Underreporting of accidents at work in nursing professionals: integrative review.

ABSTRACT
Objective: to analyze the literature on the causes of underreporting of accidents at work in nursing professionals. Method: it is an integrative review, held in BDENF, LILACS and SciELO virtual library databases, from the keywords “working accidents” and “nursing and notification of occupational accidents” with a temporal delimitation of eleven years, from 2003 to 2014. Results: after analyzing the data, two themes emerged: << Nursing and occupational accidents >> and << Occupational accidents with exposure to biological materials and notification instruments >>. Conclusion: the reasons for underreporting of occupational accidents by nursing professionals were: unaware of the need for notification, its importance, obligation, and flow; fear of serological results; lack of time to notify them; considering not necessary to notify them; source patient having negative test; the accident is simple and common; excessive bureaucracy; lack of interest; delays in care; ignorance about the possibility of disease and fear of being fired or reprimanded. Descriptors: Occupational Accidents; Nursing Staff; Work Accident Notification.

RESUMO
Objetivo: analisar a literatura sobre as causas da subnotificação de acidentes de trabalho em profissionais da enfermagem. Método: revisão integrativa realizada nas bases de dados BDENF, LILACS e biblioteca virtual SciELO, a partir dos descritores “acidentes de trabalho” e “enfermagem e notificação de acidentes de trabalho” com uma delimitação temporal de onze anos, 2003-2014. Resultados: após análise dos dados, emergiram duas categorias temáticas: << A enfermagem e os acidentes ocupacionais >> e << Acidentes ocupacionais com exposição a materiais biológicos e instrumentos de notificação >>. Conclusão: os motivos para a subnotificação dos acidentes ocupacionais pelos profissionais de enfermagem foram: desconhecimento sobre a necessidade da notificação, sua importância, obrigatoriedade e fluxo; medo dos resultados sorológicos; falta de tempo para notificar; considerar desnecessário notificar; paciente fonte ter sorologia negativa; acidente ser simples e comum; excesso de burocracia; falta de interesse; demora no atendimento; desconhecimento sobre a possibilidade de contrair doenças e medo de ser demitido ou repreendido. Descritores: Acidentes de Trabalho; Equipe de Enfermagem; Notificação de Acidentes de Trabalho.

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INTRODUCTION

Occupational accident is the sudden event occurred during the development of work activities, regardless of employment status or welfare of the injured worker, which results in damage to health, causing personal injury or functional impairment, proceeding with death, loss or reduction of capacity labor, which can be permanent or temporary. Occupational accidents are still considered those occurred when the employee is representing the company's interests and in the way home, or vice versa.1

Occupational accidents are a serious problem, affecting public health and the country’s economy. Although these types of accidents have decreased in many industries, the health sector increased by its occurrence, especially in hospitals, needing investigation to raise subsidies to change this reality.2

The local hospital environments are unhealthy since they daily deal with many types of patients, which have distinct pathologies, including infectious diseases.3 Thus, the day-to-day of healthcare workers is exposed to several risks related to work, which are classified into physical, ergonomic, chemical and biological, and can cause an accident at work.4 Among them, biological risks have been highlighted in the research because they are the main forms of exposure of health workers due to the direct or indirect handling of biological materials5 and the problems they can trigger either the injured person, the families and even the society.6

In the health workers role, nursing professionals are the most likely to have occupational accidents of this nature, especially those in the middle level as they are the ones who directly assist the patient and more handle needles and other sharps.5,7

In Brazil, despite the accidents of sharps materials being present during the practice of health professionals, especially in the nursing team, it is noted that there is still shortage of systematic data on the occurrence of these accidents, which hinders the understanding of the size of the problem, together with the growing deficit for notification.8

The notification of the accident at work is a highly relevant instrument to guide prevention strategies and is also a way of ensuring the right to the injured worker to receive a specialized assessment, appropriate therapy and employee benefits.8 However, despite its importance, the underreporting of such accidents is still too frequent.

Based on these considerations, the question is: what are the causes of underreporting of occupational accidents in the nursing professionals? To answer this question, this study aimed to analyze the literature on the causes of underreporting of accidents at work in nursing professionals.

METHOD

Integrative review study, developed from a survey of scientific articles held in the Virtual Library in Health databases (BVS-BIREME): Latin American and Caribbean Health Sciences (LILACS), Nursing Databases (BDENF) and virtual library Scientific Electronic Library Online (SciELO).

It opted for the integrative review because it is a working method that seeks review of studies relevant to the improvement of theoretical and practical knowledge, in the possibility of state synthesis of knowledge of a particular subject. This research method differs from the narrative review by allowing a synthesis of multiple published studies and enable general conclusions concerning a particular study area.9

Access to virtual databases occurred in February of 2015, using the following keywords: “occupational accidents” and “nursing and notification of occupational accidents”. The inclusion criteria to select the scientific production were: complete articles about the theme, available online, in English and published between 2003-2014.

Exclusion criteria were: monographs, dissertations, theses, books, chapters, and reviews of books, manuals, technical and scientific reports, incomplete articles or not available online and published in other languages. Also, articles that had no relationship to the guiding question of the study were excluded.

Considering the period of 2003-2014, an article in the data library SciELO, six in BDENF and eighteen in LILACS were found, totaling 25 articles, of which five were in more than one database. Therefore, respecting the object of study and inclusion criteria, 20 articles were selected.

For synthesis of the data, three stages were established: pre-analysis · initial reading of all articles; material exploration · determination of categories; treatment of results · inference and interpretation, discussion with reference materials on health worker and conclusions on the subject.10
RESULTS AND DISCUSSION

The results showed that the articles were published in the following journals: Revista Eletrônica de Enfermagem (1), Revista Brasileira em Promoção da Saúde (1), Medicina Ribeirão Preto (1), Saúde em Debate (1), Epidemiologia e Serviço de Saúde (2), Cogitare Enfermagem (4), Revista Enfermagem UERJ (1), Revista Brasileira de Enfermagem (1), UNOPAR Científica Ciências Biológicas e da Saúde (1), Revista Latino-Americano de Enfermagem (2), Online Brazilian Journal of Nursing (2), Ciência, Cuidado e Saúde (1), Revista Gaúcha de Enfermagem (1) and Texto & Contexto Enfermagem (01).

Regarding the data on the distribution of articles by publication year, the year with more publications was 2013 with five articles, followed by 2012 with three publications. Then, 2008, 2009, 2010, 2011 and 2014 presented two articles published each year, in 2003 and 2004 only one article was published per year and in 2007, there was no publication.

The results of the articles analysis were highlighted into two theme categories: Nursing and occupational accidents; and occupational accidents with exposure to the biological material and notification instruments.

* The nursing and occupational accidents

Occupational accidents represent a public health problem, affecting in deleterious consequences to the worker’s health. According to the Statistical Yearbook of Social Security in Brazil, in 2013 about 717,900 work accidents were registered, with 12.08% occurring in workers in the health sector and social services. Health professionals are exposed to various occupational risks, highlighting the biological material risks since these workers’ day-to-day is in contact with blood and other bodily secretions.

Biological risks are defined as the likelihood of exposure during work with biological agents, which in turn include microorganisms, cell cultures, parasites, toxins, and prions, which can cause infections, toxic, allergic effects, autoimmune diseases, malformations, and tumors, affecting the health of workers.

Accidents with biological materials harm the professional physically, spiritually, psychologically and financially. They also harm the patient, decreasing their service and the number of professionals who provide such assistance. The institution is also affected by reducing the number of professionals, the quality of care and increase spending.

In health services, the most vulnerable workers to these diseases are the ones who provide direct patient care. Therefore, it is essential that the nursing staff, professionals who deal daily with patients adhere to guidelines of biosafety.

The regulatory standard (NR 32) underlines the importance of the use of Personal Protective Equipment (PPE) to practice procedures with risk of exposure to blood and other bodily secretions, emphasizing that they have mandatory use and must be placed at the beginning of activities and removed only at the end, in an appropriate and unique environment.

When seeking to characterize the accident with sharp materials and to know the perception of the nursing team on this fact, the study found that 12 of the 22 participants suffered such accidents. As for the frequency of these accidents, it was observed that the nursing assistants were the most affected, followed by nursing technicians, nurses, and academics respectively.

The occupational accidents in the health services with nursing professionals, especially with nursing assistants were also observed by other authors. However, there are investigations in which it is observed that the nursing category most affected by such accidents is the nursing technician.

Another study also found that more professionals involved with occupational accidents involving sharps were nurses, followed by nursing assistants. However, as the authors point out, these results may be because this study was developed in an ICU, and it is up to the nurse to implement most of the procedures, particularly invasive.

Thus, nursing technicians and assistants represent the most affected professional of work accidents involving exposure to biological materials, as these professionals remain physically near to critically ill patients for long hours, having a stressful routine and performing assistance through Units Basic Life Support.

It is noteworthy that all categories of nursing are subject to sharps injuries, with necessary and essential planning and implementation guidelines for the team, to exercise their profession safely.

It is very often the expansion of the working day by these professionals, arising from the existence of more than one job or
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There is a small number of records in occupational exposure to biological material, which can be explained by underreporting of this disease, hindering the availability of information and, therefore, interfering with the adoption of preventive measures and control.\textsuperscript{15}

When seeking to identify the underreporting rate of occupational accidents involving nurses in surgical scenarios of a university hospital and their reasons, a study found that there was a rate of 55.1\% of underreporting, and 43.7\% of the professionals notified the accident by CAT, and three of them did not know what to do after the accident.\textsuperscript{30}

Health professionals research found that in 84.6\% of the accidents, the CAT was called; 5.8\% CAT was not filled, and 9.6\% has been completed in an inadequate way or was ignored.\textsuperscript{6} It should be noted that the absence of filling the CAT is because the possibility of a causal link between exposure to biological material and the accident and triggering labor disease.\textsuperscript{23}

On the issuance of CAT, researchers found that there was a percentage of 82.3\% notification report. However, the files of the human resources sector had only 29.4\% of notification of such accidents and highlighted that the greatest number of underreporting involved the nursing technicians. The reason given for not issuing the CAT was the lack of knowledge of the flow of notification and on the rationale for not notifying the SINAN, declared that such a procedure is unnecessary and also the fear of examination results.\textsuperscript{22}

Regarding notification of the accident, 60.9\% of the nurses did not perform the notification, only 39.1\% had such a procedure. Among the professionals who have not notified, 35.8\% claimed they did not know it was necessary to notify, 25.6\% found it unnecessary and 38.5\% stated that the accident was common, that they had no time to notify it, that the serology of the patient was negative among other causes.\textsuperscript{27}

The source patient being HIV negative, the accident being considered without risk of contamination, the lack of knowledge about the procedures that should be performed and excessive bureaucracy were also present among the causes of the nursing professionals to not fill the CAT.\textsuperscript{30}

The disinterest of the injured person; the perception of the accident as something harmless and common; the lack of information on the importance and precarious working conditions, characterized by inadequate
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remuneration, poor professional autonomy, need for double shifts and excessive demands, influence the reporting of accidents at work, hindering to be real, reinforcing the idea that the professional need only has time to notify accidents when they are with biological waste of source-positive patients.11

The record of accidents enables to identify the severity of the problem by subsidizing the planning and adoption of measures prevention in the workplace. The notification is important and it is also mandatory, but many workers are unaware of their obligation and importance, and there are those who even have the knowledge, however they say it is unnecessary,27 as evidenced by a study conducted in Ribeirão Preto/SP, with reasons for not reporting the accident by nursing professionals such as: unnecessary in 32.7% of cases; they did not think they could get diseases in 24.04%; they did not know that it was necessary to notify it in 18.27%; the accident was small, small for so much to do in 14.42%; fear of dismissal or reprimand at 6.72%; the patient was hospitalized for some time and had no serious pathology at 2.89%, and the patient serology was negative by 0.96%.8

Studies have shown that it is necessary to sensitize the workers, administrators and institutions on worker’s exposure risks to biological waste and also to encourage reporting accidents.8 The underreporting of these accidents by nursing professionals hinders the institution to know the magnitude of the problem, preventing the planning and development of preventive and control actions.17

CONCLUSION

Nursing professionals are the most vulnerable occupational category to occupational accidents with exposure to biological material in health services. It was found that in this category, the most affected by such accidents are technicians and nursing assistants. However the participation of nurses in this problem is considerable.

Despite the high frequency of involvement of these professionals in occupational accidents, it is observed that there is still underreporting of such events, which affect the adoption of preventive and control measures, to improve the quality of life of these professionals and the assistance provided.

It was found that among the reasons for non-reporting of occupational accidents by nursing professionals there were the ignorance about the need for notification, the notification flow, its importance and obligation; fear of the results of serological tests; the lack of time to notify it; considering not necessary to notify it; the source patient has negative test; the accident was simple and common; excessive bureaucracy; the lack of interest of the injured person; the delay in treatment; ignorance about the possibility of disease and the fear of being fired or reprimanded.

It was noticed the need to work biosafety issues during training, so professionals are trained taking a safe practice, considering all patients as risk and adopting the standard precautionary measures. It also becomes necessary, the implementation of continuing education programs in health institutions, seeking to prevent occupational accidents and their occurrence, facilitating and enabling appropriate monitoring, ensuring that notifications are made, the professionals receive appropriate treatment and get their rights ensured.

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