ABSTRACT
Objective: to describe the scientific evidence about the occurrence of the burnout syndrome in nurse home residents. Method: an integrative review, with time frame 1993-2013, from the research question << What is the scientific evidence about the occurrence of the burnout syndrome in nurse home residents? >>. The research of the scientific production occurred in the following databases: LILACS, IBECs, BDENF, MEDLINE, Cochrane and SCIELO virtual library. The analysis included careful consideration from the reading of the articles based on the literature. Results: a total of seven articles was found, of which only three contemplated the suggested criteria and were used in this analysis. Conclusion: it is important to develop new researches, expanding the number of involved individuals, comparing local results and other scenarios in order to build strategies for intervention, prevention and health promotion of the involved workers effectively. Descriptors: Professional Burnout; Nursing; Occupational Health; In-service Training.

RESUMO
Objetivo: descrever as evidências científicas que abordam a ocorrência da síndrome de burnout em residentes de enfermagem. Método: revisão integrativa, com recorte temporal de 1993 a 2013, a partir da questão de pesquisa << Quais são as evidências científicas sobre a ocorrência da síndrome de burnout em residentes de enfermagem? >>. A busca da produção científica se deu nas bases de dados: LILACS, IBECs, BDENF, MEDLINE, Cochrane e biblioteca virtual SCIELO. A análise contemplou apreciação criteriosa a partir da leitura dos artigos selecionados com base na literatura. Resultados: identificou-se o total de sete artigos, dos quais somente três contemplaram os critérios propostos e foram utilizados nesta análise. Conclusão: percebeu-se a importância do desdobramento de novas pesquisas com expansão do número de indivíduos envolvidos comparando-se resultados locais e de outros cenários a fim de construir estratégias de intervenção, prevenção e promoção à saúde dos trabalhadores envolvidos de forma eficaz. Descritores: Esgotamento Profesional; Enfermagem; Saúde do Trabalhador; Capacitação em Serviço.
INTRODUCTION

The search for professional qualification through residence is a growing tendency, given the demands of the labor market and the need for qualified workers.¹

The professional qualification program through the residence was created in 1889, in the United States of America, by William Malested, and its objective was to complement the theoretical and the practical training of the newly graduated physicians.²

In Brazil, only in the 1970s, after politics reorganizations in the health scenario, the medical residency gained legal regulations and reformulations in order to be enlarged. Along with the expansion of medical residency, the nurse residency arises in São Paulo, in 1961. And, in the 1970s, with the expansion of this type of education, especially in the southeast, Rio de Janeiro develops its first residence course with the objective of in-service training for nurses, specifically in the Pedro Ernesto University Hospital, an institution linked to the State University of Rio de Janeiro.³

Since its inception, the medical and nursing residencies have a qualifying character of the professionals who, mostly, are newly graduated, and find in this type of specialization a way to add, to the knowledge acquired at university, the ability to fully serve the population, from the specific knowledge.²,³

On the other hand, recent graduates have great expectations regarding the professional qualifications, the legalization of specialization and the support they expect to receive from preceptors, tutors, employees and the institution in which they develop their residence. It is clear that recent graduates find in residence a transition between the reality of the university and the professional practice.²,⁴

Consequently, the newly graduated nurse in the context of qualification through the residence is more likely to present psychophysical distress, for he/she finds the new work and learning context strange, different from the institution of graduation; other issues are also found, such as the extensive workload in the form of in-service training and accumulation of academic tasks. A study⁵ states that the quantitative characteristics of the nurse residents' work generate negative feelings (disappointment, anxiety, depression, fear and uncertainty), which made it difficult to nurses to adapt and to performance their professional activities.

In addition to the quantitative tasks of residents and the kind of occupation they are inserted in, it must be shown to the organizational and work characteristics: work characteristics - profession time, that is, bigger or smaller time of service; years in the institution; shift or night work; professional-client relationship; client type; conflict of roles; responsibility; possibility of progress; among others. Organizational characteristics - physical environment; institutional standards; bureaucracy; reward; autonomy; communication; others.⁶

It is noteworthy that, in addition to job and organizational characteristics which may influence the development of the syndrome, there are also personal characteristics which, in turn, may not trigger, but facilitate or inhibit the action of stressor agents, enabling, thus, the rise of burnout.⁷

In this sense, some of these features are described: younger professionals, mostly younger than 30 years old, which may cause insecurity or shock when facing the labor reality; prevalence of women, articulating with gender issues which, in the current world, are still disadvantageous to women; single individuals; idealism.⁶

Furthermore, this nurse is inserted in a work organization that, sometimes, does not favor mental health, for it is complex, fragmented and little reasonable⁸, constituting a context that favors the emergence of occupational stress and Burnout.

The term Burnout means, in the most direct translation, “lose the fire”, “lose energy”, “burning (out) completely,” or “what crashed for lack of energy”, “burn to exhaustion”⁴.⁹ On the other hand, there is not a single definition for burnout in the literature, but there is a consensus that it is a response to chronic work stress, a gradual exhaust process and a parallel lack of commitment to work⁸.⁹. There is also unanimity that the burnout syndrome is directly related to work’s environment.⁶

Through conducted researches, nurses, police, psychotherapists, prison guards, recent college graduates, doctors, teachers, educators, psychologists, lawyers and social workers are shown as the most affected professionals, due to a humanistic philosophy in their work, with a constant need for adapting to the job system.¹⁰,¹¹

For investigating the arising of the syndrome, there is an assessment of evidences of socio-environmental variables for which one uses the burnout assessment tool MBI -
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Maslach Burnout Inventory, which scrutinizes the following dimensions:6,9,13 I) Emotional Exhaustion (EE) - considered as the initial trace of burnout, when the individual has the feeling of physical and mental exhaustion, the feeling of not having energy anymore; II) Depersonalization (DE) - the defensive element of the syndrome and is recognized as a specific/unique feature of the syndrome, showing a cold and impersonal contact in relations with users (students, patients, clients, etc.), harsh attitudes, cynicism and irony in relation to people; III) Reduced Professional Accomplishment (RPR) - general and personal dissatisfaction with work activities - sometimes, the professional has an urge to abandon the work.

There are three versions of MBI instrument: HSS - Human Services Survey, indicated for burnout evaluation in human service professionals (doctors, nurses, psychologists, etc.); GS - General Survey, recommended for application to workers in general; ES - Educational Survey, recommended for education professionals. However, the correcting form and averages for the population depend on its translation and adaptation.6,9

With this initial context about the topics related to the research - residence and burnout syndrome - the following objective was traced to this study: to describe the scientific evidence about the occurrence of burnout syndrome in nurse residents.

It is believed that this study is relevant as it may encourage new researches to consolidate results and innovative knowledge to the Occupational Health area. Besides, it may bring some data to support a policy of prevention, promotion and intervention to the health of nurse residents.

METHOD

Descriptive study, of the Integrative Literature Review type, which aims to gather and synthesize results of researches about a particular topic.

The integrative researches shall follow six methodological steps: 1) Selection of the guiding question - theme definition, objectives, identification of keywords/descriptors related to the investigated subject; 2) Determination of the inclusion and exclusion criteria of the articles and selection of studies for composing the sample - use of databases; 3) Definition of information to be extracted from the selected studies - categorization of studies, organization and summarization of information, database construction; 4) Analysis of the studies included in the sample - application of statistical analysis, inclusion/exclusion of studies; 5) Interpretation of results - discussion of results, recommended proposals, suggestions for future researches and; 6) Review’s report - also called the synthesis of knowledge or presentation of the review by the summary of the available evidence and creating a document detailing the review.14,15

In this methodological perspective, the following research question was selected: What are the scientific evidences about the occurrence of burnout syndrome in nurse residents?

For collecting the data from the selected publications, an instrument model of gathering information was used, which includes: identification of the original article, methodological characteristics of the study, assessment of the methodological rigor, the measured interventions and the found results.14,16

For the analysis and subsequent synthesis of the articles that met the selection criteria, a second instrument was used, providing a summary of the discussed information, and, in accordance to the inclusion criteria, it consisted of the following items: journal, year, authors, design of study, objectives, methodological details, population/sample details, studied intervention, results, recommendations/conclusions.

The inclusion criteria were: articles fully available in Portuguese and Spanish, with an abstract available in the databases. The exclusion criteria were: articles available in more than one database; articles different from the proposed theme; book chapters; monographs; dissertations; theses; editorials; and incomplete articles and without abstracts.

Considering that only from the 90s the first studies about burnout syndrome were published, in Brazil6, and it is a subject little discussed regarding the intended population, the time frame of 20 years (1993-2013) was established, with the research taking place from in January and February 2014.

The literature research was performed in the Virtual Health Library (VHL) using the following databases: Latin American and Caribbean Health Sciences (LILACS), Bibliographical Index Spanish Health Sciences (IBECs), Base nursing data (BDENF), Cochrane Library, Medical Literature Analysis and Retrieval System Online (MEDLINE) and
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Scientific Electronic Library Online (SciELO). The specific strategies for detecting the articles were used, using the following Descriptors in Health Sciences (DeCS): burnout, nursing, in-service training, non-medical internship, occupational health. The descriptors were used in Portuguese, English and Spanish.

After identifying the articles and respecting the selection criteria and subsequent synthesis, the presentation of data was performed descriptively and with the use of figures.

**RESULTS**

After combined research using the keywords contained in the method section, and respecting the selection criteria, 229 documents were found. However, after reading the titles and, then, the abstracts, seven articles emerged, from which three met the criteria for this research. Since the found articles were in two or more databases, the database containing the largest number of jobs indexed was considered - LILACS.

Thus, only three articles contemplated the criteria and were used in this analysis, two with a sample of multidisciplinary residents - including nurses - and only one related specifically to nurse residents, which characterizes the lack of researches about the mentioned theme.

Figure 1 shows the selected articles, the database in which it was found, year of publication, periodic, title of the study and the research site:

<table>
<thead>
<tr>
<th>N</th>
<th>Database</th>
<th>Journal</th>
<th>Year of publication</th>
<th>Title</th>
<th>Research Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>LILACS</td>
<td>Rev Lat Am Enfermagem</td>
<td>2012</td>
<td>Stress and Burnout among multidisciplinary residents</td>
<td>Rio Grande do Sul (RS)</td>
</tr>
<tr>
<td>02</td>
<td>LILACS</td>
<td>Rev Esc Enferm USP</td>
<td>2012</td>
<td>Burnout Syndrome in multiprofessional residents of a public university</td>
<td>Rio Grande do Sul (RS)</td>
</tr>
<tr>
<td>03</td>
<td>LILACS</td>
<td>Rev Esc Enferm USP</td>
<td>2011</td>
<td>Burnout in nursing residents</td>
<td>São Paulo (SP)</td>
</tr>
</tbody>
</table>

Figure 1. Bibliographic identification of the articles selected for the integrative review. Source: Research Data.

Among the three articles, two are from 2012, and one, from 2011; two studies were conducted in Rio Grande do Sul and one, in São Paulo.

Regarding the specificities of each article, that is, the descriptors, the type of publication and objectives, the sample, the adopted study method and results, Figure 2 shows the synthesis.
The descriptors of the researches about the theme are similar: Nursing and Professional Burnout were used as primary descriptors for three articles, and In-service Training, in two of the studies.

Another relevant fact is related to the type of publication and objectives of the studies, because the selected articles have the character of identifying, describing and, sometimes, analyzing the studied phenomenon.

<table>
<thead>
<tr>
<th>No</th>
<th>Descriptors</th>
<th>Type of publication</th>
<th>Sample</th>
<th>Used method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Nursing; Burnout; Professional; Internship; Nonmedical; In-service Training; Analytical Epidemiology.</td>
<td>Analytical, cross-sectional and quantitative study.</td>
<td>37 residents</td>
<td>01 data form 01 Work Stress Scale 01 MBI-HSS</td>
<td>48.65% of the residents experienced high-stress. When associating the MBI-HSS subscales, 27% of the residents showed some indication of burnout syndrome.</td>
</tr>
<tr>
<td>02</td>
<td>Stress; Burnout; professional; Internship and residency; In-service training; Education, nursing</td>
<td>Descriptive, cross-sectional and quantitative study.</td>
<td>37 residents</td>
<td>01 data form 01 MBI-HSS</td>
<td>37.84% presented with High Emotional Stress, 43.24%, with High Depersonalization, and 48.65%, with Low Professional Fulfillment. 27% of the residents presented with signs of Burnout Syndrome.</td>
</tr>
<tr>
<td>03</td>
<td>Nursing; Burnout professional; Occupational health.</td>
<td>Investigative, descriptive, analytical, longitudinal-prospective study.</td>
<td>16 residents</td>
<td>01 data form 01 MBI</td>
<td>17.2% showed high rates in EE and Depersonalization; 18.8% showed impaired commitment in Personal Accomplishment, 75% of which belonged to specialty areas, such as Emergency Nursing, Adult and Pediatric Intensive Care. One of the Residents was identified with changes in three subscales of the MBI.</td>
</tr>
</tbody>
</table>

Figure 2. Summary of the articles included in the integrative review according to key words, type of publication/objectives, sample, used method and results. *The amount of nursing home residents addressed in the study was not specified. Source: Research Data.

The descriptors of the researches about the theme are similar: Nursing and Professional Burnout were used as primary descriptors for three articles, and In-service Training, in two of the studies.
The researches\textsuperscript{13,18} showed that residents with suggestive development for the syndrome are female (81.3%; 83.78%), mean age 25 to 29 years (93.8%, 51.35%) and singles (93.8%; 81.08%). In the study\textsuperscript{18} with the sample of multi-professional residents, it is noteworthy that individuals with indicative for burnout were predominantly young adults and nurses.

In the study of the population of nurse residents\textsuperscript{11}, there was correlation of the variable of susceptibility to burnout, stating, thus, that when correlating the sociodemographic and occupational variables with the MBI dimensions, age obtained statistically significant correlation ($p<0.05$) regarding the RPR. Despite the low number of residents with RRP over time, it was noticed that, during the second year of the residence, the evaluation of the same issue obtained positive changes in which this feeling became smaller.

The same study\textsuperscript{12} also demonstrated a statistically significant correlation directed to the specialty/job sector of the residents, because, when correlating this variable with the RP dimension of MBI, it was observed that 75% of residents with RPR changes belonged to the following specialties: Emergency/Emergency Room, Adult Intensive Care Unit and Pediatric Intensive Care Unit. However, regarding the evaluation according to the dimensions (EE, RPR and DE), it was observed that the average population with RRP was 48.65%; DE had an average of 43.24%; and, for EE, 37.84\%\textsuperscript{18}. On the other hand, for the study\textsuperscript{13} about the nurse residents, the result was set as follows: 17.2% had changes in EE and DE dimensions, and an average of 18.8% of the residents presented RRP.

In contrast, one of the studies\textsuperscript{17} had no significant data about the correlation of the RRP dimension and high stress. The author\textsuperscript{17} also states that the RPR may occur due to the transition period between the Academic and professional activities experienced by these residents. The lack of suggestive changes on the RRP dimension may be due to the similarity of the time of residence.\textsuperscript{17}

However, when associating the dimensions (EE, RPR and DE), 27% of the participants in the multi-professional residency program\textsuperscript{17-18} show indicative for burnout syndrome, as well as 6.3% of nurse residents of other study\textsuperscript{13} presented with development of this pathology.

It is noteworthy that the statistics data also showed that residents who presented a result of high stress, developed high EE and high DE.\textsuperscript{17} On the other hand, the study also shows that 51.35% of the residents were in low stress and 48.65% in high stress and it was found that the high stress was a predictor for burnout of the multi-professional residents.

In studies related to the multi-professional residence programs\textsuperscript{17-18}, the quantitative for the residents by practice area was not presented, only the total quantity of participants, namely: Nursing, Psychology, Nutrition, Social Work, Physical Therapy, Speech Therapy, Pharmacy, Occupational Therapy, Dentistry and Physical Education; totaling 37 residents for study.\textsuperscript{17-18}

**DISCUSSION**

Internationally, the specialization courses are widespread, as a natural consequence of the progress of knowledge in all areas.\textsuperscript{7} The residence increases the quality of care in the health service and trains qualified professionals for professional practice with conditions to serve the population in a qualified manner, providing greater knowledge and specialization.\textsuperscript{1} On the other hand, the residence is one of the teaching and learning modalities where professionals from different areas are able to acquire specialized knowledge, develop skills, competencies and abilities useful for next work experiences. After its conclusion, the graduates will certainly be multipliers of knowledge of their expertise area.\textsuperscript{40}

On the other hand, it is known that the Burnout syndrome is mainly related to organizational factors, and it may occur when the professional faces frustration or overload work, and tries to increase the efforts to overcome the challenges of the labor\textsuperscript{18}, or due to the use of coping strategies that do not protect the professional from the mental distress caused by work. Persistent pain can cause personal, family, institutional and social injury, causing interpersonal problems with co-workers, bosses and family; demotivation for the work, which consequently results in a deficit in the quality of life, interpersonal deterioration and working performance.\textsuperscript{6,18,21}

As for the workload, especially the residents, it is known that they take directly the health care of individuals and, sometimes, are responsible for more than one patient per shift or duty, unlike the nurses of the units, who generally exercise management activities and that hardly devote full time to direct assistance to the patient.\textsuperscript{13} Often, residents, in an attempt to avoid uncomfortable situations with the team, take care of the most severely ill patients, and also manage the unit, therefore, showing another form of overload work.\textsuperscript{12}
It is necessary to reflect that residents are in a peculiar time - they are beginning their professional career - with low familiarity about work tasks and the peculiarities of work organization, which favors the overload work. Along with the care and management demands of the unit, the resident has academic appointments that set mandatory activities of a residency program such as written works, coursework completion, lectures, tests, etc.. These characteristics, along with the profession and the organization of work, expose residents to emotional distress.

People develop and rework their strategies to face the everyday stressors from their experiences. Thus, young individuals, characteristic of most of the residents, may have fewer skills to overcome the distress from personal and professional situations.

Moreover, it is important to emphasize that nursing is considered one of the most stressful professions and prone to the development of Burnout, because it deals directly with vulnerable users. Furthermore, these professionals are subjected to physical and mental overload during their work activities, as they deal with hospital equipment and environment that, generally, do not meet the ergonomic standards, resulting in the execution of tasks that burden the individual, including long hours and duplicate duties.

Prolonged stress can lead to the emergence of burnout, which confirms what is stated by other authors, that the syndrome is due to the chronicity of work stress, due to intense days of work, or professionals that have large expectations for their professional development and dedication to the profession and do not reach their expectations. Therefore, these stressors can inhibit the coping strategies, resulting in negative consequences for the individuals and the organization.

It is important to emphasize that early identification of stress and stressful situations may establish productive interventions that minimize these effects and prevent the occurrence of the syndrome. Thereby, it is very important to discuss this matter and other diseases related to work during graduation, because it is evident that there is little knowledge of nursing professionals about this syndrome.

It is believed that the academic education may contribute to prevention and construction of coping strategies for Burnout. Through the literature research, it was possible to identify many situations that may contribute to develop the syndrome. Therefore, it is important that professionals and managers are aware both to create coping strategies of stress, as to realize, in advance, the manifested symptoms and seek help from specific professionals.

The studies show that, because this theme is broad and restricted within the investigated population, there is need to promote educational activities and guidance that enable people to know about the constructs for coping strategies that may favor the recognition and minimize the development of work stress, hence, Burnout. Nevertheless, the treatment and/or preventive actions focused on the syndrome should be prepared and focused on the living and working environment, in order to balance the expectations of the individual and the requirements of the organization, providing them with a better quality of life.

It is noteworthy the limitations of the studies that, in turn, were conducted in a single center and with a low number of participants; they also show that it was not possible to establish true comparisons of results with other researches, for there is no uniformity of cutoff criteria in Brazilian studies. The levels of Burnout are different in each culture, requiring implementation of individualized studies for each population. Therefore, it is important to implement other researches in order to standardize the specific cutoffs.

**CONCLUSION**

Burnout is an illness that physical, psychological and socially affects the individual, presenting from behavioral changes to physical and mental disorders. Moreover, the development of this study was a major challenge, considering the peculiarity of the theme and the specificities of the chosen population in order to answer the research problem and to obtain results that contribute to the nursing practice and knowledge. Nevertheless, it is inferred that there is a paucity of researches about this topic, which makes it necessary the development of other studies to strengthen the Occupational Health area, in particular, concerning the population of nurse residents. The limitation of this research is related to the small quantitative of studies regarding the theme.

It is necessary to introduce health protection measures for residents and preventive measures against occupational diseases, the emergence of occupational stress and also the burnout syndrome. Therefore, it is suggested that the Occupational Health services of institutions promote educational activities and guidance that enable people to know about the constructs for coping strategies that may favor the recognition and minimize the development of work stress, hence, Burnout. Nevertheless, the treatment and/or preventive actions focused on the syndrome should be prepared and focused on the living and working environment, in order to balance the expectations of the individual and the requirements of the organization, providing them with a better quality of life.
offering this type of in-service training have close coordination with the departments involved in the professional training of these residents, in order to think of different and specific policies to promote the health of the involved actors. In this regard, there is need for a close dialogue between the agents - Occupational Health professionals, professionals of training departments and residents - enhancing and implementing strategies for a more humane working environment, safe to occupational health.

Concerning the instruments that measure and investigate the burnout syndrome, it is necessary to translate, adapt and validate with the proper corrections and averages for the Brazilian population, considering the sociocultural and occupational characteristics, in order to make these instruments more applicable to the Brazilian reality.

REFERENCES


Scientific literature about the occurrence...