ABSTRACT

Objective: to calculate the overall turnover rate of nursing workers from the adult emergency unit of a general teaching hospital in the period between January 2005 and December 2013.

Method: quantitative, exploratory, descriptive, retrospective study; data collection performed on documents/work schedules of the unit. Turnover rate calculated considering monthly entry/exit of workers at the unit’s work schedules.

Results: 171 professionals worked in the emergency unit in this period; 101 left the unit (57 migrated to other areas and 44 left the institution). Time of service presented trend of nine years and median of two years and four months. Global turnover above 3% in four months in 2006; October/2008; April to September/2009; four months in 2010; July/2011; and May/2013.

Conclusion: considering the effects of staff turnover for nursing care, it is recommended to adopt indicators for management/control of this condition.

RESUMO

Objetivo: calcular a taxa de rotatividade global dos trabalhadores de enfermagem da emergência adulto de um hospital geral universitário, no período entre janeiro de 2005 e dezembro de 2013.

Método: estudo quantitativo, exploratório, descritivo, retrospectivo; coleta de dados realizada em documentos/escalas de trabalho da unidade. Taxa de rotatividade calculada considerando entrada/saída mensal de trabalhadores nas escalas de trabalho da unidade.


Conclusão: considerando os efeitos da rotatividade de pessoal para a assistência de enfermagem, recomenda-se a adoção de indicadores para gerenciamento/controle desta condição.

However, empirically, there is the perception that in these sectors, the professionals work with fewer working hours and little professional experience, both in nursing and in the medical field. However, there are few studies that have investigated the difficulties faced by the turnover of workers in emergency units and in hospital institutions as a whole. 1–5

Staff turnover consists of the output of workers leaving and others entering to replace them in their assignments within an organization. 6 The turnover of nursing staff significantly interferes in the quality of the care provided, demands time and cost with selection, hiring and qualification of personnel for the institution. 7

The Inter-union Department of Statistics and Socioeconomic Studies (DIEESE – “Departamento Intersindical de Estatística e Estudos Socioeconômicos”, in Portuguese language) defines the turnover of workers as “the replacement of the occupant of a job by another, that is, dismissal followed by admission, either in a specific job, individually or in several jobs, reaching a group of workers”. 8–11

For DIEESE, the turnover concept is easy to understand, however, the analytical complexity in the exact classification of replacement of the work stations, the measurement of the occurrence of turnover, and the recognition of the reasons that determine their occurrence are high, because there are a large number of factors that relate to each other, which influence the movement of the labor market. 8

The turnover phenomenon can be expressed through monthly or annual indices, however, it is more frequently verified that its calculation is performed monthly, in order to facilitate comparisons and to support the decision-making. It can be studied in a global or sectorial way, depending on the reality and necessity of the organization. 9

In order to calculate the turnover, it is proposed to use different formulas. 9–10 The option adopted in this study is to associate the number of admissions and dismissals and divide it by two, divide this number by the number of workers from the previous month and finally, multiply the result by 100, thus obtaining the overall turnover rate. 10

It should be highlighted that the percentage of turnover expressed by the number of admissions, dismissals and their replacements can be considered a health indicator for the organization, through which it relates the productivity and motivation of the professionals, as well as the satisfaction of the clients.11

In discussions about the goals of staff turnover in organizations there is no consensus on an acceptable rate, however, there are authors who claim that the often acceptable rate of turnover in organizations is about 3%. 9 Others argue that, initially, “goal-indexes” of turnover in organizations should not be imposed and that each segment, company or region should define its ideal index, that is, the one that generates less impact or loss for the good functioning of the organization. 7 In the present study, 3% was adopted as a reference of the labor turnover in nursing, as an acceptable index.

The discussion on the topic points out that the high turnover rate in an organization indicates a need for improvement. Likewise, raising staff turnover rates in a particular area or job in an organization can lead to overall difficulties, workers’ dissatisfaction, as well as a drop in the quality indicators of the services provided.12

Among the studies on staff turnover in organizations, a pioneer study is highlighted, 13 which has influenced later studies and which states that the turnover has positive and negative reflexes, both individual and organizational ones. As potential negative organizational consequences, it should be highlighted the financial costs, the fall in the worker’s level of performance before leaving, as well as the fall in social and communication standards, reduction of morale of the workers who remain in the organization, implementation of policies and undifferentiated strategies to control the turnover, postponement or cancellation of lucrative projects, among others. As potential positive organizational consequences, the dismissals of professionals with low performance, the possibility of innovation,
flexibility and adaptability, the reduction of other withdrawal behaviors and the reduction of conflicts were listed.13

Staff turnover may also generate imbalance in the organizational climate and work overload for workers who remain in the company; the reduction of the turnover rate should be part of the goals to be achieved by organizations that aim at competitive and sustainable advantages.14

In the work scenarios, it is a fact that the most developed organizations, in terms of people management, seek to know deeply the occurrence of turnover and are preparing to face the problem in a professional and scientific way.9 In nursing, studies about the turnover in health institutions are still incipient, but they are fundamental for the search for management alternatives for quality of care and patient safety.

This study aimed to calculate the overall turnover rate of nursing staff from the adult emergency unit of a general teaching hospital.

METHOD

This is a quantitative, exploratory-descriptive and retrospective research that calculated the overall turnover rate of nursing workers. It was developed in the adult emergency unit of a general teaching hospital and considered for the purposes of calculating the turnover between January 2005 to December 2013, due to the availability of institutional documents, which allowed the study to be carried out. For the purpose of calculation, it was considered the entry and exit of workers in the adult emergency unit, without considering the cause of the movement.

The data collection was carried out in May 2014 and was made possible by the evaluation of the monthly service schedules, occurrence books and records about the workers. It began after the approval of the research project by the Research Ethics Committee, which issued a favorable opinion No.466,846 in 2013.

The analysis of the registers in the work schedules identified a population of 171 nursing workers, who worked in the adult emergency unit during the period studied, among them, 50 nurses and 121 nursing technicians and/or assistants. About this number, the calculation of the overall turnover rate in the service was performed.

The register and storing of the data for calculating the turnover was done in the Microsoft Excel® 2007 Worksheet built by the researchers. It was initially considered the entry of all the workers present in the monthly service schedule of January 2005 as a cutoff point. Subsequently, the employees’ exits and entries in the unit were recorded by including/excluding their names from the other monthly service schedules, since the institution uses this means to indicate the location of their workers.

The insertion of the data in the table allowed us to calculate the global turnover rate, using the formula presented in figure 1.10

**Figure 1 - Formula for calculating the overall turnover rate**10

\[
\text{Global turnover} = \left\{ \frac{\text{number of admissions (monthly)} - \text{number of resignations (monthly)}}{\text{number of employees (previous month)}} \right\} \times 100
\]
By constructing the table and feeding data from the service schedules, it became possible to calculate the trend and the median service time of the workers. Both were expressed in periods, in years or months. The median made it possible to locate the “typical service time” of the nursing workers in the adult emergency unit between January 2005 and December 2013. The trend has revealed the most frequent service time, verified within the time frame stipulated for the research.

Finally, the data were analyzed based on the descriptive statistics.

RESULTS

In January 2005, 53 nursing workers were working in the adult emergency unit of the hospital under study, among them, nine nurses and 44 nursing technicians/assistants. This amount of personnel has been expanded over the years, reaching in 2013 the number of 70 nursing workers, being 17 nurses and 53 nursing technicians/assistants.

In this period, 171 nurses have worked there, of which 59.06% (101) have left the unit. Among those who have left, 56.43% (57) workers were working in other units of the institution; 7.92% (eight) workers retired; 0.99% (one) worker was transferred to another teaching hospital; and 34.65% (35) were dismissed from the institution. Among these dismissals, 71.42% (25) occurred due to the termination of a temporary contract, 20% (seven) at the request of the worker and 8.57% (three) by institutional decision. Only one dismissed worker was part of the federal staff, hired by the Single Legal Regime.

By applying the proposed formula to calculate the monthly, global turnover rate of nursing workers in the investigated unit, it was obtained the results shown in Table 1.

Table 1 - Overall turnover rate of nursing workers in the adult emergency unit between the years 2005 and 2013. Florianópolis, SC, Brazil, 2014. (n=171)

<table>
<thead>
<tr>
<th></th>
<th>Turnover rate (month)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Jan</td>
</tr>
<tr>
<td>2005</td>
<td>-</td>
</tr>
<tr>
<td>2006</td>
<td>4.80</td>
</tr>
<tr>
<td>2007</td>
<td>-</td>
</tr>
<tr>
<td>2008</td>
<td>-</td>
</tr>
<tr>
<td>2009</td>
<td>0.84</td>
</tr>
<tr>
<td>2010</td>
<td>0.72</td>
</tr>
<tr>
<td>2011</td>
<td>-</td>
</tr>
<tr>
<td>2012</td>
<td>1.44</td>
</tr>
<tr>
<td>2013</td>
<td>0.74</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8.54</td>
</tr>
</tbody>
</table>

Table 1 shows the increase in the nursing staff of the adult emergency unit, with an increase of 17 workers in the period studied. The increase in the number of personnel corresponds to periods of expansion of the service due to the increase in the labor demand and the incorporation of the Embracement with Assessment and Risk Classification (AACR – “Acolhimento com Avaliação e Classificação de Risco”, in Portuguese language) in 2006, proposed by the State Health Department.

In the analysis of the turnover rates (Table 1), acceptable values were found during all the months of 2005, 2007 and 2012. The turnover rates for 2006 were associated with the hiring of workers approved in the public tender held in the last months of 2005 and internal institutional relocation processes.

In 2008 and 2013, the turnover rates exceeded 3% in October (9.17%) and May (6.25%), respectively. The increase in the turnover rate in October 2008 was related to the beginning of hiring
of workers through a selective process, for a fixed period of 24 months in the institution. And the turnover observed in May 2013 coincided with the closure of a medical clinic unit, with redistribution of the nursing staff in the institution to cover deficits related to retirements and/or dismissals without replacement.

The years in which the highest turnover rates of the nursing staff of the adult emergency unit were registered were 2009 and 2010, the first being the one with the highest prevalence. In 2009, the turnover rate was higher than 3% from April to August, reaching 12.03% in May. And the period with the highest turnover rate between January 2005 and December 2013 occurred in September 2010, which resulted in 12.30%. These events are justified by the termination of the contracts through selective process and hiring of new workers through federal public tender. The workers from the public tender held in 2010 replaced the temporary workers, justifying the increase in turnover this year.

In the analysis of the annual turnover, it was verified that the highest indexes occurred in 2009 (48.29%), 2010 (34.91%) and 2006 (27.05%), respectively.

Regarding the trend and median service time in the unit, the results found show a significant difference between them. Among nursing technicians and assistants, the trend related to the service time was nine years, with 17 occurrences. On the other hand, the trend of service time among nurses was only two months. 50 professional nurses passed through the unit in this period, and of these, seven remained in the emergency unit for a period equivalent to two months.

The median service time among workers was two years and four months. When analyzed by professional category, approximate values were presented in the two categories: nurses - two years and five months; nursing assistants and/or technicians: two years and seven months.

DISCUSSION

The permanence of nursing workers in certain jobs is a goal to be pursued in the management of health services, especially in the case of emergency services, which require knowledge, professional experience and the development of practical skills that contribute to patient safety.

The raising rates of staff turnover in a particular area or job within an organization can trigger overall difficulties for the institution, as well as decrease quality indicators of the services provided.

The permanence of nursing workers in certain jobs or even institutions is closely related to the quality of the practice environments, as well as to the capacity of these environments to offer challenges that stimulate the worker. A study that addresses the relationship between emotional exhaustion and nursing practice environments concludes that the environmental conditions interfere with the feeling of satisfaction at work, both in the perception and quality of care and in the intention to leave the job.

Regarding this condition, it is known that the work in the hospital environment, although instigating and heterogeneous, concomitantly includes unhealthy, intense, and complicated activities for all the professionals. In the specific case of emergencies, the nursing work process is complex and dynamic, requiring the performance of properly qualified workers for all types of care.

The disorganized demand for care in the emergency units in the Brazilian reality, together with the insufficient structuring of the health services network, have contributed decisively to the overload of emergencies, disorganization of the unit, decrease in the quality of care, among others. The Emergency Care Network, which was conceived as a strategy to articulate and integrate the health service units, as well as broaden and qualify the access to users who need urgent care, assuring agility, timely, comprehensive and humanized care advances with several difficulties. All these factors directly influence the decrease in the quality of service ambience and the decrease in job satisfaction at work, interfering with the turnover of the nursing team.
In response to these demands, the State Health Department has invested in the adoption of the Embracement with Assessment and Risk Classification (AACR – “Acolhimento com Avaliação e Classificação de Risco”, in Portuguese language) in hospital emergencies, in order to qualify the care provision. The nurses perform the AACR, which in the institution studied increased the hiring of this professional in 2006, when the AACR was implanted. This increase influenced the turnover rates, with an increase in the number of personnel.

Considering that the recruitment and hiring of personnel is carried out for the institution as a whole, without specific positions for this or that service, there is a great mobility of institutional personnel, because many, at the moment of hiring, cannot enter into the units with which they have more affinity or that have jobs considered “privileged”. In order to meet the workers’ expectations, nursing has since 1998 adopted a management policy to carry out staff reassignments, which enables workers to claim positions according to their workplace preferences.22 The internal reassignment privileges the longest-hired workers, with good professional performance (verified through annual functional assessments) and with better curricula. Thus, when hiring new workers, the existing positions are opened and the relocation processes are carried out. Historically, the workers of the emergency unit are among the ones that most seek to transfer to other care areas, and as a result, regardless of preference or professional experience, most of the newly hired workers begin their activities there.

It is understood that the relocation process adopted, although positive for employee satisfaction and for care provision, has repercussions on the staff turnover, especially for the emergency unit.

The results indicate that the workers turnover in the service occurs both by the exit of professionals from the institution, and by the internal mobility of workers in the hospital units, which is the most significant.

It is not possible to rule out the relation of the turnover with the causes that generate this event, found in the literature, among them: dissatisfaction with the working conditions and the lack of salary recognition, intense working hours, search for a better quality of life at work, stress, pressure and work overload, and rehabilitation of the worker in another unit due to health problems.2–5

The professional satisfaction, in its different definitions, has been considered an important element in the permanence of the nursing team in the varied spaces of action.23 It also plays a key role in the organization’s success.

Job satisfaction and psychological well-being are directly related. Consequently, the quality of the environment and of the work itself is key so that the emotional health of the workers is preserved and the quality of the nursing care provided by them is ensured.24

It is worrying in the result of this study the findings regarding the permanence of the nursing professionals in the unit. The nurses coordinate and supervise the unit and nursing activities of the nursing team and are responsible for carrying out more complex activities. It is expected, therefore, that they have more experience and knowledge in the area, allowing them to carry out even the permanent education of the nursing staff. The high turnover of nurses in this unit may be related to training difficulties and professional inexperience, in addition to the lack of preparation for team coordination, since most of those who take up the unit do so with little or no previous professional experience.

In view of this reality, it is reinforced the need for mechanisms that encourage the permanence of the largest number of experienced and trained professionals in the emergency unit to meet the complex needs of the service users, performing their activities with skill and security, using a variety of skills.24
CONCLUSION

The study on the turnover of the nursing staff of the adult emergency unit of a general teaching hospital allowed us to know the frequency with which the nursing staff left the unit, the average time of service and the turnover rates of the unit.

The results confirmed the initial hypothesis that the unit stay time is low, especially among nurses, and that by allowing the internal relocation through institutional processes, there is a high level of employee evasion, with a consequent increase in turnover rates. However, these processes have positive aspects, since they value the professional performance and the qualification of the professionals, contributing to their satisfaction at work.

Peaks of turnover rates were found in six of the nine years studied, which confirms the existence of a significant turnover interfering in work management. The ability to work on emergencies is due to the time spent in practice, the personal investment of the worker and the institution, and frequent changes in the workforce can compromise the quality of the services provided. In order to minimize the possible consequences of these occurrences, it is believed that managerial strategies should be instituted by the managers of the unit and the institution, aiming at maintaining the monthly rates of global turnover at acceptable levels, as described in the literature.

Due to the identification of the occurrence of higher turnover among nurses, it is suggested that a study should be conducted to investigate this phenomenon deeply in this specific group. It is also suggested the performance of studies that quantify the costs of the turnover for the institution.

REFERENCES


NOTES

CONTRIBUTION OF AUTHORITY
Study design: Martins MS, Matos E, Salum NC.
Data collect: Martins MS.
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Review and final approval of the final version: Martins MS, Matos E, Salum NC.

ETHICS COMMITTEE IN RESEARCH
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CONFLICT OF INTEREST
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