but real friends, like a family. We joke around and respect each other; that's why we like to work (E8).*

*...it is also important, and I know that I am helping other people because that enables importing and exporting other products to other countries, and many people only see the work (E11).*

Some respondents said they do dock work because they like it and because they share life experiences with colleagues and maintain relationships of affection and friendship, separating the notion of work permanence from economic and materialistic needs exclusively.

Gomes and Junqueira<sup>4</sup> highlight the fact that dock work cooperation and friendship are closely linked to the production process. According to the authors, the mediation of companionship senses and friendship ties is at the forefront of the work sphere. Similarly, through the interviews, we have assessed the meanings of social relationships at work, which are realised through a relationship balancing between the weight of toil and the human side of labour.

We also note that one dockworker interviewed correlates the importance of his work's contribution to market dynamics by relating the transshipment of goods to import and export processes. Dockworkers as individuals are indeed part of the commercial machinery, and their work is certainly not a mere commodity because it generates social and human values.

### Work process aspects

*[...] We help one another. Loading, I will explain it to you, is quite simple, we are a team, we help each other, one lowers and loads the bag, passing it to the other. We raise it to reduce the weight, the load of 50 kg on one's shoulder, chest, or carry it like this, in our hands (E8).*

*Some younger guys lift the bag onto someone else's shoulder, some stronger guys carry the bag alone; each person does it as they prefer. The right way, with the bags on the ground, is to get help from someone but few do it this way, most only do it the hard way (E13).*

The interviews enabled us to identify an essential dimension of the dock work: its collaborative and collective aspect. Dockworkers recognise the actual foundations for the development of work in the team. They mention partnership as a facilitating mechanism of labour completion when they talk about mutual help in performing work activities. The sense of strengthening of hu-

man relations through work, friendship ties and cooperation between dockworkers also stands out in that block of statements. Thus, solidarity actions contradict a purely economic work rationale and establish human relationships, deconstructing the dominant notion that dock work is merely "strength" or "harshness" and, therefore, enabling one to see men and not only "hands" and "arms"<sup>23</sup>. Indeed, no individual worker alone is productive in the dock work because each worker is actually a component of the collective worker and the total sum of tasks completed.

The term 'quis' [wanted], mentioned by respondents, would represent the shared action of uplifting the sacks or bags, facilitating the work and rendering it less harmful. The expression 'quis', and other words mentioned during the interviews, belongs to the jargon used by workers. The term 'pulseia' [pivots], which designates the act of uplifting the sack or bag for the co-worker to decrease the weight lifted on the shoulders, was also identified in several statements. These expressions certainly show the solidarity present, given the excessive physical effort that labour requires from dockworkers. The richness of syntax existing in the dock work communication highlights an equity regarding the work of communication, which lacks new studies. Faïta<sup>24</sup> states that "language gives meaning to our actions", regarding verbal communication at work. According to the author, the way we construct our speech and how we produce utterances functions to build and rebuild relationships. Communication in the workplace serves instead to partly reconstruct the meaning of words with the interlocutors.

The dockworkers used the expression "we perform different types of services at once", which partly expresses the high number of tasks comprising dock work and the intense pace to which workers are submitted, regarding the work process:

*[...] we perform different types of services at once, do you understand? I will explain it to you: I do not just carry bags. I carry bags, I wrestle, I pull cables, I carry hot rolled billets, I bundle flat bars and I carry iron rods (E5).*

*[...] We try to work quickly [...] we must get results [...] Whether we have between twelve, fifteen or twenty workers, we must finish, we must get the job done (E6).*

The dock work process may be identified in the statements of workers describing the set of activities and multiple functions performed, namely in the words of the interviewees, regardless of the number of workers present in the day

or the amount of cargo to be moved. Cargo transshipment is performed manually in the Railway Dry Port of Uruguaiana, strictly using human strength for its completion. However, the process itself is determined by the public weightmaster, who decides the work to be performed. The aspect regarding the exploitation of manpower and the intensification of work stands out at this point. According to Guérin et al.<sup>15</sup>, the intensification of work relates to the use of the cognitive and physiological capacities of the workers.

The intensification is related to a deliberate increase in work rate and a decreased number of workers maintaining the same amount of production. According to the authors, that situation may be rather adverse to workers and should be the object of collective bargaining for implementing necessary labour changes.

Regarding the health of dockworkers, [...] *when it is really too hot, we feel the pressure, and it worsens, it is exhausting* (E2).

[...] *apparently we get used to it, our body is already half numb at the end of the day, we do not even feel pain [...]. We do not feel like playing with our children or talking and having mate tea with the wife* (E3).

The expression used by the worker stands out in that analysis category: “numb body”, highlighting that the handling and transshipment of sacks generates intense fatigue and physical exhaustion, increasing the exposure of workers to occupational hazards. This condition may be assessed when they relate the excess weight of sacks and the intense cargo handling demand leading them to exhaustion and “physical fatigue”, as stated by the workers.

Studies conducted in seaports<sup>25</sup> highlight dock work as the professional category with the highest number of cases of musculoskeletal disorders among port workers. According to the authors, statistical associations were detected between musculoskeletal disorders and workers over 50 years of age and with dock work experience longer than 21 years. Those data are premises associated with the work pace and intensity, which directly impact the health outcomes of the dockworkers.

Workers’ complaints, termed “physical fatigue”, are apparently related to work intensity and excessive weight loads, weakening the dockworkers’ health and bodies. Guérin et al.<sup>15</sup> used the category “physical fatigue” to characterise a set of signals that occurs in work circumstances considered “heavy” and that are performed under pressure. According to the authors, the

different forms of fatigue often indicate that the job requires the use of the workers’ skills to their limits, which may have repercussions on social and family relationships, as we have found in the interviewees’ statements.

Herein, we highlight some reasons for the occurrence of “physical fatigue” in dock work, based on the workers’ reports: the reduced number of workers involved in the loading movement; the high amount of cargo; and the pressure from managers to produce results. Thus, the so-called “physical fatigue” is inherent to dock work conditions and organization and should be revised according to the precepts recommended by occupational safety and health standards and the theoretical framework of dock work ergonomics. In particular, the workers’ experience and knowledge should be considered. According to Guérin et al.<sup>15</sup>, workers performing work activities considered “heavy” are those who are still able to support them, which must not be forgotten. Therefore, studies on retired dockworkers are necessary to provide further depth to the health status information for that group.

*Sometimes, they really get to me, saying that I am already old and no longer able to lift 2 or 3 bags. No, I try to take care of myself because there is no point for me to carry 2 sacks today and tomorrow I will not be able to carry half a sack or anything or walk all hunched, aching all over, so I take it easy, carrying one sack at a time. I take it easy* (E15).

According to Canguilhem<sup>26</sup>, norms, or the establishment of new biological standards, occur by questioning the usual norms during critical situations: “In the case of disease, the normal man is one who experiences the certainty of being able to slow down, in himself, a process that others would allow reaching the end of the line”. The worker’s statement also shows an empirical knowledge built on his own mode of operation. When a worker states, “Take it easy”, the worker expresses an active role in safeguarding and building his own health. According to Dejours<sup>14</sup>, workers may teach researchers the ways they invent, create and develop real work, contributing to the concrete transformation of harmful work environments.

[...] *health is always at stake because sometimes we endure sun, sometimes rain* (E6).

The reports show that the interviewees recognise the damage that dock work may cause to their health, including disabilities and morbidity. The meanings attributed to work from a health standpoint noticeably refer to suffering, fear and insecurity, with daily impacts on their lives. The

following worker's statement, also regarding health, stands out in that thematic category of interpretation: "health is always at stake". According to Canguilhem<sup>26</sup>, we adapt to the circumstances imposed while it is compatible with life. Life is not just submission to the environment. Thus, health functions as a way to establish new life standards: "There is absolutely no life without life standards". Canguilhem<sup>26</sup> explains that organic vitality develops into plasticity with the environment. The notion of "playing with" (jeopardising) health and life, mentioned by the worker, may mean the need for the worker to assign values to his work as being uniquely dangerous, requiring cunning, intelligence and wit, as in a game, to prevail against environmental adversities. In such a case, Canguilhem's concept<sup>26</sup> that "abusing health is part of health" is appropriate to understand the relationship between health and livelihoods in dockwork.

### Occupational hazards

*Look, it is hazardous when we work at night because it involves light and cold and such. Or on rainy days, which is the most dangerous hazard [...]. There is the weather, the rain, the sun, and all that puts us in danger because our health is suffering (E1).*

*The hazard here is the smell of compost, dust, sand and the manoeuvres (E12).*

*[...] there is, as they say it, physical hazard, there is the biological hazard, and the worst for us here is the ergonomic hazard, the weight-bearing hazard [...] they stand and sometimes carry 2 to 3 bags. That is unsustainable because a guy's back cannot endure it over time (E15).*

Inclement weather aggravates the occupational hazards from the dockworkers' standpoint. Rain, cold, and intense heat are factors adverse to the development of dock work activities. In particular, rain may further expose workers to occupational hazards because the gangplank (a working tool used to move between freight wagons or between a wagon and the ground during transshipment) becomes slippery when wet, making it possible for the workers conducting transshipments to slide, slip and fall, thus leading to protrusions and serious accidents. Even the placement of tarpaulins protecting the workers from the rain becomes unfavourable to workers because they are improvisations that may generate even more unsafe occupational hazards.

According to Machin et al.<sup>17</sup>, the gender dimension of dock work, requiring physi-

cal strength, virility and courage, may trigger risk-taking attitudes among workers, who challenge themselves beyond their physical and mental capacities, promoting the occurrence of work accidents and illness.

Falling ill correlates work time to physical effort that carrying the bags demands, leading to back problems for the dockworkers, as mentioned by E15. Picoloto<sup>27</sup> notes a higher prevalence of complaints of back problems, especially lower back problems.

The mechanical and ergonomic hazards present due to unforeseen circumstances that may arise in the course of railway dock work, namely, accidents with metal and wood spikes, loose screws and holes, among others, are also noteworthy. Regarding mechanical hazards, the use of iron structures, including the "gangplanks", and the so-called "donkeys" ("burros"), should be mentioned specifically. The latter ("burros") consist of makeshift stacks of sacks or sand bags used as support posts to sustain the gangplank. The burros may disintegrate, causing accidents, especially when dockworkers walk with sacks or heavy bags on the gangplanks. Additionally, workers report having endured exposure to certain products inside the freight wagons while lacking reliable information on the products regarding any chemical and biological hazards. Complaints about strong odours, powder and dust when moving the bags as possible sources of exposure were common. Poor ventilation and the confinement of workers when performing tasks inside the freight wagons are also emphasised.

### Work accidents

*[...] I remember one time at about 8 pm and we were working on a wagon, ready to finish, and suddenly the gangplank slipped because it was wet, slid sideways and caught his leg and even exposed his leg bone, you know (E3).*

*[...] they give us a raincover when it is raining hard, which we use for a couple of days and then it rips instead of giving us Personal Protective Equipment (PPE), which we should have. [...] we are the best assets working for the company and we always get screwed, the worker gets screwed (E14).*

*[...] we are as mistreated as an abandoned dog if we get hurt, we are dumped at the Holy House of Mercy (Santa Casa) Hospital and we are the last to receive care there (E14).*

The assessment of the port as a dangerous workplace, with high occurrences of accidents, some even fatal, stands out in that block of state-

ments<sup>17</sup>. The workers identify the accidents, referring to stumbles, slippages and falls, among others. They related the accidents to aspects of work organisation and poor work conditions. They also mentioned the lack of support received from the employer, indicating, for example, the poor supply of PPE, which is in breach of the law (NR 29). The interviews revealed the dissatisfaction and feelings of discontent at work, as suggested by the expression “gets screwed” (E14), hinting that the dockworkers feel cheated and conned regarding their rights.

According to Santana *et al.*<sup>28</sup>, work accidents occur at high levels in Brazil, requiring prevention measures because they are essentially preventable situations. Indeed, there is also a hazy reality regarding the reporting of work accidents in the country. The underreporting, estimated from research studies conducted in various regions, reaches values above 70% for fatal accidents and 90% for non-fatal accidents. The precariousness of dock work is expressed as much by the informality and insecurity of work bonds as by the set of factors that shape a work organisation that is unfavourable and threatening to workers, thus making it necessary to develop policies to protect their health.

According to Soares *et al.*<sup>28</sup>, dockworkers may play a key role in the prevention of diseases and accidents, enabling the necessary changes to render the workplace less unhealthy and hazardous, when they are aware of the exposure and precarious work conditions to which they are subjected in their work environment. Thus, there were many reports of work accidents in the Railway Dry Port. Therefore, we deem that surveillance measures are necessary and should be coordinated between trade unions and government bodies to comply with the laws regarding occupational safety and health standards and ensuring social rights. Workers resent the minimal social protection mechanisms, including dignified healthcare in case of work accidents and appropriate (financial) workmen’s compensation for the time they are away from work for health reasons, which is particularly noticeable in the last statement of this category of analysis.

## Final considerations

Based on the analyses of the statements given, this study enabled us to understand that changes in dock work conditions are essential, given the human limitations in performing its tasks. We heard suggestions from workers regarding improvements in Railway Dry Port work conditions during the study. The following suggestions were the most cited:

- The need for covered workspaces, similar to sheds, to avoid excessive exposure to weather conditions;
- Installation of a safe electrical system that would place lights throughout transshipment area;
- Introduction of equipment and new technologies to facilitate the transport of loads, including conveyor belts; and
- Effective participation of dockworkers in the management of hazardous situations present in the Railway Dry Port environment and interventional actions for changes in work organisation, as recommended by law.

These issues should be subject to collective bargaining towards implementing changes in work organisation and creating specific legislation, such as exist for wet dock workers. Regarding the work process, dockworkers described the high number of tasks and the intense rhythm to which workers are subjected. However, we noted that in the workers’ perspective, dock work differs in both the weight of toil, which is hard and intense, and the sense of satisfaction regarding the collaborative and collective aspect of work, emphasising the human side of the work.

Many reports on work accidents were recorded. Thus, we consider surveillance actions integrated between union and government bodies to be necessary to aid in law enforcement regarding occupational safety and health and the guarantee of social rights. Lastly, we understand that the denaturalisation of illness and accidents resulting from poor dock work conditions is a human imperative requiring measures and surveillance actions in the workplace, integrating public and trade union bodies.



## Collaborators

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