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# PRESENTEEISM: ANALYSIS OF THE PHENOMENON IN A SAMPLE OF PORTUGUESE NURSES

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Abstract: Objective: To evaluate which sociodemographic variables (age, gender, educational qualifications, organization, seniority in the organization, seniority in the role, employment relationship, work regime and professional category) are best related to presenteeism.

**Materials and methods:** The study presented descriptive-correlational, quantitative, cross-sectional and retrospective. The sample is probabilistic and the universe included all approximately 67 thousand nurses who work in Portuguese health institutions, whether public, private or public-private partnerships. The inclusion criteria were nurses with clinical and/or management activity in institutions in the aforementioned modalities, and nurses working in teaching activities in higher education institutions, on an exclusive basis, were excluded from this study. Two scales were applied to assess presenteeism, the SPS-6 and the WLQ-8.

Results: The majority of nurses who responded to the questionnaire are female (86.8%), aged 40 or over (59.9%), graduates (65.6%), who live in the northern region of the country (31.4%), who work in public organizations (85.5%), in differentiated health care units (52.6%), with a contractual employment contract in public functions (63.7%). 53.3% of participants are specialist nurses and 72.4% of respondents had no previous illness. The variables that best correlated with presenteeism were the female gender, since the results obtained point to higher values of avoided distraction in the female gender, the organization where they work (public), where the values obtained are higher in the completed work dimension (SPS-6) and in the overall SPS-6 scale and the presence of a previous disease condition, with statistically significant results being obtained for the dimensions work completed, distraction avoided and in the overall WLQ-8 Scale.

Conclusion: The results presented may constitute a challenge for change for policy makers, managers and health professionals, in order to address presenteeism with the creation of occupational health programs aimed at the needs of nurses. Other measures include flexible working hours, work policies that promote employee retention, and a strong commitment to training and training nurses to ensure better performance and involvement in the organizational culture.

**Keywords:** Presentism, work performance, nurses

### **FRAMEWORK**

According to estimates from the International Labor Organization (ILO), a worker dies as a result of an accident at work or illness every 15 seconds. Every day, around 6,300 workers die in workplace accidents or work-related illnesses, adding up to 2.3 million deaths per year. Additionally, more than 313 million workers suffer non-fatal occupational injuries each year, or in other words, 860,000 people are injured on the job every day(IGAS, 2018) (OIT, 2019).

In addition to the tremendous human cost, estimates have identified a very significant economic impact on occupational health and safety: 4% of the total global gross domestic product is lost annually (equivalent to \$2.8 billion) through costs related to working time. loss, interruptions in production, treatment of injuries, occupational illnesses, rehabilitation and compensation for all lost work (OMS, 2010).

According to data from EUROSTAT, around 5,700 people die each year in the European Union as a result of accidents at work, and it is estimated that every three and a half minutes a person dies from work-related causes. This way, safety and health at work increasingly emerge, not only as a legal obligation, but mainly as a necessity, at

various levels, intensifying its importance in organizations (IGAS, 2018).

In Portugal, the promotion and prevention of safety and health at work are regulated by Law Number: 102/2009, of September 10th, amended and republished by Law Number: 3/2014, of January 28th, with the updates introduced by DL Number: 88/2015, of May 28th, by Law Number: 146/2015, of September 9th and by Law Number: 28/2016, of August 23rd (Portuguese Parliament, 2015).

Addressing this immense burden caused by disease, economic costs and long-term loss of people resulting from unhealthy workplaces constitutes an extraordinary challenge for government and policy makers in health, social sectors of the State and health professionals. In addition to the loss of human resources, the phenomenon whereby individuals go to work despite being in a clinically unfavorable situation can also occur – presenteeism, which can be reflected in the loss of productivity and the compromise of job security for themselves and to the people you interact with (Yang et al., 2020).

Presenteeism thus describes the phenomenon in which people go to work despite being limited in their health condition, which would normally require rest and absence from work, resulting in the inability to function at full capacity (d'Errico et al., 2013); (Sendén et al., 2016); (Johansson & Lundberg, 2004); (Lohaus & Habermann, 2019); (Schneider et al., 2018). There are other definitions of presenteeism, which describe behavior as a loss of productivity due to the presence of physical, mental or emotional problems(Dickson, 2013).

This phenomenon has consequences for both the individual and the organization. The evidence has mainly highlighted the negative effects of presenteeism (Lohaus & Habermann, 2019). However, positive effects can also be found, namely an increase in self-

esteem due to the perception that a person is highly productive and capable of working despite the illness, which can eventually increase the chances of career advancement or gain the admiration of colleagues. work. The positive effects for the organization are felt through a higher level of productivity of a sick employee, compared to that of an absent worker. If workers' tasks are highly interdependent, this may also imply that affected employees will be able to maintain a higher level of performance, in particular, compared to absence. However, in most cases, it is expected that the performance of a sick employee will be lower when compared to the performance of a healthy person (Johns, 2011).

There are three distinct models to explain the processes that lead to presenteeism. The first is Johansson and Lundberg's illness flexibility model (Johansson & Lundberg, 2004) which suggests that attendance requirements, i.e. the negative consequences that employees face due to absence, and adjustment latitude, for example: modifying workloads, can determine presence or absence due to illness. Likewise, Aronsson and Gustafsson (Aronsson et al., 2000) described a second model based on two types of factors that influence presenteeism: personal factors (e.g. economic-financial situation and lack of individual limits) and work factors (for example: control of work rhythm and replaceability). Finally, the third model by (Johns, 2011) proposes that, when a health event interrupts productivity, it triggers a choice between presenteeism and absenteeism, with the final decision being influenced by work factors (e.g. ease of replacement in the workplace) and by individual factors (e.g. personality and work attitudes).

Regarding presentism, there are two distinct lines of thought that were developed simultaneously (Johns, 2011). The first,

North predominant among American health researchers and consultants, defines presenteeism as the loss of productivity at work due to individual health problems (Burton et al., 2006); (Skagen & Collins, 2016); (Zhang et al., 2012). According to this line, health conditions include behaviors that are harmful to health, risky behaviors, acute health problems (e.g. common viral respiratory infection) and more serious chronic illnesses (e.g. diabetes, arthritis or irritable bowel syndrome). The focus of this line of thought and research is analyzing the impact of health conditions and measuring productivity loss, looking for clinical interventions that can effectively reduce these losses. However, (Johns, 2011) criticizes this approach as he considers that presentism is defined only by its consequences.

In contrast to the first approach, there is the European current of thought whose research comes mainly from Scandinavian countries and the United Kingdom. In this model of thinking, research on presenteeism mainly focuses on why employees show up for work when their health status would give them a legitimate reason to stay at home (Bergström et al., 2009); (Elstad & Vabø, 2008); (Sendén et al., 2016); (Hansson et al., 2006). According to this model, the main cause of presenteeism behavior is the subjective insecurity that employees have about losing work, such as redundancies in a company (Caverley et al., 2007); (Johansson & Lundberg, 2004). Another focus that the European approach conveys is the consequences of presenteeism for an individual's health (Bergström et al., 2009); (Hansson et al., 2006); (Cooper & Lu, 2016). For (Johns, 2011) the European model is advantageous over the North American one, since it does not refrain from attributing reasons or consequences to the act of presentism and, therefore, does not confuse causes and effects (Lohaus & Habermann,

2019).

The objectives of this study were to obtain knowledge about the issue of presenteeism. In the scientific and social sphere, carrying out this study meets the need to carry out a diagnosis of the situation regarding presenteeism in Portuguese nurses to understand the dimension of the problem, since existing studies do not have a national scope, and studies that There are samples with very specific characteristics. Inherent to this need is the fact of obtaining quality indicators that raise awareness among managers, leaders and all agents involved in decision-making within the scope of health policies.

### MATERIALS AND METHODS

The study presented is quantitative, descriptive-correlational, cross-sectional and retrospective. The sample is probabilistic and the universe included all nurses who work in Portuguese health institutions, whether public, private or public-private partnerships. The inclusion criteria were nurses with clinical and/or management activity in institutions in the aforementioned modalities, and nurses working in teaching activities in higher education institutions, on an exclusive basis, were excluded.

Presenteeism was assessed using the Portuguese versions assessment of two instruments, the Work Limitations Questionnaire (WLQ-8) (Lerner et al., 2003) and the Stanford Presenteeism Scale (SPS-6) (Koopman, C. Koopman, C., Pelletier, K., Sharda, C., Berger, M., Turpin, R., Hackleman, P., Gibson, P., Holmes, D. & Bendel, T. (2002). Stanford Presenteeism Scale: Health Status and Employee Productivity. Journal of Occupational and Environmental Medicine, 2002). Data collection was done using an electronic form, model Google Forms®, and the final sample was 424 nurses.

In order to systematize and highlight the

information provided by the data, descriptive statistics and inferential statistics were used. The data were processed electronically, using the statistical processing computer application Statistical Package for the Social Science (SPSS, version 25) for Windows\*.

Regarding ethical-formal procedures, for the study to be feasible, several steps were taken. First, a research project was drawn up and presented to supervisors in order to obtain guidance, supervision and monitoring of the study to be carried out. Authorization was then sought from the authors of the Portuguese scales for their use in this study and an ethical opinion was requested by the Ethics Committee of the Health Sciences Research Unit: Nursing (UICISA: E) of the Escola Superior de Enfermagem de Coimbra (Ethical opinion number: 522/09-2018). Finally, a new request for collaboration in the investigation was addressed to the Research and Development Committee of the Order of Nurses, based on Opinion Number: 51/2013 of the Nursing Council.

In this study, ethical principles based on respect and human dignity were followed, namely respect for free and informed consent, respect for vulnerable groups, respect for private life and the confidentiality of personal information, respect for justice and equity, the balance between advantages and disadvantages and the reduction of disadvantages (Fortin, 2009).

Anonymity and confidentiality were also guaranteed, with the data obtained by the study remaining confidential. The main researcher guaranteed the security of the data, as the database was safeguarded by a password that only he had access to.

For the present study, the following research hypotheses were established:

H1: there is a correlation between presenteeism and sociodemographic variables;

H2: there is a correlation between presenteeism and clinical variables
H3: there is a correlation between presenteeism and professional variables.

### **RESULTS**

The data we present allow us to characterize the sample under study in terms of sociodemographic variables (table 1).

We found that the majority of the 424 respondents (86.8%) were female, 35.4% were between 30 and 39 years old, 65.6% of nurses did not have an educational qualification higher than a bachelor's degree and 85.8% developed their activity in public organizations, however 52.6% work in hospital institutions and 30.9% in primary health care.

On average, they had remained in the organization for 16.3±9.6 years and had been working for 18.3±9.1 years. The majority of the sample members (63.7%) had a Public Service Employment Contract and 34.4% had an Individual Employment Contract.

We also found that 45.3% did not have any specialty in nursing and the most frequent professional category (39.9%) was Nurse. Around three out of four nurses (72.4%) stated that they had no previous illness, although around one in four said they had a disease diagnosed more than 6 months ago.

Table 2 presents the results obtained by applying SPS-6.

With regard to the presenteeism scale obtained by the SPS-6, data analysis allows us to verify that 30.2% of nurses completely disagreed with the statement according to which "due to my health problem, the difficulties that are normally part of of my work were more complicated to manage" (SPS-6[1]). In the second item, 38.2% of professionals completely agreed with the fact that they managed to complete their difficult work tasks. Regarding items 3 and 4, it appears that, respectively, 34.7% and 38.2% totally

disagreed with the fact that health problems had inhibited them from taking pleasure in work and that they had felt desperate regarding to carry out certain work tasks. In item SPS-6[5], 30.4% of nurses completely agreed that they were able to concentrate on achieving their goals, despite the health problem. Finally, regarding the last item, more or less the same percentage (27-28%) neither agreed nor disagreed or slightly agreed with the fact that they felt they had enough energy to complete all the work, despite the health problem.

Table 3 presents the results obtained by applying the WLQ-8.

Regarding the analysis of the WLQ-8 scale, the distribution of the nurses' responses allows us to state that, respectively, 39.9% and 50.2% totally agreed with the statements regarding working the requested hours and starting the tasks as follows. arriving at work. Regarding the WLQ-8[3] item, the distribution was practically uniform between the neutral position and the two levels of agreement. Regarding the remaining items, most nurses agree with the statements.

Therefore, using the Mann-Whitney U test, we compared presenteeism scales according to gender (Table 4).

There is only a statistically significant difference in the distraction avoided dimension of the SPS-6 (p = 0.023). Comparing the values of central tendency measures (ordinal mean and median) it is concluded that, in situations of health problems, female nurses tend to present higher values in avoided distraction than male nurses.

Comparing, then, the values observed in the presenteeism scales depending on the organization in which the nurse works, we obtained the results shown in Table 5.

We found that there are statistically significant differences in the work completed dimension (p = 0.006) and overall (p = 0.022)

Variable	s	n	%
Gender			
Gender	Masculine	56	13.2
	Feminine	368	86.8
Age			
1180	20 – 29	20	4.7
	30 – 39	150	35.4
	40 – 49	126	29.7
	50 – 59	114	26.9
	≥ 60	14	3.3
Literary	abilities		
Litterary	Bachelor's Degree	7	1.7
	Graduation	278	65.6
	Master's degree	133	31.4
	Doctorate	6	1.4
Caaamam	his location	-	
Geograp	hic location North	133	31.4
	Center	110	25.9
	Lisbon and Tagus Valley	121	28.5
	Alentejo	17	4.0
	Algarve	20	4.7
	Azores	8	1.9
	Madeira	15	3.5
Oncomin			
Organiza	ation where you work Public	364	85.8
	Private	30	7.1
	Public-Private Partnership (PPP)	30	7.1
	-	30	7.1
Organiza	ation typology	121	20.0
	Primary Health Care	131	30.9
	Differentiated Healthcare	223	52.6
	Integrated Continuing Care/Palliative Care Private Social Solidarity Institution	10	1.7 2.4
	Private Healthcare Institution	15	3.5
	Public Institute	38	9
0 1 1		30	,
Seniority	y in the Organization (years)	102	24.1
	< 10 10 – 19	102 168	24.1 39.6
	20 – 29	107	25.2
	30 – 39	46	10.9
	≥ 40	1	0.2
			0.2
	$\overline{\mathbf{x}} = 16.33;$ Md = 15.00; s = 9.58; $\mathbf{x}_{\min} = 1;$ $\mathbf{x}_{\min}$	$_{\text{máx}} = 43;  p < 0.001$	
Seniority	y in Position (years)		
	< 10	70	16.5
	10 – 19	161	38.0
	20 – 29	141	33.2
	30 – 39	49	11.6
	≥ 40	3	0.7
	$\overline{\mathbf{x}} = 18.26;$ Md = 18.00; s = 9.13; $\mathbf{x}_{min} = 1;$ $\mathbf{x}_{n} = 1$	p < 0.001	
Labor Bo	ond		
	Public Service Employment Contract (CTFP)	270	63.7
	Individual Employment Contract (CIT)	146	34.4
	Provision of Services/Green Receipts	7	1.7
	The person did not answer	1	0.2
Professio	onal title awarded by the Order of Nurses		
	Nurse	198	46.7
	Specialist Nurse	226	53.3
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Specialty in Nursing		
No specialty	192	45.3
Specialist in Maternal and Obstetric Health	47	11.1
Specialist in Child and Pediatric Health Nursing	35	8.3
Specialist in Mental Health and Psychiatric Nursing	57	13.4
Rehabilitation Nursing Specialist	30	7.1
Specialist in Medical-Surgical Nursing	40	9.4
Community Nursing Specialist	23	5.4
Professional category		
Nurse	169	39.9
Graduate Nurse	96	22.6
Specialist Nurse	128	30.2
Chief Nurse	4	0.9
Supervisor Nurse	24	5.7
Nurse Director	3	0.7
Previous Disease Condition		
No	307	72.4
Yes, diagnosed less than 6 months ago	17	4.0
Yes, diagnosed more than 6 months ago	100	23.6

Table 1: Socio-demographic characterization

Devpd: standard deviation; Min-Max: minimum-maximum

	I disagree totally	2	2 3 4		I totally agree
	N	N	N	N	N
	%	%	%	%	%
[1] Due to my health problem, the difficulties that are normally part of my work were more complicated to manage.	128	67	81	82	66
	<b>30.2</b>	15.8	19.1	<b>19.3</b>	15.6
[2] Despite my health problem, I managed to complete difficult work tasks.	51	17	73	121	162
	12.0	4.0	17.2	<b>28.5</b>	<b>38.2</b>
[3] My health problem prevented me from taking pleasure in work.	147	61	98	70	48
	<b>34.7</b>	14.4	<b>23.1</b>	16.5	11.3
[4] I felt desperate in carrying out certain work tasks due to my health problem.	162	70	87	62	43
	<b>38.2</b>	16.5	<b>20.5</b>	14.6	10.1
[5] At work, I was able to focus on achieving my goals, despite my health problem.	48	20	103	124	129
	11.3	4.7	24.3	29.2	30.4
[6] I felt energetic enough to complete all my work despite my health problem.	49	57	118	116	84
	11.6	13.4	<b>27.8</b>	<b>27.4</b>	19.8

Table 2 – Results from the Stanford Presenteeism Scale (SPS-6)

	Disagree totally	2	3	4	Totally agree
	N	N	n	n	n
	%	%	%	%	%
[1] Work the hours requested of me.	29	25	77	124	169
	6.8	5.9	18.2	29.2	39.9
[2] Start your tasks as soon as you arrive at work.	34	19	38	120	213
	8.0	4.5	9.0	28.3	50.2
[3] Do the same movements repeatedly during work.	53	67	103	101	100
	12.5	15.8	24.3	23.8	23.6
[4] Use work equipment (i.e.: telephone, pen, keyboard, mouse).	30	27	70	130	167
	7.1	6.4	16.5	30.7	39.4
[5] Focus on work.	22	19	62	159	162
	5.2	4.5	14.6	37.5	38.2
[6] Help others finish work.	22	24	77	154	147
	5.2	5.7	18.2	36.3	34.7

[7] Develop the amount of work requested of me.	18	30	64	140	172
	4.2	7.1	15.1	33.0	40.6
[8] Feeling like I must have done what I am capable of doing.	29	37	74	141	143
	6.8	8.7	17.5	33.3	33.7

Table 3 – Results of the Work Limitations Scale (WLQ-8)

Scales Gender	n			Md	Z	p
SPS – Distraction avoided					-2.277	0.023
Masculine	56	178.14	2.21	2.00		
Feminine	368	217.73	2.62	2.67		
SPS – Work completed	•••••	••••••••	••••••	•••••	-0.438	0.662
Masculine	56	205.87	3.48	3.67		
Feminine	368	213.51	3.58	3.67		
SPS – Global	••••••	••••••••	•••••••	***************************************	-1.339	0.181
Masculine	56	232.77	3.63	3.50		
Feminine	368	209.42	3.48	3.33		
WLQ	•••••	••••••••	••••••	•••••	-0.607	0.544
Masculine	56	203.26	3.75	4.00		
Feminine	368	213.91	3.87	4.00		

Table 4 - Comparison of the SPS-6 and WLQ-8 scales according to gender

	n			Md	z	p
Organization where you work						
SPS - Distraction avoided					-0.183	0.855
Public	364	217.98	2.58	2.67		
Private/Public-Private Partnership	60	179.25	2.56	2.67		
SPS – Work completed		•••••••••••	••••••	••••••	-2.732	0.006
Public	364	219.06	3.64	3.67		
Private/Public-Private Partnership	60	172.73	3.14	3.33		
SPS - Global		••••••		•••••	-2.286	0.022
Public	364	212.94	3.53	3.33		
Private/Public-Private Partnership	60	209.85	3.29	3.00		
WLQ		•••••••••••	••••••	•	-0.394	0.694
Public	364	211.55	3.84	4.00		
Private/Public-Private Partnership	60	218.27	3.91	4.00		

Table 5 - Comparison of the SPS-6 and WLQ-8 scales depending on the organization where you work

of the SPS-6 scale. The values observed for the central tendency measures suggest that nurses who work in public organizations tend to show greater presenteeism than those who work in private organizations or with public-private partnerships. The same situation was observed when we compared presenteeism scales depending on the type of organization. There are significant differences in the work completed dimension (p = 0.003) and in the overall SPS-6 scale (p = 0.041). Considering

the results observed for the measures of central tendency, we are led to conclude that nurses who work in public organizations show greater presenteeism than those who work in private organizations.

The results presented in Table 6 were obtained when comparing the values of the SPS-6 and WLO-8 scales

These results allow us to confirm that there are significant differences in the two dimensions of the SPS-6 scale (p < 0.001 and

p = 0.010) and in the WLQ-8 scale (p = 0.022). These facts combined with the analysis of the results observed for the measures of central tendency allow us to conclude that nurses with a previous condition of illness show higher values in the dimension of distraction avoided, in the dimension of work completed and in the WLQ-8, that is, they reveal greater presenteeism that nurses without a prior illness condition.

Table 7 presents the results obtained by the SPS-6 and WLQ-8 scales in relation to previous disease status.

This table allows us to verify that there are significant differences in the two dimensions of the SPS-6 scale (p < 0.001 and p = 0.010) and in the WLQ-8 scale (p = 0.022). This fact, combined with the analysis of the results observed for the measures of central tendency, allows us to conclude that nurses with a previous condition of illness show higher values in the dimension of distraction avoided, in the dimension of work completed and in the WLQ-8, that is, they reveal greater presenteeism that nurses without a prior illness condition.

### DISCUSSION

This work had a national scope, through the collaboration of the Order of Nurses to disseminate the study. In total, 424 nurses who worked in health institutions completed the questionnaire, out of a universe of approximately 67,000 who met the criteria to participate in the study (OPSS, 2018), which corresponded to a response rate of 0.63%. The resulting sample is representative of the universe by sex and age group.

The statistical analysis of data from our study revealed that there are only correlations that are statistically significant for gender, with women presenting higher values in the avoided distraction dimension (SPS-6) and in the organization where they work, and this variable is correlated positively with SPS-6 both for the work completed dimension and for the overall assessment of SPS-6. This means that nurses who work in public health organizations achieve greater performance, even when they have limitations described as presenteeism, compared to nurses who work in private health institutions. The previous condition of illness showed a correlation with the presenteeism scales, and it was proven that nurses with a previous condition of illness had higher levels of presenteeism than healthy nurses. For all other sociodemographic and work variables, there were no statistically significant correlations.

Regarding relationship the between presenteeism sociodemographic and variables, it was found that there are only statistically significant differences between the dimension of the SPS-6 scale – Distraction Avoided and gender, concluding that female gender tends to present higher values of distraction avoided than the male gender. The remaining sociodemographic variables did not show a statistically significant correlation with the presenteeism scales.

When analyzing the relationship between presenteeism and clinical variables, it was found that there are statistically significant differences for both dimensions of the SPS-6 (although not for the overall), as well as for the WLQ-8, translating into higher levels presenteeism in nurses with previous disease conditions than in nurses without such conditions. It also allows to demonstrate the clinical sensitivity of the scales.

When the relationship between presenteeism and professional variables was questioned, statistically significant differences were identified for the variables type of organization and organization itself where nurses perform functions; for SPS-6 dimension-work completed. Nurses who work in public organizations tend to present greater

Scales Precondition of disease	n			Md	z	p
SPS – Distraction avoided		-			-4.708	< 0.001
Not	307	195.39	2.39	2.33		
Yes	117	257.39	3.05	3.00		
SPS – Work completed	: : :	••••••••••	••••••	••••••	-2.571	0.010
Not	307	203.12	3.46	3.67		
Yes	117	237.12	3.84	4.00		
SPS – Global	••••••••••••••••••••••••••••••••••••••	••••••••••	••••••	•••••	-1.505	0.132
Not	307	217.99	3.54	3.33		
Yes	117	198.10	3.39	3.33		
WLQ		••••••••••	••••••	••••••	-2.294	0.022
Not	307	220.91	3.92	4.00		
Yes	117	190.43	3.68	3.88		

Table 7 - Comparison of the SPS-6 and WLQ-8 scales depending on the previous disease condition

Scales Organization typology	n			Md	z	p
SPS – Distraction avoided		-			-0.265	0.791
Public	392	212.95	2.57	2.67		
Private	32	207.05	2.57	2.33		
SPS – Work completed	••••••••••••••••••••••••••••••••••••••	•••••••••	••••••	•••••	-2.937	0.003
Public	392	217.46	3.61	3.67		
Private	32	151.75	3.01	3.00		
SPS – Global	•	••••••••••	••••••	••••••	-2.046	0.041
Public	392	215.95	3.52	3.33		
Private	32	170.22	3.22	3.00		
WLQ		•••••••••	••••••	••••••	-0.048	0.962
Public	392	212.58	3.85	4.00		
Private	32	211.50	3.89	3.94		

Table 6 - Comparison of the SPS-6 and WLQ-8 scales depending on the type of organization

presenteeism than those who work in private or public-private institutions. The analysis and interpretation of presenteeism can be based on a clinical issue or an economic issue. Our study aimed to evaluate presenteeism in its clinical component, in line with other studies carried out with nurses (Letvak et al., 2013). Although it is not the purpose or objective of our study to identify costs associated with presenteeism, the literature review allowed us to identify some studies that revealed the financial and economic impact associated with the phenomenon; Letvak and colleagues (Letvak et al., 2013), for example, calculated that the annual economic impact on North American nurses associated with lost productivity amounts

to \$22,667M and the decrease in quality of care is estimated at \$4,070M (Taloyan et al., 2012). In addition to the economic impact, these authors report that presenteeism correlates with quality indicators associated with nursing care, such as medication errors or an increase in the number of falls. Data presented by (Rantanen & Tuominen, 2011) for the Finnish sociocultural and labor reality also indicate that the average global cost for presenteeism over a period of four weeks was €589.26 per person, with the costs associated with absenteeism being €373.87.

In view of the results presented, this study aims to contribute to improving the occupational health of health professionals who work in health institutions. Therefore,

some interventions are suggested, which include creating conditions that allow workers to find a balance between personal life and work life. Workers may face conflicting work and family demands, and it can be a challenge to reconcile them, which can lead to conflicts over time, commitment and support. Life outside of work is important not only because of the relationships that are built there, but also because of the opportunities needed to "switch off" and relax from the challenges of work.

It is therefore important to achieve an adequate balance between work and family and work life (Pinho, 2015) and (Aysun & Bayram, 2017) focus on this issue, adding the fact that nurses have low salaries despite the physical and mental effort to which they are exposed. This way, low staffing of professionals can affect performance in the workplace. Still for the same authors, since it is well known that hospitals are places where the risk of contracting some type of infection is higher, screening of healthcare professionals must be frequent. Based on these screenings, appropriate measures must be taken, which must include vaccination (with a special focus on seasonal flu), medical and nutritional advice and health education sessions.

One of the reasons for presenteeism is the impossibility of an employee being able to transfer responsibility for their work to another. As such, it is up to leaders and managers to have a greater capacity to optimize their human resources and patients among team members, in order to reduce this damage. The management of time and workload among professionals must also be taken into consideration, so that those who have more risk factors associated with presenteeism can receive special attention and be safeguarded (Brborović & Brborović, 2017). Career development can be a source of stress when there is stagnation and uncertainty, when the

worker is under-promoted or over-promoted, or when pay is low or on commission. With regard to remuneration, for example, fair and adequate financial compensation, which allows the worker to maintain an appropriate standard of living, is one of the fundamental characteristics responsible for well-being at work. Finally, the existence of job insecurity and low social value for work can also be psychosocial risk factors for workers (Pinho, 2015)

The new forms of contracting and employmentarecharacterized by the emergence of more precarious contracts, subcontracting and job insecurity. Employees on precarious contracts typically perform more dangerous tasks, under worse conditions, and receive less training. This lack of job and contractual stability can increase workers' levels of stress and anxiety. It is up to political decision-makers to create sufficiently comprehensive health policies that provide particular support to workers whose employment relationships are more precarious, thus guaranteeing greater coverage and protection in situations of illness(Rainbow & Steege, 2017).

The current period of the COVID-19 pandemic has led to many organizations and institutions finding themselves under pressure to ensure their sustainability, productivity and profitability. The pandemic reality has, in many cases, exacerbated the risk factors of presenteeism in some workers, including continuing to work, despite having health limitations associated with infectious processes and the impact of this situation on public health. The main reasons found are financial insecurity (especially in employees and workers who do not have full guarantee of sickness assistance), uncertainty in the job market, increased unemployment rates, which may encourage some employees and workers to go to work to demonstrate their value, loyalty and commitment to the organization.

The exponential growth in teleworking associated with the pandemic was a reality. However, the new work dynamics in some workers and employees manifested themselves as an inability to reconcile the balance between personal and family life.

With regard to health professions, the risk of presenteeism was increased by the enormous organizational risks, which included increased pressure and workload, increased number of working hours, understaffed work teams, allies often with a sense of mission and social responsibility, for the well-being of others that characterizes health professionals, especially in a public health emergency situation (Kinman & Grant, 2020).

### **LIMITATIONS**

The present study is not without limitations. Although the sample consists of 424 participants and is representative in terms of gender and age group, this corresponds to a percentage of less than 1% of the total universe of nurses in the country, who provide care in health institutions, which may limit generalization of the results. Furthermore, the percentage of nurses with different specialist

titles who responded to the questionnaire was not equitable, which did not allow data to be inferred based on their respective areas of specialty. It is suggested that in a future study there may be greater sample homogeneity given the current distribution of the number of nurses by geographic areas. Additionally, future samples must include other professional groups in the health sector, so that comparisons can be made between professional classes.

It is also suggested that an assessment of the economic impact of presenteeism can be carried out in a future study, as there is no Portuguese study that has carried out this assessment to date.

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### INTEREST CONFLICTS

Nothing to declare.

### REFERENCES

Aronsson, G., Gustafsson, K., & Dallner, M. (2000). Sick but yet at work. An empirical study of sickness presenteeism. *Journal of Epidemiology and Community Health*, 54(7), 502–509. https://doi.org/10.1136/jech.54.7.502

Aysun, K., & Bayram, Ş. (2017). Determining the level and cost of sickness presenteeism among hospital staff in Turkey. *International Journal of Occupational Safety and Ergonomics*, 23(4), 501–509. https://doi.org/10.1080/10803548.2016.1274159

Bergström, G., Bodin, L., Hagberg, J., Aronsson, G., & Josephson, M. (2009). Sickness presenteeism today, sickness absenteeism tomorrow? A prospective study on sickness presenteeism and future sickness absenteeism. *Journal of Occupational and Environmental Medicine*, 51(6), 629–638. https://doi.org/10.1097/JOM.0b013e3181a8281b

Brborović, H., & Brborović, O. (2017). Patient safety culture shapes presenteeism and absenteeism: A cross-sectional study among Croatian healthcare workers. *Arhiv Za Higijenu Rada i Toksikologiju*, 68(3), 185–189. https://doi.org/10.1515/aiht-2017-68-2957

Burton, W. N., Chen, C. Y., Conti, D. J., Schultz, A. B., & Edington, D. W. (2006). The association between health risk change and presenteeism change. *Journal of Occupational and Environmental Medicine*, 48(3), 252–263. https://doi.org/10.1097/01.jom.0000201563.18108.af

Caverley, N., Barton Cunningham, J., & MacGregor, J. N. (2007). Sickness presenteeism, sickness absenteeism, and health following restructuring in a public service organization. *Journal of Management Studies*, 44(2), 304–319. https://doi.org/10.1111/j.1467-6486.2007.00690.x

Cooper, C. L., & Lu, L. (2016). DISTINGUISHED SCHOLAR ESSAY Presenteeism as a global phenomenon: Unraveling the psychosocial mechanisms from the perspective of social cognitive theory. *Cross Cultural and Strategic Management*, 23(2), 216–231. https://doi.org/10.1108/CCSM-09-2015-0106

d'Errico, A., Viotti, S., Baratti, A., Mottura, B., Barocelli, A. P., Tagna, M., Sgambelluri, B., Battaglino, P., & Converso, D. (2013). Low back pain and associated presenteeism among hospital nursing staff. *Journal of Occupational Health*, 55(4), 276–283. https://doi.org/10.1539/joh.12-0261-OA

Dickson, V. V. (2013). How older workers with coronary heart disease perceive the health effects of work. *Workplace Health and Safety*, 61(11), 486–494. https://doi.org/10.3928/21650799-20131025-17

Elstad, J. I., & Vabø, M. (2008). Job stress, sickness absence and sickness presenteeism in Nordic elderly care. *Scandinavian Journal of Public Health*, 36(5), 467–474. https://doi.org/10.1177/1403494808089557

Fortin, M.-F. (2009). O Processo de Investigação. In Lusociência (Ed.), Enanpad (5.ª).

Hansson, M., Boström, C., & Harms-Ringdahl, K. (2006). Sickness absence and sickness attendance - What people with neck or back pain think. *Social Science and Medicine*, 62(9), 2183–2195. https://doi.org/10.1016/j.socscimed.2005.10.002

IGAS. (2018). Manual de Segurança e Saúde no Trabalho. Inspeção Geral Das Atividades Em Saúde, 43.

Johansson, G., & Lundberg, I. (2004). Adjustment latitude and attendance requirements as determinants of sickness absence or attendance. Empirical tests of the illness flexibility model. *Social Science and Medicine*, 58(10), 1857–1868. https://doi.org/10.1016/S0277-9536(03)00407-6

Johns, G. (2011). Attendance Dynamics at Work: The Antecedents and Correlates of Presenteeism, Absenteeism, and Productivity Loss. *Journal of Occupational Health Psychology*, 16(4), 483–500. https://doi.org/10.1037/a0025153

Kinman, G., & Grant, C. (2020). Presenteeism during the COVID-19 pandemic: risks and solutions. *Occupational Medicine*. https://doi.org/10.1093/occmed/kqaa193

Koopman, C., Pelletier, K., Sharda, C., Berger, M., Turpin, R., Hackleman, P., Gibson, P., Holmes, D. & Bendel, T. (2002). Stanford Presenteeism Scale: Health Status and Employee Productivity. Journal of Occupational and Environmental Medicine, T. (2002). Stanford Presenteeism Scale: Health Status and Employee Productivity. Journal of Occupational and Environmental Medicine, 44(1), 14-20. 14-20.

Lerner, D., Amick, B. C., Lee, J. C., Rooney, T., Rogers, W. H., Chang, H., & Berndt, E. R. (2003). Relationship of employee-reported work limitations to work productivity. *Medical Care*, 41(5), 649–659. https://doi.org/10.1097/01.MLR.0000062551.76504.A9

Letvak, S., Ruhm, C., & Gupta, S. (2013). Differences in health, productivity and quality of care in younger and older nurses. *Journal of Nursing Management*, 21(7), 914–921. https://doi.org/10.1111/jonm.12181

Lohaus, D., & Habermann, W. (2019). Presenteeism: A review and research directions. *Human Resource Management Review*, 29(1), 43–58. https://doi.org/10.1016/j.hrmr.2018.02.010

OIT. (2019). Segurança e Saúde no Centro do Futuro do Trabalho.

OMS. (2010). Ambientes de trabalho saudáveis : um modelo para ação. In World Health Organization.

Pinho, R.; DGS. (2015). Fatores de risco / riscos psicossociais no local de trabalho Autora : Rute Pinho Orientadores : Dr . ª Elsa Alexandre Mota e Prof . Carlos Silva Santos Coordenação : Programa Nacional de Saúde Ocupacional Direção-Geral da Saúde Abril de 2015 Índice. 1–32.

Portuguese Parliament. (2015). Lei n.º 146/2015 de 9 de setembro. Diário Da República / Official Journal of the Portuguese Republic, 1(176), 7325-7342.

Rainbow, J. G., & Steege, L. M. (2017). Presenteeism in nursing: An evolutionary concept analysis. *Nursing Outlook*, 65(5), 615–623. https://doi.org/10.1016/j.outlook.2017.03.005

Rantanen, I., & Tuominen, R. (2011). Relative magnitude of presenteeism and absenteeism and work-related factors affecting them among health care professionals. *International Archives of Occupational and Environmental Health*, 84(2), 225–230. https://doi.org/10.1007/s00420-010-0604-5

Schneider, D., Winter, V., & Schreyögg, J. (2018). Job demands, job resources, and behavior in times of sickness: An analysis across German nursing homes. *Health Care Management Review*, 43(4), 338–347. https://doi.org/10.1097/HMR.000000000000157

Sendén, M. G., Schenck-Gustafsson, K., & Fridner, A. (2016). Gender differences in Reasons for Sickness Presenteeism - a study among GPs in a Swedish health care organization. *Annals of Occupational and Environmental Medicine*, 28(1), 1–7. https://doi.org/10.1186/s40557-016-0136-x

Skagen, K., & Collins, A. M. (2016). The consequences of sickness presenteeism on health and wellbeing over time: A systematic review. *Social Science and Medicine*, 161, 169–177. https://doi.org/10.1016/j.socscimed.2016.06.005

Taloyan, M., Aronsson, G., Leineweber, C., Magnusson Hanson, L., Alexanderson, K., & Westerlund, H. (2012). Sickness Presenteeism Predicts Suboptimal Self-Rated Health and Sickness Absence: A Nationally Representative Study of the Swedish Working Population. *PLoS ONE*, 7(9). https://doi.org/10.1371/journal.pone.0044721

Yang, T., Ma, M., Guo, Y., Li, Y., Tian, H., Liu, Y., Chen, Q., Zhang, S., & Deng, J. (2020). Do job stress, health, and presenteeism differ between Chinese healthcare workers in public and private hospitals: a cross sectional study. *Psychology, Health and Medicine*, 25(6), 653–665. https://doi.org/10.1080/13548506.2019.1668564

Zhang, W., Bansback, N., Boonen, A., Severens, J. L., & Anis, A. H. (2012). Development of a composite questionnaire, the valuation of lost productivity, to value productivity losses: Application in rheumatoid arthritis. *Value in Health*, *15*(1), 46–54. https://doi.org/10.1016/j.jval.2011.07.009