

Living, working conditions and mental health: a study with Brazilian and Spanish workers who work in hospital cleaning services

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Abstract *Objective:* To compare living, work and health conditions, with a particular interest in the mental health of Brazilian and Spanish out-sourced hospital cleaning workers. *Method:* This is a cross-sectional, quantitative investigation carried out in two public general hospitals, one in the Brazilian Midwest region of São Paulo and the other in the Southwest region of the Iberian Peninsula. In total, 78 Brazilian hospital workers and 39 Spanish hospital workers were interviewed using a script with data on the living conditions, including some validated questionnaires such as the Job Content Questionnaire (JCQ) and Self-Reporting Questionnaire (SRQ-20). *Results:* Spanish workers are older, white and with a higher household income, with lower SRQ scores in all realms. Also, they smoke more, have a higher level of visual impairment and allergies, have been working in the same activity longer, with a lower workload and do not hold two jobs. Besides, almost 40% of them consider that their work is autonomous. *Conclusions:* Brazilian workers are subject to more impoverished living, working and mental health conditions than Spanish workers. Only a few aspects of health conditions were worse among Spanish workers, which may probably be related to their advanced age.

Key words Worker's health, Mental disorder, Cleaning service

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Introduction

In hospitals, Hygiene and Cleaning Service (HCS) workers are a large contingent of professionals, who are essential in maintaining a pleasant and risk-free environment, especially infection. Besides carrying out extensive and routine work, it has been observed that these workers often go unnoticed¹. These professionals are hardly recognized socially-wise because they engage in an activity that does not require specific training, absorbs a portion of society usually with low schooling, and is mostly held by women.

Furthermore, these services are allocated by outsourced companies. Outsourcing contributes to poor working conditions, and, consequently, less assurance of the rights achieved by workers due to the greater flexibility in labor relationships and contracts. This situation triggers feelings of discrimination against other workers who occupy the same space and have different labor rights²⁻⁵.

Outsourcing is a consequence of internationalization and transformation of production ways, resulting from the introduction of technology as a substitute for human labor, generating a loss of employment for thousands of workers⁶. This change, then, is part of the productive restructuring of capital in the face of a crisis scenario, which contributes to greater job insecurity and a sense of social void.

Work flexibilization is characterized by different types of relationships and long working hours. It has led to a fragmented workforce due to the demand for polyvalence and, consequently, the political weakening of the working class, since it hampers class actions to claim rights, resulting in losses of previous achievements of class struggles⁷. The consequences of this organization favor mental illness due to lack of support and social isolation at work, as well as physical illness due to increased accidents and occupational diseases². Among the many risk factors are psychosocial factors, which have become one of the leading causes of morbidity⁸.

From the perspective of a labor expert, Brazilian outsourcing should exceed one-third of the formal labor market. With Law N° 13.429 of 31/03/2017, which provides for labor relationships in the service outsourcing company, this proportion should increase in the coming years^{9,10}. This condition does not seem to be different from European countries, as is the case in Spain, which is the country with the most flexible labor law. Newspaper *El País* reported on

17/04/17 that changes proposed in Brazil were inspired by the Spanish government's reform program, which occurred five years ago because of a prolonged recession. He adds that Spain's rulers now commend the initiative because it has curbed unemployment, although international agencies recognize that the effort has increased inequality¹¹.

Although Spain working conditions are based on the flexibilization of contracts, as some services in Brazil, it may be that workers from both countries, who carry out activities with the same characteristics and proposals, express different needs when compared to each other, such as the case of hospital HCS staff. This is because Spain is a smaller country than Brazil and has a more substantial income with more equitable distribution.

Spain was the country chosen by the principal researcher for a comparative study to complement doctoral training, through a partnership established between the São Paulo State University, Botucatu campus, and the University of Seville. The study's object is the living, health and working conditions of hospital workers, in order to show similarities and differences experienced by Brazilian and Spanish HCS workers.

In light of this and the concern with the living, health and working conditions, especially of those who engage in the activity in clearly poor conditions, this study questions whether there are differences between outsourced Brazilian and Spanish hospital HCS workers, especially concerning mental health.

We understand that people's lifestyle is determined by the social context, the living and working conditions that are shaped as health and illness/death producers¹². Therefore, it is an extensive process since it involves multiple factors in an interconnected way. Thus, this study aims to compare the living, work and health conditions, with emphasis on the mental health of outsourced Brazilian and Spanish hospital HCS workers.

Methods

This is a quantitative cross-sectional research with HCS workers from two general public hospitals, one in Brazil and one in Spain. In Brazil, it is the city of Bauru, located in the Midwest region of São Paulo, with about 371,690 inhabitants, and is one of the largest regional centers of the country because of its diversified commerce and

companies of all sizes. The Spanish city is Seville, located in the southwest of the Iberian Peninsula, with approximately 692,773 inhabitants, and is one of the important commercial and artistic centers of that region.

In Brazil, the hospital is integrated into the Unified Health System, managed by a Social Health Organization (OSS) administered by a University of the State of São Paulo. It is equipped with 364 beds and is a regional reference for high complexity care, with urgent and emergency care and traumatology, burns, general surgeries (adults and children). It is a teaching hospital for doctors, nurses and physiotherapists. The Spanish counterpart is an 880-bed university hospital and belongs to the public health system, including clinical and economic management. It is accredited by the Agency of Sanitary Quality of Andalusia, attends urgencies and surgeries in gynecology and obstetrics, urology, orthopedics and traumatology.

In Brazil, HCS consists of 94 workers, and Spain, 196. The total number of workers was considered as the study population. The study included all workers with more than six months in the institution, and excluded those who were in a temporary contracting regimen, exercised only administrative functions, were absent due to some leave (health, pregnancy, personal interest) or vacation. Data were collected from August to December 2015 in Brazil, and from May to July 2016 in Spain. The participants' approach was individualized, in a reserved place and the collection was terminated after three attempts or when, at first, the participant refused to participate. Answers were heard only by the researcher, preserving identities.

The data collection instrument was elaborated by the authors, including some tools already validated in the literature, with the following data: sociodemographic characteristics (age, gender, marital status, skin color, study time, number of people residing in the household, type of residence, household income); health conditions (health services used, tobacco use, BMI), reported health problems, regular use of medicines, self-perceived health and presence of a Common Mental Disorder (CMD). Self-perceived health data were obtained by answering the question: "In general, compared to people your age, how do you consider your state of health?" Followed by the Likert scale with five possible answers, ranging from very dissatisfied to very satisfied¹³.

The evaluation of CMD employed the already validated Self-Reporting Questionnaire (SRQ-

20). This instrument is based on symptoms experienced in the last 30 days with dichotomous responses (yes/no), with total score ranging from 0 to 20, allowing the screening of minor psychiatric symptoms, such as depression, anxiety, somatoform disorders and neurasthenia, without the intention of providing the diagnosis regarding the existing type of disorder¹⁴. In this study, the cut-off point for the classification of CMD suspects was set at six or more positive responses for men, and eight or more for women¹⁵. The verification of working conditions, length of service in the institution, having another job, working hours/week, having suffered work accidents, having on-the-job training, job satisfaction and completing the JCQ - instrument adapted for Portuguese and Spanish, which contains questions about the labor process with emphasis on aspects of Demand (psychological and physical) and Control (autonomy and ability) on work. Aiming at evaluating psychosocial and occupational stress, through the Demand-Control Model (DCM) proposed by Karasek¹⁶, published internationally, it is used with workers from different areas^{17,18}, based on Likert scale-type responses, whose scores range from 1 (strongly disagree/*muy en desacuerdo*) to 4 (strongly agree/*muy de acuerdo*). The Control score includes items such as learning new things, repetitive work, requires creativity, high skill level, variety of activities, developing skills, and of authority (own decisions, little freedom to decide). The Demand score is comprised of psychological demand, which includes fast work, hard work, overwork, sufficient time, conflicting demands, and physical demand (physical effort, moving or lifting heavy loads, quick physical activity, maintaining the body or head and arms in a physically uncomfortable position). Also was asked about mean time spent from home to work.

Recommendations of the JCQ manual (www.jcqcenter.org) were used for the calculation of Demand and Control scales. The MDC quadrants were built on the median of the distribution and dichotomized into low/high Control and low/high Demand levels, making up groups of active labor (high control and high demand), high demand (low control and high demand), passive labor (low control and low demand) and low demand (high control and low demand)¹⁸.

The chi-square test was used to test the association between categorical variables. A significant association between the HCS studied was considered when $p < 0.05$. Differences between professional categories were analyzed regarding

sociodemographic, economic, health and working conditions data.

This study was approved by the Research Ethics Committee and by the Research Center of the Hospital in Brazil and by the manager responsible for the service in Spain.

Computer tools were used (Microsoft Excel spreadsheet and Statistical Package for Social Science (SPSS) version 23.0 for Windows) for the organization and analysis of the questionnaire data.

Results

The questionnaire was answered by 78 workers in Brazil (81.3%) and 39 workers in Spain (19.9%). In Spain, only those who worked in the morning shift agreed to participate in the research. It was found that the workload in Brazil comprises 12 working hours with a one-hour break for meals, and 36 hours of rest; in Spain, professionals work 35 hours a week, resting, in one week, Saturday and Sunday and the other week, only Sunday, working 5 hours on Saturday. They break for 30 minutes for meals during working hours. Those working on weekends have a reduced work contract of 20 hours and 45 minutes per week, on average. Both workers are outsourced. In both hospitals, workers are responsible for the daily cleaning and hygiene of an average of 20 beds in rooms occupied by patients. Each worker performs tasks individually within the time determined by the employer. The inspectors supervise compliance with the established time and all the functions in each shift.

Regarding the sociodemographic data shown in Table 1, it can be observed that Spanish workers are older, white, and the household income is higher compared to Brazilian workers, with $p = 0.00$ in all these aspects. No statistically significant differences were observed between the two groups in the other analyzed data, such as gender, marital status, study time, number of people residing in the same household and type of residence. In general, the vast majority lives with a partner, is female and lives with up to four people in the household.

Table 2 shows that, among workers in Brazil compared to Spain, there are statistically significant differences regarding smoking, traveling habit and going to bars as leisure, visual impairment and reported allergies, $p = 0.00$; $p = 0.002$; $p = 0.001$; $p = 0.05$ and $p = 0.01$, respectively, and these problems are prevalent among Spanish workers. The presence of CMD was higher

among Brazilian workers $p = 0.00$. Regarding BMI, no significant differences were found between the groups, since most workers in both groups were overweight or obese. Health problems such as muscle pain, bone problems, swelling in the legs, low back pain, and continued use of medications are also similar and with high prevalence between the two groups. In the CMD evaluation, Table 3 shows that the mean score was lower among Spaniards compared to Brazilians in all realms. Regarding depressive mood, Brazilians averaged 39.7% and Spaniards 14.7%. Concerning somatic symptoms, Brazilians averaged 22.8% and Spaniards 10.3%. Depressive thinking and decreasing vital energy were 11.5% and 28.5% among Brazilians and 1.9% and 3.5% among Spaniards, respectively.

Table 4 shows data with significant differences between working conditions in Brazil and Spain, especially regarding the length of service in the institution $p = 0.00$, and almost all Spaniards have been in the institution for more than ten years, and most of them work in a single job $p = 0.00$. The difference between workload and work satisfaction was significant since the Brazilians showed more weekly hours, and Spaniards were satisfied with their work.

Work classification was recognized by Brazilians as passive (low control) and with high demand (high demand), while for Spaniards, work is active (high control) and low demand (low demand), as shown in Table 4.

Also significant was the difference in mean time spent from home to work $p=0.018$ 99%CI (0.015-0.022); the mean time in Spain was 27.36 minutes, and in Brazil 43.21 minutes. In both countries, most use public transport.

Discussion

This study aims to compare data from HCS workers from outsourced companies of a Brazilian hospital and a Spanish hospital, although it is difficult to make such a comparison due to structural differences between the two countries. As a limitation of the study, only 19.9% of HCS workers from Spain participated in the study. Nonetheless, it is considered relevant to verify the similarities and differences of this work, since it is a worldwide trend, involving different work contexts and scenarios and with the signaling that together, living, health and working conditions are deteriorated and affect, especially, mental health.

Table 1. Distribution of the frequency of sociodemographic conditions among Brazilian and Spanish cleaning services workers, 2017.

Sociodemographic conditions	Brazil cleaning services	Spain cleaning services	p-value
	N=78(%)	N= 39(%)	
Age			0.00
18-35 years	23(29.5)	3(7.7)	
36-50 years	39(50.0)	18(46.2)	
> 50 years	16(20.5)	18(46.2)	
Marital status			0.67
Living with a partner	53(67.9)	28(71.2)	
Living without a partner	25(32.1)	11(28.2)	
Skin color			0.00
White	35(44.9)	39(100.0)	
Non-white	43(55.1)	0(0.00)	
Gender			0.16
Female	62(79.5)	35(89.7)	
Male	16(20.5)	4(10.3)	
Years of study			0.20
Up to 4 years	23(29.5)	15(38.5)	
5-8 years	18(23.1)	11(28.2)	
9-12 years	22(28.2)	11(28.2)	
More than 13 years	15(19.2)	2(5.1)	
People living at home			0.83
Up to 4 people	71(91.0)	35(89.7)	
≥ 5 people	7(9.0)	4(10.3)	
Type of residence			0.34
Owned	36(46.2)	23(59.0)	
Rented	29(37.2)	5(12.8)	
Financed	9(11.5)	8(20.5)	
Other	4(5.1)	3(7.7)	
Household income*			0.00
Up to 2 minimum wages	37(47.4)	9(23.1)	
3-5 minimum wages	33(42.3)	16(41.0)	
6-7 minimum wages	8(10.3)	14(35.9)	

* Considering a monthly amount of R\$ 937.00 monthly in Brazil, and 942.70 Euros (1 Euro equivalent at the time, on average, R\$ 4.66, or a total of R\$ 4,392.98) in Spain.

In the results of this study, most women with low schooling emerge in the two countries. These characteristics are also found in other similar studies since this type of work does not require any specific training and high schooling^{7,19}. Despite increased percentage of women seeking to improve their schooling level to attain more top placements in the labor market, and Spanish legislation promoting measures favoring equal pay between men and women who occupy the same positions, as well as protection against sexual harassment, and maternity and breastfeeding benefits, these women remain in the socially recognized female professions and with lower wages²⁰.

Data from the Brazilian Institute of Geography and Statistics (IBGE) indicate that, in Brazil, the women's income is 22.9% lower when compared to men, which is also the case in Europe^{1,20,21}. Thus, the small proportion of men in this activity in both countries is also justified and reinforces the sexual division of labor, even if experienced under different historical perspectives.

Despite changes in the Spanish labor legislation, translating into wage reduction, the workers participating in this research were not affected because they have been working for more than twenty years in this activity and the benefits have been maintained²². In Brazil, most workers do

Table 2. Health service frequency distribution among Brazilian and Spanish cleaning service workers. 2017.

Health conditions	Brazil cleaning services	Spain cleaning services	p-value
	N=78(100%)	N= 39(100%)	
Health services			0.97
Private	10(12.8)	0 (0.0)	
Public	68(87.2)	39(100)	
Tobacco use			0.00
Smokers	11(14.1)	16(41)	
Non-smokers	67(85.9)	23(59)	
Leisure			
Going to bars	3(3.8)	10(25.6)	0.00
Travel	1(1.3)	7(17.9)	0.00
Body Mass Index			0.33
< 18.5	3(3.8)	0(0.0)	
18.6-24.99	27(34.6)	12(30.8)	
25.0-29.99	30(38.5)	21(53.8)	
> 30	18(23.1)	6(15.4)	
Health problems*			
Visual impairment	24(30.8)	19(48.7)	0.05
Muscular pain	40(51.3)	16(41.0)	0.29
Hypertension	17(21.8)	9(23.1)	0.87
Bone problems	31(39.7)	10(25.6)	0.13
Difficulty sleeping	15(19.2)	6(15.4)	0.60
Hearing problems	5(6.4)	3(7.7)	0.53
Constipation	11(14.1)	4(10.3)	0.55
Swollen legs	21(26.9)	8(20.5)	0.44
Allergy	12(15.4)	14(35.9)	0.01
Irritation	9(11.5)	2(5.1)	0.33
Anxiety	25(32.1)	7(17.9)	0.10
Dizziness	8(10.3)	4(10.3)	0.63
Heart problems	5(6.4)	1(2.6)	0.66
Diabetes	5(6.4)	3(7.7)	0.53
Labyrinthitis	5(6.4)	6(15.4)	0.17
Low back pain	35(44.9)	17(43.6)	0.52
Regular use of medication			0.79
No	34(43.6)	18(46.2)	
Yes	44(56.4)	21(53.8)	
SRQ-20	20(25.6)	2(5.1)	0.00
Self-perceived health			0.16
Very poor/poor/fair	16(20.5)	4(10.3)	
Good/very good	62(79.5)	35(89.7)	

* More than one response per participant.

not have more than five years in the company and work 12 hours a day, which was not allowed before, and is now legal with the outsourcing.

Workers who self-declare brown or black in Brazil is not surprising since it is the country's miscegenation of races, as well as their occupation in less paid positions in the labor market.

The HCS counts on a more significant number of brown or black professionals, with low schooling and part of the less favored socioeconomic classes.

This is, in fact, one of the central aspects to understand the work's social relationships and respective social division of labor in the country.

Table 3. Realms of the Self-Reporting Questionnaire-20 instrument with Brazilian and Spanish cleaning service workers. 2017.

Variables	Brazil			Spain		
	N	%	Mean	N	%	Mean
Depressive mood/Anxious			39,7*			14.7*
Are you easily frightened?	26	33.3		6	15.4	
Do you feel nervous, tense, or worried?	43	55.1		9	23.1	
Have you felt sad lately?	34	43.6		0	0.0	
Do you cry more than usual?	21	26.9		8	20.5	
Somatic symptoms			22.8*			10.3*
Do you often have headaches?	23	29.5		11	28.2	
Do you sleep badly?	26	33.3		3	7.7	
Do you have uncomfortable feelings in your stomach?	18	23.1		3	7.7	
Is your digestion poor?	18	23.1		4	10.3	
Is your appetite poor?	12	15.4		0	0.0	
Are your hands shaking?	10	12.8		3	7.7	
Decreased vital energy			28.5*			3.5*
Are you easily tired?	25	32.1		2	5.1	
Do you find it difficult to make decisions?	30	38.5		3	7.7	
Do you find it difficult to enjoy your daily activities?	17	21.8		0	0.0	
Is your daily work suffering?	22	28.2		0	0.0	
Do you have trouble thinking clearly?	17	21.8		2	5.1	
Depressive thoughts			11.8*			1.9*
Are you unable to play a useful part in your life?	4	5.1		0	0.0	
Have you lost interest in things?	20	25.6		3	7.7	
Has the thought of ending your life been in your mind?	8	10.3		0	0.0	
Do you feel you are a worthless person?	5	6.4		0	0.0	

* Mean of each realm.

The mechanisms of prejudice and exclusion of the black population from schools and the formal labor market, as well as access to social objectification, have been reinforced throughout the history of Brazil's social and economic construction. As a result, today, the black population still performs the lower social status and wage level functions, such as the cleaning service. The introduction of black people into the labor market reinforces the historical roots of the country.

In the capitalist transition, it was considered incompatible with salaried work, highlighting the European immigration policy, which left black people at the sidelines of more vigorous activities, leaving out unattractive activities, with low wages and poor conditions²³. It is important to emphasize, however, that white Brazilian workers receive wages 45% higher than black workers, even if they perform the same function²¹.

The fact that Spain has a household income and a habit of leisure (traveling and going to bars)

higher than in Brazil is justified by the Human Development Report of the United Nations Program, since the Spanish nation ranks 26th among the one hundred and eighty-eight countries evaluated and evidences a high Human Development Index (HDI) of 0.876. Brazil has stagnated in the ranking since 2014, ranking 79th, with an HDI of 0.754. The report recognizes that there have been substantial but not universal improvements in the last 25 years, because not every Brazilian citizen is benefited²⁴.

Another fact to consider is related to transportation expenses. In Spain, where the research took place, the worker has the option of using public transport: bus, subway, or bicycle. A governmental plan is in place that encourages the use of public bicycles, the creation of bicycle lanes and use of rechargeable cards for low-cost buses²⁵. This is not the case in the Brazilian city, which does not have public bicycles and the bus fare burdens workers²⁶. Home-work travel time is

Table 4. Distribution of the frequency of working conditions among Brazilian and Spanish cleaning services workers. 2017.

Working conditions	Brazil cleaning services	Spain cleaning services	p-value
	N = 78 (%)	N = 39 (%)	
Length of service at the institution			0,00
Up to 5 years	55,1	2,6	
6-10 years	23,1	0,0	
10 years and over	21,8	97,4	
Second job			0,00
Yes	26,9	2,6	
No	73,1	97,4	
Workload			0,00
35 hours/week	0,0	100,0	
42 horas/week	100,0	0,0	
Work accident			0,22
No	46	56,4	
Yes	32	43,6	
On-the-job training			0,47
Rarely/never	17,9	12,8	
Sometimes/often	82,1	87,2	
Work satisfaction			0,01
Satisfied*	67,9	89,7	
Unsatisfied**	32,1	10,3	
Work classification			0,00
Active work	14,1	38,5	
Passive work	29,5	23,1	
Very demanding	46,2	15,4	
Not demanding	10,3	23,1	

* Grouping satisfied/very satisfied ** Grouping unsatisfied/very unsatisfied

higher for Brazilians, which causes physical and mental exhaustion.

Regarding health, most are overweight, and the visual impairment complaint is more significant among the Spaniards, which is understandable since they are in an older age group²⁷. Overweight (BMI > 5) and obesity in the population is a global concern and the WHO encourages countries to create alternatives for decreasing rates that grow with age. Bicycle lanes and public bicycles are alternatives built by the Spaniards. In this study, overweight had a higher percentage (53.8%) than the 2014-2015 study, which found 32.1% among Spanish women. It should be noted that the two studies were based on self-reported information and may have underestimated values²⁸.

The Spaniards smoke more than the Brazilians. Although Spain has implemented public tobacco control policies, not all institutions ad-

hered, because the law itself allows smoking in some enclosed spaces²⁹. Tobacco is the number one cause of preventable death in Europe. In Spain, its use produces more than 50,000 deaths annually³⁰. The highest percentage of smokers in Spain is between 25 and 39 years of age (40%) and 40-54 years of age (39%), according to the European *El Periodico* Report of May 29, 2015³¹, and corroborates the predominant age group in this study. Tobacco use has been reduced in Spain, but with a lower percentage than in Brazil. Brazilians have adhered to the campaign against cigarettes better. After legislation, the rate of smokers among women fell by 46%. Currently, 10.8% of Brazilians still have a smoking habit, with men smoking more (12.8%) than women (9%).

Allergies were also more present among the Spaniards. Dermatitis is common in Europe. Contact dermatitis had an incidence of 10.1% among the 1,213 patients seen in a dermal aller-

gy unit at a Hospital in Valencia. The incidence was 11.4% among the cleaning workers. The use of chemicals, common in this occupation, may favor dermatitis when personal protective equipment is not used properly³².

Another factor that causes a stir is complaints of muscular pain, low back pain, osteoarticular problems and swelling in the legs, common among the workers of both countries, although those of Brazil are younger and with lower length of service. This repetitive activity, carried out individually, which includes the cleaning of rooms and bathrooms and the removal of the trash bags from the units, requires physical effort and favors the illness. Therefore, these complaints are common among them and are work-related, growing with poor working conditions³³. Prolonged exposure due to the length of service in these activities may have contributed to the occurrence of such complaints.

The percentage of CMD among Brazilians was higher (25.6%) when compared to Spaniards. In a study performed with HCS workers and using the same cutoff point, Brazilians were found to have an index of 29.3%¹⁵. In Spain, one would expect to see 9.6% to 19.9% of mental disorders³⁴. A review study carried out in Brazil found a high percentage of CMD among women and workers ranging from 20% to 56% the same found in this study. A population study conducted in southern Brazil found that 20.5% of women scored above the cut-off number for CMD³⁵. In Ethiopia, it was 25.9%, a percentage close to that found in this study³⁶. The most prevalent group of symptoms for workers in both countries was feeling nervous, tense and worried in the realm of Depressive Mood, corroborating another study conducted in Brazil with HCS workers¹⁵. It is estimated that 4.4% of the population suffers from depressive disorders worldwide. In Europe, according to WHO, the prevalence is estimated at 5.2%, and 5.8% in Brazil³⁷. Besides the depressive/anxious mood, Brazilian workers also show decreased vital energy, revealing physical and mental exhaustion, since they *tire easily and have difficulty making decisions* were more common responses. The presence of some mental disorder contributes to an increase in the rate of absenteeism or presentism at work, with mood disorders generally leading to higher rates in countries such as Belgium, Germany, Italy and Spain³⁴.

Somatic symptoms were the second most prevalent among Spaniards, and frequent headache and bad digestion were most pointed complaints. These symptoms show a negative impact

on health and quality of life since they are signs of mental distress that may be associated with social, family, work, or economic relationships. The inability to adjust to the demands results in symptoms such as functional changes and generates suffering³⁸.

While the realm that incorporates depressive thoughts has not been the most prevalent, it is noteworthy that 10.3% of Brazilian workers have already thought about ending their own lives and 25.6% have lost interest in things. These thoughts are of concern since suicide has its genesis in mental processes with a causal connection with work, especially after changes in production processes, promoting poor working conditions, lack of solidarity and even bullying. Countries such as Japan and France have found a relationship between suicide and work mainly because of the excess demanded by large companies³⁹. Not much data about it is found in Brazil, but death by suicide has increased. In São Paulo, a study showed a correlation between work activity, especially among employed persons and death due to self-inflicted harm, which corroborates other studies carried out in Japan and the U.S., where work is also stressful and its conditions are poor⁴⁰. Suicide has always been related to workers exposed to stressful situations, such as police officers, firefighters or low-income jobs with excessive pressure and responsibility, with low autonomy, and has now been reported in other spaces, including hospitals, and Medicine is the most at risk of suicide³⁹.

Although Brazilians have lower length of service in the institution compared to the Spaniards, they have a broader workload, as well as another employment relationship, which helps to understand the realm of the Decreased Vital Energy. Besides having a shorter workload, Spanish workers are entitled to leave rights, unlike Brazilians. This workload is even higher if one considers domestic work imputed to women (cooking, washing, ironing), which overloads them with double or triple working hours⁴¹.

Brazilian HCS work is characterized as of psychic risk since it is passive (with limited autonomy) and with high psychological demand. Also, 32% of workers are dissatisfied, which is not the case among Spanish workers.

Outsourcing led to a decrease in HCS professionals from eight public hospitals in Madrid. Some hospitals had a reduction of 32% and lower wages paid to newly hired workers. Another factor, according to the Spanish union, which has contributed to the decreasing number of jobs

was the approval of the Temporary Employment Regulation (ERTE), which allows for temporary recruitment, leading to a 28% work reduction over three years⁴².

Although there has been no research on the number of employees before outsourcing, this hospital requires outsourced companies to maintain the same staff, although, over the years, the number of attendances and beds increase. In this hospital in Seville, workers receive 2% of the base salary each year. The company has the obligation not to allow gender discrimination and to safeguard salary gaps to those who occupy positions of supervision or are in charge⁴³.

The salary incentive for the length of service is not a reality in Brazil. Also, there are many layoffs among these workers. Even in the face of dissatisfaction, the fact that these workers remain on the job may be related to the lack of choice and conformity, a common condition among them⁷.

Working conditions interfere positively or negatively in mental health and the support of service coworkers and caregivers present in this study is considered a protective factor for mental health. Poor working conditions lead to a higher percentage of workers with psychosocial risks and, in the case of females, even more when compared to males³⁸.

The issues related to workers' mental health in Brazil have become increasingly evident in the field of worker's health, which is closely associated with the organization and management of services. The different levels of distress imposed by working conditions require investments in the knowledge of the situation, to transform the reality experienced by these workers⁴⁴.

While the understanding of mental health in the work context is very complicated, due to the many influencing factors, in the last decades, many of them inherent in work have contributed to this end. One can cite, for example, the division of tasks and the separation between doing and thinking, which is very much present in hos-

pital services, harming the identity of professionals and producing a progressive alienation⁴⁵.

Conclusions

Considering that work signification is built collectively and that organization and social relationships are essential in this process, we can understand that the risk of illness among Brazilian workers is higher.

Comparing aspects related to living conditions, Spanish workers are older, predominantly white, and with a higher household income when compared to Brazilians. Regarding the health conditions, Spaniards smoke more, have a higher visual impairment and level of allergies than the Brazilians. In contrast, Brazilians have higher CMD rates.

In a more detailed analysis of the SRQ-20, it is found that Brazilians have higher scores in all realms evaluated (depressive/anxious mood, somatic symptoms, decreased vital energy, depressive thoughts). These data can be explained in part by working conditions since Spaniards have been working in the same activity longer, with less workload and do not hold two jobs, as observed in more than a quarter of Brazilian workers. Moreover, almost 40% of Spaniards consider their work to be active (autonomy and high psychological demand).

In this way, Brazilian workers are found to be in worse off living, working and mental health conditions compared to those of the Spaniards. Only a few aspects of health conditions were worse among the Spaniards, which probably may be due to their advanced age group.

These data refer to reflections on the historical context and the social and economic conditions of each country. Even if the activities carried out and the work contracts are similar, the ways of living, working and getting sick differ from country to country.

Collaborations

MRA Rocha participated in the elaboration of the project, data collection; data analysis and writing; MJS Marin participated in the elaboration of the project, data analysis and final report; J Macias-Seda participated in the preparation of the data analysis project and corrections for the final report.

References

1. Petean E, Correa da Costa ALR, Ribeiro RLR. Repercussões da ambiência hospitalar na perspectiva dos trabalhadores de limpeza. *Trab Educ Saude* 2014; 12(3):615-635.
2. Antunes R, Praun L. A sociedade dos adoecimentos no trabalho. *Serv Soc Soc* 2015; (123):407-427.
3. Schimith MD, Brêtas ACP, Simon BS, Brum DJT, Alberti GF, Bidó MLD, Gomes TF. Precarização e fragmentação do trabalho na estratégia saúde da família: impactos em Santa Maria (RS). *Trab Educ Saude* 2017; 15(1):163-182.
4. Druck G. A terceirização na saúde pública: formas diversas de precarização do trabalho. *Trab Educ Saude* 2016; 14 (Supl. 1):15-43.
5. Ceolin GF. Crise do capital, precarização do trabalho e impactos no Serviço Social. *Serv Soc Soc* 2014; (118):239-264.
6. Assunção-Matos A, Bicalho PPG. O trabalho, a terceirização e o legislativo brasileiro: paradoxos e controvérsias. *Rev Psicol Organ Trab* 2016; 16(2):120-129.
7. Pereira HA, Albuquerque RS, Moraes AFG. Terceirização e precarização: um estudo com terceirizados de serviços gerais na Universidade Federal da Paraíba. *Rev Principia* 2015; (26):106-115.
8. Chagas D. Riscos psicossociais no trabalho: causas e consequências. *Rev INFAD Psicol* 2015; 1(2):439-446.
9. Alves G. Terceirização: o futuro do trabalho no Brasil. *Trab Educ Saude* 2017; 15(2):337-339.
10. Brasil. Lei nº 13.429, de 31 de Março de 2017. Dispõe sobre o trabalho temporário nas empresas urbanas e dá outras providências e dispõe sobre as relações de trabalho na empresa de prestação de serviços a terceiros. *Diário Oficial da União* 2017; 31 mar.
11. Gómez MV. A reforma da Espanha que inspirou Temer: mais empregos (precários) e com menores salários. *El País* 2017; abr 27.
12. Albuquerque GSC, Silva MJS. Sobre a saúde, os determinantes da saúde e a determinação social da saúde. *Saude Debate* 2014; 38(103):953-965.
13. Nunes APN, Barreto SM, Gonçalves LG. Relações sociais e autopercepção da saúde: projeto envelhecimento e saúde. *Rev Bras Epidemiol* 2012; 15(2):415-428.
14. Moraes RSM, Silva DAS, Oliveira WF, Peres MA. Social inequalities in the prevalence of common mental disorders in adults: a population-based study in Southern Brazil. *Rev Bras Epidemiol* 2017; 20(1):43-56.
15. Marconato CS, Magnago ACS, Magnago TSBS, Dalmolin GL, Andolhe R, Tavares JP. Prevalence and factors associated with minor psychiatric disorders in hospital housekeeping workers. *Rev Esc Enferm USP* 2017; 51:e03239.
16. Araújo TM, Graça CC, Araújo E. Estresse ocupacional e saúde: contribuições do modelo demanda-controle. *Cien Saude Colet* 2003; 8(4):991-1003.
17. Magnago TSBS, Lisboa MTL, Griep RH, Zeitoune RCG, Tavares JP. Condições de trabalho de profissionais da enfermagem: avaliação baseada no modelo demanda-controle. *Acta Paul Enferm* 2010; 23(6):811-817.
18. Teixeira JRB, Boery EN, Casotti CA, Araújo TM, Pereira R, Ribeiro ÍJS, Rios MA, Amorim CR, Moreira RM, Boery RNSO, Sales ZN. Associação entre aspectos psicossociais do trabalho e qualidade de vida de mototaxistas. *Cad Saude Publica* 2015; 31(1):97-110.

19. Martins JTR, Ribeiro RP, Bobroff MCC, Marziale MHP, Robazzi MLCC, Mendes AC. Meaning of workload on the view of cleaning professionals. *Acta Paul Enferm* 2013; 26(1):63-70.
20. Millan Vazquez de La Torre MG, Santos Pita MP, Perez Naranjo LM. Análisis del mercado laboral femenino en España: evolución y factores socioeconómicos determinantes del empleo. *Papeles Poblac* 2015; 21(84):197-225.
21. Instituto Brasileiro de Geografia e Estatística (IBGE). *Desigualdade de renda atinge regiões, gêneros, cores e escolaridade*. Rio de Janeiro: IBGE; 2017.
22. Gómez MV. La reforma laboral cumple cinco años: más empleo, pero de peor calidad [Periódico da Internet]. *El País* 2017 [acessado 2018 Maio 15]; 10 fev. Disponível em: https://elpais.com/economia/2017/02/09/actualidad/1486672169_076173.html
23. Martins TCS. O negro no contexto das novas estratégias do capital: desemprego, precarização e informalidade. *Serv Soc Soc* 2012; 111:450-467.
24. Programa das Nações Unidas para o Desenvolvimento (PNUD). *Relatório o PNUD destaca grupos sociais que não se beneficiam do desenvolvimento humano*. Brasília: PNUD; 2017.
25. Transportes público de Sevilla [página de Internet]. Sevilla: Ayuntamiento; 2017 [acessado 2018 Maio 18]. Disponível em: <https://www.sevilla.org/ayuntamiento/competencias-areas/area-de-seguridad-movilidad-y-fiestas-mayores/dgm/transportes-publicos-de-sevilla>
26. Bauru: nova tarifa de circular entrará em vigor neste sábado. *JCNET* [periódico da Internet] 2017; ago 27. [acessado 2018 Maio 10]. Disponível em: <https://www.jcnet.com.br/Geral/2017/08/bauru-nova-tarifa-de-circular-entrara-em-vigor-nessa-sexta.html>
27. Luiz LC, Rebelatto JR, Coimbra AMV, Ricci NA. Associação entre déficit visual e aspectos clínico-funcionais em idosos da comunidade. *Rev Bras Fisioter* 2009; 13(5):444-450.
28. Aranceta-Bartrina J, Pérez-Rodrigo C, Ramos-Carrera N, Lázaro-Masedo S. Prevalencia de obesidad general y obesidad abdominal en la población adulta española (25-64 años) 2014-2015: estudio ENPE. *Rev Esp Cardiol* 2016; 69(6):579-587.
29. Munhoz EF. *Evaluación de las políticas de control del tabaquismo en España (Leyes 28/2005 y 42/2010): revisión de la evidencia*. Barcelona: Ministerio de Sanidad y Política Social; 2017.
30. Jimenez-Ruiz C. La prevalencia del tabaquismo de en España: el papel de la legislación. *Bol Hosp V del Mar* 2015; 71(2):67-69.
31. España, entre los países con más fumadores pese a la caída desde 2012. *El Periodico*; 2015 may 29.
32. Subriabre-Ferrer D, Zaragoza-Ninet V, Ortiz-Salvador JM, Giacaman-vonder Weth MM, Blasco-Encinas R, Sierra-Talamantes I. Dermatitis de contacto profesional, estudio clínico-epidemiológico entre los años 2011-2015. *Med Segur Trab* 2016; 62(245):318-326.
33. Cardoso ACM. O trabalho como determinante do processo saúde-doença. *Rev Sociol USP* 2015; 27(1):73-94.
34. European Union. *World Mental Health. The burden of mental disorders in the European Union* [homepage on the Internet]. [acessado 2017 Mar 10] Disponível em: http://www.eu-wmh.org/PDF/FactSheet_Burden.pdf
35. Alves AP, Pedrosa LAK, Coimbra MAR, Miranzi MAS, Vanderlei José Hass VJ. Prevalência de transtornos mentais comuns entre profissionais de saúde. *Rev Enferm UERJ* 2015; 23(1):64-69
36. Gelaye B, Lemma S, Deyassa N, Bahretibeb Y, Tesfaye M, Berhane Y. Prevalence and Correlates of Mental Distress Among Working Adults in Ethiopia. *Clin Pract Epidemiol Ment Health* 2012; 8:126-133.
37. Organização Pan-Americana da Saúde (OPAS). *Aumenta o número de pessoas com depressão no mundo*. Brasília: OPAS; 2017.
38. Costa MTP, Borges LO, Barros SC. Condições de trabalho e saúde psíquica: um estudo em dois hospitais universitários. *Rev Psicol Organ Trab* 2015; 15(1):43-58.
39. Venco S, Barreto M. O sentido social do suicídio no trabalho. *Rev TST* 2014; 80(1):294-302.
40. Ceccon RF, Meneghel SN, Tavares JP, Lautert L. Suicídio e trabalho em metrópoles brasileiras: um estudo ecológico. *Cien Saude Colet* 2014; 19(7):2225-2234.
41. Schmidt NT. A dupla jornada de trabalho: reflexões sobre o vínculo da mulher com o trabalho doméstico em contexto de ensino e aprendizagem de sociologia para o nível médio. *Ens Sociol Debate* 2012; 1(1):1-11.
42. Fonseca D. Los hospitales pierden un tercio del personal de limpieza en tres años. *El País* [página de Internet] 2015; nov 11 [acessado 2017 Mar 11]. Disponível em: https://elpais.com/ccaa/2015/11/10/madrid/1447181846_822146.html
43. Ferroser Servicios Auxiliares. *Base documental de negociación colectiva*. Sevilla: Andalucía; 2013.
44. Leão LHC, Minayo-Gomez CM. A questão da saúde mental na vigilância em saúde do trabalhador. *Cien Saude Colet* 2014; 19(12):4649-4658.
45. Masumoto LK, Faiman CJS. Saúde mental e trabalho: um levantamento da literatura nacional nas bases de dados em Psicologia da Biblioteca Virtual de Saúde (BVS). *Saúde, Ética & Justiça*. 2014; 19(1):1-11.

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