

# Skin care in the elderly: Systematic review of the literature

bttps://doi.org/10.56238/sevened2024.025-025

Albertina Luisa Loriana Juchem<sup>1</sup>, Ana Maria Pujol Vieira dos Santos<sup>2</sup> and Maria Isabel Morgan Martins<sup>3</sup>

#### ABSTRACT

The skin is a vital organ in humans that suffers from the impact of intrinsic aging and, in this process, physiological changes occur that are responsible for the thinning of the epidermis, dermis and hypodermis, transforming it into rough, whitish skin, without elasticity, with wrinkles and without freshness. This study aimed to conduct a systematic review on dehydrated skin in older people and to promote effective care strategies. Data collection was carried out from November 2023 to February 2024, and articles published between 2018 and 2023, in Portuguese, Spanish, and English, were included. In the PubMed Portal, 129 articles were found; in the Virtual Health Library (VHL), 47; on the CAPES Portal, 22; and on the EBSCO Platform, 317. Six articles were selected that met the study objective. The need for care for dehydrated skin in the elderly was highlighted, due to the impacts caused by intrinsic aging. Different skin types have been identified, so care should be individualized. Self-care, treatments such as skin cleansing and hydration help preserve the integrity of the skin, and a good diet, drinking water and using topical and oral products are important tools to attenuate wrinkles, reduce flaking and avoid itching and lesions.

Keywords: Care, Skin Aging, Aged.

<sup>&</sup>lt;sup>1</sup> Bachelor in Aesthetics. Master's student in Health Promotion, Human Development and Society/ULBRA. E-mail: lu.juchem@yahoo.com.br

<sup>&</sup>lt;sup>2</sup> Advisor/Doctor – Professor of the Master's Degree in Health Promotion, Human Development and Society/ULBRA. ORCID: 0000-0001-9025-5215

<sup>&</sup>lt;sup>3</sup> Advisor/Doctor – Professor of the Master's Degree in Health Promotion, Human Development and Society/ULBRA. ORCID: 0000-0003-1833-1548



### **INTRODUCTION**

Intrinsic skin aging, also known as natural aging, is an inevitable process of the skin, which occurs with advancing age, and is influenced by genetic and biological factors, independent of external factors such as sun exposure, smoking, and poor diet. Aging skin has characteristics such as loss of elasticity, decreased production of collagen and elastin, formation of wrinkles and expression lines, as well as dryness and thinning of the epidermis. These skin changes can be noticed from the age of 30, but become more evident from the age of 50, due to the reduction in cell activity and skin renewal (Cruz *et al.*, 2019). Chronological skin aging can present itself in different forms and intensities, which will depend on the socioeconomic level in which the elderly person is inserted and even if they are an independent and autonomous individual, they can present skin changes (Santos *et al.*, 2021).

Other characteristics of intrinsic aging include the loss of volume, density, and elasticity of the skin, which favors the appearance of age spots and changes in skin texture caused by dryness and peeling of the skin. This aging process is its own and is part of the continuous cycle of life, and it is important to take care of the skin and adopt healthy habits to delay the signs of aging and control the skin's water imbalance. (Cross *et al.*, 2020; Sousa *et al.*, 2019).

Skin hydration is essential for preventing and treating the signs of aging, as aging skin tends to lose its natural water-holding capacity. Maintaining good hydration is key to minimizing the appearance of wrinkles and fine lines, as well as promoting skin health and vitality. It is important to choose products that are suitable for each skin type and age, that provide hydration and essential nutrients for aging skin, which includes gentle cleansing and nourishment. The search for healthy and beautiful skin must be continuous throughout life, to ensure the vitality and beauty of the skin even in old age (Gomes *et al.*, 2016).

In addition to hydration, it is important to adopt specific care habits for aging skin, which include gentle skin cleansing, the use of products with antioxidant ingredients, and the practice of an appropriate skin care routine (Gomes *et al.*, 2016). The search for healthy skin and the prevention of signs of aging must be maintained throughout life, to maintain the vitality and beauty of the skin even in old age.

In view of the above, this study aims to conduct a systematic review on dehydrated skin in the elderly and to promote effective care strategies. Knowing this care will help and support professionals and family members seeking a permanent education in skin care (Cruz *et al.*, 2020).

#### **METHOD**

A systematic review of the literature was conducted with the objective of better understanding skin care related to intrinsic aging. The research was carried out on the PubMed, Virtual Health



Library (VHL), Capes Portal and EBSCO Intuitive Platform portals, between October 2023 and February 2024. The selection of descriptors and the search strategy followed the guidelines of the PICO format (population; intervention; comparison; outcome). Health Sciences Descriptors (DeCS) were used: "Elderly" as population, "Care" as intervention/comparison, and "Skin aging" as outcome, combined with the Boolean logical operator *AND* to associate the relevant terms. In the databases used, which recommend the English language, the associations of three descriptors were used: "*skin aging AND aged AND care*". The languages selected for this research were English, Portuguese and Spanish.

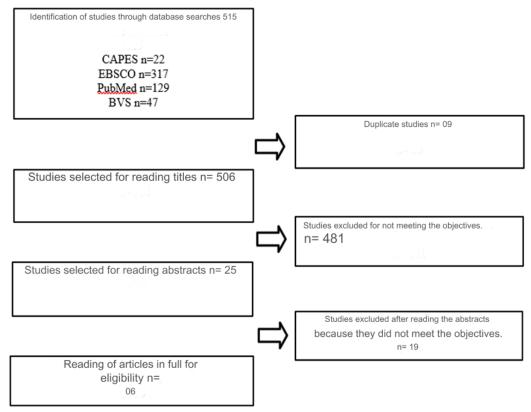
The inclusion criteria for the articles were titles and subjects related to skin care for the elderly; publications of articles in indexed journals, considering the period between 2016 and 2023. The exclusion criteria were duplicate publications in more than one database, dissertations and studies that do not fit the theme.

First, the articles were read and selected based on their titles. Then, the abstracts were analyzed to verify eligibility for inclusion. For the selected articles, the complete reading was done. The information extracted from each study included: authors' names, year of publication, objectives, methodology, instruments used, and main results.

# **RESULTS**

The initial consultation resulted in 515 articles and, after applying the inclusion and exclusion criteria, six publications remained. Figure 1 describes the stages of article selection.

Figure 1. Flow chart of the selection of articles



Source: based on survey data (2024).

Data extraction from the six articles was conducted by collecting information: authors' names, year of publication, country where the study was conducted, research objective, description of the methods used, and main results. These data were organized in Chart 1 for later analysis.



| Author                        | Year | Objectives   | Method   | Main results   |
|-------------------------------|------|--|--|--|
|                               |      | -  |  |  |
| Cruz <i>et al</i> .           | 2021 | To analyze the care of<br>cutaneous xerosis in the<br>elderly.   | Integrative review                               | Dehydrated skin is a senile complication that<br>contributes to worsening quality of life and<br>increasing the incidence of severe skin<br>lesions. Interventions such as oral and skin<br>hydration, self-care education and product<br>use. |
| Santos <i>et</i><br>al.       | 2021 | To identify factors<br>associated with the<br>development of lesions<br>and/or skin changes in<br>elderly people in<br>perioperative care. | Descriptive study                                | The main skin changes were<br>hematoma/ecchymosis and erythema. Older<br>adults over 71.92 developed more lesions<br>compared to younger people.   |
| Cruz <i>et al.</i>            | 2020 | To construct and<br>validate an instrument<br>to assess, prevent, and<br>treat cutaneous xerosis.  | Methodological<br>study of content<br>validation | The instrument's construction is valid and reliable, allowing and optimizing the work of professionals.  |
| Cruz et al.                   | 2019 | Identify nursing care to<br>assess, prevent and treat<br>cutaneous xerosis.  | Descriptive and quantitative study               | There is a need to observe the importance of<br>continuing education with the purpose of<br>optimizing the quality of care and to address<br>the lack of instruments and protocols aimed<br>at skin dryness in the elderly.                    |
| Sousa <i>et al</i> .          | 2019 | Prevent skin lesions<br>(LP).  | Integrative review<br>study                      | In addition to changing the decubitus<br>position every two hours, it is essential to<br>hydrate the skin to avoid injuries.   |
| Gomes <i>et</i><br><i>al.</i> | 2016 | Identify the best<br>interventions to prevent<br>friction injuries.  | Integrative review<br>study                      | Maintain skin homeostasis, food and<br>nutrition, hydration, protection and avoid<br>skin accidents, through a safe environment.   |

Chart 1 – Data of the selected articles

Source: based on survey data (2024).

## DISCUSSION

The absence of symptoms such as itching in older adults does not imply that skin care can be neglected, underlining the importance of specialized knowledge of healthcare professionals (Cruz *et al.*, 2019). It is important to optimize visual assessment to contribute to more accurate diagnoses, using instruments and protocols that help obtain essential information for preventive care and maintenance of skin quality. The knowledge of professionals should be continuously strengthened in relation to the skin care of the elderly, promoting health in institutionalized environments. Sousa *et al.* (2019) indicated that the use of moisturizers can have a significant positive impact in these contexts. Adequate frequency of this care is crucial to prevent skin dehydration and itching, which can lead to scratches and injuries (Gomes *et al.*, 2016).

Dehydrated skin in older adults is a common and serious problem, which can have a significant impact on quality of life and overall health. The descriptive results mentioned confirm this situation, showing that even autonomous elderly people end up developing skin changes due to dehydration. Dehydration of the skin can lead to complications, such as the appearance of serious lesions, which can become a major problem for the elderly. Therefore, it is essential that effective



interventions are carried out to prevent and treat skin dehydration (Cruz *et al.*, 2021; Santos *et al.*, 2021).

Among the suggested interventions, the importance of oral and skin hydration stands out, which are simple and effective measures to keep the skin healthy and prevent complications. In addition, self-care education is essential, as many seniors may not be aware of the importance of taking care of their skin properly. The use of specific dermatological products can also be an excellent option to prevent and treat skin dehydration in the elderly, thus ensuring an improvement in quality of life and skin health. To maintain and recover their integrity, there is an increase in the use of increasingly personalized instruments and products to provide care and prevent serious injuries, ensuring a better quality of life for these individuals (Cruz *et al.*, 2021; Santos *et al.*, 2021).

Guidance on skin care and personal cleanliness should cover both homes and institutions, evidencing the control and assiduity of this conduct, in order to obtain control of cases of skin dehydration. Investigate resources as routine and prevention measures, avoiding discomfort and compromising the quality of life of these individuals. (Sousa *et al.*, 2018).

Therefore, it is necessary for health professionals to be aware of this issue and offer appropriate guidance and interventions to prevent and treat skin dehydration in the elderly, thus ensuring a better quality of life and well-being for this population (Cruz *et al.*, 2021; Santos *et al.*, 2021). Finally, the need for courses for skin care is perceived, since the urgency in optimizing education and knowledge of professionals who have the purpose of improving the quality of this care is clear. Another relevant issue is the scarcity of recognized instruments and/or protocols for the process and management of dehydrated skin in older people (Cruz *et al.*, 2019).

All studies, in common, reinforce the importance of paying attention to the skin, fragile and vulnerable during handling and the daily need for care, since prevention can avoid elementary injuries and discomfort in patients. The use of planned and punctual strategies allows for comprehensive and safe action.

### FINAL CONSIDERATIONS

In view of the aspects presented, instructions with adequate skin care and hygiene are determinant for the integrity of the skin of the elderly, it is perceived that skin dehydration has been considered a universalized complication that harms populations over 60 years of age.

The physical wear and tear that skin aging presents stands out, favored by mechanical trauma, making it a challenge for family members and professionals, requiring greater interest and commitment from everyone. In view of the above, it is necessary to think about educational policies that guarantee professionals knowledge and the right to treatment in a humanized and effective way.



# **REFERENCES**

- Cruz, R. A. de O., et al. (2019). Cuidados de enfermagem para avaliar, prevenir e tratar a xerose cutânea em pessoas idosas. \*Aquichan, 19\*(4), e1943. https://doi.org/10.5294/aqui.2019.19.4.3. Disponível em: https://aquichan.unisabana.edu.co/index.php/aquichan/article/view/10491/5329. Acesso em: 1 nov. 2023.
- Cruz, R. A. de O., et al. (2020). Validação de instrumento para cuidado da pessoa idosa com xerose cutânea. \*Cogitare Enfermagem, 25\*, e67951. https://doi.org/10.5380/ce.v25i0.67951. Disponível em: https://revistas.ufpr.br/cogitare/article/view/67951/pdf. Acesso em: 1 nov. 2023.
- 3. Cruz, R. A. de O., et al. (2021). Avaliação de medidas de prevenção e tratamento da xerose cutânea em idoso: uma revisão integrativa. \*Revista de Pesquisa: Cuidado é Fundamental, 13\*, 241-248. https://doi.org/10.9789/2175-5361.rpcfo.v13.826. Disponível em: https://seer.unirio.br/cuidadofundamental/article/view/8261/pdf\_1. Acesso em: 1 nov. 2023.
- Gomes, B. E., et al. (2016). Sistematizando o conhecimento acerca da prevenção das lesões do tipo skin tears na pele senil. \*Revista Enfermagem Atual in Derme, 77\*, 75-80. https://doi.org/10.31011/reaid-2016-v.77-n.15-art.377. Acesso em: 30 out. 2023.
- Santos, W. F. dos, et al. (2021). Lesões de pele em idosos em cuidados perioperatórios. \*Revista Científica de Enfermagem, 11\*(35), 463-472. https://doi.org/10.24276/rrecien2021.11.35.463-472. Disponível em: https://www.recien.com.br/index.php/Recien/article/view/475/494. Acesso em: 01 nov. 2023.
- 6. Sousa, J. R. de, et al. (2019). Prevenção de lesão por pressão em pacientes internados na unidade de terapia intensiva: um enfoque nas medidas preventivas. \*Brazilian Journal of Surgery and Clinical Research, 25\*(2), 120-123. Disponível em: https://www.mastereditora.com.br/periodico/20190103\_214004.pdf. Acesso em: 1 nov. 2023.