



Journal of Nursing

Revista de Enfermagem

UFPE On Line

ISSN: 1981-8963

ORIGINAL ARTICLE

KNOWLEDGE AND PRACTICE OF NURSES ON THE CARE OF WOUNDS CONHECIMENTO E PRÁTICA DOS ENFERMEIROS SOBRE O CUIDADO COM FERIDAS CONOCIMIENTO Y PRÁCTICA DE LAS ENFERMERAS EN EL CUIDADO DE HERIDAS

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ABSTRACT

Objectives: to assess the knowledge of nurses on the evaluation and treatment of wounds and describe the clinical practice in the care of wounds. **Method:** cross-sectional study with 55 nurses interviewed in a hospital public education. We used a translated and validated instrument containing 34 questions. The data analysis process was using descriptive statistics by calculation of absolute and relative frequency. **Results:** of the participants, 92.7% had regular or inadequate knowledge on the subject. Most, 67.3% reported not having obtained sufficient knowledge at graduation on wound care. **Conclusion:** the majority of nurses present levels of knowledge lower than desired in relation to wound care. **Descriptors:** Nursing Care; Nursing Evaluation Research; Knowledge; Wounds and Injuries.

RESUMO

Objetivos: avaliar o conhecimento dos enfermeiros sobre a avaliação e tratamento de feridas e descrever a prática clínica no cuidado com feridas. **Método:** estudo seccional com 55 enfermeiros entrevistados em um hospital de ensino público. Utilizou-se um instrumento traduzido e validado contendo 34 questões. O processo de análise dos dados se deu por estatística descritiva mediante cálculos de frequência absoluta e relativa. **Resultados:** dos participantes, 92,7% apresentaram conhecimento regular ou inadequado sobre o tema. A maioria, 67,3%, referiu não ter obtido conhecimento suficiente na graduação sobre o cuidado com feridas. **Conclusão:** a maioria dos enfermeiros apresenta nível de conhecimento inferior ao desejado em relação aos cuidados com feridas. **Descritores:** Cuidados de Enfermagem; Pesquisa em Avaliação de Enfermagem; Conhecimento; Ferimentos e Lesões.

RESUMEN

Objetivos: evaluar los conocimientos del personal de enfermería en la evaluación y tratamiento de las heridas y describir la práctica clínica en el cuidado de heridas. **Método:** estudio seccional con 55 enfermeros entrevistados en un hospital de la educación pública. Se utilizó un instrumento traducido y validado que contiene 34 cuestiones. El proceso de análisis de datos se produjo por estadística descriptiva mediante cálculos de frecuencia absoluta y relativa. **Resultados:** de los participantes, 92.7% presentaron conocimiento regular o insuficiente sobre el tema. La mayoría, 67,3%, dijo no haber obtenido suficiente conocimiento en la graduación en el cuidado de las heridas. **Conclusión:** la mayoría de los enfermeros presenta por debajo del nivel deseado del conocimiento en relación con el cuidado de la herida. **Descriptor:** Atención de Enfermería; Investigación en Evaluación de Enfermería; Conocimiento; Heridas y Traumatismos.

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INTRODUCTION

Assist carriers customers wounds is a multidisciplinary challenge in health care, but it certainly causes a much greater impact on nursing practice, which, in turn, is carried out fully paid, considering the client as a biopsychosocial being and surpassing the technical realization of the dressing.¹

Taking care of wounds is a dynamic, complex process and requires specific knowledge of the nursing team, comprising professionals who will develop this care both in prevention and in the specific treatment. One should take into consideration that the wounds are changing rapidly and are resistant to various types of treatment and result of predisposing conditions that prevent normal healing.²

The practice of care to patients, clients wounds is a specialty within nursing, recognized by the Brazilian Society of Dermatology Nursing (BSDN) and the Brazilian Association of Stomatherapy (BAS), giving the nurse autonomy to care for skin lesions, since, this is a challenge that requires specific knowledge, skills and holistic approaches.³

In the search for quality of care, some authors have been highlighting the need for scientific knowledge related to wounds by the nursing professionals, since often the practice is not based on evidence, but on myths, traditions and own experiences or that of colleagues.³⁻⁴

The use of scientific nursing evidence in the treatment, and prevention of wounds, has as main objective the promotion of patient safety, since by this procedure, it is used and encourages the implementation of innovative practices. However, for nurses to have their evidence-based practice, you need to have appropriate and current scientific knowledge about the actions of treatment and prevention of wounds.⁵

Given the importance of quality of care in the care of wounds, we became interested in conducting this study to assess the knowledge of nurses on the evaluation and treatment of wounds and describe their clinical practice in wound care.

METHOD

We conducted a cross-sectional study of descriptive nature in patient units of a university hospital in the city of Vitória (ES), Brazil, in January 2015. The study population consisted of nurses in adult patient units. The intentional non-probabilistic, sample was composed of 55 nurses, whose inclusion

criteria were: to engage directly in any of adult patients in patient units (Internal Medicine, Clinical Surgery of Women and Men, Motherhood, Emergency Unit, Intermediate Intensive Care Unit and Surgical Intensive Care Unit) and not be out of service for vacation or medical certificates.

Data was collected directly by a single researcher, who used a translated to portuguese and validated instrument, in a study in Brazil, with the nurses from São Paulo/SP, Brasil.⁶⁻⁷ The instrument consists of two parts. In the first part, the issues relate to the socio-demographic data of professionals and update sources on the subject. In the second part, it covered general information about the knowledge and practice of nurses in the care of patients with wounds, totaling 24 items. Two items, present in the original English version and not contained in the validated version in Portuguese were kept in the instrument used in this study, because they are relevant issues. They are:. "Do you know the pressure ulcer incidence rate (PU) of your work unit?" And "In your workplace is there a commission of dressings/skin" ⁶ According to the item, the participants had the ability to select an answer considering the following alternatives: true, false, yes, no, I do not know, sometimes, always or never, among others. For questions of knowledge, depending on which evaluated their practice, he could select one or more than one answer.

Data was analyzed using the statistical package STATA, Version 13.0 (Stata Corp, College Station, TX, USA, 2013). The data analysis process was using descriptive statistics, by calculation of absolute and relative frequency. The total score of knowledge issues was obtained by the sum of correct answers in the test. Issues with incorrect or unknown to the participant answers were counted as errors. Corroborating in a study were considered adequate knowledge on the subject those who obtained scores equal to or above 80% .⁷

The study was approved by the Research Ethics Committee of the Health Sciences Center / UFES (Registration No. CAAE 38637114.1.0000.5060).

RESULTS

The sectors that have largest number of participants were of Internal Medicine, 24%, and Adult ICU, with 20%. The predominant age group was 26 to 30 years, with 55%. It is noteworthy that 81.8% of subjects were female. As for the length of professional experience, 54% had between one and five years of practice. The training ranged from

one to five years, with 52%. The majority, 45 (82%) had attended a post-graduation *lato sensu*, but, of these, only one (1.8%) in stomatherapy, work nursing 22% and emergency care 20% as areas concentration. Only 3.6% were considered experts in wound care. However, 65.4% of the subjects said

they felt able to perform dressings and 80% claimed to have affinity with wound care.

Most of the subjects answered that they used sometimes a source of professional development, highlighting congresses, symposiums, lectures and others, and search information with physicians, 82 and 74% respectively, as shown in table 1.

Table 1. Distribution of the number of nurses who cited professional development sources. Vitória-ES, Brazil, in 2015.

Information Sources	Never		Someti mes		Always	
	n	%	n	%	n	%
Periodic Signiture (News papers, magazines and others).	27	49	21	38	7	13
Conferences, simposiums, lectures and others.	2	4	45	82	8	14
Search for information with assistencial nurses.	2	4	12	22	41	74
Search for information with teachers.	11	20	28	51	16	29
Search for information with doctors.	10	18	41	74	4	7

As detailed in table 2, with regard to professional practice, 25 (45.5%) respondents reported that they felt sometimes able to identify six categories of PU. In turn, 25 (45.4%) said that pressure redistribution products are not used in their workplace, while 30 (54.6%) said yes. It is observed that 48 (87.3%) professionals reported using sterile

gloves to perform healing of chronic wounds. As for the daily assessment of the skin of patients, 43 (78.2%) said that they conduct and 12 (21.8%) said they sometimes do this inspection. Related to professional practice, 30 (54.6%) of respondents reported not feeling confident in making recommendations to their team about the care of wounds.

Table 2. Percentage of the results of items answered by research participants to test related to professional practice, according to patients wound care. Vitória-ES, Brazil, in 2015.

Item	n	%
Do you still feel able to identify six categories of PU in patients?		
Yes, I am able.	23	41,8
I do not feel capable.	7	12,7
Sometimes I feel able	25	45,5
Pressure redistribution products (such as beds, special mattresses, upholstered chairs) are used in your workplace to prevent PUs?		
Yes	30	54,6
No	25	45,4
Do I feel confident to make recommendations to my team about the covers for wounds?		
Yes	20	36,4
No	5	9
Sometimes	30	54,6
In this practice, are gloves used to exchange sterile dressings for chronic wounds?		
Yes	48	87,3
No	4	7,3
Sometimes	3	5,4
Is the skin assessment part of the daily evaluation of all your patients?		
Yes	43	78,2
Sometimes	12	21,8

According to data from table 3 of the interviewed nurses, 39 (70.9%) reported that there are no standards, protocols or manuals on wound care, and 10 (18.2%) said they did not know it existed. When asked about the field of action (autonomy, authority and

responsibility) in relation to the prescription of care for the treatment of wounds, 15 (27.3%) reported that its scope depends on the medical authorization, and fivwe (9.1%) of participants I could not say (Table 3).

Table 3. Percentage of the results of items answered by research participants to the test concerning the place of professional performance. Vitória-ES, Brazil, in 2015.

Item	n	%
At your place of professional presence for standards (protocols, manual, etc.) about the care of patients with wounds?		
Yes	6	10,9
No	39	70,9
I can not inform	10	18,2
Do you know the incidence rate of the PU in the working unit?		
Yes	9	16,4
No	41	74,6
Sometimes	5	9
In your workplace is there a commission of dressings / skin?		
Yes		
No	3	5,4
I can not inform	42	76,4
	10	18,2
In your workplace, what is your field of action (autonomy, authority and responsibility) in relation to the prescription (indication) of topical therapies and implementation of protocols for the treatment of wounds?		
Total autonomy		
Doctor's authorization depends	35	63,6
I cannot inform	15	27,3
	5	9,1

Of items related to knowledge, presented in Table 4, it is emphasized that 53 (96%) of the nurses gave wrong answers on this bacterial flora in chronic wounds. On the use of wet gauze to dry, 28 (69%) responded that this is the most appropriate dressing for chronic wounds and granulation tissue.

Of the professionals interviewed, 40 (73%) were wrong to classify as false, the question

"Is the wound assessment a cumulative process that includes observation, data collection, and evolution?" And seven (13%) said they did not know the answer for that matter. On the use of iodine (PVP), 14 (25%) reported that this is a product used in chronic wound cleaning (Table 4).

Table 4. Percentage of the results of items answered by research participants to test knowledge, according to customers wound care. Vitória ES, Brazil, in 2015.

Itens	Errors		Correct		Unknown	
	n	%	n	%	n	%
Povidone is indicated to clean chronic wounds.	14	25	41	75	0	0
The Braden Scale is an instrument used to assess the patient's risk of developing vascular ulcer.	12	22	33	60	10	18
In chronic wounds, the good bacteria are the ones that are dead.	53	96	2	4	0	0
Roofing moist gauze drought are most suitable for the treatment of chronic wounds clean and granulation tissue.	28	69	13	24	4	7
The wound assessment is a cumulative process that includes observation, data collection and evolution.	40	73	8	14	7	13
The first category of PU is easily identified in people of dark skin.	2	4	50	91	3	5
Nurses in Brazil are authorized to perform conservative debridement	6	11	32	58	17	31

Concerning the knowledge acquired during undergraduate studies, 37 (67.3%) professionals said they had not received sufficient education about the care of wounds.

Based on the standard adopted for evaluation of nursing knowledge, it was

observed that only four (7.3%) had adequate professional knowledge on the subject (equal hit scores or above 80%), followed by 51 (92.7 %), with the level of knowledge classified as inappropriate.

DISCUSSION

Wound care and application of dressings were always daily activities in the practice of nursing. The treatment of wounds, is recognized, as an essential competence of the nurse. This professional, in turn, requires a theoretical knowledge based on evidence to ensure the quality of care to the wound, carrier and to prevent it from happening. A study carried out in Belgium gives the knowledge of nurses fundamental role in preventing PUs and healing process, reducing customers' length of stay and expenditure of the institutions,⁸ however, in this study, there was a high number of nurses with inadequate knowledge about the care of wounds. This data corroborates a study in São Paulo, which used the same instrument, in which the percentage of nurses with inadequate knowledge was also high.⁷ The finding in this study can be explained by short time work experience and the absence of specialized courses in the area (wounds).

This study found also a large number of nurses who reported seeking sometimes some update source on the subject; never or sometimes look for teachers to update and not have acquired sufficient knowledge about the care of wounds during graduation. Moreover, a considerable group of professionals reported not knowing the risk scale for PUs (Braden Scale) and say they do not feel safe to identify the six PUs, classification categories or confident to make recommendations to its staff on wound care .

Although it is believed that the results presented and discussed here are relevant to the care of nurses in the care of the client with skin lesion, it is important to recognize the limitations of this study: the transfer of results obtained with other health services cannot; data was collected from self-report of respondents, with no on-site evaluation of the activities performed by nurses. However, it should be noted that the data was collected by a single researcher, who used a translated and validated instrument in Brazil.⁷

Because it is a thematic constant construction of knowledge, linked to new approaches and clinical practice of wound care, nurses must keep up to date with respect to advances in the area, which is likely to mean better customer support carrier wound. However, the study participants reported that they sought, sometimes update knowledge, preferring to do so, to seek information with doctors, which shows that there are still traces of the biomedical domain about some areas.⁹ The fact that the

participants of this study did not seek to update permanently could justify also the high number of nurses with inadequate knowledge about the care of wounds and, in turn, a number of professionals who reported the appointment of iodine solution (PVP) in wound cleansing and the use of sterile gloves in the exchange of chronic lesions.

Another important issue raised in this study was the significant percentage of nurses who reported never or only sometimes seek information with teachers. Because it is a teaching hospital, the institution is linked to the University. Consequently, these nurses work in preceptorship stages to nursing course students in partnership with the faculty. This finding points to a gap between the clinical Nursing staff of the hospital and faculty of the academy. Study in a school district, says that the lack of dialogue between teaching and service is a strong promoter of this detachment.¹⁰ There are situations where only education seeks to integrate the service in a unilateral way, without giving room for such service integrates the academy actions. Thus, the participation of professionals was not observed in defining and planning of academic activities in the institution.¹⁰

This gap between teaching and service may be affecting the nursing training process at the undergraduate level, since a large number of respondents said they did not receive enough information at course on the care of wounds, confirming the basics knowledge deficit on the subject. The guidelines and curriculum of nursing courses do not give emphasis on the study of wounds as a base area for the care of nursing.¹¹ This subject is treated superficially in some subjects. It is understood that the update should start from the professional, since the treatment of wounds is a constantly advancing scientific aspect. However basic concepts should be consolidated during the academic formation of the nurse.¹²

The study data showed weakness in basic knowledge of nurses about the PUs, which represents a serious public health problem, and justifies the study findings recently held in that institution, which showed a high incidence of PUs in intensive therapy patients.¹³ It's a fundamental role of the nurse to be aware of preventive measures on the subject, as the application of risk scales. However, this study found that a considerable percentage of respondents do not how to apply the Braden Scale, a worrying fact since the risk score determines the preventive actions to be implemented.¹⁴ The National Pressure Ulcer Advisory Panel (NPUAP)

attaches to the nurse the ability to classify PUs as one of its basic skills.¹⁵⁻¹⁶ However the data found shows that, in the population studied, most say no jurisdiction to identify the categories of classification, and a small percentage states that know the incidence PUs in their workplace.

Insecurity from nurses, to make recommendations to the team itself about the covers for wounds, corroborates the knowledge deficit on the subject. In this regard, the majority of respondents answered that sometimes they feel confident to make recommendations on the care of wounds. In part, this may also reflect problems of communication between the nursing staff, because the members of this population have little time of work experience. The leading role, developed by nurses is often not explored in the classroom, but in everyday practice.¹⁷

It was observed, among those surveyed, that there is a high number of professionals that know their role, and their responsibilities in relation to the care of patients carriers of wounds. The nurse, according to the SOBEST, can perform conservative debridement (surface) with a view to the removal of devitalized tissue, provided you have knowledge and skills. However, a significant number of nurses surveyed said they did not know the playing field in performing debridement in treating wounds.¹⁸

CONCLUSION

The results of this study point to the high number of nurses with inadequate knowledge about the care of wounds. The professional development sources (conferences, courses, etc.) were rarely mentioned by the nurses. The academic was reported as insufficient on wound care. The data collected shows it is relevant to distinguish the professional setting of their knowledge and rethink their practice, contributing to an educational strategic planning aimed at a plan of action for the use of recommendations focused on evidence-based practice.

The results of this study can assist in this training process, since deficiencies were identified in the nurses' knowledge of wounds, and guide the incentive strategies for protocol construction to care for wounds and for the formation of a Curative Commission.

ACKNOWLEDGEMENTS

Thanks to everyone who intensely and lovingly, helped us in this project. No funding.

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Submission: 2015/05/25

Accepted: 2016/10/27

Publishing: 2016/12/01

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