Sick leave and nursing personnel management*

LICENÇA MÉDICA E GERENCIAMENTO DE PESSOAL DE ENFERMAGEM

LICENCIA MÉDICA Y GERENCIAMIENTO DE PERSONAL DE ENFERMERÍA

Thiago Puliesi Estorce[1], Paulina Kurcgant[2]

ABSTRACT

Sick leaves in the nursing team demand immediate managerial actions when health care has quality as a goal. This descriptive-exploratory, quantitative study was performed with the purpose of characterizing that phenomenon in a university hospital between 2003 and 2007. The medical leaves added up to 3,207 leaves and 32,022 days lost. Leaves lasting up to two days accounted for 54% of the total leaves and to 7% of the days lost; leaves of more than 15 days, 5% of the total, and 66% of the lost days. Hence, sick leaves consist of an important tool in nursing personnel management.

DESCRIPTORS
Nursing, team
Sick leave
Absenteeism
Quality indicators, health care
Personnel administration, hospital

RESUMO

As licenças médicas da equipe de enfermagem exigem ações gerenciais imediatas quando a meta é a assistência de qualidade. Este estudo, descritivo-exploratório e quantitativo, busca caracterizar esse fenômeno em um hospital universitário entre 2003 e 2007. As licenças médicas somaram 3.207 afastamentos e 32.022 dias perdidos. Afastamentos de até dois dias representaram 54% do total e 7% dos dias perdidos; afastamentos acima de 15 dias, 5% do total e 66% dias perdidos. Assim, as licenças médicas constituem importante ferramenta no gerenciamento de pessoal de enfermagem.

DESCRITORES
Equipe de enfermagem
Licença médica
Absenteísmo
Indicadores de qualidade em assistência à saúde
Administração de recursos humanos em hospitais

RESUMEN

Las licencias médicas del equipo de enfermería exigen acciones gerenciales inmediatas cuando la meta es la calidad de la atención. Este estudio descriptivo exploratorio y cuantitativo busca caracterizar dicho fenómeno en un Hospital Universitario en período entre 2003 y 2007. Las licencias médicas totalizaron 3207 solicitudes y 32.022 días perdidos. Las licencias de hasta dos días representan el 54% del total y 7% de los días perdidos; las licencias por encima de quince días, 5% del total y 66% de los días perdidos. De tal modo, las licencias médicas constituyen una importante herramienta en el gerenciamiento del personal de Enfermería.

DESCRIPTORES
Grupo de enfermería
Ausencia por enfermedad
Absentismo
Indicadores de calidad de la atención de salud
Administración de personal en hospitales

1194
Rev Esc Enferm USP
2011; 45(5):1194-200
www.ee.usp.br/reeusp/

Received: 08/28/2009
Approved: 02/18/2011

OnLine
Português / Inglês
www.scielo.br/reeusp

INTRODUCTION

Current practice has shown that unscheduled absences within the nursing team require nurses to take immediate actions in the attempt to ensure the minimum conditions necessary to provide quality care with the minimum risk to patients[1].

The theme *leave* has been addressed within the literature under many designations and definitions, which hinders the recovery of support references required for analysis, such as *absenteeism*, *leave* and *absences*. There are studies addressing aspects such as illnesses in professionals on-leave[2-5]. Others address the theme in the context of personnel allotment and the determination of the Technical Security Index (TSI) to cover such personnel[6-11].

Aiming to acquire a greater clarity concerning the theme, this study adopts a classification that discriminates absences into two large groups: scheduled absences and unscheduled absences. Scheduled absences are those in which workers are entitled to leave, such as vacations, weekly paid days-off and holidays. Unscheduled absences include excused (administrative leave), unexcused leave, annual leave, suspensions, maternity leave, paternity leave, compassionate leave, marriage leave, and sick leave[12].

It is important to highlight that such rights are provided in the Constitution of the Federative Republic of Brazil from 1988 and depend on the work contract—whether it is public or private—and require a different set of laws for them to be effective. The decree, law No. 5,452 from May 1st 1942, Consolidation of Labor Laws, is valid for those working in private companies, and public employees are submitted to law No. 8,112 from December 11th 1990 from the Federal Single Legal Framework of Civil Public Servants.

Among the nurses' several daily responsibilities, personnel distribution and scheduling are undoubtedly the activities that most evidence their practice within the managerial process. These activities directly and indirectly make explicit the professional posture of nurses toward those who collaborate with them in relation to problem solving capacity and decision-making.

The most recent theories concerning the administration of human resources in health consider that

the human dimension in the quality sphere should be the focus of the discussion since the desires, expectations, and satisfaction of people responsible for achieving such purposes are vital to the achievement of institutional goals [13].

The concept *quality in healthcare* is classically defined as a set of attributes such as

level of professional excellence, efficient use of resources, minimum risk and a high level of satisfaction among users, essentially considering existing social values[14-15].

On the other hand, indicators are units of quantitative measure that can be used as a guide to monitor and evaluate *quality* in health facilities[16].

They are generally constructed based on a mathematical expression where the numerator represents the total of predefined events and the denominator the selected risk population, through which reliability, validity, objectivity, sensitivity, specificity and predictive value of data are observed [17].

The characterization and monitoring of unscheduled absences are part of Quality Programs in some hospitals in the state of São Paulo, Brazil, which serve as a management indicator and is called *absenteeism rate*. Data are collected monthly and internally and externally compared to data from other facilities. Due to the multifactor nature of causes that generate absenteeism, an investigation of absenteeism should be taken into account in the institution's human resources policy[18].

Considering the importance of human resources in the implementation of a care proposal, the need to have both quantity and quality in regard to health personnel to implement such a proposal, and also considering quality as a factor that guides managerial decisions, this study characterizes the absences of nursing personnel due to sick leave in a university hospital and evaluates the relevance of sick leave to construct an indicator of quality in the managerial process of nursing.

> The characterization and monitoring of unscheduled absences are part of Quality Programs in some hospitals in the state of São Paulo, Brazil, which serve as a management indicator...

METHOD

This descriptive-exploratory study was carried out at the University Hospital of the University of São Paulo (HU-USP), SP, Brazil. The project was approved by the Research Ethics Committee at USP under number SISNEP CAAE: 0042.0.198.000-08, in July 2008 as an extension of the research project *Constructing quality indicators to evaluate nursing services in university hospitals* (CEP-HU/USP: 601/05).

Setting

This University Hospital provides secondary care and has 258 beds of installed and available for occupancy, 14 beds at the Adult Intensive Therapy Care Unit and six beds in the Neonatal Intensive Therapy Care in addition to seven beds in the recovery room. There are also nine surgical rooms and four obstetrical rooms, in addition to 57 outpatient offices, 13 emergency offices, five screening offices, 11 beds for adult observation, 12 beds for pediatric observation and two for obstetrical observation.

Sick leave and nursing
personnel management
Estorce TP, Kurcgant P

Rev Esc Enferm USP
2011; 45(5):1194-200
www.ee.usp.br/reeusp/
1195

Executive management is performed by the director, which the Medical and Nursing Departments are directly linked to. The administration includes a Deliberative Board (senior management body) and other specific committees: Committee on Hospital-Acquired Infections; Pharmacy and Therapeutics Committee; Committee for Culture and University Extension Services; Committee of Medical Ethics; and Medical Residence Committee.

The Nursing Department is composed of four divisions: Division of Clinical Medicine; Division of Clinical Surgery; Maternal and Pediatrics Division; Outpatient Division; and Division for Educational Support Office.

According to data from Personnel Service at the institution, the nursing team was composed of approximately 635 (100%) members at the time of data collection. Of these, 183 (28.8%) were auxiliaries, 277 (43.6%) were nursing technicians and 175 (27.6%) were nurses.

Population

The amount of sick leave between 2003 and 2007 among the nursing team members (nurses, nursing technicians and auxiliaries) working in the 12 departments that compose the four nursing divisions at the hospital.

The 12 studied departments will be identified according to the following: Nursery Department: Nursery; Central of Material Department: Material; Surgical Center Department: Surgical; Obstetrical Center Department: Obstetrics; Surgery, Outpatient and Endoscopy Department: Surgery Outpatient Endoscopy; Emergency Department: Emergency; Inpatient Department: Inpatient Surgical (Surgical Nursing Division); Inpatient Department: Inpatient Clinical (Clinical Nursing Division); Inpatient Department: Inpatient maternal-pediatric (Maternal-Pediatric Clinical Division); Inpatient Department: Outpatients (Outpatient

Nursing Division); ICU and Semi-ICU Department: ICU and Semi-ICU (Maternal-Pediatric Nursing Division) and ICU and Clinical Semi Intensive Department: ICU and Clinical.

Data collection

The investigation of sick leave was conducted through the collection and analysis of data obtained at the Personnel Service in July 2008 after the project was approved.

Data treatment and analysis

The collected data were stored in a Microsoft Excel spreadsheet. The quantitative variables *sick leave* and *missed workdays* are presented in absolute numbers, percentages and averages according to the year of occurrence, profession, department where workers were allocated and duration of sick leave (missed workdays).

The duration of sick leave was divided and analyzed according to periods from *1 to 2 days*, *3 to 15 days* and *over 15 days*. This classification is justified given the way the duration of sick leave affects the managerial and decision-making process toward a solution.

The data obtained revealed the number of professionals on leave during the studied period, however, since we could not access the total number of professionals per department, a proportional analysis by profession was not possible.

RESULTS

The amount of sick leave taken by the nursing team from January 2003 to December 2007 involved 499 employees totaling 3,207 incidences of leave, corresponding to 32,002 missed workdays, as presented in Table 1.

Table 1 – Distribution of professionals on leave, sick leave and missed workdays according to profession from 2003 to 2007 – HU-USP – São Paulo, SP, Brazil – 2008

Profession	Professionals on leave		Sick leave			Missed days		
	N	%	N	%	aLeave*	N	%	aMWD**
Auxiliaries	168	34	1.341	42	8.0	17.420	55	13.0
Technicians	216	44	1.339	42	6.1	11.264	35	8.4
Nurses	115	23	527	16	4.7	3.338	10	6.3
Total	**499**	**100**	**3.207**	**100**	**6.4**	**32.022**	**100**	**10.0**

*aLeave = average of sick leave per profession on leave
**aMWD = average of missed workdays by sick leave

Nursing technicians presented the largest number of professionals involved in sick leave (216), nursing auxiliaries presented the largest percentage of missed workdays (55%) and both professions together registered 84% of the total of sick leave in the period.

Nursing auxiliaries presented the highest average of sick leave (aLeave=8.0) and missed workdays in rela-

tion to the others (aMWD=13). Nursing technicians presented intermediate levels (aLeave=6.1; aMWD=8.4) and nurses presented the lowest figures in the analyzed variables.

Table 2 presents the number of sick leave by year according to the profession in the studied period.

Table 2 – Distribution of the number of sick leave according to profession by year of occurrence – HU-USP – São Paulo, SP, Brazil – 2008

Profession	2003		2004		2005		2006		2007		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Auxiliaries	273	20	235	18	254	19	267	20	312	23	1.341	100
Technicians	175	13	221	16	278	21	308	23	357	27	1.339	100
Nurses	103	19	82	16	106	20	120	23	116	22	527	100
Total	551	17	538	17	638	20	695	22	785	24	3.207	100

The amount of sick leave increased over the studied period, totaling 785 occurrences of leave in 2007. 2006 and 2007 presented the largest percentages of leave in the period in all the professions: nursing auxiliaries: 20% and 23%; nursing technicians: 23% and 27%; nurses: 23% and 22%. Nursing technicians presented an expressive increase in the amount of sick leave, from 13% in 2003 to 27% in 2007.

Table 3 shows the number of missed workdays due to sick leave according to profession and year of occurrence.

Table 3 – Distribution of number of missed workdays due to sick leave among the nursing team according to profession and year of occurrence – HU-USP – São Paulo, SP, Brazil – 2008

Profession	2003		2004		2005		2006		2007		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Auxiliaries	1.794	10	1.720	10	2.751	16	4.681	27	6.474	37	17.420	100
Technicians	986	9	2.284	20	2.763	25	2.413	21	2.818	25	11.264	100
Nurses	537	16	288	9	669	20	792	24	1.052	32	3.338	100
Total	3.317	10	4.292	13	6.183	19	7886	25	10.344	32	32.022	100

The number of *missed workdays* by the nursing team in 2007 tripled in 2007 in relation to the beginning of the studied period (from 10% to 32%) though with a different intensity depending on the profession: an increase of 3.7 times (from 10% to 37%) was observed for nursing auxiliaries, 2.7 times for nursing technicians (from 9% to 25%), and 2.0 times (from 16% to 32%) for nurses.

The classification of sick leave according to duration is justified given the different influences these occurrences have on the managerial process towards a solution. Table 4 presents the distribution of sick leave and missed workdays according to profession between 2003 and 2007.

Table 4 – Distribution of the amount of sick leave and missed workdays among the nursing team by duration from 2003 to 2007 – HU-USP – São Paulo, SP, Brazil – 2008

Profession	Sick leave				Missed days			
	1 to 2 days	3 to 15 days	> 15 days		1 to 2 days	3 to 15 days	> 15 days	
	N (%)	N (%)	N (%)	N Total	N (%)	N (%)	N (%)	N Total
Auxiliaries	672 (50)	568 (42)	101 (8)	1.341	885 (5)	3.797 (22)	12.738 (73)	17.420
Technician	765 (57)	527 (39)	47 (4)	1.339	1.000 (9)	3.391 (30)	6.873 (61)	11.264
Nurses	284 (54)	224 (42)	19 (4)	527	394 (12)	1.519 (45)	1.425 (43)	3.338
Total	1.721 (54)	1.319 (41)	167 (5)	3.207	2.279 (7)	8.707 (27)	21.036 (66)	32.022

Sick leave from *1 to 2* days was the most frequent (54%), representing only 2,279 missed workdays (7%); leave from *3 to 15 days* totaled 1,319 (41%) corresponding to 8,707 (27%) missed workdays; and leave over 15 days, though less frequent (5%), represented 21,036 (66%) missed workdays.

Nursing auxiliaries presented the highest percentage (8%) of sick leave over 15 days at twice those of the other categories, which represented 12,738 missed workdays (73%).

Table 5 presents the averages of sick leave (aLeave) by profession and average duration of missed workdays (aMWD) by sick leave according to the department professionals worked in.

Sick leave and nursing
personnel management
Estorce TP, Kurcgant P

Rev Esc Enferm USP
2011; 45(5):1194-200
www.ee.usp.br/reeusp/

1197

Table 5 – Averages of sick leave by profession and averages of missed workdays by sick leave according to department from 2003 to 2007 – HU-USP – São Paulo, SP, Brazil – 2008

Department	Auxiliaries		Technicians		Nurses	
	aLeave*	aMWD**	aLeave*	aMWD**	aLeave*	aMWD**
Nursery	7.0	6.1	7.7	6.2	3.1	4.7
Surgical	7.9	5.2	5.7	3.5	3.6	3.6
Material	9.4	9.2	3.5	4.2	3.7	4.5
Obstetrics	4.8	5.0	5.3	3.0	3.4	7.5
Surgical-Outpatient- Endoscopy	10.2	7.0	12.2	24.2	4.6	5.1
Emergency	10.8	11.7	5.9	4.9	5.8	7.8
Inpatient Clinical	6.9	20.5	6.9	23.2	2.8	3.2
Inpatient maternal-pediatrics	5.8	19.1	4.4	10.0	6.3	3.0
Inpatient Surgical	9.1	13.1	9.6	4.9	4.8	8.7
Outpatient	5.4	22.0	4.6	4.6	2.3	26.4
ICU and Clinical	6.9	10.2	6.2	4.8	5.3	3.9
ICU and Semi-ICU	15.3	24.8	5.9	10.3	6.3	4.8
Facility's average	**8.0**	**13.0**	**6.2**	**8.4**	**4.6**	**6.3**

In relation to nursing auxiliaries, the departments that presented the lowest average of leave were: Obstetrics (aLeave=4.8), Outpatient (aLeave=5.4) and Inpatient maternal-pediatrics (aLeave=5.8). The following departments stood out with the highest averages: ICU and Semi-ICU (aLeave=15.3); Emergency (aLeave=10.8); and Surgical Outpatient Endoscopy (aLeave=10.2).

The averages of missed workdays (aMWD) by sick leave also varied according to department. Those with the lowest values were: Obstetrics (aMWD=5.0); Surgical (aMWD=5.2); and Nursery (aMWD=6.1). The departments that presented the highest aMWD were: ICU and Semi-ICU (aMWD=24.8); Outpatient (aMWD=22.0); and Inpatient Clinical (aMWD=20.5).

The departments that presented the lowest average sick leave among nursing technicians were: Material (aLeave=3.4); Inpatient maternal-pediatrics (aLeave=4.4); and Outpatient (aLeave=4.6). The departments with the highest average leave were: Surgical Outpatient Endoscopy (aLeave=12.2); Inpatient Surgical (aLeave=9.6); and Nursery (aLeave=7.7).

The highest average of missed workdays was observed in the Surgical Outpatient Endoscopy (aMWD=24.2) and Inpatient Clinical (aMWD=23.2) departments. The lowest averages were observed in the following departments: Obstetrics (aMWD=3.0); Surgical (aMWD=3.5); and Material (aMWD=4.2).

Nurses presented the lowest average leave and the lowest average duration of sick leave in most of the departments in comparison to the other mid-level professions. The departments with the lowest averages of sick leave were: Outpatient (aLeave=2.3), Inpatient Clinical (aLeave=2.8) and Nursery (aLeave=3.1). The highest average sick leave was found in: Inpatient maternal-pediatrics; ICU and Semi-ICU (aLeave=6.3); and Emergency (aLeave=5.8).

The highest average of missed workdays was observed in Outpatient (aMWD=26.4), followed by Inpatient Sur-

gical (aMWD=8.7) and Emergency (aMWD=7.8) and the lowest averages were observed in the departments Inpatient maternal-pediatrics (aMWD=3.0), Inpatient clinical (aMWD=3.2) and Surgical (aMWD=3.6).

DISCUSSION

This study's findings revealed that nursing auxiliaries took sick leave more frequently and for longer periods in comparison to nursing technicians, though there is no difference in the activities performed by the two professionals in this facility. Nurses represented 23% of the total of professionals on leave, 16% of sick leave and 10% of missed workdays.

A study conducted in a university hospital in the interior of São Paulo[4] revealed that mid-level professionals (nursing auxiliaries and technicians) were those who more frequently took sick leave of longer duration in relation to high-level professions (nurses). The authors assert that the lower number of sick leave among nurses is due to their increased responsibility, prompting them to remain at work, due to the greater probability of arrangements in their schedule, and to the fact that they are able to get days off to rest and recover at home.

Considering that nurses have mainly administrative responsibilities in most of the departments, it is expected that the indicators for this category of professional are lower in comparison to the nursing auxiliaries and technicians, who are exposed to a workload with a greater physical and ergonomic wear, which explains the higher frequency and duration of sick leave.

This study indicates an increase of sick leave between 2003 and 2007 both in terms of incidence (from 551 to 785 incidences of sick leave) and duration (from 3,317 to 10,344 missed workdays), though with greater concentration among nursing auxiliaries followed by nursing technicians and lastly by nurses. This increase is demonstrated

1198 Rev Esc Enferm USP
2011; 45(5):1194-200
www.ee.usp.br/reeusp/

Sick leave and nursing
personnel management
Estorce TP, Kurcgant P

by data presented in Table 1 in which 34% of nursing auxiliaries account for 55% of missed workdays.

Table 3 concerns the increase in missed workdays over the studied period for the nursing auxiliaries followed by nursing technicians and nurses. Data revealed the importance of monitoring and analyzing not only the frequency of sick leave but also its duration.

A study[19] conducted at HU-USP verified that sick leave (up to and over 15 days) is the main and most frequent cause of unscheduled absences among nursing technicians and auxiliaries in most of the studied departments of this facility. The increase in the incidence of sick leave over 15 days in the studied period (2001 and 2005) for these professionals caught our attention. The frequency of sick leave, absences and maternity leave increased little among nurses, while sick leave over 15 days was rare.

Data in Table 4 characterize two distinct and important aspects for the management process of the phenomenon *sick leave*. The first refers to the frequency employees are absent, which requires immediate corrective measures (rescheduling the present team members, head nurses have to deliver care, other departments lend employees, among other measures).

The second aspect refers to the duration of leave. Long-duration leave (over 15 days), which is the least frequent (5%) type, accounts for 66% of missed workdays, requiring other managerial measures in addition to reviewing the monthly schedule, negotiating with superiors for the loan of employees from other units in the facility, and hiring temporary employees, among others.

A study addressing absenteeism that includes sick leave as one of its components identified that sick leave of one or two days represents 79% of unscheduled leave. The authors assert that such sick leave is exempt from medical investigation, while from the 3rd day on the employee has to go to the State Social Security Institute to obtain a formal medical report[3].

A recent study[2] correlated absences due to leave and occupation rate at HU-USP and identified that the monthly frequency of leave was inversely proportional to the occupation rate, suggesting that professionals may have become sick after more intense workload. Sick leave above 15 days was the most frequent (81.9%) among absenteeism due to illness but accounted only for 20.7% of the missed workdays in 2007.

Data concerning Table 5, *amount of sick leave* (aLeave) by profession on leave and average duration of *Missed workdays* (aMWD) by sick leave, indicate different contexts according to the studied departments.

There are departments in which the variations per profession according to department are more expressive: Inpatients Clinical: nursing auxiliaries (aLeave=6.9 and aMWD=20.5); nursing technicians (aLeave=6.9 and aM-WD=23.2); Nurses (aLeave=2.8 and aMWD=3.2). Another example of department presenting such variation is Outpatient: nursing auxiliaries (aLeave=5.4 and aMWD=22.0); nursing technicians (aLeave=4.6 and aMWD=4.6; nurses (aLeave=2.3 and aMWD=26.4).

On the other hand, there are departments in which these variations are less expressive: Obstetrics: nursing auxiliaries (aLeave=4.8 and aMWD=5.0); nursing technician (aLeave=5.3 and aMWD=3.0; and nurses (aLeave=3.4 and aMWD=7.5).

Significant differences were observed in relation to sick leave among the departments and professions in a study[11] performed in hospitalization units at HU-USP, confirming the tendencies observed in this study.

The computation performed by the authors[11] took into account the average of missed workdays per profession (by percentage) over the year to determine the coverage of care. Sick leave up to 15 days varied little among nurses (from 0.45% to 2.07%); sick leave above 15 days was observed only in the Medical ICU (0.55%). Among mid-level professionals (nursing technicians and auxiliaries) sick leave up to 15 days varied from 0.9% to 2.06% and above 15 days was observed in seven of the eight studied departments with an expressive percentage: 7.42% in the Pediatric ICU; 4.06% in the medical ICU and 2.24% in the nursery.

This study also indicates the need for further studies correlating the causes of leave with the workers' social and working conditions and working processes in these units[11]. The need to monitor and evaluate sick leave in the nursing team is evident both for leave of one to two days of duration, which overloads the team, and leave over 15 days, which considerably harms personnel assignments, causes suffering for the professional on leave, and imposes costs on the entire society[20].

It is evident that this phenomenon should be more specifically analyzed according to department and profession because these variables imply different working process and, consequently, differences related to sick leave among workers in each department are expected.

CONCLUSION

This study allowed us to characterize sick leave in terms of occurrence, duration, department and progression over the course of five years in a university hospital. It demonstrated that sick leave is an important element to be considered in the quality of nursing services management, which deserves to be highlighted, especially in the case of mid-level professions. This phenomenon has been addressed in relation to the health of workers, to the identification of aspects harming the health of professionals, as well in the context of personnel allotments to determine the index of care coverage.

Sick leave and nursing
personnel management
Estorce TP, Kurcgant P

Rev Esc Enferm USP
2011; 45(5):1194-200
www.ee.usp.br/reeusp/ 1199

Systematic monitoring and evaluation of such an event can support managerial decision-making and improve human resources policies, heath prevention programs, occupation health prevention programs and the quality of working life.

This study also indicates possible ways to monitor sick leave with greater attention to leave of longer duration (over 15 days) and its reoccurrence over the years.

In this context, we believe the use of sick leave as an indicator is relevant to evaluating the quality of management jointly with other indicators, such as turnover, accident rate index, training index, and hospitalization occupation rate.

A differential analysis for each profession is necessary due to the similarities existent in the activities performed by nursing auxiliaries and nursing technicians.

REFERENCES

1. Parra MT, Melo MRAC. Ações administrativas do enfermeiro frente ao absentismo. Esc Anna Nery Rev Enferm. 2004;8(1):29-38.

2. Sancinetti TR, Gaidzinski RR, Felli VE, Fugulin FMT, Baptista PCP, Ciampone MHT, et al. Absentismo: doença na equipe de enfermagem: relação com a taxa de ocupação. Rev Esc Enferm USP. 2009;43(n.esp 2):1277-83.

3. Silva DMPP, Marziale MHP. Condições de trabalho versus absentismo-doença no trabalho de enfermagem. Ciênc Cuid Saúde. 2006;5 Supl:166-72.

4. Reis RJ, Rocca PF, Silveira AS, Bonilla IML, Giné NA, Matin M. Fatores relacionados ao absenteísmo por doença em profissionais de enfermagem. Rev Saúde Pública. 2003;37(5):616-23.

5. Barboza DB, Soler ZASG. Afastamentos do trabalho na enfermagem: ocorrências com trabalhadores de um Hospital de Ensino. Rev Latino Am Enferm. 2003;11(2)177-83.

6. Laus AM, Anselmi ML. Absences of nursing workers at a teaching hospital. Rev Esc Enferm USP [Internet]. 2008 [cited 2010 Ago 15];42(4):681-9. Available from: http://www.scielo.br/pdf/reeusp/v42n4/en_v42n4a09.pdf

7. Inoue KC, Matsuda LM, Silva DMPP, Uchimura TT, Mathias TAF. Absenteísmo-doença da equipe de enfermagem em unidade de terapia intensiva. Rev Bras Enferm. 2008;61(2):209-14.

8. Rogenski KE, Fugulin FMT. Índice de segurança técnica da equipe de enfermagem da pediatria. Rev Esc Enferm USP. 2007;41(4):683-9.

9. Matsushita MS, Adami NP, Carmagnani MIS. Dimensionamento do pessoal de enfermagem das Unidades de Internação do Hospital São Paulo. Acta Paul Enferm. 2005;18(1):9-19.

10. Nicola AL, Anselmi ML. Dimensionamento de pessoal de enfermagem em um hospital universitário. Rev Bras Enferm. 2005;58(2):186-90.

11. Fugulin FMT, Gaidzinski RR, Kurcgant P. Ausências previstas e não previstas da equipe de enfermagem das Unidades de Internação do HU-USP. Rev Esc Enferm USP. 2003;37(4):109-17.

12. Gaidzinski RR. Dimensionamento de pessoal de enfermagem em instituições hospitalares [tese livre-docência]. São Paulo: Escola de Enfermagem, Universidade de São Paulo; 1998.

13. Leitão RER, Kurcgant P. Qualidade na prática gerencial da enfermagem. Niterói: Intertexto; 2004.

14. Donabedian A. Evalución de la calidad de la atención médica. In: White KL, Frank J, editores. Ivestigaciones sobre servicios de salud: una antologia. Washington: OPAS; 1992. p. 383-404.

15. Organização Mundial de Saúde (OMS). Avaliação dos Programas de Saúde: normas fundamentais para sua aplicação no processo de gestão para o desenvolvimento nacional na saúde. Genebra; 1981.

16. Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Accreditation manual for hospitals: nursing care standards. Oakbrook Terrace (IL); 1992. p. 79-85.

17. Kurcgant P, Tronchin DM, Melleiro MM. A construção de indicadores de qualidade para a avaliação de recursos humanos nos serviços de enfermagem: pressupostos teóricos. Acta Paul Enferm. 2006;19(1):88-91.

18. Programa de Qualidade Hospitalar (CQH). Manual de indicadores de Enfermagem NAGEH. São Paulo: APM/CREMESP; 2006.

19. Rogenski KE. Tempo de assistência de enfermagem: identificação e análise em instituição hospitalar de ensino [dissertação]. São Paulo: Escola de Enfermagem, Universidade de São Paulo; 2006.

20. Brant LC, Gomez CM. O sofrimento e seus destinos na gestão do trabalho. Ciênc Saúde Coletiva. 2005;10(4):939-52.

Correspondence addressed to: Thiago Puliesi Estorce
Rua Vinte e Quatro de Fevereiro, 488 - Apto. 96 Bl. 2
CEP 09015-610 - Santo André, SP, Brazil