



PEOPLE MANAGEMENT INDICATOR: ASSESSMENT OF RESIGNATIONS AND TURNOVER RATE OF NURSING PERSONNEL

INDICADOR DE GESTÃO DE PESSOAS: ANÁLISE DOS DESLIGAMENTOS E DA TAXA DE ROTATIVIDADE DA EQUIPE DE ENFERMAGEM

INDICADOR DE GESTIÓN DE PERSONAS: ANÁLISIS DE RENUNCIAS Y DE LA TASA DE ROTACIÓN DEL PERSONAL DE ENFERMERÍA

Paula Buck de Oliveira Ruiz¹, Marcia Galan Perroca², Marli de Carvalho Jericó³

ABSTRACT

Objective: to assess the types and causes of resignations and the turnover rate of nursing personnel in a teaching hospital. **Method:** cross-sectional and retrospective case study (2009 to 2012) using a quantitative approach. The types and causes of resignations were obtained through resignation interviews conducted and made available by the Human Resources Department. The equation proposed by the Commitment to Hospital Quality program was used for the calculation of the turnover rate. The research project was approved by the Research Ethics Committee, Protocol 96.830/2012. **Results:** of the 522 resigned employees, 459 completed the interviews. The average number of resignations was 76.3 (SD = 97.3). Personal reasons was the predominant cause of resignations (35.9%), primarily for nursing assistants. **Conclusion:** the information obtained through this study provide the managers with the necessary tools for the organizational trend, understanding the turnover behavior, and the adoption of strategies for the development and personnel retention. **Descriptors:** Management Indicators; Human Resources in Health; Nursing; Hospital Administration.

RESUMO

Objetivo: investigar os tipos e motivos de desligamentos e a taxa de rotatividade da equipe de enfermagem em um hospital de ensino. **Método:** estudo transversal, retrospectivo (2009 a 2012) com abordagem quantitativa, na modalidade de estudo de caso. Os tipos e motivos de desligamentos foram obtidos por meio de entrevistas de desligamentos realizadas e disponibilizadas pelo Departamento de Recursos Humanos. Para o cálculo da rotatividade foi utilizada a equação proposta pelo programa Compromisso com a Qualidade Hospitalar. O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, Protocolo 96.830/2012. **Resultados:** dos 522 desligados, 459 responderam as entrevistas. A média dos desligamentos foi de 76,3 (DP = 97,3). O motivo pessoal foi a causa predominante dos desligamentos (35,9%), principalmente para auxiliares de enfermagem. **Conclusão:** o histórico das informações geradas por este estudo instrumentaliza os gestores para a tendência organizacional, compreensão do comportamento da rotatividade e a adoção de estratégias de valorização e retenção de pessoal. **Descritores:** Indicadores de Gestão; Recursos Humanos em Saúde; Enfermagem; Administração Hospitalar.

RESUMEN

Objetivo: investigar los tipos y causas de renuncias y la tasa de rotación del personal de enfermería en un hospital de enseñanza. **Método:** estudio de caso retrospectivo y transversal (2009 a 2012) con enfoque cuantitativo. Los tipos y causas de renunciass fueron obtenidos a través de entrevistas de renuncias llevadas a cabo y ofrecidas por el Departamento de Recursos Humanos. Para el cálculo de la rotación se utilizó la ecuación propuesta por el programa Compromiso con la Calidad Hospitalaria. El proyecto de investigación fue aprobado por el Comité de Ética en Investigación, Protocolo 96.830/2012. **Resultados:** de los 522 empleados que renunciaron, 459 respondieron las entrevistas. El promedio de dimisiones fue de 76.3 (DE = 97.3). El motivo personal fue la causa predominante de renuncias (35.9%), principalmente para auxiliares de enfermería. **Conclusión:** las informaciones obtenidas por este estudio capacitan a los administradores a respecto de la tendencia organizacional y para la comprensión de la rotación y la adopción de estrategias de valoración y retención del personal. **Descriptor:** Indicadores de Administración; Recursos Humanos en Salud; Enfermería; Administración Hospitalaria.

¹Nurse, Master's degree candidate, Graduate Program in Nursing, São José do Rio Preto Medical School (FAMERP). São José do Rio Preto (SP), Brazil. E-mail: pbuckinha@yahoo.com.br; ²Nurse, PhD. in Nursing, Professor at the Specialized Nursing Department, São José do Rio Preto Medical School (FAMERP). São José do Rio Preto (SP), Brazil. E-mail: marcia.perroca@gmail.com; ³Nurse, PhD. in Nursing, Professor at the Specialized Nursing Department, São José do Rio Preto Medical School (FAMERP). São José do Rio Preto (SP), Brazil. E-mail: marli@famerp.br

INTRODUCTION

Turnover is a term widely used in the field of personnel management; however, there is a lack of consensus as to its definition. It can be defined as the number of people who are hired and leave the institution,¹ or when this process occurs internally between the units of the institution,² and, yet, as the replacement of employees.³ The causes of turnover are related to external and internal phenomena to the organization and influence employees' behavioral attitudes. The external phenomena are based on supply and demand for people in the market and the economic situation. On the other hand, the internal phenomena are related to wage policies and social benefits, and the kind of supervision performed, among others.⁴

Turnover tends to be initiated by psychological factors related to negative aspects of the organizations. Workers' dissatisfaction with the role played by them and the lack of autonomy and recognition of the position held are problematic factors observed in the field of nursing worldwide.⁵ Usually, it implies loss of workers, which impacts on healthcare quality and costs, undermining the organizational efficiency, not only due to the loss of monetary bases concerning the reduction in production, but also the time spent on recruitment, selection, and training of new workers.¹

In Brazil, surveys on turnover are carried out in the framework of health services management and they address primarily issues that compromise the quality and the productivity, and generate unnecessary expenses.^{3,6-7} Studies show that the field of nursing experience problems related to personnel management, including personnel shortage,⁴ dissatisfaction at work, and high turnover rates in the services.⁸⁻⁹ It is necessary to know the causes of resignations of employees in order to address directly the causes and decrease the number of personnel losses.^{4,10}

In the international sphere, in line with national studies, turnover is seen as an event that generates additional costs for institutions and impacts on the quality of healthcare provided by nursing,¹¹ since turnover increases the adverse events related to inadequate healthcare practice.¹² A Finnish researcher¹¹ conducted a study on the intention to leave the profession and found that there was a crisis in nursing and showed that, in the future, the market trend will be characterized by more nurses' resignations than hirings in health institutions. Managers' role is to

understand and perform addressing the impact of turnover on healthcare quality, as well as increased costs.¹³

The Commitment to Hospital Quality (CHQ) program¹⁴ is based on voluntary adherence and developed a nursing quality indicator called turnover rate of nursing professionals to measure hirings and resignations. The indicators help managers in the decision-making process in the face of increased turnover occurring in the institutions.¹⁵ In the scenario of organizational changes and the impact on personnel management, it becomes fundamental to conduct studies addressing this issue.

OBJECTIVE

- To investigate the types and causes of resignations and the turnover rate of nursing personnel in a teaching hospital.

METHOD

The present study is linked to the "Management of Healthcare Services and Nursing (GESTSAÚDE)" research group and drawn from the dissertation "Cost of nursing personnel turnover in a teaching hospital" submitted to the Graduate Program in Nursing of the São José do Rio Preto Medical School (FAMERP), São José do Rio Preto (SP), Brazil, 2014.

This is a cross-sectional and retrospective case study (2009 to 2012) using a quantitative approach. It was carried out in a teaching hospital located in the southeast region of Brazil, with extra capacity (576 beds) and quaternary level. The average number of nursing employees in the studied period was 1,506. Of these, 225 were nurses, 270 technicians, and 1,011 assistants.

The research scenarios were all the units of the hospital: medical and surgical clinics (11); specialized services (21); diagnosis and therapeutic services (5); and administrative services (4). The outpatient clinics and health units that were not part of the structure of the hospital complex were not taken into consideration. The population was composed of members of the nursing staff that were out of the institution, excluding those undergoing residency programs.

The types and causes of resignations were assessed through interviews conducted by the Department of Human Resources and composed by the following items: types of resignations; causes of resignations; working environment; working conditions and safety; leadership; benefits; workload; remuneration; career plan; and positive and negative issues.

Ruiz PBO, Perroca MG, Jericó MC.

People management indicator: assessment of...

We classified as voluntary dismissals those that had taken place at the request of the employee and involuntary those with or without just cause, termination of the determined contract, and dismissals during the trial period.

The causes of resignations were grouped into items: personal choice (moving to other cities, family issues, adaptation to schedule, and type of admission units); professional

choice (retirement, job offer, agreement with the institution, remuneration, and termination of contract); work environment (interpersonal relationships, overload, and technical errors); unplanned work absence; not reported; and did not answer. The calculation of the turnover rate was conducted using the equation proposed by the CHQ, which considers the number of people who are hired and leave the institution.¹⁴

$$\text{Turnover} = \frac{\text{No. of hirings} + \text{No. of resignations}}{2 \times \text{No. of workers per period month}} \times 100$$

The Rx64 software, version 2.13.0 (The R Foundation for Statistical Computing 2011) was used for the analysis. Fisher's test, Pearson's chi-squared test, and likelihood ratio test were used for the association between the professional classes, age, and job permanence, and the association between the nursing categories and the types and causes of resignations.

The data were obtained from the Department of Personnel and Human Resources after being authorized by the institution and approved by the Research Ethics Committee of the institution under study (Opinion No. 96.830/2012).

Table 1. Distribution of demographic variables of nursing professionals who resigned from 2009 to 2012 (N = 459). São José do Rio Preto, SP, 2014.

Variables	2009		2010		2011		2012		Total			
	n	%	n	%	n	%	n	%	N	%	M	DP
Nurse	6	7.9	14	12.1	17	13.6	16	11.3	53	11.5	13.3	5.0
Technician	5	6.6	5	4.3	5	4	22	15.5	37	8.1	9.3	8.5
Assistant	65	85.5	97	83.6	103	82.4	104	73.2	369	80.4	92.3	18.9
Age (years)												
Up to 29	29	38.2	48	41.4	44	35.2	55	38.7	176	38.3	44	11
30 - 39	29	38.2	48	41.4	54	43.2	59	41.5	190	41.4	47.5	13.1
40 - 49	16	21	15	12.9	17	13.6	10	7	58	12.6	14.5	20
50 or over	1	1.3	4	3.4	10	8	9	6.4	24	5.3	6	4.2
NR	1	1.3	1	0.9	-	-	9	6.4	11	2.4	4.6	3.7
JP (years)												
Less than 1	22	28.9	38	39.8	39	30.5	51	35.9	150	32.7	37.5	11.9
From 1 to 5	24	31.6	34	21.2	33	25.8	38	26.8	129	28.1	32.2	5.9
6 to 10	19	25	26	24.8	31	24.2	35	24.6	111	24.2	27.7	6.9
11 and over	8	10.5	11	8.8	19	14.8	17	12	55	12	13.7	5.1
NR	3	3.9	7	4.4	3	2.4	1	0.7	14	3	3.5	2.5
Specialized												
admission unit	24	31.6	30	25.9	27	21.6	49	34.5	130	28.3	32.5	11.3
DTS	49	64.5	72	62.1	87	69.6	88	62	296	64.5	74	18.2
AS	3	0.6	11	9.5	8	6.4	3	2.1	25	5.4	6.3	3.9
NR	-	-	-	-	3	2.4	1	0.7	4	0.9	1	1.4
NR	-	-	3	2.5	-	-	1	0.7	4	0.9	1	1.4
Total	76		116		125		142		459			

NR - Not reported; JP - Job Permanence; DTS - Diagnosis and Therapeutic Service; AS - Administrative Service.

During the years assessed, the total number of dismissals was 331 voluntary (range: 56 - 115) and 127 involuntary (range: 19 - 43). The highest percentage of voluntary dismissals occurred in 2012 (34.6%) and the involuntary dismissals in 2010 (33.9%); the latter being prevalent in the study period (Table 2). The average number of dismissals was 76.3 (SD = 97.3). The voluntary type represented 72.3%

of the total, with 8.3% nurses, 7% technicians, and 57% assistants.

Involuntary dismissals totaled 27.7%, and 13.1% were due to termination of determined contract, 5.2% due to just cause, 4.6% without just cause, 3.1% completion of experience time, and 1.7% without justification. Nursing assistants represented the highest number of dismissals (84.3%).

RESULTS

There were 522 resignation cases of the nursing personnel from 2009 to 2012 and 459 of them answered the dismissal interviews (Table 1). Among them, 53 (11.5%) were nurses, 37 (8.1%) technicians, and 369 (80.4%) assistants. There was a predominance of females (395 = 85.8 %), age group of 30 to 39 years (190 = 41.4%), and job permanence at the institution was up to one year (150 = 32.7%). The average number of professionals in specialized units was 74 (Standard deviation [SD] = 18.2).

Table 2. Distribution of types of resignations, according to nursing categories, from 2009 to 2012 (N = 458). São José do Rio Preto, SP, 2014.

Category	Nurse				Technician				Assistant				Total			
	V		I		V		I		V		I		V		I	
Year	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
2009	5	13.2	1	6.7	4	12.5	1	20	47	17.8	17	16.2	56	16.9	19	15
2010	7	18.4	7	46.7	5	15.6	-	-	61	23.2	36	32.4	73	22	43	33.9
2011	13	34.2	4	26.6	3	9.4	2	40	71	26.9	32	30.4	87	26.5	38	29.9
2012	13	34.2	3	20	20	62.5	2	40	82	31.1	22	21	115	34.6	27	21.2
Total	38	11.5	15	11.8	32	9.7	5	3.9	261	78.8	107	84.3	331	72.3	127	27.7

* One did not answer; V - Voluntary; I - Involuntary.

As for the causes of dismissals (Table 3), personal choice totaled 165 (35.9%), and it was the most cited by nursing assistants (36%). Professional choice corresponded to 159 (34.7%), cited by 39.6% of the nurses and

48.6% of the technicians. It is worth noting the percentage of employees (19.6%) who reported not having received information about the cause for their dismissals.

Table 3. Distribution of causes of resignations according to nursing categories from 2009 to 2012 (N = 459). São José do Rio Preto, SP, 2014.

Variables	Nurse		Technician		Assistant		Total	
	N	%	N	%	N	%	N	%
Personal choice	17	32.1	15	40.5	133	36	165	35.9
Professional choice	21	39.6	18	48.6	120	32.5	159	34.7
Work environment	1	1.9	-	-	28	7.6	29	6.3
Unplanned work absence	1	1.9	1	2.7	13	3.5	15	3.3
Not justified	13	24.5	3	8.1	74	20.1	90	19.6
NR	-	-	-	-	1	0.3	1	0.2
Total	53		37		369		459	

NR - Not reported

No significant difference was found for the years studied and proposed associations: category and age; category and job permanence; category and type of resignation; and category and cause of the resignation.

Table 4 shows the number of hired and resigning employees, average number of employees, and turnover rate of the nursing

personnel. The average turnover rate was 18.8% (SD = 21.7). It was 9.4% for nurses (SD = 2.3% - ranging from 6.1 to 11.2%), 35.7% for technicians (SD = 33.7% - ranging from 8.9 to 79.1%), and 11.2% for assistants (SD = 4.6% - ranging from 6.8 to 17.2%).

Table 4. Distribution of hired and resigning employees, average number of employees, and turnover rate according to nursing categories from 2009 to 2012 (N = 522). São José do Rio Preto, SP, 2014.

Variables	2009			2010			2011			2012		
	N	T	A	N	T	A	N	T	A	N	T	A
Hired	13	44	70	22	80	110	36	69	91	36	69	98
Resigned	10	7	86	19	7	99	17	5	125	20	31	96
A. workers*	187	56	1148	215	55	1216	237	408	895	259	562	786
Taxa	6.1	45.5	6.8	9.5	79.1	8.6	11.2	9.1	17.2	10.8	8.9	12.3

N - Nurse; T - Technician; A - Assistant. *A. workers - average number of workers.

DISCUSSION

This study showed that the majority of the resigning members of the nursing staff were assistants (80.4%), since these professionals made up the largest contingent of the staff. These results are similar to those described for hospitals of the State of Minas Gerais (65.6%).⁹ The predominant age of resigning employees was 39 to 30 years (41.4%). These professionals tend to search for better quality of life and working conditions due to being in full professional development and targeting social and professional ascent.¹⁶

The assessment of the work profile showed that the largest number of resigning employees (32.7%) had remained less than a year at the institution. It was observed that as the job permanence increased, there was a decrease in the number of resigning employees. In this regard, it is worth highlighting the importance of promoting better monitoring, training, and adaptation of newly hired personnel at the institution, thereby allowing the engagement of the employees with the institution and the possibility of increasing job permanence.

The large amount of newly graduates on the market that use the early years of the

Ruiz PBO, Perroca MG, Jericó MC.

People management indicator: assessment of...

profession to improve their skills, in search of better opportunities in a future job might explain this fact.¹⁷ Short job permanence also entails costs for the institution, doubling the expenses of the hiring process.¹⁸ Specialized units—particularly intensive care units—were those which had a higher number of resignations. This fact can be related to healthcare provided to critical patients, due to the complexity, work overload, and constant stress.¹⁷

Professionals' voluntary dismissals have been growing over the years, showing an increase of 89.3% during the period studied. An international study¹¹ reports that in the future there will be a larger trend of nurses' resignations than hirings in health institutions, since the professionals search for the possibility of better working conditions, remuneration, benefits, and even another profession. This quest for greater quality in the profession is demonstrated by 34.7% of the resigning nursing personnel, who reported the "professional choice" as justification for their resignation. This cause was overcome by the desire for better personal conditions, with 35.9% of the employees citing the "personal choice".

It was noted that, relating the data of the types with the causes of resignations, there was 71.7% of voluntary dismissals, of which 39.6% was caused by professional choice and 32.1% by personal choice. These professionals have ambitions, personal expectations, and perspectives related to their own careers. If the institution does not meet their expectations, they may feel encouraged to seek personal and professional satisfaction, better wages, benefits, and working conditions in other workplaces.¹⁹

The "assistants" category had 71.4% of voluntary dismissal cases. Of these, 36% cited "personal choice" and 32.5% "professional choice". The same result was described in a study in which 37.5% of dismissal requests were linked to personal reasons, and the personal dissatisfaction had influenced these findings in this category.¹⁸ The dismissal of any team member implies changes in the activities, affecting directly the quality of healthcare provided to the patients, given that these employees—who work in direct healthcare provided to the patients—already have knowledge about work processes.¹⁹

By assessing the turnover rate, the present study showed an average value of 18.8%, which is similar to the value found in 41 Canadian hospitals (19.9%)²⁰ that assessed nurses from 183 different units. Another research conducted in Ribeirão Preto showed

a turnover rate above 50% for philanthropic and private hospitals.²¹ High turnover causes variation of production levels, lack of sense of the staff, and overload to the remaining employees, representing financial and time demand for the institution. This investment is due to great repetition of recruitment, selection, training, adaptation, and dismissal processes.¹⁷

Data presented by the CHQ from 2009 to 2012 in 32 general hospitals showed that the turnover rate ranged from a median of 1.5 to 1.8% in that period.²² When the evolution of the data obtained in this study was compared with that presented by the CHQ, it was possible to observe a large discrepancy in turnover rates, even though there was a decrease in the rates during the research over the years.

Turnover rates were classified from defined cut-off points, in which the range from 0 to 7% is regarded as expected, from 7 to 15% acceptable, 15 to 25% bad, and greater than 25 critical.⁷ According to this classification, the present study showed overall average turnover of 18.8%, which was regarded as bad. Nurses' turnover was 9.4% and assistants' 11.2%, considered acceptable, and technicians' turnover was 35.7%, considered critical. It is important to note that this classification proposal was made in a context of community health. It is essential to take into consideration that the optimal value of turnover will depend on the specific situation of each institution.⁷ A resignation rate greater than 30% indicates little acceptable levels. If this index reaches 50%, it will generate high costs arising from the replacement of professionals.⁹

Comparing the turnover rate between the categories, it is essential to emphasize that the high values found for the technicians from 2009 to 2010 (45.5 and 79.1%, respectively) are directly related to the small workforce contingent. In 2000, the Ministry of Health created the Nursing Staff Professionalization Program (PROFAE), which provides for promoting assistants to technicians, aiming at qualitative adequacy of the professional staff and enforcement of nursing legislation.²³

From 2011, the institution started the process of qualitative adjustment of professionals, which influenced turnover rates through changing the number of professionals in the assistants and technicians categories. The average number of technicians increased 90% from 2009 to 2012 and, consequently, at the end of this period the turnover rate fell from 45.5 to 8.9%. Meanwhile, the assistants category showed an inverse trend, decreasing

Ruiz PBO, Perroca MG, Jericó MC.

31.5% the number of professionals in the period and increasing the turnover rate from 6.8% in 2009 to 12.3% in 2012, reaching its peak in 2011 with 17,2%.

These intraorganizational changes—i.e., promoting assistants to technicians—caused the decrease in the number of assistants. Some professionals showed no interest in being promoted, since to do so they would have to carry out curriculum adequacy in order to perform the new role. This way, they chose to be dismissed. This behavior can explain the rate changes in the assistants category from 2011 to 2012.

High turnover is a synonym of productivity and organizational health loss, impacting on clients and employees' commitment and credibility. When this loss value is high, there is a challenge to be overcome, representing loss of knowledge, intellectual capacity, and contact with clients, market and business.²⁴ The efforts to retain talents should be as important as efforts to decrease turnover rates.²⁵

This information related to the nursing personnel movement on the labor market demonstrates the need to seek new tools to hire, value, and retain talents, since studies addressing this topic are scarce and understanding these data depends on periodic and detailed studies, due to the complexity of the turnover phenomenon.

The questionnaire applied by the institution was a limiting aspect in the present study, since it was pre-drawn and limited the responses of the interviewees. In order to have accurate information obtained by the institution through the resignation interviews, a favorable environment should be provided for the freedom of thought on the part of those that have worked and are leaving the hospital, given that these interviews will serve as a basis for analysis of the turnover phenomenon, its types and causes.

The redesign of the flow of information generated by the dismissal interview, as well as the elaboration of an instrument covering the work context experienced by the employees, is recommended, so that the information generated can subsidize personnel retention strategies at operational level.

Internationally, there is a shortage of nursing professionals, leading to the development of talent retention policies, since it is difficult to obtain new professionals. In Brazil, this trend differs by the large supply of workforce. This is explained by the fact that personnel retention has not become a management strategy and

People management indicator: assessment of...

also by the shortage of studies and knowledge related to the cost of employees' turnover.

CONCLUSION

The present study has allowed mapping the hiring and resignation flow of nursing professionals in a teaching hospital. We believed that the results may contribute in drafting personnel management policies to promote the managers' decision-making process and the establishment of strategies with integrated actions among the various services related to personnel movement, valuing and retaining talents, thus making the turnover rate favorable.

FUNDING

The present study was carried out with financial support from "Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - CAPES" (Government agency linked to the Brazilian Ministry of Education in charge of promoting high standards for post-graduate courses in Brazil).

REFERENCES

- 1- Nomura FH, Gaidzinski RR. Rotatividade da equipe de enfermagem: estudo em hospital-escola. Rev Latinoam Enferm [Internet]. 2005 [cited 2014 Jan 08];13(5):648-53. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-11692005000500007&lng=en
- 2- Hayes LJ, O'Brien-Pallas L, Duffield C, Shamian J, Hughes F, Laschinger HK, et al. Nurse turnover: a literature review - an update. Inst J Nurs Stud [Internet]. 2012 [cited 2014 Jan 08]; 49(7):887-905. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22019402>
- 3- Stancato K, Zilli PT. Fatores geradores da rotatividade dos profissionais de saúde: uma revisão de literatura. Rev Adm Saúde [Internet]. 2010 [cited 2013 Oct 20];12(47):87-99. Available from: http://www.cqh.org.br/portal/pag/anexos/baixar.php?p_ndoc=207&p_nanexo=%20289
- 4- Medeiros CRG, Junqueira AGW, Schwingel G, et al. A rotatividade de enfermeiros e médicos: um impasse na implementação da estratégia de saúde da família. Ciênc Saúde Coletiva [Internet]. 2010 [cited 2014 Jan 08];15(Suppl 1):1521-31. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232010000700064&lng=en
- 5- Takase M. A concept analysis of turnover intention: implications for nursing management. Collegian Internet]. 2010 [cited

Ruiz PBO, Perroca MG, Jericó MC.

People management indicator: assessment of...

2014 Jan 08]; 17(1):3-12. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/20394269>

6- Campos CVA, Malik AM. Satisfação no trabalho e rotatividade dos médicos do programa de saúde da família. Rev Adm Pública [Internet]. 2008 [cited 2013/09/20];42(2):347-68. Available from: <http://www.scielo.br/pdf/rap/v42n2/07>

7- Sancho LG, Carmo JM, Sancho RG, et al. Rotatividade na força de trabalho da rede municipal de saúde de Belo Horizonte, Minas Gerais: um estudo de caso. Trab Educ Saúde [Internet]. 2011 [cited 2014 Jan 08];9(3):431-47. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1981-77462011000300005&lng=en&nrm=iso

8- Anselmi ML, Duarte GG, Angerami ELS. "Sobrevivência" no emprego dos colaboradores de enfermagem em uma instituição hospitalar pública. Rev Latinoam Enferm Internet]. 2001 [cited 2014 Jan 08]; 9(4):13-8. Available from: <http://www.revistas.usp.br/rlae/article/view/File/1579/1624>.

9- Iwamoto HH, Anselmi ML. Rotatividade dos colaboradores de enfermagem nos hospitais do município de Uberaba, Minas Gerais. Rev Gauch Enferm [Internet]. 2006 [cited 2013 Aug 15];27(3):443-53. Available from: <http://seer.ufrgs.br/RevistaGauchadeEnfermagem/article/view/4663/2581>

10- Iwamoto HH. Os recursos humanos de enfermagem na rede hospitalar do município de Uberaba, Minas Gerais [tese]. Ribeirão Preto: Universidade de São Paulo; 2005.

11- Flinkman M, Leino-Kilpi H, Salanterä S. Nurses' intention to leave the profession: integrative review. J Adv Nurs [Internet]. 2010 [cited 2013 Aug 15]; 66(7):1422-34 Available from: <http://www.ncbi.nlm.nih.gov/pubmed/20497270>

12- Cutruzulla JF, Cipriano PF. Over recruiting: breaking the short staffing and rotatividade cycle. Nurse Leader. 2007;5(6):28-32. DOI: 10.1016/j.mnl.2007.09.005

13- Kluck M, Guimarães JR, Ferreira J, Pronpt CA. A gestão da qualidade assistencial do hospital das clínicas de Porto Alegre: implementação e validação de indicadores. Rev Adm Saúde [Internet]. 2008 [cited 2014 Mar 05];10(40):97-102. Available from: <http://jararaca.ufsm.br/websites/ephusm/download/ARTIGORAS16.pdf>

14- CQH- Controle de qualidade hospitalar: Indicadores de enfermagem. http://www.cqh.org.br/portal/pag/area.php?p_area=98.

15- Gabriel CS, Melo MRAC, Rocha FLR, Bernardes A, Miguelaci T, Silva MLP. Utilização de indicadores de desempenho em serviço de enfermagem de hospital público. Rev Latino-Am Enfermagem [Internet]. 2011[cited 2014 Mar 02];9(5):1-9. Available from: http://www.scielo.br/pdf/rlae/v19n5/pt_24.pdf

16- Poeira A, Mamede RP. Os fatores determinantes da rotatividade externa dos enfermeiros: vínculo contratual, incentivos salariais ou reconhecimento profissional. Rev Enf Ref [Internet]. 2011[cited 2014 Jan 08];3(4):107-14. Available from: http://www.scielo.gpeari.mctes.pt/scielo.php?script=sci_arttext&pid=S0874-02832011000200011&lng=pt

17- Holanda FL, Cunha ICKO. Tempo de permanência de enfermeiros em um hospital-escola e valores monetários despendidos nos processos de admissão, desligamento e provimento de novo profissional. Rev Latinoam Enferm [Internet]. 2005 [cited 2014 Feb 10];13(5):642-7. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-11692005000500006&lng=en

18- Zucatti APN. Tipos e motivos de desligamento dos colaboradores de enfermagem de Porto Alegre. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2012.

19- Oliveira SAO, Paiva RFR. Possibilidade de diminuir a rotatividade da equipe de enfermagem nos serviços hospitalares. Rev Gest Saúde [Internet]. 2011;2(1):60-73. Available from: <http://www.herrero.com.br/revista/Edicao%204%20Artigo%205.pdf>

20- Pallas L O'Brien-, Murphy GT, Shamian J, et al. Impact and determinants of nurse rotatividade: a pan-Canadian study. J Nurs Manag [Internet]. 2010 [cited 2013/11/10];18(8):1073-86. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21073578>

21- Anselmi ML. A rotatividade dos colaboradores de enfermagem nos hospitais de Ribeirão Preto [tese]. Ribeirão Preto: Universidade de São Paulo; 1993.

22- Tronchin DMR, Reis EAA, Gerolin FSF, cordenadores, et al. Manual de Indicadores de enfermagem NAGEH - Compromisso com a qualidade hospitalar CQH. 2nd ed. São Paulo: APM/CREMESP; 2012.

Ruiz PBO, Perroca MG, Jericó MC.

People management indicator: assessment of...

23- Ferreira MA, Oliveira BGRB, Porto IS, Anborn CG, Castro JBA. O significado do PROFAE segundo os alunos: contribuição para a construção de uma política pública de formação profissional em saúde. *Texto & Contexto Enferm* [Internet]. 2007 [cited 2013/11/10]; 16(3):445-52. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072007000300010

24- França MGA. Rotatividade dos auxiliares de enfermagem em instituições de longa permanência: causas e consequências [monografia]. São Paulo: Faculdade de Ciências Médicas da Santa Casa de São Paulo; 2010.

25- Jones CB. Revisiting nurse turnover costs. *J Nurs Adm* [Internet]. 2008 [cited 2013/11/10]; 34:562-70. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/18157000>

Submission: 2013/07/09

Accepted: 2014/11/28

Publishing: 2015/02/01

Corresponding Address

Paula Buck de Oliveira Ruiz
Rua das Cerejeiras, 597
CEP 15110-000 – Guapiaçu (SP), Brazil

English/Portuguese

J Nurs UFPE on line., Recife, 9(2):643-50, Feb., 2015