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RESEARCH

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The Nurses' Viewpoint Regarding the Use of the braden Scale With the Elderly Patient

A Visão de Enfermeiros Quanto a Aplicação da Escala de Braden no Paciente Idoso

La Visión Enfermeras Para la Aplicación de Escala en Braden Paciente Anciano

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ABSTRACT

Objective: The study's goal has been to identify if nurses are knowledgeable and use correctly of the Braden Scale with the elderly in their daily care practice. The Braden Scale is a consolidated instrument in pressure injury prevention. **Methods:** It is a descriptive-exploratory research with a qualitative approach, which has been performed in a hospital localized in North of *Rio Grande do Sul* State. Data were collected through semi-structured interviews with fourteen nurses, and analyzed through thematic analysis. **Results:** It was found that most nurses use the scale and are knowledgeable about it, but they also have some difficulties, such as lack of time for performing the needed care. **Conclusion:** The Braden Scale is a health indicator that assesses the risk of injury formation, where the nurse plays a key role by using this scale. Although the nurses consider the scale an important instrument, they often use it only to meet institutional protocols.

Descriptors: Pressure injury, Elderly, Nursing Care.

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RESUMO

Objetivo: Identificar se os enfermeiros têm conhecimento e fazem uso correto em seu cuidado diário da escala de Braden em idosos, instrumento consolidado na prevenção das Lesões por Pressão. **Método:** Trata-se de uma pesquisa qualitativa, exploratória, descritiva, realizada em um hospital ao Norte do RS. Os dados foram coletados por meio de entrevistas semi-estruturadas com quatorze enfermeiros e analisados mediante análise temática. **Resultados:** A maioria dos enfermeiros realizam a escala, tem conhecimento da mesma, porém encontram dificuldades como falta de tempo para que seja realmente efetivado os cuidados que aparecem no escore de risco. **Conclusão:** A Escala de Braden é um indicador de saúde que avalia o risco de formação de lesão, onde o enfermeiro tem papel primordial no seu desempenho, apesar de considerá-la importante, muitas vezes realiza-a apenas para preencher protocolos institucionais.

Descritores: Lesão por pressão, Idoso, Cuidados de enfermagem.

RESUMEN

Objetivo: Identificar si las enfermeras tienen conocimiento y hacer un uso adecuado en su cuidado diario de la escala de Braden en la herramienta de edad avanzada, consolidada en la prevención de lesiones por presión. **Método:** Se trata de un salto cualitativo, exploratorio, descriptivo, realizado en un hospital al norte de la RS. Los datos fueron recolectados a través de entrevistas semiestructuradas con catorce enfermeras y analizados mediante el análisis temático. **Resultados:** La mayoría de las enfermeras se dan cuenta de la escala, es consciente de ello, pero se encuentran con dificultades como la falta de tiempo para ser realmente efectuado el cuidado que aparece en la puntuación de riesgo. **Conclusión:** La escala de Braden es un indicador de salud que evalúa el riesgo de formación de lesiones, donde la enfermera tiene un papel clave en su rendimiento, a pesar de que es importante tener en cuenta, a menudo llevado a cabo sólo para llenar los protocolos institucionales.

Descriptores: Lesiones de presión, Anciano, Atención de enfermeira.

INTRODUCTION

The increase in life expectancy due to advances in health, greater coverage of the hospital care network, improvements in general living conditions, better income distribution and a better level of schooling, among other factors, resulted in an increase of the elderly population. One of the consequences of this change in the epidemiological profile was observed in clinical practice, developed in the institutional and home setting, with the growing number of people with injuries, mainly pressure injuries.[1]

When this elderly patient is hospitalized, the care by the nursing team should be intensified. One of the eminent risks of a bedridden elderly is the case of Pressure Injury (PI), caused mainly by the lack of alternating decubitus, maintaining this patient for a long time in the same position.

Given this scenario, it is important that the nursing team become attentive to this kind of care. The Braden Scale (BS) appears as a resource, because it is a validated and easily applied instrument to assess the risk of PI formation.

The BS, which was developed by Barbara Braden and Bergstrom Nancy in 1987, is the clinically useful tool enabling health professionals to reliably assess patients.[2]

Throughout history there have been several designations including bedsores, decubitus ulcers, among others. But, on April 13th, 2016, the term "PRESSURE INJURY" replaces " PRESSURE ULCER" in the National Pressure Ulcer Advisory Panel (NPUAP). The change in terminology more accurately describes PIs in both intact skin and ulcerated skin.[3]

The international definition of the National Pressure Ulcer Advisory Panel and the European Pressure Ulcer Advisory Panel for PI is, as follows: a localized damage to the underlying skin and/or soft tissues, usually over a bone prominence or related to the use of a medical device or other artifact. The injury can occur in intact skin or as open ulcer and may be painful. It occurs as a result of intense and/or prolonged pressure in combination with shear. Soft tissue tolerance to pressure and shear might also be affected by nutrition, perfusion, comorbidities, and clinical condition.[3-4]

In Brazil, studies estimate that the PI incidence in Intensive Care Units (ICU) is raging from 10.62% to 62.5%, whereas in medical clinics an incidence of 42.6% was found and, in surgical units 39.5%.[5]

The BS is composed of the following six subscales: sensory perception, moisture, activity, mobility, nutrition, friction and shear. From the six subscales, three can measure clinical determinants of exposure to intense and prolonged pressure - sensory perception, activity and mobility; and three measure the tissue tolerance to pressure - moisture, nutrition, friction and shear. The first five subscales are scored from 1 (less favorable) to 4 (more favorable); the sixth subscale, referring to friction and shear, is scored from 1 to 3. Each subscale is accompanied by a title, and each level is composed of a concept, a key descriptor and one or two sentences describing or qualifying the attributes to be evaluated. The BS score ranges from 4 to 23. Hospitalized patients, with a score equal to or greater than 16 points, are considered low risk for developing PI; scores from 11 to 16 indicate moderate risk; and below 11, are at high risk.[6]

This research is justified due to the large number of "pressure injury" event installed in hospitalized elderly patients, and pursues to identify if nurses have knowledge and make correct use of the BS with the elderly during their daily care practice. This research also has specific objectives, such as: to identify the possible doubts or difficulties of the nurses that use and those who do not use the BS in their work routine; as well as, to investigate the importance that nurses attribute to the scale regarding the prevention of PI in the elderly patient.

METHODS

It is a descriptive-exploratory research with a qualitative approach, which was carried out in September 2016 in a general hospital localized in North of *Rio Grande do Sul* State. In order to ensure compliance with ethical research questions, the study was submitted and approved by the Research Ethics Committee from the *Universidade de Passo Fundo* under the *Certificado de Apresentação para Apreciação Ética (CAAE)* [Certificate of Presentation for Ethical Appreciation] No. 56940516.6.0000.5342, as well as the approval of the Research Committee from the mentioned hospital.

There have been selected nurses from the emergency, clinical and surgical hospitalization units (Place 1, 4 and 6), nephrology, radiotherapy, Central and Cardiology Therapy Center of the hospital. The choice for these environments was due to the large number of chronic elderly people that undergo either continuous treatment or hospitalization in these units, as well as due to fact that the Multiprofessional Residency team performs its practice in these places. The study participants were selected using as inclusion criteria nurses that had been in the research sector for at least 6 months, from different shifts, morning, afternoon and evening, and who voluntarily accepted to participate, as well as by data saturation. Sample closure by theoretical saturation leads to the suspension of the inclusion of participants when the data present, in the evaluation of the researcher, either redundancy or repetition.[7,8] Nurses were excluded when they were either on vacation or removed by health license, and also with less than six months at the company.

At the beginning of the interview, they were informed that they could freely choose to drop out at any time without prejudice. Therefore, the interview proceeded once the participants placed their signature on the Free and Informed Consent Term as recommended by the Resolution No. 466/12 from the National Health Council, which deals with the ethical aspects in research involving human beings.[9]

Data collection was performed with fourteen nurses, who participated in a semi-structured interview with guiding questions, recorded in an audio system. Data from the interviews were transcribed in full and the information was grouped according to similarity to meet the study objectives. As a method of analysis, the information was grouped, after reading them twice, in the form of content analysis, focusing on thematic analysis.[10]

In the first moment, the profile of the participating nurses was registered for a better understanding of the study. Subsequently, the interviewees' statements were reported according to the study's purposes and also discussed based on the theoretical reference.

In order to organize the data exposition and in aiming to keep the anonymity, the participants received codenames that were symbolized by flower names.

RESULTS AND DISCUSSION

The nurses participating in the research work in the institution from 8 months to 11 years. They all either had contact or routinely perform BS in their work routines at the hospital. They are nurses of the three hospital work shifts.

BRADEN SCALE UTILIZATION

The interviewees were asked about the scale in the sectors in which they perform their functions, more than half answered affirmatively, but are realistic in explaining that they often fail to carry it out, and launch alternatives in internal logistics to involve all nurses from the unit in a rotation system and in some units made by the nursing technicians:

> *As far as possible, yes. (Sunflower)*

> *It is performed, the technicians do it, we have done a week a month, every week is a shift that does, the shift that is responsible for the patients they are doing the scales. (Fern)*

> *Yes, we take turns between me and the other nurse. (Bromeliad)*

The BS is a parameter that should be used in association with the clinical evaluation of the nurse.[11] The evaluation and prescription of skin care is an assignment of the nurse, and the participation of the multiprofessional team in the prevention of changes is fundamental in the contribution for prescribing and planning patient care at risk. Alongside this, nutritional adjustments will be necessary, interventions to aid the mobilization or mobility of patients, among other possible care measures.[12]

The nurse practitioner is responsible for caring for the patients hospitalized with PI; therefore, they are fundamental to prevent the appearance of these wounds.[13]

Some nurses do not use the scale due to either the lack of time or because it is not routine in the sector:

> *I am going to be honest, I particularly do not do it, but in the sector have to do, it is advocated by the hospital. Because of the demand of patients I end up not doing, who does more are the residents. (Jasmine)*

> *No, we do not perform Braden Scale here in this sector as routine. (Glass of milk)*

As part of the prevention protocols, risk assessment scales for PI development are often studied and implemented. The Braden Scale is the most widely used scale, published more than 30 years ago, are widely used in the United States, adapted and legitimized for Brazilian culture in 1999.[14] Based on this strength, nurses need

to incorporate the importance of applying the BS into their routine.

In the outpatient units the BS is not performed, as it does not occur in the hospitalization of patients. Given this negative, nurses were questioned if they felt the need to use the scale in the sector, obtaining the following answers, observed in some speeches:

As our patients are outpatients they do not stay in with us they come and go home, we do not have any bedridden patients who have a greater propensity to develop the injury we end up not doing the Braden Scale. I think with the passing of days we are going to have to get into the rhythm of the institution and start doing it on all patients, but I believe it's more for the records. (Glass of milk)

There is no much neediness, isn't it?; you do not have to, the patients do not even spend much time in the sector, they do the treatment and go home; I could not perform the scale in order to assess the risk. (Rose)

PI is a constant problem in hospitalized patients, lack of care results in an unwanted effect by not offering adequate care to the patient.[15] Similarly, the patient that is discharged with non-reversed PI may suffer complications from this event and trigger a hospital readmission.

THE BRADEN SCALE IMPORTANCE REGARDING THE PRESSURE INJURY PREVENTION IN ELDERLY PATIENTS

The aim here was to make a profile of the type of client found in the work units, where the vast majority are elderly people, and also find about the length of hospital stay, bed rest, and aggravation involving hospitalization leads to the onset of the lesions.

The skin of the elderly undergoes transformations of the physiological process of aging due to the reduction in elasticity, texture, reduction of muscle mass and frequency of cell replacement, becoming more fragile.[16]

Yes, of course, more friable, thinner skin. With the comorbidities installed it is easier to develop injury. It comes fairly institutionalized elderly patient already with injury or develops injury much faster. Their diet is low in protein; are several factors that influence in developing an injury faster than a young patient that has more energy to spend. (Clove)

Yes we have a very large demand, more than half of the patients are elderly patients, many of them come with pressure injuries from home already, in different degrees and have patients who end up acquiring injuries here because our beds are small, the mattresses are bad and we cannot do the patients' bed-wetting here. (Jasmine)

The prevalence of chronic diseases in the elderly population indicates that aging is accompanied by an increase in diseases and conditions that can lead to functional incapacity.[17] Unfortunately, PIs are often due to the lack of enforcement of basic patient safety standards.[12]

Regarding the value of BS use in the elderly patient, all the interviewees considered it important, as it helps them to identify the risk of PI formation.

Oh, it is very important because when you open the system you already see high risk, it gives more attention, and your look already emphasizes more for the skin, for the care. (Daisy)

Currently, I identify as of great importance [...] only, however, it is not so valued by the nursing team. (Sunflower)

I believe it is very important because through it we can make an assessment of which patient has the most need for skin care, change of position, protein intake, basic needs such as food. (Bromeliad)

In the international scenario, the use of protocols in the prevention of PI, from 43% to 28%. Therefore, a choice is made of a risk assessment method for the development of PI that is effective and easy to apply so that a nursing team correctly identifies the patients in a development, developing the use of measures and adopting assertive behaviors.[18]

At the same time they consider BS important, often one performs to comply with institutional protocols. Some consider primary care to be detrimental to documents, as follows:

We have little time to evaluate the patient, so often the patient arrives in the industry we take a look and the staff does the scale, it is not the evaluation that you are really going to make of the patient, I think that is missing. The scale is often made to meet protocol. (Fern)

The scale will see the risk that the person has to develop injury. That is the nurse's knowledge. In the ICU 99-100% of the patients that enter have an increased risk of developing lesion, then all patients are evaluated the same. It is not the scale that will define for us if it has more or less risk. The patient with spinal cord trauma, with a still neck collar is more at risk than another patient who can be lateralized. Nowadays, I see the scale much more like a bureaucratic part really of obligatory filling, but I do not think that it helps us to change our conduct, being very sincere. (Clove)

It has a lot of value, but there are some details that suddenly end up not doing, it becomes a habitual practice. The professional often ends up not examining, as he/she should in order to perform the scale, then does not follow well that injury of the patient. (Bromeliad)

Based on the statements it is observed that some nurses are concerned with doing it independent of the official registry, that the individualized care is more relevant in detriment to the filling of the BS.

On the other hand, it is also perceived that PIs seem to be trivial, common, something expected, neglected by professionals. But, worrying evidence is about performing the BS, filling in the items of the subscales without evaluating the patient in person.

Intensive care patients are prone to PI due to sedation, altered level of consciousness, ventilatory support, use of vasoactive drugs, prolonged movement restriction, and also hemodynamic instability.[19]

The BS should be used by a trained professional, which is trained to obtain positive results. It is an instrument for evaluation, but also for prevention and treatment associated with nursing care, it is necessary to work together.[20] The risk assessment scales are considered important supporting instruments, but they do not replace the clinical evaluation of the nurse.[21]

When talking about care, we consider the basic care that should be performed by the nursing team in the prevention of PI, as well as put the scale score into practice in the daily risk assessment of the patient.

Strictly, we have the control of switching the decubitus of the patients. (Bromeliad)

[...] checklist of lateralization, the decubitus position [...]. (Clove)

[...] changing the decubitus position [...]. (Fern)

What is emphasized in the speeches is the valuation of the alternation of decubitus, which was cited by most of the interviewees when describing the care.

The change of position is cited as the main action of responsibility of the nursing team to prevent PI.[22]

A survey carried out indicated that 96.0% of nurses recommend a change of position and 68.0% report using special mattresses.[23] Pyramidal foam along with the protection of bony prominences are also other care used by nurses as a way to avoid the PI, for them is a daily practice.

Serious patient already at risk first thing is pyramidal. Second thing, protection of heel always, even if it has nothing, hydrocolloid in all bony prominences. (Violet)

Protecting the prominences, taking care of the lower limbs in order that the feet do not get in contact with the other, and the use of pyramidal. (Rose)

[...] put some protectors to prevent a pressure injury from beginning right there [...]. (Clove)

Changing the decubitus position is important in relieving and redistributing pressure to the skin, allowing blood flow to flow into ischemic areas and assisting in the recovery of tissues from the effects of pressure.[16] Side shifting can be performed every four hours, when in use of pressure reducing surfaces, or every two to four hours when in use of non-pressure reducing surfaces. In patients with normal circulatory capacity, the maximum period of two hours is recommended in the same position.[24]

The pyramidal mattress, also known as egg shell, is foamed and has a rough surface that minimizes pressure points on bony prominences.[25]

DOUBTS AND DIFFICULTIES CONCERNING THE IMPLEMENTATION AND APPLICATION OF THE BRADEN SCALE WITH THE ELDERLY PATIENT

Aiming the concrete effectiveness of the scale and in order to obtain expected results, it was asked about how the BS was presented at the institution. The majority received training as analyzed in the following arguments:

Yes, when she was implanted in the hospital, there was a training session, and then the technicians had training, because it is for the nursing technicians to perform it, but here at this sector, the nurses did it. (Daisy)

As soon as I started, there was a training session, they passed an article that we read, but we did not perform it. (Violet)

BS is indispensable for assessing the risk of developing PI, but it is necessary for the whole team to understand the classification criteria. In studies carried out on the effect of educational interventions on the knowledge of nursing professionals about PI prevention, they affirm that several educational strategies can be used to increase the level of knowledge, and the training of professionals is a learning tool.[26]

The BS was implanted in the institution under study in the middle of 2009 in a handwritten form, now follows the models of the scale validated for Brazil, in a computerized way and follows the Patient Safety protocols, as a quality indicator.

When asked if difficulties were encountered when performing the BS, the great majority considered it easy to understand and manage and can be easily accessed in

the computerized prescription. BS aims to individualize the treatment that will be dispensed to each patient in a systematized way through the score obtained.[27]

It is necessary to mention the speech of three nurses that see limitations to perform the BS. They listed not having a thorough knowledge of the evaluated patient, and not having a daily contact with the patient, sometimes due to the great workflow, lack of time or even because they do not work in the sector responsible for performing the scale:

> *I particularly think it's not very understandable. It is not so easy to apply the scale from which are few options, do not know how, to evaluate in this sense, but I think there are missing options. (Jasmine)*

> *I believe that for the nurses working in the sector, they know their patients from entry to discharge and also have a daily contact, then it becomes easier to do. But for a person who makes a monthly scale, so it is a day in the month that stays on the sector, there is no time to know the patients so thoroughly to know if it is decreasing or increasing this injury, how is the progression. (Glass of milk)*

> *In fact it is not difficult to make the scale itself, but the difficulty we see is the time limitation to evaluate the patient. (Fern)*

When the number of employees in the nursing area is reduced, the workload is increased. In order to meet all the demand, the nurses have to deploy themselves to simultaneously attend several units and develop several functions, which makes it impossible to establish a bond with the patient, which makes a complete evaluation difficult.[28]

Every patient ought to be systematically evaluated on admission. Taking into account the weaknesses, vulnerabilities and risk factors for the development of skin changes. The predictive scale used for PI is the BS.[15] As mentioned in the literature, the BS assesses the patient overall for risk of injury, assessment should be made at the first contact with patient, in case of scaling only once in the month, makes this evaluation impossible, which means that the results are not as expected, and then impairing the care quality provided to this patient.

CONCLUSIONS

PI is a major public health problem, especially in chronic elderly patients hospitalized and in continuous home treatment. PI is difficult to treat, usually prolonged and costly, which corroborates the premise of prevention.

The BS is a useful instrument, it is easy to handle, it has no cost to the institution and it is used as a health indicator. Regarding the patient safety, the BS has a preventive character and assists the nurse to carry out an overall evaluation of the risk of PI formation in the hospitalized elderly patient. This way, the necessary care can be taken in order to avoid the injury. Nevertheless, it is necessary to involve the whole team in order to get the job done, the nurse alone can measure the risk, but nursing technicians must put it into practice.

In the nurses' rational, BS is considered important because it is a useful tool in the prevention of PI formation, but the lack of time and the workload in the sector means that it is applied often only to meet institutional protocol, without a reliable patient assessment, then making the appearance of lesions in patients at risk a still frequent issue.

Continuing education in the hospital settings can keep the professional upon constantly learning, in a process of recycling for a better nursing care toward the patient. The PI incidence in a hospital should be used as an indicator of the nursing care quality. Therefore, reducing the PI incidence is a primary role of the nursing team that has major contact in the elderly patient daily care.

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