

# **REVIEW**

### The scientific production about occupational health of nursing

A produção científica sobre a saúde do trabalhador de enfermagem La producción científica sobre la salud del trabajador de enfermería

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#### **ABSTRACT**

**Objective:** To know the scientific literature about the nursing worker's health. **Method:** Bibliography review of literature published from 2005 to 2010. It was used the databases LILACS and SCIELO and BDENF, with intersection between the descriptors nursing and worker's health, 20 studies were selected. **Results:** Most publications on nursing worker's health discuss biosecurity, exposure to biohazards, occupational stress and its prevention and control measures. There are still few published studies about this issue in primary care or family health strategy, with most studies conducted in hospitals, mainly in university hospitals. **Conclusion:** The research on occupational health of nursing is important because it can contribute significantly to the improved quality of life of nursing staff. **Descriptors:** Nursing, Occupational health, Occupational risks.

# **RESUMO**

Objetivo: Conhecer a produção científica sobre a saúde do trabalhador de enfermagem. Método: Revisão sistemática da literatura publicada no período de 2005 a 2010. Utilizou-se as bases de dados LILACS, BDENF e SCIELO e o cruzamento dos descritores enfermagem e saúde do trabalhador. Foram selecionados 21 estudos. Resultados: A maior parte das publicações sobre a saúde do trabalhador de enfermagem discute sobre biossegurança, exposição a riscos biológicos, estresse ocupacional e suas medidas de controle e prevenção. Ainda há poucos trabalhos publicados acerca da saúde do trabalhador de enfermagem na atenção básica ou na estratégia saúde da família, sendo a maior parte dos estudos realizados no âmbito hospitalar, principalmente nos hospitais universitários. Conclusão: A realização de pesquisas sobre saúde ocupacional da enfermagem é importante, pois poderá contribuir de forma significativa para a melhor qualidade de vida dos trabalhadores de enfermagem. Descritores: Enfermagem, Saúde do trabalhador, Riscos ocupacionais.

### RESUMEM

Objetivo: Evaluar la literatura científica en en la salud del profesional de enfermería. Método: Una revisión sistemática de la literatura publicada de 2005 a 2010. Se utilizó la base de datos LILACS, SCIELO y BDENF, con una intersección entre los descriptores enfermería y salud laboral, 21 estudios fueron seleccionados. Resultados: La mayoría de las publicaciones de enfermería en salud laboral analiza la bioseguridad, la exposición a riesgos biológicos, estrés laboral y sus medidas de prevención y control. Todavía hay pocos estudios publicados sobre la enfermería de salud ocupacional en la atención primaria o la estrategia de salud de la familia, con la mayoría de los estudios realizados en los hospitales, principalmente en hospitales universitarios. Conclusión: La investigación en enfermería de salud ocupacional es importante porque puede contribuir significativamente a la mejora de la calidad de vida del personal de enfermería. Descriptores: Enfermería, Salud laboral, Riesgos laborales.

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## INTRODUCTION

The professional with difficulty in articulating the process of caring for others and oneself can convert this into a cause dislocation stress generator in the development of their activities. Thus, it is understood that it is impossible to separate work from personal life. Thus, it is necessary for the nurse to take care of themselves on a personal and professional responsibility with the same care with that of another. On the other hand, one must recognize the limitations and weaknesses to learn to act so as not to hurt their own beliefs, desires and wishes, reaching the full exercise professional.

The work environment has various health risks of individuals, which can be avoided or reduced through protective measures. However, sometimes the worker, by ignoring or failing to identify certain risk situations, performs actions without protection.<sup>3</sup> Among these risks, there is occupational exposure to biological material, problem faced routinely in nursing services, particularly for the diagnosis of the factors associated with its occurrence and its consequences for workers and institutions.<sup>4</sup>

The devotion, selflessness, dedication, characteristics accepted as intrinsic to the profession of nursing are applicants in their professionals. The idealized vision of the profession opposes the harsh reality of work done in less than ideal conditions. Thus, nursing professionals create defense mechanisms to tolerate living with daily pain, death and impotence in the face of situations that are beyond their control.<sup>5</sup> These working conditions lead to the urgent need for interventions rise in worker health.

In developing actions aimed at professional nursing interventions no standardized or predetermined.<sup>6</sup> There is the possibility of investing in occupational health, for their emancipation, and in association with worker health self-care, with social and political determinants, and ethical and legal aspects.<sup>7</sup>

Especially in primary care, there is a debt with health workers, since the specifics of the work at this level are not addressed from the standpoint of normative and prevention and control. Besides the pursuit of the establishment of the determinants of these health problems, should the Unified Health System (SUS) develop evaluation process, prevention and control of occupational hazards and damages that meet the needs of the worker.<sup>8</sup>

Given the specificities of health work, it is possible to understand that nursing workers are exposed to certain risks and illnesses, affecting not only the quality of care provided by these professionals, as their own quality of life.

Thus, this research is subject to occupational health of nurse who is responsible for the process of taking care of lives, needs to exercise self-care and decent working conditions. The motivation to research this issue is the fact that it is considered not only an issue of significance to nursing, but also for the population that uses their assistance and to the managers of health services.

In this sense, this research is relevant both at the personal, social and political, as through knowledge of how this issue is being addressed in scientific research, it is possible to reflect on issues related to occupational health nursing, minimizing accidents and occupational diseases.

Thus, this study had a guiding question: what do scientific researches disclosed the databases LILACS, and SciELO BDENF reveal about the nursin worker's health? Thus, in order to answer the research question the following goal emerges: to understand the scientific literature on the nurse's health.

## **METHODOLOGY**

This is a bibliographical research held in virtual databases using scientific articles available on the website of the Virtual Health Library (VHL), specifically in the databases of Latin American Literature (LILACS), the database of nursing (BDENF) and Scientific Electronic Library Online (SciELO). The words "worker's health" and "nursing" (occupational health/nursing; salud labor/enfermería) were used as descriptors, as descriptors for the classification of health sciences (DECS).

The inclusion criteria were as follows: available texts online, in Portuguese, published from 2005 to 2010 in order to present these publications in relation to the theme. We excluded studies incompatible to the objectives of the study and not fully available in electronic format. Those that were repeated in more than one database were counted only once.

Thus, 44 articles were identified, selected according to the criteria established for inclusion: in LILACS with 7 articles, but only 3 were selected, 16 in BDENF, these ones we selected 3; SCIELO in Brazil 21 productions were identified, of which 14 were selected. In this sense, after performing the search, 20 studies were selected.

Data were collected by using a structured form, covering issues consistent with the research proposal, including: research method, language, year, journal, title of the study and database that was available. They were analyzed using descriptive statistics and presented in the form of tables.

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## **RESULTS AND DISCUSSION**

Initially we present the results and analysis of the data of publications from Table 1 with the category as author, year of publication, title of publication and research method. All items in this table were available in the database SCIELO Brazil.

Among the studies analyzed, it becomes clear the interest to occupational health of the nurse in relation to the issue of biosafety and occupational stress. Although there are few published studies about occupational health in nursing in the Family Health Strategy (FHS), with most studies conducted in hospitals, especially in university hospitals.

The professionals more prone to accidents are technicians and nursing assistants, because they are in direct contact with the patient, administering medications, performing dressings and other procedures that keep them in contact with the sharps.<sup>9</sup>

Given the responsibility with human life that nursing assistants have during their working hours, the findings can contribute to more effective actions on the part of health services to workers, to deal with stress in that category. Thus, multiple factors may be involved in triggering labor accidents and occupational diseases in nursing.

	V	Title Caller Library	December 1
Author  David, Mauro, Silva,	Year 2009	Title of the publication  Organization of nursing	Research method  A quantitative, cross-
Pinheiro, Silva <sup>8</sup>	2009	work in primary care: a matter for worker's health	sectional, descriptive and inferential study
Jodas, Haddad <sup>11</sup>	2009	Burnout syndrome in nursing staff of an emergency room of the university hospital	Descriptive quantitative approach
Elias, Navarro <sup>5</sup>	2006	The relationship between work, health and living conditions: negativity and positivity in the work of nurses in a university hospital	Descriptive exploratory qualitative approach
Kirchhof ALC, Magnago TSBS, Camponogara S, Griep RH, Tavares JP, Prestes FC, et al <sup>12</sup>	2009	Working conditions and socio-demographic characteristics related to the presence of minor psychiatric disorders in nursing	Cross-sectional, epidemiological study
Santos, Soares, Campos <sup>13</sup>	2007	The relationship between work and health of nurses of the PSF in São Paulo	Descriptive qualitative approach
Dal Pai, Lautert <sup>14</sup>	2009	Strategies to prevent illnesses: a study on nursing work	Descriptive qualitative approach, case study
Moreira, Magnago, Sakae, Magajewski <sup>15</sup>	2009	Prevalence of burnout syndrome among nursing staff of a large hospital in southern of Brazil	Epidemiological study, cross-sectional quantitative approach
Robaina, Lopes, Rotenberg, Faerstein, Fischer, Moreno, Werneck, Chor <sup>10</sup>	2009	Life events stress and insomnia complaints among nursing assistants at a university hospital in Rio de Janeiro: Pro-Health Study	Cohort study of sectional approach
Vieira, Padilha <sup>9</sup>	2008	HIV and the nursing front of needlestick accidents	Literature review
Mantovani, Lacerda, Ulbrich, Bandeira, Galo <sup>7</sup>	2009	Panorama of the production of nursing knowledge in occupational health: impact and prospects	Literature review
Sailer, Marziale <sup>4</sup>	2007	Experience of nursing staff towards the use of antiretroviral drugs after occupational exposure to biological material	Exploratory retrospective, quantitative and qualitative methodological approach

**Table 1 -** Distribution of studies on occupational health in nursing according to author, year, title and research method. Natal / RN, 2011. Source: Layout of the authors.

Psychological demands and control are psychosocial dimensions that can generate high demand in nursing work. Thus, it is necessary organizational and participatory management that includes

workers in the process of changes and improvements in the workplace, especially in regard to the difficulties and control at work.<sup>12</sup>

Within the ESF, nurses live with the expectation of their ability to solve problems and at the same time with the impossibility of a solution for people. The wear is realized in physical and mental fatigue, leading to hypertension, allergies, stomach aches and other.<sup>13</sup>

Facing strategies created by the worker community characterize the relationship of the individual to the survival unfavorable labor. Thus, they constitute an important factor in protecting the health of nurses working within the context studied. Nurses deal with the demands of a labor with favorable conditions for disease, such as overcrowding, work overload and helplessness in the face of the weaknesses of SUS.<sup>14</sup>

In a study to investigate signs and symptoms of burnout in nursing staff of a university hospital emergency room correlating them with predictors, it was concluded that the organizational dynamics of an ER generates a workload and tension, being necessary to develop strategies of reorganization of the work process reducing sources of stress.<sup>11</sup>

The implications for health due to that fact is relevant, since the high frequency of absenteeism, inquiries, job abandonment and deterioration of service quality have negative impact on the effectiveness of care provided to patients.<sup>15</sup>

Table 2 presents the data according to categories of publications: author, year of publication, title, research method and database.

The studies presented in Table 2 show a concern with various aspects of the nursing profession, particularly issues related to biosafety, occupational stress and burnout, relevant problems in this area of work in the health sector. Comparing the two tables 1 and 2, the method, studies have diversity, predominantly quantitative studies and qualitative.

About the year of publication of journals on the subject of occupational health nursing, the highest expression was the years of 2009 and 2008 followed by 2007 and 2006. Thus, it is observed that the number of publications on this subject has been growing over the years, reflecting a greater concern of nursing in learning about their employees. The database with the highest number of studies on occupational health nursing was the SCIELO, where many Brazilians nursing journals are indexed.

Author	Year	Title of the research	Research method	Database
Azambuja, Kerber, Kirchhof <sup>3</sup>	2007	Worker's health in the design of nursing students	Descriptive exploratory with qualitative approach	SCIELO
Dias, Nascimento, Mendes, Rocha <sup>6</sup>	2007	Promoting family health of nursing professors: support, network and social roles in the family	Descriptive exploratory with qualitative approach	SCIELO
Baggio, Formaggio <sup>2</sup>	2008	Work, daily life and nursing professional: the meaning of self- careless	Descriptive exploratory with qualitative approach	LILACS
Baggio <sup>1</sup>	2007	Human relations in the workplace: the (un) self care of the nursing professional	Descriptive exploratory with qualitative approach	LILACS
Oliveira, Kluthcovsky, Kluthcovsky <sup>16</sup>	2008	Study on the occurrence of work accidents with biological material in nursing professionals of a hospital	Descriptive, cross- sectional, quantitative approach	LILACS

Silva, Lima, Farias, Campos <sup>17</sup>	2006	Work hours: factor that interferes with the quality of nursing care.	Descriptive exploratory with qualitative approach	BDENF
Murofuse, Abranches, Napoleão <sup>18</sup>	2005	Reflections on stress and burnout and the relationship with nursing	Literature review	BDENF
Pinheiro, Zeitoune <sup>19</sup>	2008	Hepatitis B: knowledge and biosecurity measures and occupational health of nursing	Descriptive exploratory with quantitative approach	BDENF
Monteiro, Santos, Kawakami, Wada <sup>20</sup>	2007	The teaching of occupational health surveillance in Nursing Course	Descriptive exploratory with quantitative approach	SCIELO

**Table 2 -** Distribution of studies on occupational health of nursing according to author, year, title, language, method and database. Natal /RN, 2011. Source: Layout of the authors.

About exhaustive workload of nursing, before what was researched, the working conditions of nurses are reflected in physical and emotional exhaustion. Many of these professionals seek motivation as money and knowledge to pursue a double shift of work, challenging the extrinsic and intrinsic factors that are constantly emerging, bringing this work to a stressful life due to long working hours.<sup>17</sup>

The elements common stressors, regardless of the occupation of the nurse, can reflect the culture of the causes and consequences they cause in professional practice. Despite the nursing work requiring good physical and mental health, nurses rarely receive adequate social protection for their performance in order to avoid accidents and diseases arising from activities.<sup>18</sup>

In a study that aimed to assess the occurrence of work accidents with biological material for technicians and nursing assistants who work in hospital, 81 employees participated, reporting on demographic data, and work on accidents with biological material in the last 2 years. Of the workers surveyed, 17.3% had accidents. All 16 accidents were reported percutaneous type, most blood and wrapped the fingers, the needle was the main causative agent, occurred during disposal of material, and most employees did not use personal protective equipment.<sup>16</sup>

As for biosecurity measures, it appears that nursing professionals need ongoing training to increase their knowledge about the correct decision making in case of exposure to bodily secretions, minimizing the consequences of this exposure.<sup>19</sup> Wrapped in many activities, nursing workers are exposed to potential accidents with biological material, among other occupational hazards.

Some studies have focused on nursing education. It described an experiment conducted with undergraduate students in teaching health surveillance of workers, the nursing course at Universidade Federal de São Carlos. As a teaching strategy it was developed epidemiological analysis of all Communications of Work Accidents recorded at the National Institute of Social Security (Instituto Nacional de Seguridade Social) in 2000 in São Carlos. Approaches were developed for monitoring worker health and related issues, and practical activities relating to the systematization of information and use of the software used to insert, consolidation and analysis of data.<sup>20</sup>

It is believed that training in nursing would be significant for the development of nurses aimed at caring for others and themselves, i.e., health professionals perform their duties with excellence, but they are aware of the need to exercise vigilance in health worker.

## **CONCLUSION**

In the scientific literature about the health of the nursing staff, it was found that the most used research methods were the quantitative and qualitative approaches; the language most often used was the Portuguese. The time periods for large number of publications on the topic in the study were 2008 and 2009, mainly in SCIELO Brazil.

Nursing represents the largest contingent among health workers and thus the health of the professionals directly influences the final quality of the service offered. The analysis of the literature on the health of nursing staff shows us that these professionals are constantly exposed to numerous occupational hazards that could harm both their physical and mental wellbeing. The continuity and conducting research over extended on worker health in nursing is healthy, it may contribute significantly to the quality of life of nursing professionals.

Whereas occupational health in nursing is not an issue of significance only for nursing, but also for the population that uses their assistance and managers of health services, it is understood that such studies serve as a source of information for healthcare professionals, employers and managers develop greater seriousness in improving working conditions for professionals.

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