THE REGULATORY STANDARD 32 AND NURSING CARE IN THE EMERGENCY SERVICE OF A TEACHING HOSPITAL

A NORMA REGULAMENTADORA N. 32 E A ENFERMAGEM NA EMERGÊNCIA DE UM HOSPITAL DE ENSINO

LA NORMA REGLAMENTARIA 32 Y LA ENFERMERÍA EN LA URGENCIA DE UN HOSPITAL DE ENSEÑANZA

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ABSTRACT

Objectives: to identify how the occupational health of nursing professionals has been addressed since the Regulatory Standard 32 was officially adopted and describe the health actions which have been implemented from then on in the hospital emergency work. Methodology: this is a study with a qualiquantitative approach, carried out at the emergency sector of Hospital Universitário Antônio Pedro of Universidade Federal Fluminense (HUAP/UFF). Thirty nursing professionals participated in the research, who answered to a questionnaire whose data were grouped, categorized, and presented in tables with frequency and simple percentage. The study was approved by the Research Ethics Committee of the Medical School of UFF, under the Protocol 047/2010. Results: the following categories were defined: Behavior of the nursing professional with regard to the biosafety measures in the hospital environment; Safety measures related to the cutting and piercing materials and immunization; Actions aimed at the health of workers from the emergency service of HUAP/UFF in compliance with the Regulatory Standard 32. Conclusion: the health professionals’ exposure to various occupational risks is still alarming. There’s a need to increase efforts to implement continuing education actions, in order to preserve the workers’ health. Descriptors: nursing; education, continuing; occupational health.

RESUMO

Objetivos: identificar como tem se dado a atenção à saúde do profissional de enfermagem a partir da oficialização da Norma Regulamentadora n. 32 e descrever as ações de saúde que têm sido implementadas desde então no trabalho em emergência hospitalar. Metodologia: trata-se de um estudo com abordagem qualiquantitativa, realizado no setor de emergência do Hospital Universitário Antônio Pedro da Universidade Federal Fluminense (HUAP/UFF). Participaram da pesquisa trinta profissionais de enfermagem, que responderam a um questionário cujos dados foram agrupados, categorizados e apresentados em tabelas com frequência e percentual simples. O estudo foi aprovado pelo Comitê de Ética em Pesquisa da Faculdade de Medicina da UFF, sob o Protocolo n. 047/2010. Resultados: foram definidas as seguintes categorias: Comportamento do profissional de enfermagem quanto às medidas de biossegurança no ambiente hospitalar; Medidas de segurança relacionadas aos materiais perfurocortantes e imunização; Ações de atenção à saúde do trabalhador da emergência do HUAP/UFF em cumprimento à Norma Regulamentadora n. 32. Conclusão: a exposição dos profissionais da saúde a diversos riscos ocupacionais ainda é alarmante. Faz-se necessário ampliar esforços na implementação de ações de educação permanente, com o intuito de preservar a saúde dos trabalhadores. Descriptors: enfermagem; educação contínua; saúde do trabalhador.

RESUMEN

Objetivos: identificar cómo se ha prestado atención a la salud del profesional de enfermería a partir de la oficialización de la Norma Reglamentaria 32 y describir las acciones de salud que se han implementado desde entonces en el trabajo en urgencia hospitalaria. Metodología: esto es un estudio con abordaje cualcuantitativo, realizado en el sector de urgencia del Hospital Universitario António Pedro de la Universidad Federal Fluminense (HUAP/UFF). Participaron de la investigación treinta profesionales de enfermería, que respondieron a un cuestionario cuyos datos fueron agrupados, categorizados y presentados en tablas con frecuencia y porcentaje simple. El estudio fue aprobado por el Comité de Ética en Investigación de la Facultad de Medicina de la UFF bajo el Protocolo 047/2010. Resultados: fueron definidas las siguientes categorías: Comportamiento del profesional de enfermería en cuanto a las medidas de bioseguridad en el ambiente hospitalario; Medidas de seguridad relacionadas con los materiales corto-punzantes y inmunización; Acciones de atención a la salud del trabajador de la urgencia del HUAP/UFF en cumplimiento a la Norma 32. Conclusión: la exposición de los profesionales de la salud a diversos riesgos laborales sigue siendo alarmante. Es necesario incrementar los esfuerzos para implementar acciones de educación permanente, con el fin de preservar la salud de los trabajadores. Descriptors: enfermería; educación continua; salud laboral.
Introduction

In the hospital environment, a large part of the nursing professionals ignores the occupational risks they may face, and they often behave indifferently when facing risk situations, suffering damages due to non-compliance with the biosafety standards.

Occupational diseases are those caused by the type of work or the condition of the workplace. In the hospital environment, the nursing professional is the person who has more contact to the patient, the one who performs more procedures along with this patient and, this way, she/he is also the worker who is more exposed to accidents, by handling cutting and piercing objects used in the procedures or by handling bodily eliminations, which are often contaminated with some pathogen.

This possibility is also the cause of occupational illness, since the professional, when contacted by such fluids, and faced by the expectation of being contaminated or not, becomes worried until the results are obtained. Once the result of serological tests is received, and in case of being positive, she/he seeks treatment, but the professional is psychologically affected, and often she/he is physically affected, through the side effects of drugs.

Aiming to protect the health of professionals who work in health care services, the Portaria MTE 485, enacted on November 11, 2005, approved the Regulatory Standard 32, which was published in the Diário Oficial da União, on November 16, 2005, establishing measures for the protection to the safety and health of health care professionals, including everyone working in health care facilities. Based on this legislation, it’s of paramount importance that the worker has, in her/his work environment, physical conditions, as well as conditions for preventing accidents, promoting hygiene, and preserving psychic equilibrium, in order to be able to have a good performance and protect her/his health, so that this environment is free of stressors which can undermine the health of this professional.

Therefore, the aims of this study are:

♦ To identify how the occupational health of nursing professionals has been addressed since the Regulatory Standard 32 was officially adopted.

♦ To describe the health actions that have been implemented since then at work in hospital emergency.

The relevant point for carrying out such a study is the observation that after the Regulatory Standard 32 was officially adopted, in 2005, the health care institutions had a pre-established period until April 2007 to conform to it and comply with it. However, in practice, one can notice a certain difficulty on the part of some institutions, especially the public ones, to fulfill this implementation.

Methodology

Exploratory and descriptive research, with a qualititative approach, developed in the emergency sector of Hospital Universitario Antonio Pedro, located at the town of Niteroi, in the state of Rio de Janeiro, Brazil. It’s a qualitative study, since, through the description of the results on the perception of nursing professionals, it was possible to relate the event to its possible causes. And it’s quantitative because it involves “the systematic collection of numerical information, under controlled conditions, besides the analysis of this information, using statistical procedures”.

Thirty nursing professionals who work at the emergency sector of the hospital participated in the study. For the inclusion of research participants there was no distinction with regard to age group, gender, skin color, or social group; no participant was excluded, except when the participant her/himself requested it.

For data collection a questionnaire was used. This instrument has advantages, such as the possibility of reaching a large number of people; it doesn’t require training of people; it’s time saving; it allows anonymity of answers; there’s a lower risk of distortion because the researcher doesn’t have any influence on the answers; there’s more time to answer and this occurs at the time considered most appropriate. To prepare the instrument, we surveyed the nursing actions recommended by the Regulatory Standard 32, from the Brazilian Labour Ministry, with regard to the biological risks, which should be observed within the hospital.

Data collection occurred from August to October 2010. The questionnaires were handed in to the subjects after signing of the Free and Informed Consent Term, and they were collected at the end of the shift or in next shift, according to the choice made by the participant. After collecting data, they were analyzed statistically, through the quantitative approach, and discussed, in order to grasp the meaning of answers. Thus, in this study the answers were grouped, categorized,
and presented with simple percentage frequency in table form.

This study followed the guidelines for research involving human beings, according to the Resolution 196, enacted in 1996. Therefore, the project was submitted to the Research Ethics Committee of Hospital Universitario Antonio Pedro (HUAP), analyzed and approved, under the Protocol 047/2010.

**RESULTS AND DISCUSSION**

1. Behavior of the nursing professional with regard to biosafety measures in the hospital environment

Portaria 2,616, enacted on May 12, 1998, from the Health Ministry, sets out the minimum actions to be systematically developed, in order to reduce the incidence and severity of infections related to health services. It also highlights the need for hand hygiene in health services. Resolution RDC 50, enacted on February 21, 2002, from the Brazilian National Agency of Sanitary Surveillance (Anvisa), provides on Standards and Physical Projects of Health Care Facilities, defining, among others, the need for washbasins/sinks for hand washing. These legal instruments reinforce the role of hand hygiene as the most important action in preventing and controlling infections related to health care.

Table 1 displays the variables related to the behavior of the nursing professionals within her/his work environment and the biological risks.

<table>
<thead>
<tr>
<th>Data</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hands before putting on gloves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>17</td>
<td>56.67%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>11</td>
<td>36.67%</td>
</tr>
<tr>
<td>Never</td>
<td>2</td>
<td>6.67%</td>
</tr>
<tr>
<td>Doesn’t know</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Hand washing is, undoubtedly, a theme which can become embarrassing when directly approached, because it’s difficult for a health professional to assume she/he fails in such an elementary aspect. Despite this fact, one can observe in Table 1 that 36.67% said that “sometimes” they wash their hands before putting on gloves and 6.67% never do that.

With regard to hand washing after using gloves and the completion of procedures, one observes in Table 2 that adhesion becomes larger, as 73.33% of participants always perform hand washing. This large adhesion may be explained by the fact that the professionals from the hospital emergency sector perform activities which involve direct contact to secretions and body fluids, and thus their hands are visibly dirty, calling their attention to the need for washing them.

<table>
<thead>
<tr>
<th>Wash hands after using the gloves</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>22</td>
<td>73.33%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>7</td>
<td>23.33%</td>
</tr>
<tr>
<td>Never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doesn’t know</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Didn’t answer</td>
<td>1</td>
<td>3.33%</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Resolution RDC 50 requires the provision of resources for hand washing in washbasins or sinks used by the health care staff, whenever there’s a patient (in bed or not) being examined, handled, touched, medicated, or treated. According to this standard, the washbasin must be used only for hand washing.

A factor which drew attention in this study was the finding that 40% of professionals from this institution use ornaments sometimes, and 16.67% use these objects often while working. It’s known that the use of jewelry should be avoided, as it’s a possible source of germs.8

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According to the general guidelines for working, related to the containment of biological material, it’s forbidden to eat, drink, and smoke in the work areas of laboratories, something which has been expanded to the jobs of the nursing team through the Regulatory Standard 32. Therefore, it’s a worrisome finding that about 84% of nursing professionals from the sector under investigation use its refrigerator to store food.

Another important aspect which the Regulatory Standard 32 refers to concerns the use of closed shoes as a factor protecting the health of workers in health care services. The results of this study pointed out that 73.33% of workers surveyed answered they never used open shoes during working hours in the hospital emergency sector.

One regards as open shoe that providing exposure of the calcaneus (heel), the instep, or the sides of the foot. The prohibition of this type of shoes applies to the workers from the health care service, as well as to those performing activities to promote health and provide health care, who are potentially exposed, as defined by the Program for the Prevention of Environmental Risks (PPRA), which should indicate the most appropriate type of footwear according to the jobs.

Closed shoes minimize the risks of contamination and accidents.

Overall, the results point out that the nursing professionals from the emergency sector of the hospital under study are aware of their responsibilities with regard to the protection of their own health, something which indicates that there’s a movement of the hospital’s continuing education staff to suit the requirements from the Regulatory Standard 32.

2. Safety measures related to the cutting and piercing materials and immunization

Regarding the use of cutting and piercing materials and its disposal, it was observed that 50% of these professionals still keep the habit of recapping or connecting needles after using them, even before its disposal, often or occasionally, increasing the risk of an accident at work.

Concerning the limit for filling in the appropriate container for disposal, it’s not always observed. It was found that 23.33% of participants comply with this limit, 13.33% “never” do that or it’s “unknown” by 6.67% of professionals. Adding up the responses “sometimes”, “never”, and “unknown”, the disposal box isn’t always kept at eye level in 50% of cases and the material isn’t disposed by the professional who used it immediately after the completion of procedure in 46.66% of cases. These data indicate failures with regard to the compliance with standard precautions and they expose considerably everyone working or moving through this environment.

Regarding the vaccination status, it’s of paramount importance that all health care professionals are vaccinated against preventable diseases whose microorganisms are widely found in the hospital environments, especially cutting and piercing objects, such as the hepatitis B virus.
Concerning the immunization, 100% of professionals fulfilled the whole course of double immunization and 80% fulfilled the whole course of hepatitis B. However, it's not enough to complete only the immunization schedule for hepatitis B, serology test is needed to make sure that the individual is actually immune to the virus in case of an accidental exposure. The anti-HBs serology test can be done to confirm the vaccine response (the presence of protective antibodies with titers greater than 10 mIU/ml). This must be done from 1 to 6 months after the third dose of vaccine.¹⁰

Among the 30 professionals who answered on this item of the survey, 13.33%, at some moment, received information on side effects and risks to which they are exposed in case of refusal or lack of vaccination, and 86.67% never received or are unaware of it. It’s known that the risk perception by the worker influences on her/his behavior and, hence, on her/his exposure to risks.¹¹

The results are troublesome, because they demonstrate the considerable exposure of nursing professionals to contamination risks, since the vaccination itself doesn’t represent the individual’s immunization, especially in the case of hepatitis B. When these workers were vaccinated, only 30% received their vaccination voucher.

The professionals responsible for managing the occupational risks should create and maintain a plan for controlling needlestick accidents, with systematic recording of occurrences and analysis on sources of risk to ensure the development of more effective strategies to reduce needlestick accidents.¹²,¹³ One stresses that there’s within the research scenario the sector of Infectious and Contagious Diseases, which notifies and monitors internal accidents.

Based on the above considerations, one believes that it’s still necessary to intensify the continuing education actions, so that the nursing professionals who work in the emergency sector become aware of their own responsibility in the prevention of exposure to risks and the use of protective individual equipment, as an urgent means to protect their own health.

3. Actions aimed at the health of workers from the emergency service of HUAP/UFF in compliance with the Regulatory Standard 32

Concerning the assessment of risks found in the workplace, provided by the PPRA, according to 23.33% of answers this procedure isn’t performed and 30% are “unaware” of what can result from lack of information on the risks found in this environment by managers and professionals. In turn, the information on the risks found in this environment isn’t passed on to health professionals, something which hampers the prevention of occupational accidents.

Through the detailed analysis of data on accidents at each institution, specific prevention measures can be taken, the locations with major risks highlighted, and shared data, collaborating to the construction of knowledge and to the determination of the problem.¹⁶ The programs must be consistent with the institution’s aims and priorities, and its effectiveness is assessed through observation in practice, since it’s the look at the daily activities which allows the educator to identify new needs. The nurse is in charge of planning activities, taking into account the workers and the service’s needs, as well as the implementation of the educational process.¹⁵

The results pointed out that 30% of participants reported not having had any type of training before the start of their activities, and 16.67% of professionals weren’t aware of the existence of a program for continuing education within the hospital. According to the Regulatory Standard 32, the training of health professionals must always occur before the start of activities and on a continuous basis, taught by trained professionals who are
familiar with the risks inherent to each workplace and occupational exposure condition. This analysis includes potential health risks, control measures, hygiene standards and procedures, individual and collective protective equipment, clothing appropriate for work, measures for preventing accidents and incidents, and measures to be taken when they occur.1

The results also revealed that 20% of workers didn’t have this training on a continuous basis, and 30% said that the activities related to training offered had never happened during the workday, hampering their participation. Professional training is needed so that the worker has the opportunity to acquire new knowledge relevant to her/his work, thus she/he can become aware of the risks from it, in order to avoid them.

One can notice in this study that 33% of nurses, 39% of nursing technicians, and 50% of assistants are “unaware” of any type of disclosure or the existence of training offered by the hospital, which was related to the Regulatory Standard 32. And 33% of nurses said they never received any training related to the issue.

Thus, it’s believed that the professionals who participated in the study don’t know the Regulatory Standard 32 and its provisions, yet, and, because of this, despite participating in continuing education activities within the hospital, they don’t understand that this fact results from the requirement to implement this standard in the health care workplaces. There is, therefore, lack of a greater disclosure, or even the preparation of a primer for workers presenting the provisions from this regulatory standard.

In this research, the results revealed, among the nursing professionals, that 50% of workers claimed that “sometimes” written information on the possibility of occupational exposure are provided. And 56.67% of participants were often relocated to other sectors. However, when relocated, 70% “never” received a specific training.

The Regulatory Standard 32 provides that in any location where there’s possibility of exposure to biological agents written instructions must be given to workers, in simple language, about the routines performed in the workplace, as well as measures for prevention of accidents and diseases related to work. These instructions must be handed in to the worker, upon a receipt, which must be available to inspection by the Labour Ministry.1 According to the current legislation, the employer must ensure the training of workers, whenever there’s a change in the conditions of workers’ exposure to biological agents.1

CONCLUSION

Recommendations of the Regulatory Standard 32 and standard precautions aren’t followed by all participants in the research, either because of unawareness of that standard or carelessness with her/his own health/safety, which exposes these professionals, on an excessive basis, to a variety of occupational risks factors. The exposure of health care professionals to various occupational risks within a health institution, especially the nursing professionals, is alarming, considering the existence, since 2005, of a regulatory standard aimed at accident prevention and elimination of risks unique to these environments.

Many behaviors of the nursing professionals are potentially hazardous and they are at odds with what is recommended by the Regulatory Standard 32, such as, for instance, recapping and manual disconnection of needles, non-observation of the limit to the cutting and piercing objects disposal container, lack of protection when helping to perform RX test, and non-use of individual protective equipment when handling chemotherapy agents.

The factors mostly interfering with the applicability of the Regulatory Standard 32 were the professionals’ lack of concern when assessing the work environment and adopting measures to control accidents and diseases related to work, despite the existence of continuing education actions – which, during the study, included a symposium on the Regulatory Standard 32, on August 19, 2010 – and efforts aimed at providing the needed explanations.

One may infer, through the preparation of this study, that there’s still a need in the public sector to find a more effective way to require from the health authorities an effective implementation of this standard, along with a policy which encourages the adoption of biosafety measures in the hospital environment.

Therefore, one may conclude that, even after its creation, in 2005, the resistance to take all or most of the recommendations from the Regulatory Standard 32 is still considerable. It’s a challenge to all health professionals to meet biosafety measures, a duty of health institutions to provide
infrastructure and environmental conditions in accordance with what is recommended by the standard, and a duty of the government to ensure that this is fulfilled.

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