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Veröffentlichungsversion / Published Version  
Zeitschriftenartikel / journal article

#### Empfohlene Zitierung / Suggested Citation:

Coelho, N. D., Faustino, A. M., Cruz, K. C. T. d., & Santos, C. T. B. d. (2017). Knowledge of caregivers about skin injuries in seniors. *Revista de Pesquisa: Cuidado é Fundamental Online*, 9(1), 247-252. <https://doi.org/10.9789/2175-5361.2017.v9i1.247-252>

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## Conhecimento de cuidadores acerca de lesões de pele em idosos

Knowledge of caregivers about skin injuries in seniors

Conocimiento de cuidadores sobre lesiones de la piel en las personas mayores

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### How to quote this article:

Coelho ND; Faustino AM; Cruz KCT; et al. Knowledge of caregivers about skin injuries in seniors. Rev Fund Care Online. 2017 jan/mar; 9(1):247-252. DOI: <http://dx.doi.org/10.9789/2175-5361.2017.v9i1.247-252>

### ABSTRACT

**Objective:** To evaluate the knowledge of caregivers as for the identification of changes in the skin of the elderly and the care they consider correct in these situations. **Methods:** Descriptive study with caregivers of patients treated at a university hospital in the Federal District. It was used pre and post-test with questions about type, cause and treatment of common skin disorders in the elderly. **Results:** Sample with 31 caregivers, 93.5% women, average age of 45.2 years old, 48.4% children of the elderly, 93.5% reported not having a course to be the caregiver. In the pre-test more damage was recognized in the diaper area dermatitis (48.39%). In the post-test there was an improvement in recognition for all items with 50% or more correct answers. **Conclusion:** The results showed that some injuries were known by caregivers for being part of the day-to-day care of the elderly, and easy to be recognized, so the educational guidance carried becomes an effective method to identify lesions.

**Descriptors:** Senior, Caregivers, Skin care.

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## RESUMO

**Objetivo:** Avaliar os conhecimentos de cuidadores quanto a identificação das lesões de pele em idosos e os cuidados que consideram corretos nestas situações. **Métodos:** Estudo descritivo, com cuidadores de idosos atendidos em hospital universitário do Distrito Federal. Foi utilizado pré e pós-teste, com perguntas sobre tipo, causa e tratamento de lesões de pele comuns em idosos. **Resultados:** Amostra com 31 cuidadores, 93,5% mulheres, média de idade 45,2 anos, 48,4% filhos dos idosos, 93,5% relataram não possuir curso para ser cuidador. No pré-teste a lesão mais reconhecida foi a dermatite na área de fraldas (48,39%). No pós-teste houve melhora no reconhecimento para todos os itens avaliados com 50% ou mais acertos. **Conclusão:** Os resultados demonstraram que algumas lesões já eram conhecidas pelos cuidadores por fazerem parte do dia-a-dia do cuidado com o idoso, sendo fáceis de serem reconhecidas, assim a orientação educativa realizada torna-se um método eficaz na identificação de lesões.

**Descritores:** Idoso, Cuidadores, Higiene da pele.

## RESUMÉN

**Objetivo:** Evaluar el conocimiento de los cuidadores como la identificación de los cambios en la piel de las personas mayores y la atención que consideran correcta estas situaciones. **Métodos:** Estudio descriptivo con los cuidadores de los pacientes tratados en un hospital universitario en el Distrito Federal. Fue utilizado pre y post-test con preguntas sobre el tipo, la causa y el tratamiento de trastornos cutáneos comunes en los ancianos. **Resultados:** muestra con 31 cuidadores, 93,5% mujeres, con una edad media de 45,2 años, 48,4% niños de los adultos mayores, el 93,5% manifestaron no tener preparo para ser cuidador. En el pre-test el daño más reconocido fue la dermatitis en área del pañal (48,39%). En el post-test hubo una mejora en el reconocimiento de todos los artículos 50% o más hits. **Conclusión:** Los resultados mostraron que algunas lesiones eran conocidos por los cuidadores por ser parte del cuidado del día a día del ancianos, y fácil de ser reconocido, por lo que la orientación educativa llevada convierte en un método efectivo para identificar las lesiones. **Descriptor:** Anciano, Cuidadores, Cuidados de la piel.

## INTRODUCTION

The fragility of the integumentary system due to the natural process of aging is itself a risk factor for the development of lesions on the skin of the elderly. These lesions alter not only the quality of life of the elderly, but also generate large costs for the health system due to the difficulties of treatment. So it becomes very important to intensify actions to prevent these injuries in the elderly who are bedridden for long periods.<sup>1</sup>

Among the major tegumentary changes in the elderly are the injuries caused by pruritus, seborrheic dermatitis, scabies, venous ulcers, pressure ulcers, diabetic foot and dermatitis in the diaper area.<sup>1-2</sup>

The rash appears as a skin reaction that induces the act of scratching, that may or may not be associated with skin lesions, xerosis being its most common cause. Seborrheic dermatitis is a common chronic disease in the elderly, may accompany some neurological diseases and manifest as a side effect of neuroleptic drugs. Scabies, another

common disorder, is a contagious disease caused by mite *Sarcoptes scabiei*, exclusive of human skin.<sup>1-3</sup>

Venous ulcers are lesions on the lower limbs and may have different etiologies, common in patients with diabetes, venous insufficiency or arterial insufficiency.<sup>4</sup>

Diabetic foot is a complication resulting from metabolic disorder and long duration of diabetes mellitus which contribute to the development of peripheral neuropathy, leading to decreased sensitivity of the feet, callus formation and, consequently, ulcers.<sup>5</sup>

Another common type of injury in older people who have mobility and functional capacity alteration, are pressure ulcers (PU). These develop when soft tissue is compressed between a bony prominence and an external surface for a long time. Some factors that influence the appearance are: friction, shearing, humidity, immobility, etc.<sup>6</sup>

Dermatitis in the area of diapers or Dermatitis Associated with Incontinence (DAI) clinically manifests with a bright erythema, with varying intensity, according to the impairment. Erythematous papules may arise associated with edema and mild desquamation, in older people barrier function of the skin is less effective, as well as being more vulnerable to irritating surfaces as urine and feces, as well as the process of recovery after acute display of these irritants agents is smaller and slower in elderly.<sup>7</sup>

The caregiver of the elderly can be a family member or someone hired to provide general care.<sup>8</sup>

These caregivers will usually cater mainly self-care needs of older adults with some degree of cognitive and functional dependence, for long periods it can reach up until the death of the elderly.<sup>9</sup>

The act or task of caring can bring satisfaction, ability to face challenges, improved relationship with the elderly, but often what is present is the overload, emotional stress, physical stress, family conflicts, uncertainty about conducted care, because in many cases when the caregiver is a family member it is almost always performed by one person, being a solitary activity performed without relays with other family members.<sup>8-9</sup>

For a more effective care it is important the knowledge about the aging process in both the natural aspects that are present in senescence, as the pathological, or senile aging, which can be recognized easily from prior information, constituting this, extremely important for changes in the act of looking and promoting care.<sup>9-10</sup>

Many of the integumentary system disorders in elderly are evident through observation with the naked eye, a quick assessment can help assess color, moisturization, cleansing of the skin, the presence of injuries, conditions of the hair and, in addition, the appearance of the nails, which can thus facilitate early identification and more efficient care interventions.<sup>1-3</sup>

In this perspective there is a relationship that the caregiver is who is ahead in the daily care activities of the elderly and the occurrence of skin lesions can often be avoided by the act of caring. Also identifying the caregiver's knowledge about

changes in the skin of elderly people can foster care and improve the quality of life, both as elderly care, and avoid potential complications related to tegumentar injuries.

Thus the aim of the study was to evaluate the knowledge of caregivers about the identification of skin lesions in the elderly and the care they consider the correct conduct in these situations.

## METHODS

This is a descriptive, cross-sectional study with quantitative analysis. The population studied was of caregivers who attended a university hospital in the Federal District, in the medical clinic hospitalization units and ambulatorial unit specialized in care for the elderly. The data collection period was the months of July to November 2014.

Inclusion criteria were: to be the primary caregiver of the elderly and aged greater than or equal to 18 years old.

The completion of data collection was organized in three integrated and complementary steps, which were held in a single meeting with the caregiver. It was used an instrument elaborated by the researchers, which had information about the expertise of the caregivers about skin care of the elderly, sociodemographic variables and the caregiver's relationship with the elderly.

The first stage, called pre-test consisted of individual interviews with caregivers about knowledge of skin care. The second stage was the individual educational guidance on best practices for skin care of the elderly and its alterations. It was used a folder and album of serial images, also developed by the researchers, with pictures of the most common injuries in elderly: injury of pruritus, seborrheic dermatitis, scabies, pressure ulcers, venous ulcers, diabetic foot and dermatitis of diapers. And the third and final stage, also called post-test, was performed at the end of the meeting, it applied a post-orientation questionnaire to caregivers about changes and skin care of the elderly, and then assessed the setting of guidelines.

The research project was submitted to the Research Ethics Committee of the Health Sciences Faculty of the University of Brasilia and was approved under protocol CAAE:16038413.1.0000.0030.

## RESULTS

Sample was composed of 31 caregivers, being 93.55% (n = 29) women, average age of 46.22 years old, 48.39% (n = 15) were children of the elderly, 41.94% (n = 13) had completed high school, 58.06% (n = 18) lived with the elderly, 93.55% (n = 29) reported not having any course or preparing to exercise the caregiver role. The total average of period as caregivers was of 7.72 years (Table 1).

**Table 1** - Sociodemographic characteristics and context of elderly's caregivers. Brasília, 2014 (n = 31)

Sex	n	%
Female	29	93,55
Male	2	6,45
<b>Age groups</b>		
<b>Aver = 45,22 years</b>		
18   20	1	3,23
21   30	3	9,68
31   40	6	19,35
41   50	9	29,03
51   60	8	25,8
61   70	3	9,68
71   80	1	3,23
<b>Parentage relationship</b>		
Spouse	6	19,35
Child	15	48,39
Grandchild	3	9,68
In law	4	12,9
Sibling	1	3,23
Nephew/Niece	2	6,45
<b>Time as caregiver (years)</b>		
<b>Aver = 7,72 years</b>		
< than 1 year   2	9	29,03
3   10	17	54,84
11   20	3	9,67
21   30	1	3,23
31   40	1	3,23
<b>Ethnicity</b>		
Brown	17	54,84
White	6	19,35
Black	8	25,81
<b>Religion</b>		
Catholic	18	58,06
Evangelic	8	25,81
Spiritist	2	6,45
No religion/Atheist	3	9,68
<b>Total</b>	<b>31</b>	<b>100</b>

As the occupation of the caregiver, the most reported type was being "of home" with 38.70% (n = 12). In relation to color 54.84% (n = 17) self-declared to be brown, and as for religion 58.06% (n = 18) reported being Catholic, followed by evangelical 25.81% (n = 8) (Table 1).

Regarding the results of the pre-test and the recognition of injuries by pruritus 45.16% (n = 14) of caregivers recognized them. As for having observed any injuries, 35.48% (n = 11) reported having appeared in the elderly. As for the cause,

38.71% (n = 12) were able to answer correctly. As for treatment 45.16% (n = 14) knew what was the appropriate treatment. At the post-test, 83.87% (n = 26) recognized the lesions, 87.10% (n = 27) were unable to inform the cause. As for treatment 90.32% (n = 28) said they could tell the right form (Table 2).

**Table 2** - Answers on the knowledge of injuries, on pre and post test. Brasília, 2014 (n = 31)

Injury Type	Recognizes	Cause	Treatment
<b>Pre-test</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>
Pruritis	45,16	38,71	45,16
Seborrheic dermatitis	9,68	6,45	19,35
Scabies	9,68	6,45	12,9
Pressure ulcer	25,81	22,58	22,58
Venous ulcer	9,68	9,68	16,13
Diabetic foot	12,9	9,68	12,9
Dermatitis in the diaper area	48,39	51,61	48,39
<b>Post-test</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>
Pruritis	83,87	87,1	90,32
Seborrheic dermatitis	51,85	48,15	51,85
Scabies	58,06	41,94	45,16
Pressure ulcer	54,84	64,52	58,06
Venous ulcer	51,61	48,39	45,16
Diabetic foot	77,42	74,19	70,97
Dermatitis in the diaper area	90,32	90,32	93,55

Regarding the image of seborrheic dermatitis lesion in the pretest, 9.68% (n = 3) recognized the injury, 6.45% (n = 2) were unable to inform the cause. As for treatment 19.35% (n = 6) indicated the correct way. In the post-test 51.61% (n = 16) recognized the lesion, on the treatment 51.61% (n = 16) responded the correct way to achieve the treatment (Table 2).

For the image of injury scabies, during the pretest, 9.68% (n = 3) recognized the injury. When asked if the elderly had already been observed the injury, only 9.68% (n = 3) said yes. With respect to the cause, 6.45% (n = 2) were unable to inform the correct answer, 12.90% (n = 4) were unable to inform the form of treatment. Upon the post-test, 58.06% (n = 18) recognized the lesion. About the cause 41.94% (n = 13) answered correctly. Regarding the correct treatment 45.16% (n = 14) were unable to inform the correct answer (Table 2).

When the image presented a pressure ulcer in the pretest, 25.81% (n = 8) recognized the injury. Regarding if the injury had already appeared in the elderly 16.13% (n = 5) said yes. About the cause, 22.58% (n = 7) reported the correct way. As

for treatment, 22.58% (n = 7) answered correctly. In the post-test moment 54.84% (n = 17) recognized the injury. With respect to the cause, 64.52% (n = 20) reported the correct way. And when asked about the treatment 58.06% (n = 18) responded appropriately (Table 2).

For the image of the venous ulcer at the pretest, 9.68% (n = 3) recognized the injury, 3.23% (n = 1) said it had already appeared in the elderly. As for the cause of venous ulcers 9.68% (n = 3) answered correctly. And for the treatment 45.16% (n = 14) were unable to inform the correct form (Table 2).

When presented the image of a diabetic foot injury in the pre-test, 12.90% (n = 4) recognized the injury and 9.68% (n = 3) said they had appeared in the elderly who they cared for. Regarding the cause, 9.68% (n = 3) had sufficient and adequate knowledge. Regarding treatment 12.90% (n = 4) knew properly. Upon post-test, 77.42% (n = 24) recognized the lesion and 74.19% (n = 23) indicated the correct form of the etiology of diabetic foot. About the treatment 70.97% (n = 22) answered correctly (Table 2).

And finally for dermatitis image in the diaper area in the pretest, 48.39% (n = 15) recognized the injury, 19.35% (n = 6) reported that the lesion had appeared in the elderly. Of the cause of dermatitis, 51.61% (n = 16) responded correctly as well as for the treatment in 48.39% (n = 15) of respondents caregivers. In the post-test, 90.32% (n = 28) recognized the injury and for the cause 90.32% (n = 28) were able to answer correctly. Regarding indicated treatment 93.55% (n = 29) responded appropriately (Table 2).

The lesions obtaining the highest number of correct answers and recognition of them were lesions of pruritus with a distribution of 45.16% (n = 14) and dermatitis in the diaper area, 48.39% (n = 15). Regarding causes, the greatest number of hits was for diaper dermatitis 51.61% (n = 16) as well as the treatment, with 48.39% (n = 15) hits. In the post-test there was an improvement in the recognition of injuries for all items with a 50% or more hits. As for the causes and treatments all hit rates have improved, except for scabies injuries and venous ulcers which did not obtain hits greater than 50% (n = 13) and seborrheic dermatitis also did not reach 50% (n = 15) or over correct responses as to the cause of the lesion (Table 2).

## DISCUSSION

Although this study has sought to investigate the knowledge of caregivers regarding the changes of the skin, one of the limitations was that they were not exhausted for all types of injuries that may occur in the elderly and could not investigate other skin changes that caregivers already might have had contact in their practice because it was not the scope of this study, however we found that after the intervention of educational guidance on the types of injuries that the study was to verify, caregivers showed significant improvement in the accuracy of the answers.

The caregiver is a key person for the implementation of home care, can be a member of the senior's family or be represented by any technical level of health professional. The act or task of caring can bring satisfaction, ability to face challenges, improved relationship with the elderly, but often what is present is the overload, emotional stress, physical stress, family conflicts, uncertainty about the performed care.<sup>9-10</sup>

The incidence of women as main caregivers was higher than that of men, since the number of participants in the study was predominantly female. According to studies, analyzing the caregiver's profile was observed the predominance of women caregivers, especially wives and daughters.<sup>10</sup>

In a study involving twenty-three caregivers in a Care Center for the Elderly in Rio de Janeiro, which aimed to describe characteristics of the elderly and their caregivers, attended at the neurogeriatric ambulatory also showed the highest number of women as caregivers, which included ten daughters and three wives.<sup>11</sup>

Regarding the average age of caregivers, some studies have found similar results to this study with caregivers over the age of 40, a fact that also occurred in other studies as one carried out in the state of São Paulo, which identified among 90 caregivers, an average age of 52.3.<sup>12</sup> And at the other study with 30 caregivers, the average age was 48.8.<sup>13</sup>

Investigating the health education actions, studies point out that in this process the general population, have the option to accept or not the information that is presented, and may adopt new behaviors in relation to the problems identified. The educational intervention aims to help change in the lifestyle, favoring knowledge, with an option for caregivers to perform new care practices.<sup>14</sup>

The pruritus appears as a skin reaction that induces the act of scratching, and may or may not be associated to skin lesions.<sup>1</sup>

The dermatitis in the diaper area, which covers a number of inflammatory dermatoses that are located in the part of the body covered by the diaper were the lesions with a higher percentage of recognition at the time of performed pretest with caregivers.<sup>15</sup>

The correct practice of skin integrity maintenance should be part of care among elderly people with incontinence to prevent DAI.<sup>7</sup> The knowledge about the cause and treatment was also higher for dermatitis in the diaper area.

Scabies is a parasitic disease most commonly seen among institutionalized elderly, in a study of 75 elderly residents in a long-stay institution nine of them presented the disease.<sup>16</sup> In this study less than 50% of caregivers at the post-test identified the cause and treatment of scabies, which may be associated with a lack of prior knowledge and for being community-dwelling elderly.

Venous ulcers are the most common cause of leg ulcers and can reach up from young individuals to the oldest.<sup>17</sup> It was the injury that also obtained less than 50% accuracy in relation to the cause and treatment. The other addressed

injuries obtained higher correct responses at 50% in at least one of the criteria, recognizing the cause or treatment of injuries by the caregivers.

Several studies indicate the importance of studies about care, it is a process that has a complex dimension both in the experience of those who produce and for those who receive it.<sup>10-12</sup>

## CONCLUSION

The results show that some injuries were known by caregivers and are part of their routine work, and easier to be recognized, but the educational orientation made about the skincare of the elderly proved to be an effective method through the analysis of the number of correct answers in the post-test. Whereas it is a low-cost health education method to the services, it may be used in contact with caregivers in any elderly person care environment, it favors the early identification of skin lesions and can provide better conditions for treatment and quality of life of the elderly assisted and thus promote early recovery of the skin lesions.

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Received on: 05/02/2016

Reviews required: No

Approved on: 15/06/2016

Published on: 08/01/2017

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