

# What factors influence clinical nurses' self efficacy after wound care training? A scoping review

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## Abstract

The inadequate management of wounds carries significant implications for patients and challenges clinical nurses. Consequently, there is a need for wound care training to enhance self-efficacy. However, despite participation in such training, nurses often need more practical experience and educational background to exhibit higher confidence levels. This results in a deficiency in self-efficacy when performing wound care. This study aims to amalgamate literature discussing the determinants influencing self-efficacy and present strategies for clinical nurses to enhance it after wound care training. The article search utilized the PRISMA method, with searches conducted in Google Scholar, Proquest, Science Direct, and Pubmed databases. Sixteen articles met the specified inclusion criteria, which required English-language articles published within the last five years (2018-2023) discussing factors affecting clinical nurse self-efficacy after wound training. Various factors, including competence, social support, and self-motivation, influence wound nurses' self-efficacy. Competence factors encompass structured training and education, while social support involves sharing experiences and engaging in case reflection. Additionally, motivational factors play a significant role, such as reinforcing values and attitudes when facing obstacles and maintaining the belief that nurses can effectively adhere to wound care standards. Enhancing self-efficacy includes improving competencies through standardized wound training, increasing educational opportunities, self-experience, social persuasion support, sharing experiences, high self-motivation, and managing emotions when assessing one's ability to achieve goals successfully. Professional development programs designed to provide structured training for nurses have enhanced their competencies, social support, and motivation, strengthening holistic wound care clinical skills and improving self-efficacy. Therefore, exploring additional factors that may further contribute to this positive outcome is advisable.

## Introduction

In recent years, there has been a notable increase in the number of patients seeking care from home and public healthcare

units, many of whom present with chronic and challenging-to-treat wounds.<sup>1</sup> These chronic wounds necessitate specialized attention from nurses, as they have substantial implications for healthcare services and the affected patients, leading to increased care costs and directly impacting the patient's quality of life.<sup>2</sup> Social isolation, feelings of burden on family and relatives, persistent pain, infection, and resistance to antibiotics are additional significant effects associated with chronic wounds.<sup>3</sup>

The persistent presence of chronic wounds is increasingly acknowledged as a significant issue in the healthcare sector, exerting a substantial impact on global morbidity and mortality reminiscent of an "unrecognized epidemic." The escalating prevalence of chronic wounds imposes a considerable burden on patients, healthcare providers, and the entire healthcare system. This affects the quality of life and influences resource allocation and healthcare expenditures.<sup>4</sup> In Europe, chronic wounds primarily affect the lower extremities in approximately 1.51% of the population and 2.21% of patients with mixed aetiology.<sup>5</sup> Within Italy, an estimated 24% of the population, approximately two million people, are affected by chronic wounds, mainly due to factors related to ageing and lifestyle-related comorbidities such as diabetes, obesity, hypertension, and peripheral vascular disease.<sup>3</sup> To address this issue effectively, the healthcare team must comprehensively understand the elements that define chronic wounds, the management of wound drainage, and the assessment of wounds while providing wound care.<sup>2,6</sup>

Wound care is a specialized clinical area that demands multidisciplinary teamwork, with nurses playing a pivotal role.<sup>5</sup> Nursing professionals are responsible for contributing to society and are expected to maintain their professional capabilities in providing direct care.<sup>7</sup> Hence, it is imperative to conduct education and training programs to enhance nurses' knowledge, attitudes, and skills, particularly regarding wound healing and care.<sup>8</sup> In a prior study, it was shown that the training of community nurses in wound care led to significant improvements in their knowledge and practice ( $p < 0.001$ ). In addition to this, utilizing the TIME framework effectively provided wound care education, ultimately resulting in notable enhancements in wound care practice.<sup>9</sup>

Inadequate wound care represents a significant challenge for clinical nurses and has substantial implications for patient outcomes. Addressing this challenge necessitates specialized wound care training to enhance nurses' self-efficacy. However, despite

### Significance for public health

*Nurses currently employed face the ongoing challenge of effectively making professional contributions to society. The degree of self-efficacy plays a pivotal role in determining nurses' belief in their capabilities, ultimately influencing the quality of their performance. Programs that foster professional competency can play a significant role in bolstering nurses' perceived self-efficacy, thereby enhancing their confidence in establishing empathetic connections with patients, resulting in heightened patient contentment. From a public health perspective, heightened self-efficacy among wound care nurses equips them with the confidence to establish independent practices and offer home care. This enables individuals, especially those with chronic wounds, to access specialized wound care services.*

participating in training programs, nurses often need more confidence due to insufficient experience and education, resulting in reduced self-efficacy in the provision of wound care. Bandura (1997) contends that self-efficacy is a cognitive process involving decisions, beliefs, and expectations about individuals' perceived ability to execute specific tasks or actions necessary to achieve desired outcomes.<sup>10</sup> Nurses' self-efficacy denotes their faith in their ability to effectively undertake particular nursing care activities. Augmenting nurses' knowledge and experience in wound care represents a practical approach to enhancing competence, confidence, and service quality. By affording nurses opportunities to strengthen and refine their knowledge through training, self-efficacy can be bolstered, thereby amplifying the nurse's role in delivering comprehensive patient care. The level of self-efficacy significantly influences nurses' confidence in their abilities, which determines their performance quality. Professional competency development programs can aid in elevating nurses' perceived self-efficacy, fostering confidence in developing empathetic patient relationships and ultimately enhancing patient satisfaction. Competency development programs, such as wound care training initiatives, are crucial. They empower nurses to gain a deeper understanding of wound conditions and improve their capacity to select appropriate treatment modalities and equipment for managing complex wounds, consequently elevating nurses' confidence. More literature on strategies to enhance self-efficacy following standardized wound care training programs is needed. Therefore, synthesizing articles that address the factors influencing self-efficacy and strategies utilized by clinical nurses to enhance self-efficacy post-wound care training is imperative.<sup>11,12</sup>

## Materials and Methods

The research design employed in this study involves analyzing 16 articles. These articles were sourced from various scholarly databases, including Google Scholar (n=13500), ProQuest (n=1154), Science Direct (n=676), and PubMed (n=1681). The search for articles was conducted using the PRISMA method, following predefined criteria for inclusion and exclusion.

To maintain the highest level of methodological integrity, the article search process strictly adhered to the PRISMA method (Figure 1), which involved a meticulous and thorough search process. The inclusion criteria were predefined and encompassed several specific parameters. These parameters included the requirement for articles to be in the English language, address factors influencing nurse self-efficacy in clinical practice following wound care training, and have been published within the last five years (2018-2023). Conversely, exclusion criteria were carefully established to ensure the selection of relevant and accessible articles. These criteria encompassed the exclusion of paid articles, articles without full-text accessibility in book or module formats, articles in the form of undergraduate theses, master's theses, dissertations, and scientific papers, as well as articles not in English. The articles that satisfied the criteria were deemed to have met the specified requirements. Supplementary materials Table 1 shows the summary of articles.

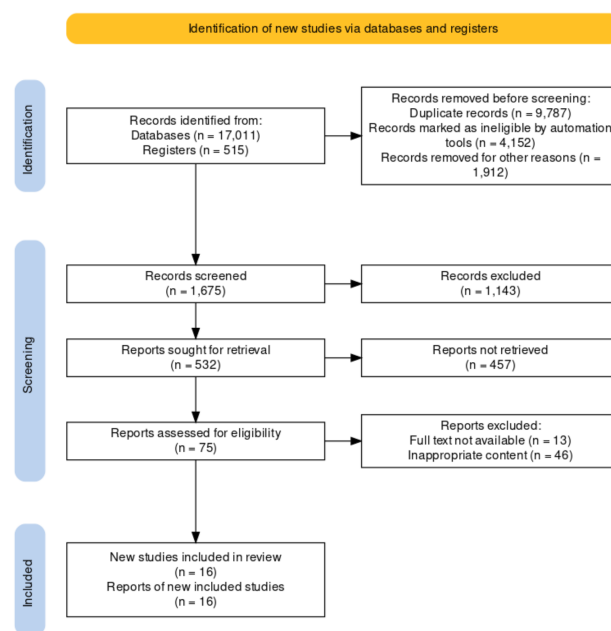
## Results and Discussions

The provision of wound care is integral to upholding patients' health and overall well-being, constituting a fundamental aspect of

nursing practice. Various studies have underscored nurses' need to augment their expertise in this specialized care. This imperative often stems from the need for more clearly defined and standardized competency frameworks among nurses, particularly in consistent and efficient wound care administration.<sup>13</sup> The proficiency of wound care nurses is influenced by various factors that can impact their self-efficacy. One significant factor is the need for some nurses to develop confidence in wound care post-training, primarily due to limited experience and education. This can lead to a deficit in self-efficacy when performing wound care. A closely related factor is nursing students' relatively insufficient wound care education, particularly in contemporary moist care techniques. Nurses primarily acquire numerous skills based on empirical knowledge and experience throughout their clinical careers.<sup>2,8</sup>

One proven effective method for acquiring new skills and enhancing nurses' performance is through training, leveraging previous nursing experience as the most influential source. It is crucial to consider the influence of nurses' educational backgrounds on developing essential skills required for providing optimal wound care to patients. Training programs facilitate a better understanding of wound status and enhance the nurses' capacity to select appropriate medical methods and equipment for managing complex wounds, consequently bolstering their confidence levels.<sup>2</sup> To this end, nurses must augment their nursing competencies by undergoing wound care training programs and implementing these learnings in their daily practice. The domain of competency in wound care is intrinsically linked to theoretical knowledge and practical training, reinforced by the nurses' educational background.<sup>14</sup>

According to the study, nurses who received specific training in wound care demonstrated significantly higher proficiency in providing wound care than those who did not. The research findings indicate that a substantial number of nurses needed to gain the necessary knowledge and skills in wound care, with over 40% failing to offer comprehensive discharge planning related to wound



**Figure 1.** Flowchart of scoping review with selection process using PRIS-MA.

care education. This highlights the urgent requirement for well-structured educational and training initiatives that prioritize advancing nurses' proficiency in wound healing and care while emphasizing the enhancement of academic standards in this critical area of healthcare.<sup>15</sup> This stands consistent with the research conducted by Welsh (2018), which underscored the deficiency in applying wound care theory to practice owing to the absence of structured education. Proficiency in wound care knowledge significantly influences wound healing and care practices, with well-informed professionals more likely to adhere to recommended practices. Consequently, it can be concluded from these two studies that trained nurses are more likely to possess up-to-date knowledge of wound care and can apply evidence-based practices obtained in wound care service settings. Enhanced knowledge in the care of patients with wounds can bolster nurses' practical competence and self-efficacy, while also fostering evidence-based wound care practices.<sup>16</sup>

Competence, social support, and self-motivation significantly influence the self-efficacy of wound nurses. Nurses who have received comprehensive training are more likely to exhibit high levels of self-efficacy.<sup>17</sup> Competence, rooted in a person's interest and experience, is a behaviour-based characteristic influenced by motivation and attitude, thus directly impacting self-efficacy.<sup>7</sup> Training and simulation can enhance nurses' competence and skills, increasing confidence and self-efficacy.<sup>12,18</sup> Allowing nurses to enhance their knowledge during exercise can improve self-efficacy and enhance their role in providing comprehensive nursing care to patients. Remember, nurses' motivation is the key to your success.<sup>19</sup>

Moreover, social support from clinical nurse colleagues, reflection, sharing of experiences, and mentoring play a crucial role in enhancing nurses' self-efficacy.<sup>13</sup> Furthermore, it is imperative to consider environmental and resource variables, as well as knowledge, skills, and the impact of social and spiritual factors when seeking to enhance nurses' clinical practice.<sup>20</sup> A systematic continuing education program, delivered through a blended learning approach, is essential for nurses caring for patients with wound problems, as it leads to better knowledge, clinical performance, and increased self-efficacy scores.<sup>21,22</sup>

Developing clinical nurses' self-efficacy in their practice is of utmost importance. This involves augmenting their knowledge and expertise in wound care, fostering confidence in their clinical skills, and establishing standardized fundamental and advanced competencies. Additionally, it requires comprehensive wound nursing education and drawing on successful experiences from others to bolster self-efficacy.<sup>23,24</sup> Providing enhanced social support and encouragement for independent wound care performance is crucial. Equally important is the need for nurses to prioritize maintaining positive emotional and physical well-being, as it is a pivotal factor in achieving their objectives.<sup>25-28</sup>

## Conclusions

Nurses who have received training are more likely to possess knowledge regarding wound care and the capability to apply evidence-based practices within wound care services. This heightened expertise in tending to patients with wounds enhances nurse competence and boosts nurse self-efficacy when accompanied by adequate knowledge and competence. Moreover, structured training assists nurses in improving their competence, nurturing social support capabilities, and igniting motivation to provide comprehensive wound care, enhancing nurses' self-efficacy. Therefore,

exploring additional contributing factors to improve evidence-based wound care practices is recommended.

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Online supplementary materials  
Table 1. Summary of articles.