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## ORIGINAL ARTICLE

### PRESSURE SORE PREVENTION: KNOWLEDGE OF FORMAL CAREGIVERS OF INSTITUTIONALIZED ELDERLY PEOPLE

#### PREVENÇÃO DE ÚLCERA POR PRESSÃO: SABERES DE CUIDADORES FORMAIS DE PESSOAS IDOSAS INSTITUCIONALIZADAS

#### PREVENCIÓN DE ÚLCERA POR PRESIÓN: SABERES DE CUIDADORES FORMALES DE LOS ANCIANOS INSTITUCIONALIZADOS

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#### ABSTRACT

**Objective:** to investigate knowledge of the elder's caregivers about pressure ulcers (PU) and the necessary precautions to prevent them. **Method:** this is a cross-sectional study with quantitative approach, conducted with 51 caregivers of two long-stay institutions for elderly nursing in João Pessoa/PB, Brazil. The interview technique was used and the data were analyzed with descriptive statistics. **Results:** 96% of caregivers are women, 41% are 31-40 years-old and only 18% have formal education for elder's care. Regarding the development of UP, 55% pointed to the lack of changing positions as a determining factor and as a means of prevention, 55% highlighted the body hydration. **Conclusion:** caregivers value preventive care, however, they need to improve the knowledge through capabilities that address the prevention of skin lesions of the elderly people, such as UP. **Descriptors:** Pressure Ulcer; Disease Prevention; Caregivers; Homes for the Aged.

#### RESUMO

**Objetivo:** investigar os saberes de cuidadores de idosos sobre úlcera por pressão (UP) e os cuidados necessários para preveni-las. **Método:** estudo transversal, de abordagem quantitativa, realizado com 51 cuidadores de idosos de duas instituições de longa permanência para idosos de João Pessoa/PB, Brasil. Empregou-se a técnica de entrevista e os dados foram analisados sob a estatística descritiva. **Resultados:** 96% dos cuidadores eram mulheres, 41% possuíam 31 a 40 anos e apenas 18% apresentava formação de Cuidador de idoso. Quanto ao desenvolvimento de UP, 55% apontaram a falta de mudança de decúbito como fator determinante e como forma de prevenção, 55% destacaram a hidratação corporal. **Conclusão:** os cuidadores valorizam os cuidados preventivos, no entanto, necessitam aprimorar os conhecimentos por meio de capacitações que abordem a prevenção de lesões na pele do idoso, como as UP. **Descritores:** Úlceras por Pressão; Prevenção de Doenças; Cuidadores; Instituição de Longa Permanência para Idosos.

#### RESUMEN

**Objetivo:** investigar los saberes de cuidadores de los ancianos acerca de las úlceras por presión (UPP) y las precauciones necesarias para prevenirlos. **Método:** estudio transversal con un enfoque cuantitativo, realizado con 51 cuidadores de dos instituciones de larga estancia para ancianos de João Pessoa/PB, Brasil. La técnica de la entrevista fue utilizada y los datos se analizaron con estadística descriptiva. **Resultados:** El 96% de los cuidadores eran mujeres, el 41% tenía 31-40 años y sólo el 18% tienen la formación del cuidador de anciano. En cuanto al desarrollo de UP, 55% señaló la falta de cambio de posiciones como un factor determinante y como medio para la prevención, el 55% destacó la hidratación del cuerpo. **Conclusión:** los médicos valoran la atención preventiva, sin embargo, que necesitan para mejorar el conocimiento a través de las capacidades que se ocupan de la prevención de lesiones en la piel de las personas mayores, tales como UP. **Descriptores:** Úlcera por Presión; Prevención de Enfermedades; Cuidadores; Hogares para Ancianos.

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## INTRODUCTION

In view of the increasing number of elderly people in Brazil and around the world, resulting in enlargement of the top of the age pyramid, it is imperative to monitor the aging process in order to evaluate and to prepare the various segments of society to act for specific and qualified with this age group.

The aging process involves a set of biopsychosocial factors that lead the elderly people to increased functional decline and risks of harm to health and the prevalence of chronic diseases that may cause some kind of disability, or dependence. This dependence is characterized as a state in which the elderly cannot perform their basic activities of daily life, requiring the help of other people.<sup>4,5</sup>

Due to limitations imposed by aging that cause changes in cognitive status and dependency in activities of daily living, some families seek to shelter the elderly in long-institutions for the elders (ILPIs) because they do not have people who is available to care for the dependent elder in the family environment. This institutionalization often occurs as an alternative to ensure the necessary care to this elder.<sup>3,1</sup>

In long-stay institutions this care is offered by a multidisciplinary team and formal caregivers who provide paid services and assist in meeting the needs of daily life of the elderly person.

For the hiring of elderly caregivers, institutions must have minimum criteria for admission, such as the experience in the care of elderly people or course of caregiver of elders, since care for the dependent older people is not an easy task and requires dedication and knowledge, as there are elderly people with different levels of dependency and require continuous care.<sup>4</sup>

In senior care, the caregiver must have known that the aging process is accompanied by changes in both the cognitive and biological level, being especially marked by changes in the skin and underlying structures, where there is reduction in vascularization, dry skin and loss of muscle mass, resulting in greater prominence of bony structures that favor the occurrence of injuries, particularly pressure ulcers (PU).<sup>5</sup> Thus, the fragility of the skin of the elderly people makes them vulnerable to PU and the associated decline in functional capacity, the risk of PU development is increased.<sup>6</sup>

The presence of lesions in the elders causes emotional overload and provide change in

body image, pain, infection and high cost to the family for their treatment.<sup>7</sup>

According to the National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance,<sup>8</sup> the PUs are related to many extrinsic and intrinsic factors to the patient that contribute to the occurrence of tissue injury or may be related to other factors which role is not fully understood. In this context, the caregiver should identify elements that integrate the skin care of the elderly people, in order to keep them intact or that contributes to the recovery of integrity during institutionalization. It is noteworthy that the caregiver has a significant role in assisting the elder, but in some circumstances they may not be adequately trained for this function. In this sense, nursing should assist caregivers in the care provided and define the specific supportive care.<sup>5</sup> Therefore, being in continuous contact with the elderly patient and helping with the care of their basic needs, caregivers constitute a link between the elder and the health team.

It is urgent to reflect on the implications brought to the elderly people when the elderly caregivers are not trained nor have little preparation to work with them, for the technical realization in many situations, the caregiver may come to perform an action that causes damage and this fact could worsen the health status. And in the particular case of the elderly people's skin integrity, the caregiver can contribute or not to the preservation of a healthy skin.

Faced with the above, considering the PU as a component of the National Patient Safety Plan, to investigate the knowledge of elderly caregivers of ILPIs about UP and the ways to prevent them, it is a timely concern, given that is growing the number of elders in the institutionalization process, requiring general and specific care is essential to routine care developed by caregivers in these institutions. Thus, to promote the maintenance of a healthy skin during aging exempt further damage to their health. It has also shown to be relevant to trace this kind of knowledge, because depending on the preparation of caregivers, it may raise in the services the need to empower caregivers, thus contributing to the quality of services and reducing or preventing the occurrence of PU between elderly people.

Considering the changes that occur in the elderly people due to the physiological process of aging and the risk of developing PU, we formulated to study the following question: Knowledge about PU? Do they know

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how to care for the prevention of PU? What do elders' caregivers know about pressure ulcers and the care to prevent it? Thus, the present study aims to:

- Investigate the elders' caregivers of knowledge about pressure ulcers (PU) and the necessary precautions to prevent them.

## METHOD

Cross-sectional study with a quantitative approach, carried out in two long-stay institutions for the elderly people (LTCF), in the city of João Pessoa, Paraíba, during the months of August and September, 2012. At the time of the survey we registered six-ILPI in the Municipal Elderly People Council, the choice of two institutions for convenience; they represented the largest number of elderly people and human resources. The institutions were philanthropic and received the elders who are 60 years-old, of both sexes.

The study population consisted of 60 caregivers of seniors; those 51 caregivers agreed to participate and were included in the sample. Inclusion criteria were: to act as formal caregivers of seniors in the institution and to be in exercise of the function at the time of the survey. Exclusion criteria were: being on vacation or away from the exercise of elder caregiver role in the investigated institution.

After informed consent to participate in the study by signing the free and informed consent, we continued with data collection by interview technique, and used a structured instrument elaborated by the researchers. This instrument underwent a pilot test for suitability and the variables addressed were: gender, age, education, factors that contribute to the development of PU; anatomic regions at greatest risk of developing PU; care to prevent PU.

The data were organized in a database of Microsoft Excel®, following they were subjected to analysis of descriptive statistics. The results are presented by the concept map prepared using the Cmap Tools software, in version 6.01.<sup>9</sup>

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The conceptual map is considered a graphic representation that stimulates the concepts of organization and unity between theory and practice; therefore, it is evaluative tool that enables knowledge organization promoting experiences that give rise to reflection, seeking understanding and processing information, thus facilitating the understanding.<sup>10</sup>

This study was approved the project by the Ethics Committee of Faculdade de Enfermagem Nova Esperança - FACENE by Protocol 92/12 and CAAE: 06529612.2.0000.5179, respecting the ethical aspects of research involving human subjects, recommended by Resolution 466/12 of the National Health Council.<sup>11</sup>

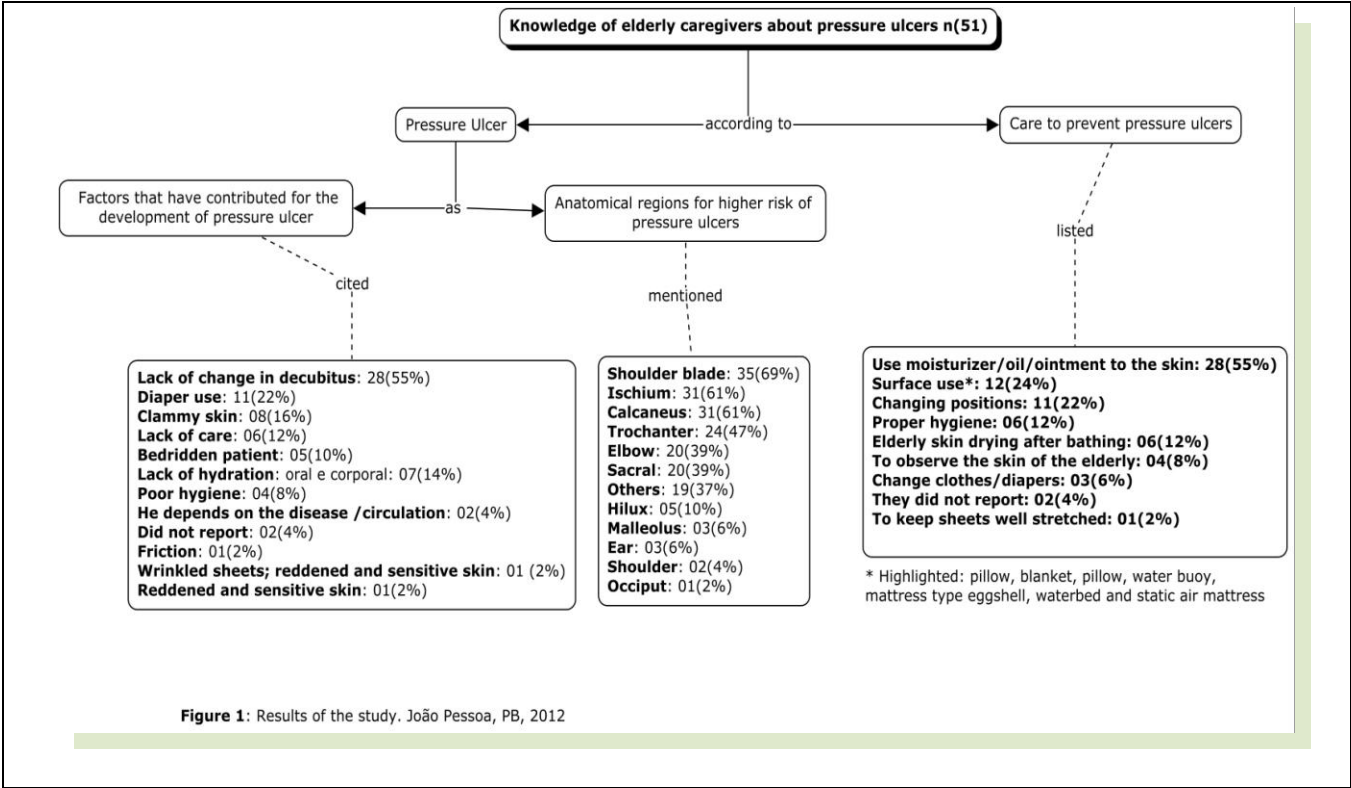
## RESULTS

The results showed among the subjects, 49 were women (96%), 21 (41%) were aged from 31 to 40 years-old, 18 (35%) referred having completed high school and only one complete higher education, 14 (27%) had technical course of nursing assistant and only nine (18%) said they had done the course of caregiver for the elderly people. Considering the working time as a caregiver of seniors, 31 people (61%) reported one to five years of experience in this area.

The information related to knowledge of elderly caregivers on PU and care needed to prevent them is presented in the conceptual map (Figure 1).

Regarding the factors that favor the development of PU in the elderly people, the responses of caregivers who received most featured were: lack of decubitus change (55%), diaper use (22%), moist skin (16%) and lack of oral and body hydration (14%). Regarding the anatomical regions of higher risk for the development of PU, there was a greater number of response for: scapular region (69%), ischial regions and calcaneal (61% each) and trochanter (47%) (Figure 1).

As for the care needed listed by the caregivers for the prevention of PU, it was showed a higher citation to: body moisturizing (55%), use of support surfaces (24%) and changing positions (22%) (Figure 1).



DISCUSSION

In this study 96% of the elders’ caregivers investigated from the institutions are female, corroborating for studies in the issue.<sup>12-3</sup> This fact has historical, cultural, social and emotional roots, blaming the woman for family care, and assigned this function in different situations, such as the role of caregiver<sup>12</sup>, and in this case the occupation in a ILPI. Nowadays, another fact is related to greater female participation in the labor market.

In general, the profile of caregivers is similar to the findings of other studies.<sup>12-5</sup> As regards the existence of the course Elderly Care among those surveyed, there was a low percentage of caregivers with this formation in the ILPI investigated, it is still something to become a reality within ILPI of the country, given the strong government investment in education, especially in the last decade, the Elderly Care course is being offered free of charge, both as a training course as a technical.

Concerning the topic PU, this study identified a lack of consistency between the respondents when asked about the factors that contribute to it and preventive measures, and it is notorious that they did not have a relation between causal factors and acting on these factors as a means of preventing PU, as examples, it was found that: although more than 50% of the sample the absence of decubitus change was chosen as a causal factor for PU, only 22% said the position change as a preventive measure; Likewise, 22% reported the use of diaper as a factor

that contributes to the PU and only 6% mentioned changing clothes/diaper in order to prevent (Figure 1).

Dissonance evident among caregivers about the PU and its prevention demonstrates the need for preparation of these caregivers in order to qualify them in skin care of the elder, especially in the prevention of PU. Therefore, considering the national protocol for the prevention of PU, proposed from the National Program for Patient Safety,<sup>16</sup> the caregivers could implement some specific support care for PU, as work to not trigger injury when the implementation of daily care hygiene and comfort; identification of any changes in the skin that can be reported to health professionals; Elderly skin hydration; changing positions; moisture inspection of the skin and diapering/clothing; to check food acceptance; besides informing the elderly complaints. Finally, to enable caregivers for the exercise of basic care in preventing PU, it may be possible to minimize the morbidity implications and mortality brought about by these injuries, to reduce the burden on caregivers and healthcare professionals, given that when the PU is present it demands more time to care, increase spending on health and compromise the quality of life of the affected.

It is essential to emphasize that nursing plays an important role in caring for the elderly because they identify vulnerability factors in the elderly, plan nursing care, in addition to guiding the support of care provided by the caregiver,<sup>5</sup> therefore, nursing defines and controls these supportive care or basic that can be performed by caregivers in the routine.



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Research conducted in ILPI showed a lack of knowledge necessary for the exercise of care as one of the difficulties in the daily routine of elderly caregivers, confirming the need for ongoing educational activities along the caregivers.<sup>12</sup>

As for the factors that favor the development of PU or risk factor, study in ILPI identified most frequently among elderly institutionalized to: chronic diseases, such as hypertension and stroke; bed rest; deficient nutritional status and pressure on bone prominences.<sup>7</sup>

As the Protocol for Pressure Ulcer Prevention of Brazil, drawn from the National Program for Patient Safety (PNSP), Ordinance No. 529 / 2013,<sup>13</sup> maintaining the integrity of the skin of patients confined to bed, it is based on knowledge and applying relatively simple care measures. Most of the recommendations for skin assessment and preventive measures can be used universally, i.e., they are valid both for the pressure ulcer prevention (UPP) and for other skin injuries.

The Protocol for Pressure Ulcer Prevention<sup>13</sup> and guideline of EPUAP/NPUAP<sup>8</sup> list several recommendations for the prevention of PU and, among these, we highlight some of the strong force of evidence as to inspect the skin on the areas of erythema; to avoid positioning the individual on a body surface that is flushed; to keep the skin clean and dry (using PH balanced product); do not massage or rub the skin vigorously that is at risk of pressure ulcers (such as the fragile skin of the elderly); to keep skin sanitized immediately after the episodes of incontinence; to protect the skin from exposure to excessive moisture; to apply emollients to moisturize dry skin; to develop an individualized plan of nutritional care and to monitor nutritional status; to promote daily and adequate fluid intake for hydration; reposition all individuals who are at risk of developing or who have already developed PU (unless contraindicated); do not use devices in the form of ring or loop; to raise their heels ensuring that these do not come into contact with the surface of the bed; to analyze the characteristics of foam mattresses used in the institution and to ensure that they are of high specificity, and ensuring that medical devices are properly sized and adjusted to prevent excessive pressure.

The results of this study raises the responsibility of ILPIs to implement and standardize actions to prevent PU in routine care exercised by caregivers, since these spend more time close to the elderly in these institutions, representing the key link to care

the elderly skin and to signal any change to the nursing staff and/or other health professionals.

Thus, caregivers need to be able to maintain the skin integrity of the elderly, and thus for the prevention of skin lesions, such as PU; apart from that, the nursing is urged to guide and supervise the care of support that can be performed by caregivers in the prevention of PU.

## CONCLUSION

The surveyed caregivers are not trained to assist in PU prevention among the elderly, as evidenced due to dissonance related to theme PU identified in the current study. Thus, these elderly caregivers need to improve their knowledge through training related to the prevention of skin lesions of the elderly, such as PU, in order to focus care covering from maintaining old skin integrity, preservation of functional capacity to the prevention of health problems.

It is recommended that nurses with other health professionals of institutions aimed at educational strategies to educate caregivers of ILPIs in order to be their faithful collaborators in the fight against PU in the elderly, by adopting simple preventive measures, but in some services they are presented as innovative realities.

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