ORIGINAL ARTICLE

REVISTA ENFERMAGEM ATUAL IN DERME

NURSES' KNOWLEDGE ABOUT THE PRESSURE INJURY PROTOCOL IN A PRIVATE AND ACCREDITED HOSPITAL

CONHECIMENTO DOS ENFERMEIROS SOBRE O PROTOCOLO DE LESÃO POR PRESSÃO EM HOSPITAL PRIVADO E ACREDITADO

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ABSTRACT

Objective: To investigate the knowledge of nurses regarding the use of the pressure injury protocol instituted in a private and accredited hospital. **Methodology:** Research with quantitative and cross-sectional approach, carried out in a private and internationally certified hospital, located in the city of Curitiba, State of Paraná, Brazil. Data collection occurred through the use of a questionnaire elaborated by the researchers themselves and applied to 27 nurses during November 2020. **Results:** There was a prevalence of participation of nurses working in intensive care units (n=8;29.63%), and in hospitalization units (n=5; 18.52%). Regarding the use of the protocol for prevention and classification of pressure injury established by the research hospital, 16 nurses use it (59.26%) and 21 (77.78%) are able to apply the Braden scale daily. Regarding the standardized dressings in the institution through the protocol, 14 (51.85%) of the nurses feel secure for their indication and use and 13 (48.15%) do not feel secure. Nine nurses reported participating in the dressing committee (33.33%). **Conclusion:** The data revealed the use of the Braden scale daily by nurses, low participation of professionals in the committee of dressings and incipience regarding the knowledge of nurses in relation to the protocol.

Keywords: Pressure Injury; Quality of Health Care; Nursing Care; Nursing Evaluation; Patient Safety.

RESUMO

Objetivo: Investigar o conhecimento dos enfermeiros em relação ao uso do protocolo de lesão por pressão instituído em um hospital privado e acreditado.

Método: Pesquisa com abordagem quantitativa e transversal, realizada em um hospital privado e certificado internacionalmente, localizado na cidade de Curitiba, estado do Paraná, Brasil. A coleta de dados ocorreu mediante a utilização de um questionário elaborado pelos próprios pesquisadores e aplicado a 27 enfermeiros durante o mês de novembro de 2020. **Resultados:** Houve prevalência de participação dos enfermeiros atuantes em unidade de terapia intensiva (n=8;29,63%), e nas unidades de internação (n=5; 18,52%). Quanto a utilização do protocolo de prevenção e classificação de lesão por pressão instituído pelo hospital da pesquisa, 16 enfermeiros o utilizam (59,26%) e 21 (77,78%) conseguem aplicar a escala de Braden diariamente. Em relação aos curativos padronizados na instituição através do protocolo, 14 (51,85%) dos enfermeiros se sentem seguros para a indicação e utilização dos mesmos e 13 (48,15%) não se sentem seguros. Nove enfermeiros referiram participar na comissão de curativos (33,33%). **Conclusões:** Os dados revelaram utilização da escala de Braden diariamente pelos enfermeiros, baixa participação dos profissionais na comissão de curativos e incipiência quanto ao conhecimento dos enfermeiros em relação ao protocolo.

Palavras Chave: Lesão por Pressão; Qualidade da Assistência à Saúde; Cuidados de Enfermagem; Avaliação em Enfermagem; Segurança do Paciente.

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INTRODUCTION

Pressure Injury (PI) can be defined as damage caused to the skin and/or underlying soft tissue resulting from an intense and/or prolonged pressure or a force combined with shear, and can be classified as stage I, II, III, IV and non-stateable and its classification will depend on characteristics such as size and depth[1]. The incidence of this disease is a critical problem in hospital care, which affects bedridden patients with impaired physical mobility, due to the clinical picture, the therapeutic proposal, the use of devices, the use of health technologies, the time of hospitalization of the patient and its clinical evolution[2].

The occurrence of PI in hospitalized patients results in reduced quality of life, increased length of hospital stay and costs for the health service and a higher incidence of infections related to health care[3]. A systematic literature review with analysis of 32 studies and whose objective was to evaluate the direct cost of dressings in the treatment of PI showed that the cost of treating these lesions was higher than with prevention. Among the most expensive forms of treatment are for PI stages III and IV located in the sacral region[4]. In this sense, there is a proportional relationship between the costs for treatment and the stages of PI, the more severe the injury, the greater the financial expenditure[5].

To reduce the incidence of PI, it is necessary to adopt measures prescribed by the multidisciplinary team, associated with the theory to practice, such as nutritional assessment of the patient, planned repositioning with greater frequency of the patient (change of decubitus), reduction of skin exposure to moisture and pressure points, application of transparent film in bony prominences and evaluation of the risk of PI development by the Braden Scale[6]. This scale assesses the risks in hospitalized patients, using six criteria (sensory perception, skin moisture, activity, mobility, nutrition, friction and shear). It is recommended that the health team be used to patients hospitalized daily to assist nurses in clinical reasoning to perform nursing care planning[7].

In the meantime, the importance of nurses in constantly seeking sources of knowledge to update their practices in order to enhance the prevention and treatment of PI is highlighted, and thus be able to effectively implement measures that identify factors that contribute to the emergence of this disease, in maintaining the integrity of the skin, and to increase the quality of care in the institution that operates, since the incidence of PI reflects negatively for the institution and generates an increase in the workload to be performed by the nursing team[8].

The identification of the risks of PI performed by nurses and implementation of prevention measures provides health gains

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regarding costs and quality in the care provided[2]. The nursing team's support for the PI prevention protocol contributes positively to the low injury rate[9]. It is emphasized that the PI protocol is one of the strategies for implementing the National Patient Safety Program, which aims to improve actions to qualify health care, aimed at patient safety, thus reducing, to an acceptable minimum, the risk of unnecessary damage to the individual during care[10].

For the nursing team to enjoy a good understanding of prevention practices and PI protocol and to perform the actions well, it is essential to participate in the training of their team, in monitoring and continuous evaluation of the work performed; therefore, health education should be part of daily planning to standardize the conduct of professionals[11].

In view of the above, this study aimed to investigate the knowledge of nurses regarding the use of the pressure injury protocol instituted in a private and accredited hospital.

METHODS

This is a cross-sectional research with a quantitative approach, conducted from November 5 to 30, 2020, in a private hospital with 82 beds, providing medium and high complexity care services, certified internationally with the title Qmentum International Accreditation Program and that of surgical review corporation (certification focused on bariatric surgery), located in the city of Curitiba, State of Paraná, Brazil.

The research hospital applies the skin care protocol, which addresses the prevention and treatment of PI, built based on national and international literature. It was implemented by the nursing management and verified by the skin committee, and its last update occurred in 2019. Its objective is to perform preventive and systematized measures aimed at maintaining the integrity of the hospitalized patient's skin. The protocol addresses injury prevention, eligibility, preventive measures, skin evaluation steps and treatment, being available for consultation in a printed and digital form to all professionals.

The target population of the study consisted of 43 nurses. Inclusion criteria were nurses with a time of work in the institution of more than 90 days, who have already fulfilled the period of experience on the date of data collection, with availability and interest in participating in the research, and the one with due signature in the Free and Informed Consent Form -FICF. Nurses on vacation, medical leave or maternity were excluded. After applying these criteria, the non-probabilistic and convenience sample consisted of 27 nurses.

The instrument used for data collection was a questionnaire elaborated by the researchers themselves, composed in two parts: the first with the identification of the

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participant (age, gender, working time in the nursing area, academic training, training in PI, participation in the committee of hospital dressings and working time in the hospital) and the second part composed of nine closed questions regarding the classification and prevention of PI. The questionnaire was applied to nurses through the digital platform Google Forms to be answered individually, after reading and signing the Informed Consent. The data were transcribed by automatically exporting Google Forms to Microsoft Office Excel 2016® Software for descriptive statistical analysis (absolute and relative frequency of questions). The research was approved by the Ethics and Research Committee of the Paraná Institute of Otorhinolaryngology under Opinion N 4,349,300.

RESULTS

Of the 27 (62.79%) nurses participating, 21 (77.78%) were female and 6 (22.22%) were male. Eight nurses were admitted to the hospital in the last 12 months (29.63%). There was a prevalence of professionals in the Intensive Care Unit (n=8;29.63%) followed by the hospitalization ward (n=5;18.52%). The time of work in the nursing area was between six and eleven years old (n=10;37.04%) and from zero to five (n=8;29.63%) according to Table 1.

Table 1 - Demographic and work profile of hospital nurses.

DESCRIPTION	n	%
Gender		
Female	21	77.78
Male	6	22.22
Age group (years)		
20 ├ 25	1	3.7
26 ├ 31	10	37.04
32 ├ 37	7	25.93
38 ├ 43	7	25.93
44 ├ 49	1	3.7
50 ├ 55	1	3.7
Year of Admission		
2007	2	7.41
2009	2	7.41
2011	1	3.7
2013	2	7.41
2014	2	7.41
2015	1	3.7
2016	2	7.41
2018	1	3.7
2019	6	22.22

2020	8	29.63
Sector of Operation		
Intensive Care Unit	8	29.63
Inpatient Ward	5	18.52
Ready RoSocor	5	18.52
*Rest taker/Vacation taker	3	11.11
Surgical Center	2	7.41
Administrative Sector	2	7.41
Hospital Infection Control	1	3.7
Diagnosis and treatment	1	3.7
Time Shift		
19:00 h - 07:00 h	7	25.94
13:00 h - 19:00 h	4	14.81
07:00 h - 17:00 h	4	14.81
*Rest taker/Vacation taker	4	14.81
07:00 h - 13:00 h	3	11.11
07:00 h - 15:12 h	2	7.41
08:00 h - 16:12 h	2	7.41
08:00 h - 18:00 h	1	3.7
Time of Practice in Nursing		
00 - 05	8	29.63
06 - 11	10	37.04
12 - 17	5	18.52
18 - 23	4	14.81
TOTAL	**27**	**100**

*Rest taker/Vacation taker these are nurses who work covering vacations, absences or absences of other employees on a relay scale without schedule and fixed sector of work defined.
Source: The authors

Due to the institution presenting international quality certification of hospital level, there was a need to highlight the provision of knowledge to the care team, since 20 nurses (74.07%) reported having training in the work environment for the prevention and treatment of PI, as shown in Table 2.

Table 2 - Knowledge and training on injuries under pressure from nurses – 2020.

TRAINING/KNOWLEDGE	n	%
Has participated in training course and classification and prevention of pressure injury?		
Yes	**20**	**74.07**
Offered by research hospital	11	55
In another hospital that worked	5	25
Own initiative	4	20
No	**7**	**25.93**
He is currently a member of the commission of dressings of the institution?		
Yes	**9**	**33.33**
> 6 months	1	11.11

06 meses ├ 11 months	1	11.11
01 ├ 02 years	3	33.34
02 anos ├ 04 years	2	22.22
Not mentioned time	2	22.22
No	**18**	**66.67**
Did you conduct training regarding the protocol for the prevention and treatment of pressure injury? In the hospital?		
Yes	13	48.15
No	9	33.33
I don't remember	5	18.52
You request support from the multidisciplinary team to assess the pressure injury?		
Yes	14	51.85
No	3	11.11
Sometimes	10	37.04
Have you suggested in the last six months standardization of any product or equipment to assist in the prevention and treatment of pressure injury?		
Yes	**2**	7.41
No	**25**	92,59
TOTAL	**27**	**100**

Source: The authors

Regarding the use of the protocol of prevention and classification of PI, 16 nurses (59.26%) reported using it and 7 (25.93%) sometimes use it, and 17 (62.97%) reported that the protocol is easy to access for handling and consultation, and 5 (18.52%) stated that sometimes. Regarding the standardized dressings in the institution through the protocol, 14 participants (51.85%) felt safe for the indication and use of coverage and 13 (48.15%) do not feel safe, as shown in Table 3.

Table 3 - Applicability of the protocol for the prevention of pressure injury by nurses – 2020.

VARIABLE	n	%
You feel safe to perform the classification of a pressure injury?		
Very Satisfactory	3	11.11
Satisfactory	17	62.96
Unsatisfactory	7	25.93
In the institution where you work offers training and/or materials for updating related to the prevention and treatment of pressure injury?		
Very Satisfactory	3	11.12
Satisfactory	17	62.96
Unsatisfactory	6	22.22
Insufficient	1	3.7
Do you use the protocol instituted in the hospital to assist in the prevention and treatment of pressure injuries?		
Yes	16	59.25
No	2	7.41

	Sometimes	7	25.93
	I'm not in the Protocol	2	7.41
Can you apply the Braden scale daily?			
	Yes	21	77.78
	No	5	18.52
	Rarely Apply	1	3.7
Do you know and feel safe for the indication and use of all dressing covers available in your work institution?			
	Yes	14	51.85
	No	13	48.15
Can you assess the continuity of prevention and treatment in the unit that works?			
	Yes	13	48.15
	No	9	33.33
	Sometimes	5	18.52
Do you have easy access to the use of the covers and dressings described in the protocol?			
	Yes	14	51.86
	No	4	14.81
	Sometimes	8	29.63
	I'm not in the Protocol	1	3.7
Is the protocol for classification and prevention of pressure injury easily accessible for handling and consultation?			
	Yes	17	62.97
	No	4	14.81
	Sometimes	5	18.52
	I'm not in the Protocol	1	3.7
TOTAL		**27**	**100**

Source: The authors

DISCUSSION

The implementation of the quality manual and strategic planning for certified institutions is of paramount importance for the treatment of non-compliance and preventive actions to seek care with excellence and in prioritizing patient care[12]. Specifically, the PI prevention protocol provides the institution with a quality service, with a view to patient safety, applicable to all patients at risk, strictly providing care measures for the prevention and evaluation of skin integrity[13].

The study hospital has the PI protocol established, and just over half of the nurses claim to use it for the prevention and treatment of injuries. A study conducted in the Intensive Care Unit of the teaching hospital in northeastern Brazil, analyzing the actions of nursing professionals before and after the use of the PI prevention protocol, it showed that with the use of the protocol there was a higher frequency of preventive actions by the nursing team, such as risk assessment

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for PI, care for bone protein and skin hydration, this denotes the importance of this tool[14], and the importance of the PI protocol being accessible to all of the team for their knowledge and applicability.

The results presented here revealed that among the nurses participating in the research, not all of them affirm that the protocol established in the hospital is easily accessible for handling and consultation. This is a vulnerability and an opportunity for institutional improvement in order to facilitate access to information for knowledge of PI prevention and treatment actions as well as to promote familiarity of nursing professionals to the implemented protocol, especially, when considering the number of nurses admitted to the institution in the last two years and professionals working in the hospitalization and intensive care ward sectors, since they are the sectors in which they have patients at higher risk to develop injuries.

The intensive care unit is a sector where patients with critical clinical conditions are intended, who require constant monitoring and complex care, and require greater technical and scientific knowledge of the nursing professional for the correct decision-making[15]. Patients in intensive care are more vulnerable to developing PI due to clinical fragility. It is usually restricted to the bed, with physiological eliminations in diaper or bladder intake tube, with hemodynamic instabilities, some cases with sedation and other medical devices, which hinders its mobility[16].

It is recognized that the incidence of PI may be related to intrinsic and extrinsic factors specific to each patient, but it is necessary to identify potentially preventable lesions[17]. The integrative review conducted with articles published in the period between 2008 and 2019 showed that among the risk factors for the incidence of PI, the intrinsic relate to the clinical condition of the patient as his nutritional status, reduced or absent physical mobility, cardiovascular diseases, urinary and fecal incontinence and advanced age and among the extrinsic factors have the actions of strength and shear on the individual, skin moisture and lack of preventive measures[18].

In the search to evaluate the nurses' knowledge about PI, it was evidenced that not all participants feel safe about their classification, even if it is an accredited hospital. This data corroborates the study conducted in a public hospital in João Pessoa/Paraiba, with a sample of 17 nurses, in which it showed that most nurses presented weaknesses to conceptualize, classify and cite the causes of PI[19]. In a near-experimental study conducted with 95 nurses from a teaching hospital in the interior of Minas Gerais, it demonstrated that nurses have knowledge about PI prevention, but presented weaknesses regarding the use of outdated techniques, thus requiring updating and active

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participation of hospital institutions in the provision of training[6].

Thus, the need to conduct continuing education actions in health institutions is highlighted, to placate the limitations identified[19], including for the participants of this study, because, when nurses were asked about their safety for indication and use of the coverage and dressings available in the institution, it was possible to reveal that half of the professionals feel unsafe.

It is worth mentioning that the dressings and covers aimed at the prevention and treatment of PI are available in the hospital investigated and described in the institution's protocol; however, the data indicate the need for managers to invest in other strategies that can positively impact nurses' knowledge about the use of these technologies and raise the level of safety of these professionals to use them to promote safety and quality of care.

This finding corroborates another Brazilian study conducted in a teaching hospital in the Midwest region that pointed out the main managerial needs of qualification of the nursing team. Among them, we highlight the need to improve the nursing process, implementation of procedure protocols and patient admission routine. The researchers of the study reaffirmed that continuing education contributes significantly to the quality of care provided and guarantees valorization to workers[15].

The offer of training/training to nurses in the institution presents a fragility, few professionals claim to have already performed training regarding the classification of PI in the hospital itself and specific training related to the protocol, some claim not to remember, which makes us rethink about the commitment on the subject by these professionals. For better effectiveness in the PI protocol in the institution, it is necessary to support the administration in the provision of human and material resources, being essential also, the engagement of health team professionals in the execution of actions and in the constant search for knowledge[14].

It is notepoint that health institutions have great responsibility in educational actions for their professionals and nurses play a fundamental role in improving the knowledge of their team, so that there is an understanding about the service itself[20]. The elaboration of a standardized PI prevention protocol should be applied to all sectors of hospital units and approached by the nursing professional in an individualized manner for each patient, whose purpose is to offer care according to their needs[18].

Often nurses have limited care activities, due to insufficient materials to perform care, the lack of specialization on the part of professionals also contributes to an inefficiency, the nurse has freedom to make decisions about the material to be used in the dressing for skin rehabilitation, and this choice is efficient by evaluating its

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therapeutic aspects according to the characteristics of each lesion and skin integrity of the patient[19].

In this context, scientific knowledge provides autonomy for nurses, being responsible for daily monitoring of the lesion and analysis of the efficacy of the product used for the dressing, if it is in accordance with the type and classification of the lesion[21]. It is important that this health professional be engaged in this process and suggest improvements to the institution, in the hospital it was evidenced that there is a great fragility in this regard, few nurses have suggested in the last six months new products to assist in the prevention and treatment of PI. Among the suggestions some dressing coverages mentioned are already standardized and available in the institution, and a point of attention, is the suggestion of effective training, this reinforces the need to invest in the provision of training for the team.

Nurses should involve the role of the multidisciplinary team in the process of prevention and treatment of PI, a fact that the protocol brings as a guideline, but only half of the nurses claim to request support. It is important for the multidisciplinary team to strengthen the commitment of collective work and mature the culture of safer patient care. However, the challenge focuses on guiding and re-educating the team for the implementation of actions aimed at patient safety, and in this context, continuing education is fundamental for the implementation of activities[22].

Another important aspect is the involvement and participation of the skin committee in the follow-up of patients in the prevention and treatment of existing lesions. The role of the skin committee goes further, being fundamental in the promotion of training programs for its members and care team addressing issues related to debridement, dressings, coverage, prevention, among other related issues[23]. The committee of dressings in the institution is composed only of nurses, of the 27 professionals participating in the research 9 (33.33%) are members. Another valuable tool for the prevention of PI is the use of the Braden scale by nurses, which allows the assessment of the risks of developing these lesions. The daily application of the scale allows the health professional to know the characteristics of the patient and to develop preventive actions, it is more satisfactory to prevent an injury than to treat it afterwards[24].

The hospital protocol determines the use of the Braden scale daily by nurses, which justifies the high rate of use of the scale by participating nurses and a strong point in the prevention of PI. In a study conducted at the university hospital located in southern Brazil, the application of the Braden scale daily was evaluated in 120 hospitalized patients, it was evidenced that with the applicability of the scale the incidence of lesions was equal to zero. These data corroborate the effectiveness

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of the Braden scale as a predictive instrument for assessing the risk of PI[5].

CONCLUSION

Relevant points such as the high rate of use of the Braden scale daily by nurses in the prevention of PI are observed in this study. Some weaknesses were evidenced, such as the low participation of professionals in the dressing committee. There is a lack regarding the degree of knowledge of nurses in relation to the protocol, which generates a need for conducting and offering training on the part of the institution. Training is of paramount importance for the work to be performed with higher quality, to obtain more effectiveness in health care.

This research has some limitations. One of them results from the number of participating nurses and the study in a single accredited health institution, which deserves caution in the generalization of the data. In addition, the limitations are the fact that it does not investigate the periodicity of training in the hospital.

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