

## LETTER

# Bedsores: We need more Research, Development and Innovation

Jeanette Carolina Ojeda<sup>1</sup> & Juan Cartes-Velásquez<sup>1</sup>

Prostrate people are exposed to a series of complications resulting from one or several chronic diseases, a trauma, or any situation of high dependency. These complications result because prostrated people spend most of the time in a situation of immobility that affects various organs and systems. Several of these conditions can be serious, especially among elderly patients (*MINSAL, 2015; Academia Nacional de Medicina de Buenos Aires, 2017*).

The cardiovascular system is one of the most affected because blood circulation slows down, increasing the risk of thrombosis. Alterations in heart rate may also appear. The respiratory system is also affected, since immobility causes deterioration of pulmonary ventilation, which affects the retention of secretions, leading to an increased risk of infections such as pneumonia. On the other hand, in the case of the musculoskeletal system, immobility causes the loss of muscle mass, with the consequent atrophy and loss of muscle endurance. In addition, prostration can produce contractures, joint stiffness, and other muscular problems that hinder the movement of the patient. All this supposes an important functional deterioration, especially in the articulations, which can cause syndromes of intense and/or permanent pain.

Another serious consequence is a loss of bone mass, accelerating the development of osteoporosis, which increases the risk of fractures. In the case of the digestive system, loss of appetite is common, with the consequent risk of malnutrition. There are also swallowing problems and alterations in fecal bolus formation, with frequent episodes of constipation and a tendency to gastric reflux. In the case of the integumentary system and specifically the skin, bedsore, also known as decubiti ulcers or pressure ulcers, are the most common complications if the patient's position is not changed frequently. These pressure ulcers are degenerations of the skin that can be caused by friction between the patient's body and a contact surface. Pressure ulcers can be acute or chronic and can even cause death. In Chile, the prevalence of pressure ulcers is 5%, and they are one of the main skin lesions that require treatment by primary care nurses, especially in elderly prostrate patients (*MINSAL, 2015; Rojo & Cardoso, 2016; National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance, 2014*).

The MINSAL (2015) highlights the preventive procedures to be performed in hospital and primary health centers. These procedures include mobilization to increase physical activity as much as possible; postural re-



**Affiliations:** <sup>1</sup>Fundación Kimntrum, Chile.

**Corresponding author:**  
Jeanette Carolina Ojeda. Freire  
1255 Depto. 404, Concepción,  
Chile. Phone: 56-976936768.  
E-mail: carolinaojedad@gmail.com.

**Conflict of interests:** None.

**Acknowledgements:** None.

**doi:** [10.32457/ijmss.2018.003](https://doi.org/10.32457/ijmss.2018.003).

placement, which is essential to reduce the duration and magnitude of the pressure; and the monitoring of weight, humidity, friction, and skin lesions in patients.

With the proper care mentioned above, the vast majority of pressure ulcers are potentially avoidable. In order to reduce the number of patients with this health problem, the correct training of patients and caregivers is necessary, since the latter dedicate more time, commitment, and responsibility to the movement and transfer of patients. Many pressure ulcers are caused by the ignorance of the caregiver, as well as the lack of necessary resources, both material and human, to make correct postural changes.

In the case of hospitalized patients, the estimates indicate that up to 10% of people who enter a hospital develop a pressure ulcer, especially elderly people. It is important to note that older people represent approximately 70% of patients with this type of ulcer (*Lyder, 2003*).

Pressure ulcers are often not recorded because of the lack of medical statistical codes. This situation makes it difficult to obtain statistical data to estimate the prevalence and incidence of pressure ulcers in hospitals, which also makes it difficult to recognize the true magnitude of the problem. In addition, little information about the weight of the patient is available, requiring various methods of measurement that are quite complex. All this lack of information can cause different problems for the patient, affecting their nutrition, generating chronic health problems, and, above all, affecting the welfare and quality of life of the patients, their family, and their caregivers (*Carrillo, 2004*).

If we consider the prevalence of pressure ulcers, the costs associated with their treatment, and the impact on the quality of life of patients, added to the aging of the population, it becomes essential to have more and better clinical data, as well as more and better research, development, and innovation.

## REFERENCES

Academia Nacional de Medicina de Buenos Aires. Primer Consenso de Úlceras por Presión (PriCUPP). Bases para la implementación de un Programa de prevención, diagnóstico y tratamiento de las Úlceras por Presión. Coordinadores:

Acad. Fortunato Benaim y Acad. Jorge Neira. Buenos Aires: Academia Nacional de Medicina de Buenos Aires, 2017.

Carrillo, M. Aplicación de un protocolo de atención para pacientes con riesgo de úlceras por presión, servicio de medicina interna. (tesis pregrado). Valdivia: Hospital Base Osorno, Universidad Austral de Chile; 2004.

Lyder CH. Pressure ulcer prevention and management. JAMA. 2003;289(2):223-6.

MINSAL. Guía práctica de Úlceras por presión en Atención Primaria. Santiago: MINSAL, 2015.

National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Emily Haesler (Ed.). Cambridge Media: Osborne Park, Western Australia; 2014.

Rojo J, Cardoso R. Guía práctica de Úlceras por presión en Atención Primaria. Publ Didáct. 2016; 47:269-73.