

## The nurse facing the treatment of complex wounds by negative pressure

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### ABSTRACT

The research reviewed recent studies on the use of negative pressure therapy (NPT) to treat complex wounds, highlighting its potential to speed up healing and reduce costs and lengths of stay. Despite its advantages, NPP is underused in Brazil. Fourteen relevant publications were identified, exploring the role of nurses in the treatment process, as well as economic aspects and the patient's quality of life, which are fundamental for guiding the adoption of this technique in the national context.

**Keywords:** Nurse, Complex wounds, Negative pressure therapy, Dressing.

### INTRODUCTION

Complex wounds are considered a public health problem due to the high risk of complications, in addition to requiring complex treatment with a long hospitalization period. In this context, negative pressure therapy is a promising treatment, as it presupposes greater agility in the healing process, resulting in a reduction in hospitalization periods and costs, in addition to providing a reduction in the nursing workload related to dressing changes. Despite all these advantages, the therapy is still a method that is rarely used in Brazil. This research seeks, through an evaluation of recent studies, to identify good nursing practices and to weigh positive and negative aspects of the technique in order to help nurses identify their role in the treatment of complex negative pressure wounds and how they can contribute to the expansion of access to this technique in Brazil.

### MATERIALS AND METHODS

The research consists of an integrative literature review, with an exploratory and explanatory character, based on articles published from 2018 to 2023, available in consolidated databases such as Scielo, VHL and PubMed, and whose theme added understanding of the role of nurses in the treatment of complex negative pressure wounds. Publications in Portuguese and English were conducted, using the descriptors nursing, wound, negative pressure and vacuum dressing in Portuguese and *nursing* and *negative pressure wound therapy* in English.

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## **FINDINGS**

A total of 14 publications were identified, 4 in Portuguese and 10 in English, from three different continents and consisting, for the most part, of integrative literature reviews or qualitative research. From the publications found, relevant information was collected to understand the role of nurses in the treatment of NPT wounds, as well as economic, operational and quality of life data of the patient, which together contribute to the technical-scientific basis for decision-making regarding the indication of the technique.

## **FINAL CONSIDERATIONS**

Negative pressure therapy is a viable alternative for a wide range of complex wounds, including infected, refractory, and healing wounds with secondary intention. It is known for preventing complications and reducing the healing and hospitalization period and has pain when changing dressings as its main negative point. It is the role of the nurse to identify the indications for therapy based on scientific evidence, to adjust parameters such as suction pressure and intervals between dressing changes according to the characteristics of the wounds and the patients, in addition to adopting an individualized care plan, aiming at the safety, satisfaction and quality of life of the patient. Some initiatives suggested to expand access to this therapy in Brazil include greater dissemination of academic research results, the adoption of care protocols, the study of low-cost techniques, and technical improvement of nursing professionals.



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