

## 59 - PROFILE OF THE ELDERLY WHO DEVELOPED PRESSURE ULCER DURING HOSPITALIZATION IN A PUBLIC HOSPITAL IN THE MUNICIPALITY OF JOÃO PESSOA – PB

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### INTRODUCTION

In Brazil, the elderly population has growing in recent years, representing 10% of the Brazilian population. The projections of the Brazilian Institute of Geography and Statistics indicate that the number of people over 60 years will be 32 million in 2025. Brazil is the sixth country in the world in relation to the contingent of this population (IBGE, 2010). This growing is associated to the high fecundity in the past and the current mortality reduction, the result of improvement in the quality of life of the urban and rural populations, and better sanitary, alimentary, and habitation conditions (SILVA; LEITE; PAGANINI, 2007).

To the extent that the population aging occurs, it is observed the utilization of hospital services by this public with bigger frequency in relation to other age groups, resulting in bigger costs to hospital services, what implies in the prolongation of treatment and in slow recuperation, increasing the probability for complications (SIQUEIRA et al, 2004).

Along with the aging comes changes in the morphology, physiology and psychology of the individual, producing loss in the ability to adapt and keep stability with the medium. Then, the individual becomes more vulnerable to diseases, breaking out loss of body mass, reduction of albumin on blood and the cohesion between epidermis and dermis (LISBOA, 2010). According to the same author, it also occurs loss of subcutaneous fat of limbs and bony prominence, what results in poor distribution of mechanical load, compromising blood circulation and predisposing to the onset of pressure ulcer (PU).

Pressure ulcers are characterized by ischemia and tissue necrosis due to prolonged compression of soft tissues between bony prominences and the external surface. It prevails in patients with spinal cord injury debilitated, elderly or chronically ill. Moreover, it constitutes an important problem to the institutions and professionals involved with health care because it affects the quality of life, increases the time of internment and the hospital costs (SMELTZER; BARE, 2005).

Based on the above, this study aims to characterize the profile of the elderly who developed pressure ulcer during the hospitalization.

### METHODS

This is an exploratory-descriptive study, retrospective, with quantitative approach, which was developed in a public hospital in the municipality of João Pessoa – PB, specifically in the following sectors: medical clinic, semi-intensive and intensive care unit. The study population was constituted by 1244 patients, including 70 who developed PU during hospitalization. In addition, the sample consisted of only the elderly aged over 60 years, 46 (65.7%) in total. The collected data were extracted from medical registers, selecting the ones that presented PU register by nursing. The data were quantitatively analyzed using MS Excel and SPSS, version 17.0. They were grouped to form tables and charts with absolute numbers and percentages. The project was analyzed and approved by the Research Ethics Committee of Santa Emília de Rodat College (FASER), under number 034/2010, obeying the Resolution 196/96 of the National Health Council (BRASIL, 2002).

### RESULTS E DISCUSSIONS

In the studied year, 1244 patients were hospitalized in the following sectors: medical clinic, semi-intensive and intensive care unit of the researched institution. From these patients, 70 developed PU, corresponding to an overall incidence of 5.6%. From these ones, 46 (65.7%) were elderly aged over 60 years. A study done in São Paulo/SP also appointed to a population predominantly elderly population, with 66.7% in the age group over 61 years and, consequently, with bigger risk to develop injuries on the skin, once the aging process causes modifications on skin as the diminution of dermal layer, of its vascularization and the reduction of pain perception, the inflammatory response and the barrier function, becoming the elderly more susceptible to these damages (BLANES et al).

**Table 1-** Characterization of the sample. João Pessoa, PB, 2009.

Variables	N	%
<b>Sex</b>		
Masculine	25	54.3
Feminine	21	45.7
<b>Age group</b>		
60 - 64	03	6.5
65 – 69	10	21.7
70 – 74	03	6.5
75 – 79	10	21.7
= 80	20	43.6
<b>Length of Hospitalization</b>		
= 15 days	11	23.9
16 – 30 days	19	41.3
31 – 49 days	12	26.1
= 50 days	04	8.7
<b>Time to develop PU</b>		
= 15 days	31	67.4
16 – 30 days	08	17.4
31 – 49 days	04	8.7
= 50 days	03	6.5
<b>Conditions of discharge</b>		
Discharge from hospital	16	34.8
Death	30	65.2
?	46	100

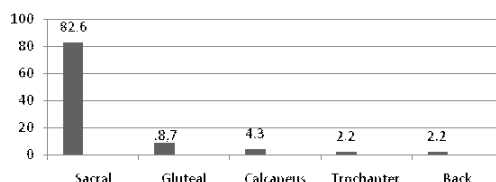
Source: Direct research, 2010.

In the characterization of the profile of the 46 elderly who composed the sample, there are 25 (54.3%) men and 21 (45.7%) women. The age group presented a variation from 60 to 96 years, and 43.6% are over 80 years. These findings could have contributed to the development of PU, once age is an important risk factor to its appearance. According to Wocn (2003), people over 65 years had high risk for the development of PU. Gomes and Magalhães (2008) affirm that its prevalence increases with age. Also, this prevalence is still bigger in the age group over 70 years. Then, knowing the characteristics of the population and being aware of the risks which they are exposed, it can be noted that it is indispensable the care planning in a preventive way, in order to prevent the appearance of this disease in the hospitalized elderly.

In relation to the length of hospitalization, most of the elderly patients remained hospitalized from 16 to 30 days. This time may have favored the appearance and the aggravation of injuries, legitimating the result of other researches which demonstrated a close relation between the length of hospitalization and the development of PU (ARAÚJO, et al, 2010; MORO et al, 2007). It is known that the elderly are more prone to the disequilibrium of organic systems, becoming them more vulnerable to the hospitalization and its consequences. Sales and Santos (2007) mention the issues of care provided by multidisciplinary health teams at the primary level. That is, they draw attention to possible failures in promoting health of the elderly population, a fact that probably can justify the occupation of hospital beds and, as a consequence, the development of PU.

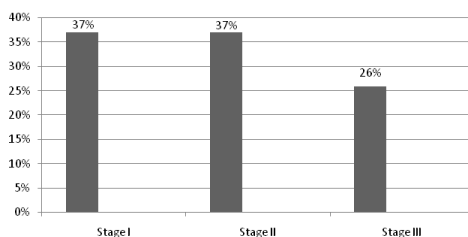
When measured the time for the development of injuries after hospitalization, it was verified that 31 elderly (67.4%) presented injuries in the first fifteen days of hospitalization, 08 (17.4%) from 16 to 30 days, 04 (8.7%) from 31 to 49 days, and 03 (6.5%) only developed injuries after 50 days of hospitalization. A similar finding was found in a study done in Joinville/SC, which noticed the development of pressure ulcer in 13 days for the surgical sector, 8 days for the clinic one, and 10 for the intensive care unit (MORO et al, 2007). Rocha and Barros (2007) endorse this finding by revealing in their study done in the municipality of São Paulo the appearance of pressure ulcers between the 2nd and the 15th days. These results reinforce the urgent need for evaluation of client and planning of preventive measures as early as possible, in order to avoid or, at least, retard the appearance of this disease, which is responsible for increasing the length of hospitalization. Also, the disease is responsible for difficult recuperation and still makes the patient more susceptible to other complications.

In relation to the conditions of the hospitalized elderly, the research verified that only 16 (34.8%) were discharged and 30 (65.2%) subsequently died. This event coincides with empirical evidences of the daily practice in the hospital service.



**Chart 1-** localization of pressure ulcers according to body region. João Pessoa, PB, 2009.

Furthermore, considering the area affected by the ulcers, the most registered was the sacral region, with 82.6%, followed by the gluteal one (8.7%). The study of Moro et al (2007) endorses our findings, revealing an incidence of 73.1% of these injuries in the sacral region. Blanes et al(2004) encountered 87.2% of PU development in the same region. The adding of the incidence in the sacral and gluteal region corresponds to more than 90% of the sample, denouncing possible failures in the complexity of preventive care about these lesions. This fact appoints the urgent need for a planning and execution of continuous care for these patients, starting precociously the recommended prophylactic measures, such as: repositioning in bed every two hours; avoid friction and shear; keep the skin free of humidity, dirty and hydrated; use devices to reduce the pressure and apply films or hydrocolloid transparent plates. (ROCHA; MIRANDA; ANDRADE, 2006)



**Chart 2-** Staging of Pressure Ulcers. João Pessoa, PB, 2009.

When investigated the stage of evolution of PU, the study showed 37% for stages I and II, and 26% for stage III. The data mentioned above present a positive aspect of the reality of service, because the greater incidence of pressure ulcers is in stages I and II. This way, it is possible to infer that, although the prevention strategies are not being efficient to avoid the emergence of PU, the therapeutic adopted by the professionals is being considered satisfactory to avoid the progression of these lesions to more advanced stages, easing the suffering for patients and families. In addition, it dispenses the necessity of care by the specialized professionals and, consequently, reducing the costs for the institution and for the Health System as a whole.

**Table 2-** Preexistent pathologies identified in the elderly. João Pessoa, PB, 2009.

Pathologies	N	%
DM <sup>1</sup>	22	47.8
SAH <sup>2</sup>	17	36.9
CVA <sup>3</sup>	24	52.2
Cardiopathy	05	10.9
Neoplasm	04	8.7
Others	04	8.7

1Diabetes Mellitus; 2Systemic Arterial Hypertension; 3Cerebrovascular Accident;

In the comorbidities context, the table 2 shows that 100% of the sample had basis disease. Most of them presented two or more pathologies. A study done in Campos dos Goytacazes/RJ found the coexistence of three or more pathologies in most of the elderly (59.3%) (SALES; SANTOS, 2007). The individual analysis of the preexistent diseases shows that CVA was the most

predominant disease among the participants, with 52.2% of register. This way, it is observed that all these alterations predispose the elderly to develop PU.

When researching the motif of hospitalization, the majority was from diseases of circulatory (45.6%) and respiratory system (24%). This is similar to the study of Sales and Santos (2007), which found 36.3% and 22.7%, respectively, for the same systems. According to Duarte (2001), it is common the development of respiratory and cardiovascular diseases in the elderly.

### CONCLUSION

The findings show that the elderly are predominantly male, patients with PU in the sacral region, with evolution in stage I and II and who developed the lesion in the first 15 days of hospitalization. According to the results, it is possible to infer that there is a gap in the prophylactic measures adopted by the team, favoring the development of PU in the hospitalized elderly. However, it is observed a therapeutic action more vigorous from the identification of the lesion installation in a way to impede its escalation for more advanced stages.

It is emphasized the need for a bigger attention to this group of population, who is in frank expansion and requires sensitive professionals, trained and aware of the possible complications which may ensue during hospitalization.

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### PROFILE OF THE ELDERLY WHO DEVELOPED PRESSURE ULCER DURING HOSPITALIZATION IN A PUBLIC HOSPITAL IN THE MUNICIPALITY OF JOÃO PESSOA – PB

#### ABSTRACT

In Brazil, the population of elderly has growing in recent years, representing 10% of the whole population. To the extent in which the population aging occurs, it is observed the utilization of the hospital services by this public with greater frequency than the other age groups, resulting in greater costs for the hospital services. This implies on the prolongation of treatment and on the slow recuperation, increasing the susceptibility for the development of complications like pressure ulcers, which are skin injuries characterized by ischemia and tissue necrosis due to the prolonged compression of soft tissues between bony prominences and the external surface. Objectives: to characterize the profile of the elderly who developed pressure ulcer during hospitalization. Methodology: exploratory-descriptive study, retrospective, with quantitative approach, realized in João Pessoa-PB, from January to December, 2009. The population was constituted by all the hospitalized patients in the period, and the sample was composed by 46 elderly aged over 60 years and that developed pressure ulcer. The project was analyzed and approved by the Research Ethics Committee of Santa Emília de Rodat College (FASER), under number 034/2010, obeying the Resolution 196/96 of the National Health Council. Results: In the studied period, 46 elderly developed PU during hospitalization, 54.4% of them were men and 45.7% were women. The predominant sample was over 80 years (43.6%), with length of hospitalization between 16 and 30 days (41.3%), and that developed PU in the first 15 days (67.4%). The sacral region was the most affected by the injuries (82.6%), with evolution of 37% for stages I and II, each. Conclusion: it is emphasized the need for a greater attention to this group of population who, in frank expansion, necessitates professionals that are sensitive, trained and aware of the possible complications which may ensue during hospitalization.

**DESCRIPTORS:** Aging. Pressure Ulcer. Characteristics of population.

### **PROFIL DES PERSONNES AGEES DE DÉVELOPPER PRESSURE ULCER PENDANT L'HOSPITALISATION DANS UN HOPITAL PUBLIC A JOÃO PESSOA-PB**

#### **RÉSUMÉ**

Au Brésil, la population des personnes âgées a connu une croissance ces dernières années, représentant 10% de la population totale. Dans la mesure où la population vieillit, il ya le recours aux services hospitaliers par le public plus souvent que les autres groupes d'âge, ce qui entraîne des coûts plus élevés pour les services hospitaliers résultant de la prolongation du traitement et de reprise lente, ce qui augmente la susceptibilité à développer des complications telles que les ulcères de pression, des lésions cutanées qui sont caractérisées par une ischémie tissulaire et la nécrose due à la compression prolongée des tissus mous entre les proéminences osseuses et les surfaces externes. Objectifs: Pour caractériser le profil des personnes âgées qui ont développé des ulcères de pression pendant l'hospitalisation. Méthodologie: étude exploratoire-descriptive, rétrospective, avec une approche quantitative, réalisée dans un hôpital public à João Pessoa, dans la période de janvier à décembre 2009. La population étudiée comprenait tous les patients admis au cours de la période ; l'échantillon comprenait 46 adultes âgés de plus de 60 ans qui ont développé UPP. Le projet a été examiné et approuvé par le Comité d'éthique en recherche du Collège de Sainte Emilie de Rodat (FASER) sous le n ° 034/2010, obéissant à la Résolution 196/96 du Conseil National de Santé. Résultat: Pendant la période d'étude 46 personnes âgées ont développé UPP pendant l'hospitalisation, 54,3% du genre masculin et 45,7%, féminin. L'échantillon était majoritairement formé par des gens de plus de 80 ans (43,6%), et la durée du séjour à partir de 16 à 30 jours (41,3%), le développement de l'UPP dans les 15 premiers jours (67,4%), et dans la région la plus touchée par des lésions sacrées (82,6%), soit une augmentation de (37%) pour le stage I et II, chacun d'eux. Conclusion: il souligne la nécessité d'une plus grande attention à ce groupe que, dans l'expansion franche, exige des professionnels plus sensibles, formés et conscients des complications possibles qui peuvent s'ensuivre lors de l'hospitalisation.

**DESCRIPTEURS:** vieillissement, les ulcères de pression, les caractéristiques de la population.

### **PERFIL DE LAS PERSONAS MAYORES QUE HAN DESARROLLADO ÚLCERAS DE PRESIÓN EN HOSPITALIZACIÓN EN UN HOSPITAL PÚBLICO DE JOAO PESSOA-PB**

#### **RESUMEN**

En Brasil, la población mayor ha crecido en los últimos años, representando el 10% de la población total. En la medida en que el envejecimiento se produce tiene la utilización de los servicios del hospital por parte de los ancianos con más frecuencia que otros grupos de edad, trayendo mayores costos para los servicios hospitalarios lo que resulta en la prolongación del tratamiento y la recuperación lenta, y el aumento de la susceptibilidad para desarrollar complicaciones como úlceras por presión (UPP), que son lesiones en la piel que se caracterizan por la isquemia y necrosis de los tejidos debido a la compresión prolongada de los tejidos blandos entre las prominencias óseas y las superficies externas. Objetivos: caracterizar el perfil de los ancianos que desarrollaron úlceras por presión durante la hospitalización. Metodología: Se trata de un estudio exploratorio-descriptivo, retrospectivo, con un enfoque cuantitativo, realizado en un hospital público de João Pessoa, en el período de enero a diciembre de 2009. La población de estudio incluyó todas las personas en hospitalización durante el período, la muestra está compuesta por 46 ancianos mayores de 60 años que han desarrollado UPP. El proyecto fue revisado y aprobado por el Comité de Ética en Investigación de la Facultad de Santa Emilia Rodat (FASER) teniendo el número 034/2010, obedeciendo a la Resolución 196/96 del Consejo Nacional de Salud. Resultados e discusiones: Durante el período de estudio 46 ancianos han desarrollado UPP durante la hospitalización, 54,3% son hombres y 45,7% mujeres. La muestra era predominantemente en ancianos mayores de 80 años (43,6%), con mayor tiempo de hospitalización de 16 a 30 días (41,3%), tenido desarrollado la UPP en los primeros 15 días (67,4%), y la región sacra fue la más afectadas por las lesiones (82,6%), un aumento del (37%) para la etapa I y II, cada uno. Conclusión: es necesario una mayor atención a este grupo de la población que, en gran expansión, requiere profesionales sensibles, capacitados y conscientes de las posibles complicaciones que pueden sobrevenir durante la hospitalización.

**DESCRIPTORES:** envejecimiento, úlceras por presión, características de la población

### **PERFIL DOS IDOSOS QUE DESENVOLVERAM ÚLCERA POR PRESSÃO DURANTE HOSPITALIZAÇÃO EM UM HOSPITAL PÚBLICO DO MUNICÍPIO DE JOÃO PESSOA- PB**

#### **RESUMO**

No Brasil, a população de idosos vem crescendo nos últimos anos, representando 10% da totalidade da população. Na medida em que ocorre o envelhecimento populacional observa-se a utilização dos serviços hospitalares por esse público com maior frequência que os demais grupos etários, acarretando maiores custos aos serviços hospitalares implicando no prolongamento do tratamento e na lenta recuperação, aumentando a suscetibilidade para desenvolvimento de complicações como as úlceras por pressão, que são lesões de pele caracterizada pela isquemia e necrose tecidual em decorrência da prolongada compressão dos tecidos moles entre proeminências ósseas e a superfície externa. Objetivos: caracterizar o perfil dos idosos que desenvolveram úlcera por pressão durante a hospitalização. Metodologia: estudo exploratório-descriptivo, retrospectivo, com abordagem quantitativa, realizado em um hospital público de João Pessoa-PB, no período de janeiro a dezembro de 2009. A população foi constituída por todos os pacientes internados no período, sendo a amostra composta por 46 idosos com idade igual ou superior a 60 anos que desenvolveram UPP. O projeto foi analisado e aprovado pelo comitê de ética em Pesquisa da Faculdade Santa Emília de Rodat (FASER) sob N° 034/2010, obedecendo aos preceitos da Resolução 196/96, do Conselho Nacional de Saúde. Resultados: No período do estudo 46 idosos desenvolveram UPP durante a hospitalização, sendo 54,3% do gênero masculino e (45,7%) feminino. A amostra predominantemente era maior de 80 anos (43,6%), com maior tempo de internação entre 16 a 30 dias (41,3%), desenvolvendo a UPP logo nos primeiros 15 dias (67,4%), sendo a região sacral a mais acometida pelas lesões (82,6%), com evolução de (37%) para estágio I e II, cada. Conclusão: enfatiza-se a necessidade de uma maior atenção a este grupo da população que, em franca expansão, necessita de profissionais sensíveis, capacitados e atentos para as possíveis complicações que podem desencadear-se durante a hospitalização.

**DESCRITORES:** Envelhecimento; Úlcera por pressão; Características da população.