



ACIDENTES OCUPACIONAIS EM PROFISSIONAIS DE ENFERMAGEM DA ATENÇÃO PRIMÁRIA À SAÚDE E INTERVENÇÕES IMPLEMENTADAS: REVISÃO INTEGRATIVA

Occupational accidents in nursing professionals from primary health care and implemented interventions: integrative review

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Abstract: Objective: To identify, in the literature, the main occupational accidents in nursing professionals in Primary Health Care as well as the interventions implemented. **Methodology:** This is an integrative review of the literature, carried out between April and May 2018. The search for the studies occurred in the Virtual Health Library. The following inclusion criteria were adopted: investigate occupational accidents in members of the nursing team who work in Primary Health Care, either primary study, with no time limit of period of publication, in the English language or texts available in full. **Results:** Three studies were found that addressed the proposed theme. The year of publication ranged between 2012 and 2018 and the Qualis of the periodicals were B1 (rated), B2 (satisfactory rating) and B3 (intermediate rating). The most common type of study was the descriptive, with level of evidence VI, considered low level of scientific evidence. Regarding the accidents the occupational, psychosocial and biological ones stand out (100%) and of interventions implemented 100% of the studies pointed to continuing education in health as a prevention strategy. **Conclusion:** It is pertinent to address this issue among nursing professionals of Primary Health Care, guiding them, mainly through lifelong learning strategies in health, about potential and real occupational hazards to which they are exposed so they can use measures to promote safety in the work environment, care and maintenance of the workers' health.

Keywords: Accidents; Occupational; Primary Health Care; Family Health Strategy; Nursing; Nursing Care.

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Resumo: Objetivo: Identificar, na literatura, os principais acidentes ocupacionais em profissionais da enfermagem na Atenção Primária à Saúde, bem como as intervenções implementadas. **Metodologia:** Trata-se de uma revisão integrativa da literatura, realizada entre abril e maio de 2018. A busca dos estudos ocorreu na Biblioteca Virtual em Saúde. Adotou-se como critérios de inclusão: investigar acidentes ocupacionais em membros da equipe de Enfermagem que atuam na Atenção Primária à Saúde, ser estudo primário, sem limite temporal do período de publicação, no idioma português e textos disponíveis na íntegra. **Resultados:** Foram encontrados três estudos que abordavam o tema proposto. O ano de publicação variou entre 2012 e 2018 e os Qualis dos periódicos foram B1 (boa classificação), B2 (classificação satisfatória) e B3 (classificação intermediária). O tipo de estudo mais comum foi o descritivo, com nível de evidência VI, considerado baixo nível de evidência científica. Em relação aos acidentes ocupacionais, destacam-se os psicossociais e biológicos (100%) e quanto às intervenções implementadas 100% dos estudos apontaram a educação permanente em saúde como estratégia de prevenção. **Conclusão:** Torna-se pertinente abordar essa temática entre os profissionais de enfermagem da Atenção Primária à Saúde, orientando-os, principalmente por meio de estratégias de educação permanente em saúde, sobre os riscos ocupacionais potenciais e reais aos quais estão expostos para que possam utilizar medidas que promovam a segurança no ambiente de trabalho, o cuidado e manutenção da saúde dos trabalhadores.

Palavras-chave: Acidentes de Trabalho; Atenção Primária a Saúde; Estratégia Saúde da Família; Enfermagem; Cuidados de Enfermagem.

INTRODUCTION

It is understood worker's health as a set of activities aimed at the promotion, protection, recovery and rehabilitation of workers' health, subjected to the risks and problems resulting from working conditions. It is noteworthy that the scenario in which the health and the work are expressed has been undergoing transformations, which are fundamentally linked to the new working arrangements and the most dynamic processes of production implemented by technological innovations.¹

In accordance with Law no.8.213, of 24th of July 1991, accident at work is characterized as the one which occurs by performing work in a firm's service or by the exercise of work of the insured members. They may result in bodily injury or functional disorder that causes the loss or reduction, permanent or temporary for the ability to work or death.²

Occupational risks are defined as all work situations that can break the physical, mental and social balance of workers and not only the situations that cause accidents and illnesses. In this context, the nursing professionals stand out. It is the largest contingent of

professionals in the area of health and due to the nature of the own care and managerial functions, are exposed to occupational risks and consequently to accidents at work.³

In the area of health, the Family Health Strategy (FHS) emerges as a facilitator and innovator in the assistential model advocated by the Unified Health System (SUS) and is an important scenario for health professionals, among these, the nursing team.⁴

In the ESF, the nursing team members perform direct activities with the user, which make them susceptible to exposure to occupational accidents mainly by biological material due to the quantity of procedures performed, by contact with bodily fluids and with piercing and cutting material, in addition to the exposure of other occupational risks such as physical, chemical and ergonomic ones.³

There is evidence that occupational accidents with nursing professionals in the ESF have become common due to the number of people that are answered by the units structure conditions, physical violence, incorrect postures and many times by inappropriate attitudes on the part of professionals who neglect the utilization of individual protection equipment

(IPE).⁵

The integration between Worker's Health (ST) and Primary Health Care (PHC) is a recent activity, consequently, the professionals of the area may have little knowledge about the occupational risks to which they are exposed. In addition, there are countless assignments of nursing staff and all members of the team that develop activities within the unit. It should be emphasized that there is a lack of studies on the theme.⁶

Before the facts aforementioned, the study herein aimed to identify, in the literature, the main occupational accidents in nursing professionals in Primary Health Care as well as the interventions implemented.

LITERATURE REVIEW

An integrative literature review (IR) was performed and it was conducted in five steps: selection of the thematic issue (drafting the guiding

question), the establishment of criteria for inclusion and exclusion of articles, drafting of search strategies, analysis and interpretation of the results.⁷

The guiding question was the following: What are the main occupational accidents in nursing professionals in Primary Health Care and the interventions implemented in the literature?

The search was conducted during the months from April and May 2018. For the pursuit of primary studies, the Virtual Health Library (VHL) was used.

The search strategies in the VHL involved the intersection, in the Portuguese language, of the following descriptors: “*Acidentes de Trabalho*”, “*Cuidados de Enfermagem*”, “*Atenção Primária*”, “*Estratégia Saúde da Família*” e “*Enfermagem*”. These descriptors were combined, using the Boolean operator “and” (Table 1), until you obtain studies corresponding to the delimited inclusion and exclusion criteria.

Quadro1. Search strategies used in the VHL. Montes Claros (MG), Brazil, 2018.

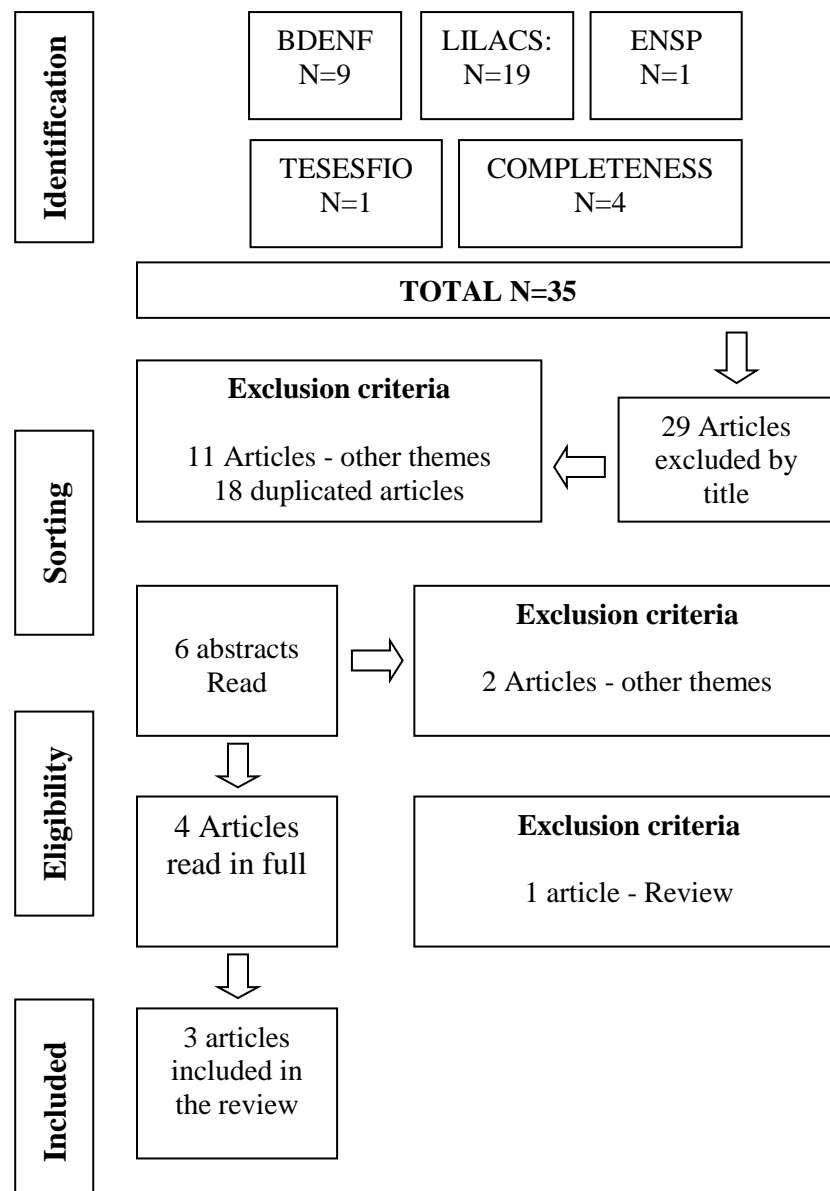
Data base:	Strategies
BVS	"Work Accidents "and "Nursing" and "Nursing Care" and "Primary Health Care"
	"Work Accidents "and "Nursing" and "Nursing Care" and "Family Health Strategy"
	"Work Accidents "and "Family Health Strategy" "Work Accidents" and "Nursing "and "Family Health Strategy "

In order to be included in the review, the following inclusion criteria should be obeyed by the studies: investigate occupational accidents in members of the nursing team who work in Primary Health Care, either primary study, with no time limit of period of publication, in the English language or texts available in full.

Literature studies, secondary studies, letters, editorials, experience reports and case studies were excluded. This revision has followed the *Preferred Reporting Items for Systematic Review and Meta-Analyses* (PRISM).⁸ Figure 1 presents, in brief, the studies selection.

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Figure 1. Adaptation of the *Flow* diagram of the process of selection of articles of the integrative review, in accordance with the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)* Montes Claros (MG), Brazil, 2018.



The studies were analyzed by two independent researchers. The results obtained individually were compared. The disagreements were reviewed to ensure that the questions were exhausted.

For the extraction and presentation of the data of interest, an instrument developed by the researchers was used, containing the following characteristics: the title of the article; Year; venue; study objective; type of study; Qualis according to *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior* (CAPES); journal; data base; level of evidence (SE); types of occupational accidents in nursing professionals in primary care and interventions implemented for these accidents. The data were extracted by two evaluators independently. The inconsistencies were resolved by consensus.

The quality of the studies was evaluated on the basis of classification of evidence level, opting for grouping of

publications in the following way: level I - Evidence obtained from the of meta-analysis result or systematic review of randomized clinical trials (RCTS) or non-randomized clinical trials; level II - Evidence obtained in a study of individual of RCTS or non-randomized clinical trial; level III - Evidence obtained from a systematic review of studies of correlation/observation; level IV - Evidence obtained from correlation studies/observation; level V - Evidence obtained from systematic review of qualitative descriptive studies/physiological/; level VI - Evidence obtained from descriptive studies/qualitative/individual; physiological level VII - Evidence obtained from opinions of authorities or committees of experts. This classification has allowed to identify the level of evidence studies about the issue investigated.⁹

3 studies were found that addressed the main occupational

accidents in nursing professionals in Primary Care and interventions implemented. The year of publication ranged between 2012 and 2018, in which two were performed in the city of João Pessoa - PB and one in Niteroi - RJ, which aimed to describe, characterize and identify the understanding/perception of nursing professionals from the family health units regarding the occupational risks and the means to minimize such exposure.

The most common type of study

was the descriptive one. Regarding SE, the totality of the studies (3) are level VI, denoting the lack of studies with better NE.

In relation to Qualis it was identified that studies of this review were classified as Qualis B1¹⁵ (good classification), B2¹² (satisfactory classification) and B3¹¹ (intermediate classification). Concerning the data base, there was a predominance of LILACS (n=2) - 66.7%. Table 2 presents the summary of the articles.

The title of the Article/ Journal	Year/ Place of Accomplishment	Objective of the study	Type of study	Qualis	Data base:	Evidence level
P1- Perception of nursing about working conditions in family health units in Paraíba - Brazil / Electronic Journal of	2013/João Pessoa - PB	Describe and characterize the perceptions of nursing professionals about the accidents and working conditions of the Family	Descriptive study with a qualitative approach.	B1	LILACS:	VI

Nursing ¹⁵		Health Units of João Pessoa - PB.				
P2 - Occupational Risks: perception of nursing professionals of the Family Health Strategy in João Pessoa - PB/Revista Brasileira de Ciências da Saúde ¹¹	2012/João Pessoa - PB	Investigate the understanding of nursing Family Health Units regarding occupational risks to which they are exposed and identify their suggestions to minimize such exposure.	Descriptive study with a qualitative approach.	B3	LILACS:	VI
P3 - Management of occupational risks of nursing in primary care / Journal of Research: Cuidado é Fundamental	2018/Niterói - Rio de Janeiro	Identify the occupational risks to which nursing professionals are exposed in basic health care; describe the risk factors present in the units and correlate them with the	Exploratory and descriptive study with a quantitative approach.	B2	BDENF	VI

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(Online) ¹²		security conditions of the structure.				
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Four different types of occupational accidents were identified in nursing professionals in the APS, and the psychosocial and biological accidents were identified in 100% of the

studies. Concerning the implemented interventions 100% of the studies pointed out the permanent education in health (Table 3).

Table 3. Types of occupational accidents and interventions implemented. Montes Claros (MG), Brazil, 2018.

Publication	Types of occupational accidents in nursing professionals in primary care	Interventions implemented for occupational accidents
P1 ¹⁵	Psychosocial and psychosocial	Permanent education in health
P2 ¹¹	Chemical, biological, psychosocial and ergonomic	Permanent education in health
P3 ¹²	Psychosocial and psychosocial	Permanent education in health

The Health Primary Care professionals are vulnerable to several occupational hazards that can cause damage to health.¹⁰ In the APS in the nursing professionals are subject to chemical, ergonomic risks, with highlight to the psychosocial and biological accidents.

The chemical risks are related to the contact with powders and chemical substances at the time of the materials sterilization. Whereas the ergonomic risks are the occurrence of repetitive physical efforts and violence situations.¹¹

The APS professional experiences a labor context permeated with situations that may compromise the health and safety of workers, particularly regarding the infrastructure of the work place and the ways in which the professionals perform their assignments.¹⁰ In addition, the vulnerability to violence, which is associated to social, economic and

cultural conditions of the reality in which the professional is inserted.¹²

Regarding psychosocial accidents or psychosocial risks, these are related to the coexistence, the subordination and disqualification of the worker, the fatigue, tension, overtime and the loss of control over the work, generating the emotional exhaustion of the professional.¹¹⁻¹²

The psychosocial risk factors and situations of negligence, breach and offense to the dignity of the citizen can be the cause of illnesses and accidents at work, which contribute to the loss of the mental health professional.¹³ It should be emphasized that the psychosocial risk is not covered in the regulatory standards.¹²

In this sense, it is essential to reflect on new forms of health practices, structures of services and professionals' attitudes, so that it is possible to mitigate the vulnerability which the nursing professional is exposed.^{12,14}

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Since the biological accidents are related to exposure to biological material, such as blood and body fluids, and occur via percutaneous and/or by direct contact with mucous membranes of the eye, nasal and oral or by skin contact. The occupational accidents associated with biological materials is a factor of concern, not only for the losses that are generated to the institutions, but also to the own professionals.¹⁵⁻¹⁶

The bioburden contamination causes serious disorders for the professional, because they are potentially capable of transmitting more than 20 types of pathogens, with emphasis on the human immunodeficiency virus (HIV), hepatitis B and hepatitis C.^{12.15}

It should be emphasized that, when it is not possible to identify the patient source, the professional is subjected to the cocktail and several other procedures to ensure that the same does not acquire the abovementioned diseases, this often generates the absenteeism, because you need a longer time for the completion of all exams.¹⁷

In addition, after exposure to

biological material, the professional suffers with the doubts and uncertainties and consequences which generate striking feelings, as the anguish, the fear and frustration, and may even lead to depression,¹⁸ also being related to psychosocial risks.

For many professionals the use of safety equipment only becomes necessary when the patient presents exposed secretions and visible dirt in general.¹⁹ Associated to this, the occurrence of accidents in the APS context contribute to inadequate infrastructure and the own unavailability of PPE.^{11.15}

It is evident that the PPEs are more used in-patient care when one has knowledge of the diagnosis, underestimating the vulnerability of the human organism to infections. The neglects of the biosecurity standards are highlighted in several nursing care provision scenarios, including the APS, either by the professionals themselves or by inappropriate work conditions.¹¹

In this context, the revision of the strategies employed in programs of continuing education is essential. The

Permanent Education in health is originated in the reflection about the reality of the service and the existing needs, to then formulate strategies that help to solve problems.^{11,15}

The practices of permanent education in health should be focused on orientation, with the aim of contributing to the professionals' awareness about the occupational risks, for which, as a consequence, the same appraise the security during the labor activities, even with the difficulties encountered in daily work.^{15,19}

The early identification of occupational risks in order to provide a decrease in the occurrence of accidents becomes the first strategy to reduce such accidents. However, such strategy should be linked to others, such as the viability of secure devices and the availability of PPEs. But even so, the need for training and continuing education for nursing professionals is the first option, so that they can identify situations of occupational risks and propose alternatives to protect their own and the workmates' health.²⁰

In order to build and coordinate educational groups there is a need of other knowledges beyond the traditional health, as the anatomical and physiological knowledge; such knowledge include, for example, group

dynamics and the pedagogical process, which are necessary and desirable.²¹

Continuing education is not only characterized as a continuous process of improvement but is also a form of connection with the context of work and with the local needs. Thus, it is pointed out as an incentive to the workers' qualification, higher professional income and guarantee of quality of care.¹⁵

It is evident that the permanent education in health is a work process based on education of health professionals, characterizing as a path to improvement in the quality of FHS. The educational processes go by sociocultural changes, and occur both in public policies, as well as in work spaces, i.e., in the micropolitical sphere.²²

In this context, the nurse as an educator and worker inserted into the reality of a community should use the permanent education as a way of changing professional practices and the organization of work, especially in the surveillance practices environment in occupational health, recommending that the workers' education take place from the problematization of the work process.¹⁵

This review presents some limitations, such as the limited number

of studies due to having occurred only in a data base; the classification of journals that ranged between B1 and B3; the low level of evidence of selected studies and the restriction of seeks to be in the Portuguese language.

FINAL CONSIDERATIONS

The nursing team is essential in health care, being exposed to occupational hazards. This review has identified four different types of occupational accidents in nursing professionals in Primary Health Care, with a higher prevalence of the psychosocial and biological ones. It stands out as a form of intervention the permanent education in health.

It is pertinent to address this issue among nursing professionals of Primary Health Care, guiding them, mainly through lifelong learning strategies in health, about potential and real occupational hazards to which they are exposed so they can use measures to promote safety in the work environment, care and maintenance of the workers' health.

This a non-sponsored study.
There is no conflict of interests.

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