

Predictors associated with absenteeism-disease among Nursing professionals working in an emergency hospital service

Preditores associados ao absenteísmo-doença entre profissionais de enfermagem de um serviço hospitalar de emergência

Predictores asociados al ausentismo-enfermedad entre profesionales de Enfermería de un servicio hospitalario de emergencia

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ABSTRACT

Objective: To verify the predictors associated with sick leave from 15 days onwards among Nursing professionals of an emergency hospital service.

Method: A cross-sectional, retrospective, and descriptive-analytical study. The sample consists of the records of sick leave (n=2,403) due to diseases of the Nursing professionals (n=197) working in an emergency hospital service in southern Brazil, from 2013 to 2018. Descriptive and statistical analysis was used, as well as the multivariate regression model.

Results: There was predominance of females (72.6%), white-skinned (86.3%), with a mean age of 45.05 (SD=9.77) years old, and nursing technicians (74.6%). The prevalent cause of sick leave was related to clinical diseases (62.5%). The predictors associated with sick leave from 15 days onwards were the following: Age (OR: 0.97; 95% CI=0.95-0.99) and Musculoskeletal Diseases (OR: 8.95; 95% CI=5.30-15.11).

Conclusion: Age and musculoskeletal diseases were predictors of sick leave from 15 days onwards of the Nursing team.

Keywords: Absenteeism. Nursing team. Occupational health. Emergency service, hospital. Nursing staff, hospital.

RESUMO

Objetivo: Verificar os preditores associados ao afastamento da atividade laboral a partir de 15 dias motivados por doença entre profissionais de enfermagem de um serviço hospitalar de emergência.

Método: Estudo transversal, retrospectivo, descritivo-analítico. A amostra constituiu-se dos registros de ausência (n=2.403) por doenças dos trabalhadores de enfermagem (n=197) lotados em serviço hospitalar de emergência do sul do Brasil, no período de 2013 a 2018. Empregou-se análise estatística descritiva e modelo de regressão multivariável.

Resultados: Houve predominância do sexo feminino (72,6%), brancos (86,3%), com média de idade de 45,05 (DP=9,77) anos e técnicos de enfermagem (74,6%). A causa prevalente de afastamento foi relacionada às doenças clínicas (62,5%). Os preditores associados ao afastamento a partir de 15 dias foram: Idade (OR:0,97; IC95%= 0,95-0,99) e doenças osteomusculares (OR:8,95; IC95%= 5,30-15,11).

Conclusão: Idade e doenças osteomusculares foram preditores de afastamento a partir de 15 dias das atividades laborais da equipe de enfermagem.

Palavras-chave: Absenteísmo. Equipe de enfermagem. Saúde do trabalhador. Serviço hospitalar de emergência. Recursos humanos de enfermagem no hospital.

RESUMEN

Objetivo: Verificar los predictores asociados con licencias por enfermedad a partir de 15 días entre los profesionales de Enfermería de un servicio hospitalario de emergencia.

Método: Estudio transversal, retrospectivo y descriptivo-analítico. La muestra consta de los registros de licencias (n=2.403) debido a enfermedades de los profesionales de Enfermería (n=197) que trabajan en un servicio hospitalario de emergencia en el sur de Brasil, entre 2013 y 2018. Se utilizó análisis descriptivo y estadístico y el modelo de regresión multivariado.

Resultados: Predominaron personas del sexo femenino (72,6%), de raza blanca (86,3%), con una media de edad de 45,05 (DE=9,77) años y técnicos de Enfermería (74,6%). La causa más frecuente de licencia se relacionó con enfermedades clínicas (62,5%). Los predictores asociados con las licencias por enfermedad a partir de 15 días fueron los siguientes: edad (OR:0,97; IC del 95%=0,95-0,99) y enfermedades musculoesqueléticas (OR:8,95; IC del 95%=5,30-15) 11).

Conclusión: La edad y las enfermedades musculoesqueléticas fueron predictores de licencias por enfermedad a partir de 15 días de las actividades laborales del equipo de Enfermería.

Palabras clave: Ausentismo. Equipo de enfermería. Salud laboral. Servicio de urgencia en hospital. Personal de Enfermería en hospital.

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■ INTRODUCTION

It is increasingly evident that the Nursing work, due to its multiple burdens, can be an important source of illness for workers. With compromised health, workers tend to be absent on days/shifts when their presence was expected, a phenomenon known as absenteeism due to illness or absenteeism-illness, which corresponds to worker absences motivated by illness⁽¹⁾.

Absenteeism-illness is the main source of unforeseen absences in the Nursing work, making it one of the main problems related to the management of human resources, even in hospitals⁽¹⁻³⁾. Among the hospital sectors, the emergency services and the Nursing staff are among those with the highest rates of absenteeism-illness⁽⁴⁾, possibly due to their recognizably different characteristics from other units due to their emergency, variable, and unpredictable nature, whose complexity demands intense involvement of the physical, mental, and psychosocial abilities of the health professionals. In the frequent exposure of the emergency professionals to these and other factors, illness is favored and workers are absent from work for many days⁽⁴⁾.

Among the difficulties inherent to the emergency services, overcrowding is frequent, especially in developing countries like Brazil. To put it in context, overcrowding is a picture of the imbalance between supply and excessive demand for care in urgency and emergency services. As a result, in addition to the users facing long waiting times for the first service, these services, in their majority, present a precarious structure and provide low quality assistance, generating dissatisfaction of users and professionals, consequently affecting the safety of both⁽³⁻⁵⁾.

A study⁽⁴⁾ carried out in a public hospital of São Paulo showed that, in the three-year period, a total of 71,460 days of sick leave was verified, with 3,323 medical leaves granted to 1,533 workers. The professional category most affected by absenteeism-illness was that of Nursing assistants, and the adult emergency service was the sector with the largest number of leaves, reaching 11,460 days. In this same sector, most of the reasons for illness were due to diseases of the musculoskeletal system and of the connective tissue, in addition to mental and behavioral disorders⁽⁴⁾.

Other recent studies, both in literature review and field research, point out that diseases of the musculoskeletal system, respiratory system, infectious diseases, and mental disorders are highlighted as causing higher rates of absenteeism-illness in Nursing^(1,6-8). No less important, it is known that the longer the employee is absent from work, the greater the difficulties imposed (both for the professional and for the organizations), as they evidently impact more sharply

on the work dynamics and also on the personal life of the absent worker⁽⁵⁻⁶⁾.

With the high rates of absenteeism in Nursing, the managerial alignment of work schedules to meet the needs of the work process is even more difficult, reinforcing investment regarding robust studies on the absenteeism-illness of the Nursing professionals. Thus, it is believed that this epidemiological scenario reasserts the need to use reliable data to plan improvements towards reducing absenteeism-illness in Nursing, especially in the emergency services, both as a way of reinforcing the commitment to the workers' health as well as a means of enabling better organizational performance⁽⁹⁾.

Considering the need to identify predictive factors for the absenteeism-illness of the Nursing team as a means of increasing more specific strategies for the management of absenteeism, especially that with a prolonged nature and, also, the peculiarity of the emergency service, the relevance of the study now presented was postulated, since it can contribute to the advancement of discussions about how absenteeism presents itself in this specific context. Based on this, the following question emerged: What are the predictors associated with sick leave from 15 days onwards due to illness among the Nursing professionals working in an emergency hospital service? Thus, the objective was to verify the predictors associated with sick leave from 15 days onwards due to illness among the Nursing professionals working in an emergency hospital service.

■ METHOD

The construction and reporting of this study was carried out in accordance with the guidelines of the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE), suitable for observational studies⁽¹⁰⁾.

Study design

A cross-sectional, retrospective and descriptive-analytical study.

Study locus

The study was carried out in the adult and pediatric Emergency Service of a public university hospital in southern Brazil. This hospital has a daily commitment to provide humanized and comprehensive care to the patients, certified by international quality and safety standards. In the ES, patients from the clinical, surgical, gynecology, obstetrics (up to 20 weeks of gestation), and pediatrics specialties are treated.

The operational capacity agreed upon with the municipal manager is 50 beds.

Participants

The target population of the study was composed of Nursing professionals (nurses and nursing technicians) away from their work activity, of both genders, who performed their work activity in the adult and pediatric Emergency Service, in the time frame between January 2013 and December 2018.

Regarding the eligibility criteria, the electronic medical records of employees who were on leave during the time frame established due the illness of a Nursing professional were included in the study. Leaves such as maternity, adoption, dental problems, monitoring of dependents (children, father, mother), death of family members, and medical records with missing or incomplete data were excluded from the sample.

Variables

The variables chosen to answer the research purpose were the following: Sociodemographic variables: gender, age, ethnicity, schooling, professional category, and work shift. Variables referring to employee leaves: reason for sick leave, month of leave, and number of days away. The length of stay in leave days was categorized by definition of this study in two ways: up to 14 days and from 15 days onwards or more, to characterize the outcome of the study (Simple health leave or Leave for the National Institute of Social Security [*Instituto Nacional do Seguro Social*, INSS] indefinitely). Finally, the variable referring to the Emergency Service capacity rate during the study period was volume of patients seen at the service, per month.

Data source

Data was collected in March 2019 from the institutional Occupational Medicine Service (*Serviço de Medicina Ocupacional*, SMO). The data were obtained by means of two computerized institutional programs that have managerial information of the emergency service. These programs guarantee the anonymity of the employees, as they only provide data related to leaves, as well as medical information of patients and employees.

Bias

The data were entered into the Excel® program by two independent typists, and they were subsequently compared to control possible typing errors in order to reduce bias.

Sample size

The sample size estimates were performed using the WinPepi program, version 11.65, for the outcome of sick leave from 15 days onwards due to illness of Nursing professionals working in emergency services. Considering 95% confidence, 5% error margin, and 41.6% proportion for absenteeism referred to in a recent previous study⁽⁴⁾, the sample size of 374 leaves was reached. Thus, seeking to answer the main outcome, the sample size was increased by 20% in order to make up for possible losses, ending in a sample of 449 leaves.

Variables

The continuous variables were described as mean and standard deviation (\pm SD) or as mean and 95% Confidence Interval (CI), minimum and maximum. The categorical variables were presented as frequencies in absolute number and percentage [n(%)]. The continuous variables that did not meet the normality criterion in their distribution, tested using the *Shapiro-Wilk* test, were presented as median and interquartile range of 25% and 75%.

Statistical analysis

The univariate analyses were performed using the Chi-square and Fisher's Exact tests for the categorical variables, and the *Student's T* and *Mann-Whitney* tests for the continuous variables. The multivariate analysis was performed using the Generalized Estimating Equation (GEE) Model, considering the Logistic Regression Model. Variables with $p < 0.10$ in the univariate analysis were included in the multivariate model, eliminated by the *backward* method. The quality of fit of the model was assessed to meet the calculation assumptions, in addition to the multicollinearity assessment. The results were considered significant when $p \leq 0.05$, arbitrated for a power of 80%.

The data were analyzed using the *Statistical Package for the Social Sciences*® software (Version 17.0, Chicago, IL, USA: SPSS Inc.) and the R® program (Version 3.5.3, Vienna, Austria: The R Foundation for Statistical Computing).

Ethical aspects

The study was prepared in accordance with the principles of the Declaration of Helsinki and with the Regulatory Guidelines and Rules for Research Involving Human Beings (CNS Resolution No.466, of December 12th, 2012) and complementary to the National Health Council. This is an exclusively observational study, in which all the routines with

the research subjects were maintained. The confidentiality of the participants' records was ensured by the researchers in charge. For the organization of the database, the identification number was adopted as the medical record number and date of birth in order to minimize identification errors.

The research was approved by the Institutional Research Ethics Committee, under protocol No. 2018-0473 and CAAE: 98473118800005327. It is worth mentioning that the research advocated the General Law of Data Protection. To this end, the researcher in charge, as well as the other researchers in the study, assumed the commitment to follow the ethical precepts through the Term of Commitment for the Use of Institutional Data.

■ RESULTS

Between January 2013 and December 2018, sick leaves ($n=2,403$) of 197 employees of the adult and pediatric Emergency Nursing Service were evaluated. Of these 197 professionals, 143 (72.6%) were female, 170 (86.3%) were white-skinned, with a mean age of 45.05 ± 9.77 years old, minimum of 26, and maximum of 72. Among the research participants, 61.4% had 10 to 12 years of study, and 147 (74.6%) were nursing technicians (Table 1).

During the study period, 2,403 sick leaves were analyzed among the 197 employees. The prevalent reason was due to clinical diseases: 1,503 (62.5%), followed by musculoskeletal diseases: 556 (23.1%), psychiatric diseases: 169 (7.0%), surgical causes: 105 (4.4%) and, finally, unknown causes: 70 (2.9%). The month of the year that most presented sick leaves in the ES was September: 244 (10.2%), followed by August: 239 (9.9%), June: 236 (9.8%), May: 233 (9.7%), July: 217 (9%), and the others distributed according to Table 2.

The mean number of days away was 10.10 ± 27.66 , with a median of 2 days and an interquartile range of 5 days. The minimum number of days was 1 and the maximum was 451. Of the total sample of leaves, 2,199 (91.5%) were up to 14 days, of these 1,566 (71.2%) corresponded to nursing technicians and 633 (28.8%), to nurses. Table 2 illustrates the characterization of the causes of absenteeism-illness among the Nursing professionals, by professional category.

The mean capacity rate of the ES in the studied period was 148.57% (± 34.83). The ES capacity rate during the study period varied from 216.80% to 61.33%, which characterizes overcrowding in the sector. The months with the highest mean capacity rate were August (165.59%), followed by July (157.39%), April (157.05%) and June (156.8%).

Table 3 shows the results of the univariate and multivariate analyses in relation to the predictive factors related to sick leave from 15 days onwards of the Nursing professionals

working in the ES. In the multivariate analysis, the variables that remain adjunct to the outcome of sick leave from 15 days onwards were the following: age (OR: 0.97; $CI_{95\%} = 0.95-0.99$) and causes related to musculoskeletal diseases (OR: 8.95; $CI_{95\%} = 5.30-15.11$). Of the workers who needed more than 15 days of leave, characterizing leave for the INSS ($n=204$), 142 (69.6%) were nursing technicians (OR: 1.02; $IC_{95\%} = 0.93-1.12$) and 62 (30.4%) nurses (OR: 0.94; $IC_{95\%} = 0.76-1.17$).

■ DISCUSSION

The emergency service is an environment where the patient's instability generates a climate of expectations and anxiety in the care team. Decision-making must be very quick and assertive to maintain the user's life. It is an often unhealthy environment, which experiences pain, suffering and death on a daily basis. Such services face a serious problem, common to most public establishments in the country, overcrowding, which not only occupies the physical space but also increases the demands for care that most of the times are performed by the same number of employees^(3,5).

According to the characteristics of the Nursing team, there was predominance of the category of nursing technicians, women, young, who work in the night shift, followed by the morning shift. A study carried out recently in a university hospital in Santa Catarina showed similar results, which reinforces the characteristics inherent to the Nursing team with regard to gender, age and work shift⁽¹¹⁾.

The Nursing profession has historically been composed mostly of female professionals, be them nurses or nursing technicians/assistants. Women tend to accumulate more activities outside their work, having to assume the role of heads of households, carry out domestic activities, and take care of their children. Thus, it is possible that the responsibilities of their social daily life, combined with situations of stress at work, predispose women to be away from work due to illness. Despite this, gender was not a predictor of absenteeism-illness in this study, which signals an important discussion regarding social issues of stigma (even veiled) that women face in the labor market, including those that make up the workforce of the Nursing work.

The largest contingent in the health team corresponds to mid-level Nursing professionals (nursing technicians and assistants). These professionals are responsible for carrying out direct care, remaining a good part of their workday involved with repetitive activities, which require physical strength. Despite the great physical and mental effort expended in their activities, the remuneration of nursing technicians is low, making the majority of them supplement their income with more than one job, characterizing a double workday^(6,9).

Table 1 – Sociodemographic and work characteristics of the Nursing workers on sick leave in an emergency hospital service (n=197). Southern Brazil, 2013-2018

Variables	Professional Category					
	Team Total n (%)	Nurses n (%)	CI _{95%}	Nurs. Technicians n (%)	CI _{95%}	p-value
Demographic	197 (100)	50 (100)	-	147 (100)	-	
Age, median (IQR)	42 (16)	41.5 (11)	-	42 (18)	-	0.196^a
Minimum-Maximum	26-72	30-60	-	26-72	-	
Gender						
Male	54 (27.4)	11 (22)	[11.5-36]	43 (29.3)	[22-37.3]	0.211^b
Female	143 (72.6)	39 (78)	[64-88.]	104 (70.7)	[62.7-78]	
Schooling						
Up to 9 years	1 (0.5)	0 (0)	[0]	1 (0.7)	[0-3.7]	<0.001^b
10-12 years	121 (61.4)	1 (2)	[0.1-10.6]	120 (81.6)	[74.4-87.5]	
13 years or more	75 (38.1)	49 (98)	[89.4-99.9]	26 (17.7)	[11.9-24.8]	
Ethnicity						
White	170 (86.3)	47 (94)	[83-5-98.7]	123 (83.7)	[76.7-89.3]	0.173^b
Black	25 (12.7)	3 (6)	[1.3-16.5]	22 (15)	[9.6-21.8]	
Brown	2 (1)	0 (0)	[0]	2 (1.4)	[0.2-4.8]	
Days Away						
Minimum-Maximum	1-169	1-159	-	1-169	-	0.692^a
Shift						
Night	90 (45.7)	21 (42)	[28.2-56.8]	69 (46.9)	[38.7-55.3]	<0.001^b
Morning	51 (25.9)	9 (18)	[8.6-31.4]	42 (28.6)	[21.4-36.6]	
Afternoon	47 (23.8)	11 (22)	[11.5-36]	36 (24.5)	[17.8-32.3]	
Sixth Shift ^c	9 (4.6)	9 (18)	[8.6-31.4]	0 (0)	[0]	

Source: Research data, 2018.

^aStudent's t test for independent samples

^bPearson's Chi-square test

^cWork shift that includes nurses who work only on Saturdays, Sundays and holidays.

A double shift means double exposure to risk factors for illness, possibly increasing the chances of this professional being absent from work.

A study⁽¹²⁾ carried out in the state of Minas Gerais corroborates the results presented, since it verified that, of the 565 certificates and leaves, 489 correspond to nursing assistants and technicians and 76 to nurses. Thus, the incidence of absenteeism among mid-level workers was six times higher than that of higher-level professionals⁽¹²⁾, which can be explained by the greater volume of technical/auxiliary workers in relation to nurses, a very common aspect in Brazil. This reinforces the need to identify predictors beyond the description of leaves, which is a contribution of the present research.

The clinical causes are pointed out in this study as the main reason for the leaves of the Nursing team, a fact that can also be related to the climatic condition of the South of the country where the climate is highly variable subtropical. This characteristic increases the susceptibility to seasonal respiratory diseases, with an increase in the demand for emergency services to treat these pathologies. For this reason, the professional is more exposed to contamination by these pathogens, generating withdrawal from the work activities⁽¹³⁾.

Secondary absences due to psychiatric causes were the third cause in this study. It is worth mentioning that the working conditions offered to the Nursing professionals are not always adequate for the performance of their work in the work shift, since this "pressure" that the employees

Table 2 – Causes of absenteeism-illness (n=2,403) among Nursing professionals working in an emergency hospital service. Southern Brazil, 2013-2018

	Professional Category					
	Team Total n (%)	Nurses n (%)	CI _{95%}	Nurs. Technicians n (%)	CI _{95%}	p-value
Causes of Leave	2,403 (100)	695 (100)		1,708 (100)		
Clinical	1,503 (62.5)	466 (67.1)	[63.4-70.5]	1,037 (60.7)	[58.4-63]	<0.001^b
Musculoskeletal	556 (23.1)	126 (18.1)	[15.3-21.2]	430 (25.2)	[23.1-27.3]	
Psychiatric	105 (4.4)	52 (7.5)	[5.6-9.7]	117 (6.9)	[5.7-8.2]	
Surgical	169 (7)	22 (3.2)	[2-4.8]	83 (4.9)	[3.9-6]	
Unknown	70 (2.9)	29 (4.2)	[2.8-5.9]	41 (2.4)	[1.7-3.2]	

Source: Research data, 2018.

^bPearson's Chi-square test

Table 3 – Predictors associated with sick leave from 15 days onwards of Nursing professionals working in an emergency hospital service. Southern Brazil. 2013-2018

Co-variables	Univariate			Multivariate			
	OR	CI _{95%}	p-value	OR	CI _{95%}	p-value	
Age	0.97	[0.95-0.99]	0.023	0.97	0.95-0.99	0.042	
Gender	Male	0.64	[0.37-1.12]	0.123	-	-	
Causes	Musculoskeletal Diseases	9.02	[5.36-15.20]	<0.0001	8.95	5.30-15.11	<0.0001

Source: Research data, 2018.

OR: Odds Ratio/ CI: Confidence Interval

face in their daily work life can cause labile changes in their feelings, an allusion ratified by the high proportion of sick leaves due to mental disorders.

The context in which the Nursing team operates, including in emergency services, is commonly linked to the condition of human suffering. It is not uncommon for workers to have to live with pain, with the worsening of the condition and death of patients, added to precarious working conditions that generate professional dissatisfaction. These factors favor the professional exhaustion syndrome, also known as *Burnout* syndrome, which is already related to the worse environment conditions of the professional practice among nurses⁽¹⁴⁾.

Regarding the capacity rates of the emergency hospital service under study, it showed rates that characterized overcrowding in most of the period studied. This characteristic, which is quite common in public emergency services in Brazil, is known to decrease professional satisfaction and quality of care, since the health problems of the Nursing professionals generally have an association with inadequate working conditions⁽¹⁵⁾. In this way, it is possible to raise the hypothesis that the high occupancy rate in the sector interfered in the leaves of the Nursing workers, even because there were coincidences of a higher volume of leaves with higher rates of service capacity, per month of analysis, in

particular the month of August, which was the first among the absences and the second for the capacity rate.

When the Nursing professionals miss work, in a service with poor working conditions, they end up generating managerial disorganization. This reality generates great disturbance in the performance of the activities, as it overloads the other team members, causing a decrease in production and, consequently, a reduction in the quality of the care provided. Absences generate an increase in operating costs, as the worker who does not report to work needs to be replaced, causing overtime pay⁽¹¹⁾.

The present study showed that age and musculoskeletal diseases were predictive factors for sick leave from 15 days onwards from the work activities. It is known that the aging of the individual, in turn, has great significance in the performance of Nursing work activities.

In a 2016 study, whose main objective was to verify the absences of the Nursing staff in the emergency room of a university hospital, showed that Labor Health Leaves (*Licenças Trabalhistas de Saúde*, LTS) longer than 15 days had the following reasons: mental and behavioral disorders (78.9% of days away), followed by musculoskeletal and respiratory diseases⁽¹⁵⁾. It should be noted that the present research moves towards demonstrating, based on the multivariate regression model, that only age and musculoskeletal diseases were related to the outcome of leave from 15 days onwards among professionals working emergency hospital service.

With aging, there is a gradual decline in the physiological systems, which reduces the body's ability to produce adequate responses to internal and external stressors. Along with these factors, there is predisposition to chronic diseases, cardiac and respiratory disorders, muscle resistance and strength, and a decrease in the components of balance, coordination and flexibility. These characteristics, added to the workload in Nursing, lead the individual to illness⁽¹⁵⁻¹⁸⁾.

Musculoskeletal disorders are an important reason for absenteeism, reaching around 27 million Brazilians. The work activity of the Nursing team is an aggravating factor for these disorders since it demands great physical effort and repetitive activities. For this reason, the regions most affected are the cervical, shoulders and knees, with the lumbar region being the most evident. These are the causes that have the longest recovery time and recurrence, since some pathologies become chronic and require medium- and long-term therapies⁽¹⁹⁾.

In a study that aimed to verify the reasons for medical leaves in emergency services, the results converge with the present research. This is because the highest rates of absenteeism-illness in the hospital area were caused by the Nursing team, with approximately 78% of the leaves.

Most of the medical leaves were concentrated on diseases of the musculoskeletal system and of the connective tissue, followed by diseases of the respiratory system⁽²⁰⁾.

Nursing care requires constant attention. In hospitals, it is the profession that stays the most in direct contact with the patient. Because of this, the teams are divided into shifts so that assistance and execution of care are carried out integrally. The survey showed a higher percentage of absenteeism due to illness in night workers. Perhaps, this can be explained by the fact that these professionals present physiological changes due to the non-synchronization of the circadian cycle with possible changes in their quality of life.

The results of this research are relevant to outline the situation of sick leaves among the Nursing professionals working in the service under study, in addition to clearly pointing out their predictive factors, such as, for example, the more than eight-fold increased chance of musculoskeletal diseases causing leaves for more than 15 days in relation to other causes. This demonstrates the need for a continuous collegiate discussion between managers and employees, in order to increase the number of strategies to reduce absenteeism-illness, focusing on workers' health and, consequently, on organizational performance.

Given the above, the study points out with greater emphasis the need to monitor the musculoskeletal health situation of the emergency Nursing team in parallel to considerations pertinent to the age groups of the professionals.

■ CONCLUSION

It is concluded that age and musculoskeletal diseases were predictive factors for sick leaves from 15 days onwards from the work activities of the Nursing professionals of the emergency hospital service. The clinical and musculoskeletal causes were the prevalent reasons why the workers were away from work. Nursing technicians, especially those who work in the night shift, presented higher concentration of leaves. Overcrowding is also a common characteristic in the public emergency services, a fact ratified by this study, and can be related to the leaves of the Nursing workers in the emergency hospital service.

Among the limitations of this research, it is known that it was a study conducted in a single center. Another aspect to be highlighted is the possibility of lack of adequate and complete records in the employees' electronic files, which often hindered data collection for analysis. However, the study contributes to the area of emergency Nursing and management of human resources, mainly because it delimits the predictive factors for prolonged leave in the Nursing team, which tends to be valuable for the (re)planning of

strategies in order to prevent and reduce absenteeism, even if a challenging task.

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