



Challenges Faced by Nurses in Pressure Ulcers Prevention in Healthcare Settings.

(A Literature review)

Sabina Adhikari

Pratiksha Khanal Bhandari

Bachelor `s Thesis

Bachelor of Health Care Nursing

(Nursing Top-Up Program)

(2025)

Degree Thesis

Pratiksha Khanal Bhandari

Sabina Adhikari

Title. Challenges Faced by Nurses in Pressure Ulcers Prevention in Healthcare settings.

Arcada University of Applied Sciences: Nursing 2025

Abstract:

Context: Pressure ulcers, this problem sounds like a common but serious issue in healthcare settings, especially elderly, less mobile patients and chronically ill. Pressure ulcer prevention not only increases the quality-of-life patients but also reduces the cost of care and treatment. Nurses play a vital role in preventing these ulcers, but they often face difficulties in doing so. The review is based Imogene King`s Theory of goal Attainment, which emphasized the importance of the nurse-patient relationship, goals setting, and having support systems in place for effective care. Aim: The study aims to explore the challenges faced by nurses in preventing pressure ulcers in health care settings. Methods: A literature review was conducted in this study to answer the following research question. What are the nurse's challenges in preventing pressure ulcers in healthcare setting? 4 electronic databases were used for literature search. The inductive content analysis method was used to examine a total of eighteen research articles. Finding: The finding indicates key challenges, including staff shortages, time limitations, lack of training and prevention protocols and inadequate resources. Nurses also reported gaps in knowledge related to pressure ulcer prevention. Furthermore, Nurses expressed stress and frustration because of these structural obstacles. Conclusions: The study reveals that nurses encounter multiple challenges when it comes to preventing pressure ulcers, these factors not only make it tough to effective prevention care but also lead to frustration and stress among nurses. Addressing these barriers with better education, training and consistent protocols to help support both nurses and the patients.

Keywords: Pressure Ulcers Prevention, Nurse, Challenges

Opinnäyte

Pratiksha Khanal Bhandari

Sabina Adhikari

Työn nimi. Sairaanhoitajien kohtaamat haasteet painehaavojen ehkäisyssä terveydenhuollon yksiköissä.

Arcada University of Applied Sciences: Nursing 2025

Tiivistelmä:

Konteksti: Painehaavat, tämä ongelma kuulostaa yleiseltä mutta vakavalta ongelmalta terveydenhuollon toimintaympäristöissä, erityisesti iäkkäillä, vähemmän liikkuvilla ja kroonisesti sairailta potilailla. Painehaavojen ennaltaehkäisy ei ainoastaan paranna potilaiden elämänlaatua vaan myös vähentää hoito- ja hoitokustannuksia. Sairaanhoitajilla on tärkeä rooli näiden haavaumien ehkäisyssä, mutta heillä on usein vaikeuksia siinä. Katsaus perustuu Imogene Kingin tavoitteiden saavuttamisen teoriaan, jossa korostetaan sairaanhoitajan ja potilaan välisen suhteen merkitystä, tavoitteiden asettamista ja tukijärjestelmien olemassaoloa tehokkaan hoidon kannalta. Tavoite: Tutkimuksen tavoitteena on selvittää, millaisia haasteita sairaanhoitajat kohtaavat painehaavojen ehkäisyssä terveydenhuollon toimintaympäristöissä. Menetelmät: Tässä tutkimuksessa tehtiin kirjallisuuskatsaus, jonka tarkoituksena oli vastata seuraavaan tutkimuskysymykseen. Mitkä ovat sairaanhoitajan haasteet painehaavojen ehkäisyssä terveydenhuollon toimintaympäristössä? Kirjallisuushaku tehtiin neljästä sähköisestä tietokannasta. Induktiivista sisällönanalyysimenetelmää käytettiin yhteensä kahdeksantoista tutkimusartikkelin tarkasteluun. Löytö: Havainto osoittaa, että keskeisiä haasteita ovat muun muassa henkilöstöpula, aikarajoitukset, koulutuksen ja ennaltaehkäisyprotokollien puute sekä riittämättömät resurssit. Sairaanhoitajat raportoivat myös painehaavojen ehkäisyyn liittyvien tietojen puutteista. Lisäksi sairaanhoitajat ilmaisivat stressiä ja turhautumista näiden rakenteellisten esteiden vuoksi. Päätelmät: Nämä tekijät eivät ainoastaan vaikeuta tehokasta ennaltaehkäisevää hoitoa, vaan myös aiheuttavat turhautumista ja stressiä sairaanhoitajien keskuudessa. Näiden esteiden poistaminen paremmalla koulutuksella ja johdonmukaisilla pöytäkirjoilla auttaa tukemaan sekä hoitajia että potilaita.

Avainsanat: Painehaavojen ennaltaehkäisy, sairaanhoitaja, haasteet.

Contents

1. Introduction	5
2. Background	5
2.1 Definition Pressure Ulcer	6
2.2 Causes	6
2.3 Incidence and Prevalence	6
2.4 Risk Factors of Pressure Ulcers	7
2.5 Classification of Pressure Ulcers	7
2.5.1 Stage 1; Pressure Injury	7
2.5.2 Stage 2 Pressure Injury; Partial thickness skin loss with exposed Dermis.	7
2.5.3 Stage 3 Pressure Injury; Full thickness skin loss	8
2.5.4 Stage 4 Pressure Injury; Full thickness skin and tissue loss	8
2.5.5 Unstageable Pressure Injury	8
2.5.6 Deep tissue pressure injury: (Persistent Non blanchable Deep red, maroon or purple discoloration). 8	
2.6 Prevention of Pressure Ulcers	9
3. Theoretical Framework	11
4. AIM and Research Question.	12
5. Methods.....	13
5.1. Literature Review.....	13
5.2. Data Collection	13
5.3 Data Analysis	18
5.4 Ethical Consideration	20
6. Result / Findings	22
6.1. Challenges faced by nurses to prevent pressure ulcers.....	22
6.1.1. Staffing and Workload	22
6.1.2 Knowledge and Training	23
6.1.3 Institutional barriers:	25
6.1.4 Communication	26
6.1.5 Psychological distress	27
7. Discussion.....	28
8. Conclusion.....	30
References	31
Appendixes	36
List of chosen articles for data analysis.....	48
Figure 3. Application of King’s Theory in Nursing Interventions.....	50

1. Introduction

Pressure injuries, also called bedsores, decubitus ulcers or pressure ulcers (zaidi & sharma 2024). Pressure ulcers form a chronic disease in healthcare especially among old people living in nursing homes. If too much pressure is applied for extended periods of time in the same position over bony prominences such as hips, heels ankles and tail bones develop. Effective assessment, prevention and management can however reduce their incidence (Alyahyawi et al.,2024).

Pressure ulcers most commonly affect elderly and chronically ill individuals, 2.5 million people in Europe annually develop pressure ulcers based on AHRQ data (Zencir et al.,2025). Pressure ulcers are common within the healthcare setting and can be life threats, but also preventable and curable. According to Balan et al. (2021) Studies show that the preventive care for pressure ulcers also improves the quality of life of the patients and lowers the cost of care and treatment. Pressure ulcers are treated as a team and nurses have a crucial role due to their continuous patient care. Studies indicate that low number of pressure ulcers is a sign of good quality nursing care. Evidence – based practice has been found to reduce the occurrence of pressure ulcers by up to 50%, which places nursing care at the center of pressure ulcer prevention (Balan et al., 2021).

We have job experience in a nursing home as nursing students; we took care of elderly patients. We noticed that many of them had pressure ulcers, which were painful and discomfort for elderly patients. Even with improved healthcare, it remains a major problem. Therefore, it is necessary to investigate and analyze the challenges or barriers for nurses to prevent pressure ulcers that`s why we want to find out this issue through this study.

2. Background

This chapter Presents background information draw from previous research and studies to establish fundamental concepts related to pressure ulcers. It provides an overview of pressure ulcers, their definition, causes, incidence, classification, risk factors and prevention. It also covers the importance of quality nursing care and the specific conditions of elderly care. The following concepts will be explored in detail below.

2.1 Definition Pressure Ulcer

Pressure ulcer is an injury to the skin and underlying tissues resulting from prolonged pressure on the same body parts causing a reduction or complete stop in the flow of blood. It usually happens over bony areas like the heels, hips or lower back. (Fletcher & Hall 2018) Pressure ulcers are a very painful condition associated with increased patient morbidity and financial but can be prevented by using a few simple measures. It is common in the elderly as well as in patients with limited mobility or those confined to bed. (Meena et.,2024).

2.2 Causes

Pressure ulcers often develop in people who cannot move or feel normally, like those who are paralyzed and unconscious and they can't shift their position, unrelenting pressure on certain areas cutting off blood flow. The lack of circulation can damage the skin and deeper tissues. There are two factors which are caused by pressure ulcers (Zhao et al.,2016). Pressure ulcers are complex, external and internal factors. In Externally such like Prolonged pressure, friction, shear, and moisture cause damage to the skin and underlying tissues. Internally conditions like anemia, malnutrition, and endothelial dysfunction can make the skin break down faster. (Zaidi & Sharma, 2024).

2.3 Incidence and Prevalence

Pressure ulcers are common in healthcare, affecting 4% to 38% of hospital inpatients. In the elderly complications lead to a mortality rate of 68% and a study found 91% of patients with pressure ulcers in Health Care Setting. The cost of treating this wound is 11 billion dollars per year (Afzali et al., 2020). Pressure ulcer prevalence in long-term care homes is different throughout Europe. In Finland, one study reported the prevalence of 5% of the residents of long-term care homes having pressure ulcers. A study in Germany revealed that 7.8% of older nursing homes patients had at least one chronic wound, and more than half of them were pressure ulcers. Prevalence was lower in Spain, at 3,5 %. Sweden has performed national pressure ulcers prevalence studies in hospitals every year since 2011, with a prevalence of 17% in 2011 and 11.4% in 2020. A more extensive systematic review of European studies reported

the overall high prevalence of the care setting with a median prevalence of 10.8%. (Anker-Hansen et al., 2024)

2.4 Risk Factors of Pressure Ulcers

Pressure ulcers are most commonly present in bed patients who are unable to change positions independently. Pressure ulcers primarily result due to the impaired circulation in the affected tissues (Zaidi & Sharma, 2024). Additional risk factors for pressure ulcers include malnourishment, inadequate oral care and recurrent falls, especially among elderly and bedridden who live in institutions. They might make them vulnerable to skin breakdown (Neziraj et al., 2021).

2.5 Classification of Pressure Ulcers

In 2016, the National Pressure Ulcer Advisory Panel (NPUAP) updated the pressure injury staging system that replaced the term ulcer with injury. The updated terminology describes pressure injuries to both intact skin and ulcerated tissue. Every Ulcers present from an injury, but an injury can be present without being an ulcer. Moreover, Arabic numbers were replaced with Arabic numbers in stage name to prevent confusion with similar medical term such as intravenous (IV). (Edsberg et al., 2016). According to National Pressure ulcers Advisory Panel, Pressure injury is categorized in the following stages.

2.5.1 Stage 1; Pressure Injury

In this stage, the intact skin with a localized area of non-blanchable erythema. The skin remains unbroken but with patches of color that do not disappear when lightly pressed. (Edsberg et al., 2016).

2.5.2 Stage 2 Pressure Injury; Partial thickness skin loss with exposed Dermis.

In this stage, the wound extends to the epidermis and possibly to the dermis but does not go deeper into the underlying tissue layers. It may be red or pink in colour as the wound base,

partial thickness skin loss in an open shallow wound or blister. Underlying tissue and fats are not visible and there is no presence granulation tissue, slough or eschar. (Edsberg et al.,2016).

2.5.3 Stage 3 Pressure Injury; Full thickness skin loss

In this stage, it involves deeper wounds with full thickness skin loss and visible fats. Eschar and slough may be present, but bone, tendon and muscle are not exposed. (Edsberg et al.,2016)

2.5.4 Stage 4 Pressure Injury; Full thickness skin and tissue loss

This stage is characterized by full thickness tissues loss with exposed bone, tendon or muscles. The wound is deep and may impact muscles, tendon and bone. Slough and eschar may be visible. The depth of the injury can vary depending on the body area with some body parts being more severely damaged than others. Epiboly, undermining and tunnelling are found in this stage. (Edsberg et al.,2016).

2.5.5 Unstageable Pressure Injury.

An unstable Pressure injury is one where it is difficult or unable to determine the how depth of wound because of the slough or eschar present on wound area. these substances shield the wound; it is difficult to assess the degree of tissue damage until the necrotic tissue is removed. The wound may have the appearance of a dark, leathery scab like covering and unless the covering is removed, the full stage of the wound remains unknown. However, if slough and eschar are taken off, it becomes clear that the injury is stage 3 or stage 4 pressure injury. Heel or limb pressure injuries with stable slough or eschar should never be removed or softened. (Edsberg et al.,2016).

2.5.6 Deep tissue pressure injury: (Persistent Non blanchable Deep red, maroon or purple discoloration).

The National Pressure Ulcer Adversary panel (NPUAP) guidelines also include another category known as Deep tissue injury (DTL). The injury is caused by sustained pressure as

well as shear forces and is usually found in the region where bone and muscles meet. The skin might look either intact or non-intact, but there's a noticeable deep red area which stays the same color when it is pressed. Equipped with vascular and traumatic neuropathic and dermatologic injuries, deep tissue pressure injury cannot be used to describe such types. (Edsberg et al.,2016).

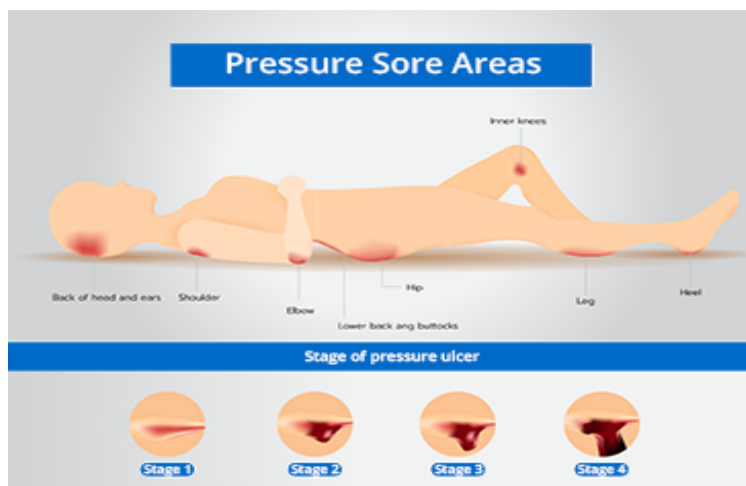


Figure 1 [Pressure Ulcer Stages and Pressure Injury Prevention \[Image Guide\] | STERIS](#)

2.6 Prevention of Pressure Ulcers

Managing Pressure ulcers is a serious challenge in long-term care homes. Pressure ulcers can be very costly for the health care system. In the US it costs between 9 to 11 trillion dollars per year (Na et al.,2024). In Sweden, 30% of older nursing home patients are in danger of pressure ulcer development, whereas internationally the danger lies somewhere between 4% and 31% (Neziraj et al.,2021). Elderly patients, especially those in nursing homes or with limited mobility, deserved that approach to comfort, dignity and quality of life. The turn Everyone and Move for Ulcer Prevention (TEAM-UP) trial demonstrated that regular and frequent repositioning is essential for preventing pressure ulcers (Yap et al.,2024). for Prevention it's important to manage risk and protecting the skin by regular repositioning, proper cushioning and ensuring a good fit for prosthetics and wheelchairs. These measures help to prevent skin breakdown. Pressure mapping technology helps to identify risk areas and maximize support surfaces (Boyko et al.,2018). Nurses have a vital responsibility in the prevention, diagnosis and treatment of pressure ulcers. Nurses check

patient`s skin regularly to prevent wounds on a prophylactic basis and coordinate other health care workers to ensure the best care. Additionally, nurses serve as educate, advocate support in health care and society (Ramadan, 2025). Although nurses carefully adhere to all the guidelines and preventions available, pressure ulcers are still a long-standing problem in nursing homes for the elderly.

3. Theoretical Framework

Theoretical framework is a map to data analysis, helping identify patterns, connect ideas, and make clear conclusions based on existing theories. It helps to analysis and interpret our data with clarity and accuracy (Kivunja,2018). Theoretical framework is conceptual guiding light for researchers, helping them to understand a problem and find the best ideal solution. A Theoretical framework brings together three elements of established knowledge, the researcher`s perspective as a guiding lens, and systematically analytical approach (Lacerda et al.,2024). This thesis base on Imogene King`s theory of goal attainment which focused on the teamwork between patients and nurses to support patients in meeting their health needs. It emphasizes the importance of patient care, considering individuals' needs and environment for better health outcomes. The theory of goal Attainment says that “Nursing is a process of action, reaction, and interaction whereby nurse and client share information about their perception in the nursing situation” (Gonzalo, 2024). King's Goal Attainment Theory emphasizes the mutual interaction between nurses and patients within the health-care context. The theory of Goal Attainment outlines three core interacting systems that work together – The personal system, Interpersonal system and social system. These systems work in nursing practice in terms of establishing mutual goals and goals attainment through effective communication, interaction and feedback processes. In the personal system it refers to the individual factors of the patient, self-perception development, body image, personal space and sense of time. The interpersonal system highlights the interaction between nurse and patient, focuses on the nurse- patient relationship, including communication between them and working together to set goal. This social system considers the external societal factors like family, culture and community that influence the patient`s health (Gonzalo, 2024). Principles of Imogene King`s Theory of Goal Attainment fit into the nursing process. Theory supports and guides each phase of nursing process, including assessment, diagnosis, planning, implementation and evaluation. First, during the assessment Nurses begin by collecting essential details about the patient`s health and personal care needs. In the diagnosis phase the nurse identifies health issues along with problems and challenges to reach desired goals. Next, during planning, the nurse works together with other members of the healthcare team, creates individualized care plan to meet problems and provide the right interventions. In the implementation phase, the nurse applies interventions to help the patient achieve their desired goals. Finally, in the evaluation phase,

the nurse monitors the patient's progress and implements the necessary adjustments. (Gonzalo, 2024).

4. AIM and Research Question.

The study aims to explore the challenges faced by nurses in preventing pressure ulcers in health care settings.

The following question will be studied in this research.

What kind of challenges do nurses face in preventing pressure ulcers in healthcare settings?

5. Methods

5.1. Literature Review

This literature review aims to identify and analyze challenges faced by nurses involved in preventing pressure ulcers. Literature review typically describes previous work on a specific topic. It gathers information from sources like journal articles, books, conference papers and dissertations. It sets the basis for several points of importance, indications, gaps, associations to understand references and its development over time (Brodsky,2025).

Literature reviews are essential for keeping up with rapid scientific advances. With new research emerging regularly and evolving quickly, these reviews help describe key findings, highlight gaps in knowledge, and provide directions for future research. This review not only provides readers with information about the topic in a clear or organized manner, but it also helps writers increase their knowledge, strengthen their critical thinking and improve their ability to express complex ideas with clarity (Dhillon, 2022). The literature review was conducted by collecting information from previously published literature. Creating a literature review involves six key stages. The first step is Formulating the research question and objectives. The next step is Searching For the extant literature, after gathering sources Screening for inclusion. Once that is complete Assessing the quality of primary studies. The fifth stage involves Extracting relevant data. In the final stage analysis of the collected data (Paré & Kitsiou,2017).

5.2. Data Collection

This thesis was conducted by collecting information from previously published literature. We searched for publication of different databases such as Academic search Complete (EBSCO), CINAHL Complete (EBSCO), science direct databases and manual search (Google scholar). The search keyword utilized in these studies are Pressure ulcer prevention AND nurse or nurses or nursing AND challenges or barriers or difficulties. A PICO chart was used to create appropriate keywords for the literature search (table 2).

The articles chosen were assessed for eligibility based on inclusion and exclusion criteria. Database search was carried out using predefined inclusion criteria as shown in table-1. The process began with keyword searches to identify relevant articles followed by applying filters such as English language, peer reviewed, publication date and free full text figure 2 present the PRISMA flow chart illustrates the overall result of the search conducted in multiple databases. We used the PICO framework to make our research question, clear and to help find the right article. Table 2 shows the PICO chart used in this study.

<p style="text-align: center;">Data selection criteria</p> <p style="text-align: center;">(Inclusion)</p>	<p style="text-align: center;">Data selection criteria</p> <p style="text-align: center;">(Exclusion)</p>
<p>Articles written in English.</p>	<p>Articles in other languages rather than English.</p>
<p>Peer reviewed</p>	<p>Non-peer reviewed articles</p>
<p>Studies Published between the years</p> <p>2015-2025</p>	<p>Studies published before 2015</p>

Articles answer the research question.	Articles not related to the research question.
Articles with free full text access.	Full text not available.

Table 1 Inclusion and Exclusion criteria

Pico Elements	Keywords	Search Strategies
P(patient/population)	Nurses	Nurse OR Nurses OR Nursing
Intervention	Pressure Ulcer Prevention	Pressure Ulcer Prevention
Comparison	-	-
Outcomes	Challenges faced by Nurses	Challenges OR Barriers OR Difficulties

Table 2 PICO

Database	Keywords	Hits	Accepted
EBSCO	pressure ulcer prevention AND (nurse or nurses or nursing) AND (challenges or barriers or difficulties)	529	11
CINAHL complete (EBSCO)	pressure ulcer prevention AND (nurse or nurses or nursing) AND (challenges or barriers or difficulties)	1097	1
Manual Search	pressure ulcer prevention AND (nurse or nurses or nursing) AND (challenges or barriers or difficulties)		5
Science Direct	pressure ulcer prevention AND (nurse or nurses or nursing) AND (challenges or barriers or difficulties)	86	1

Table 3 Search Outcomes

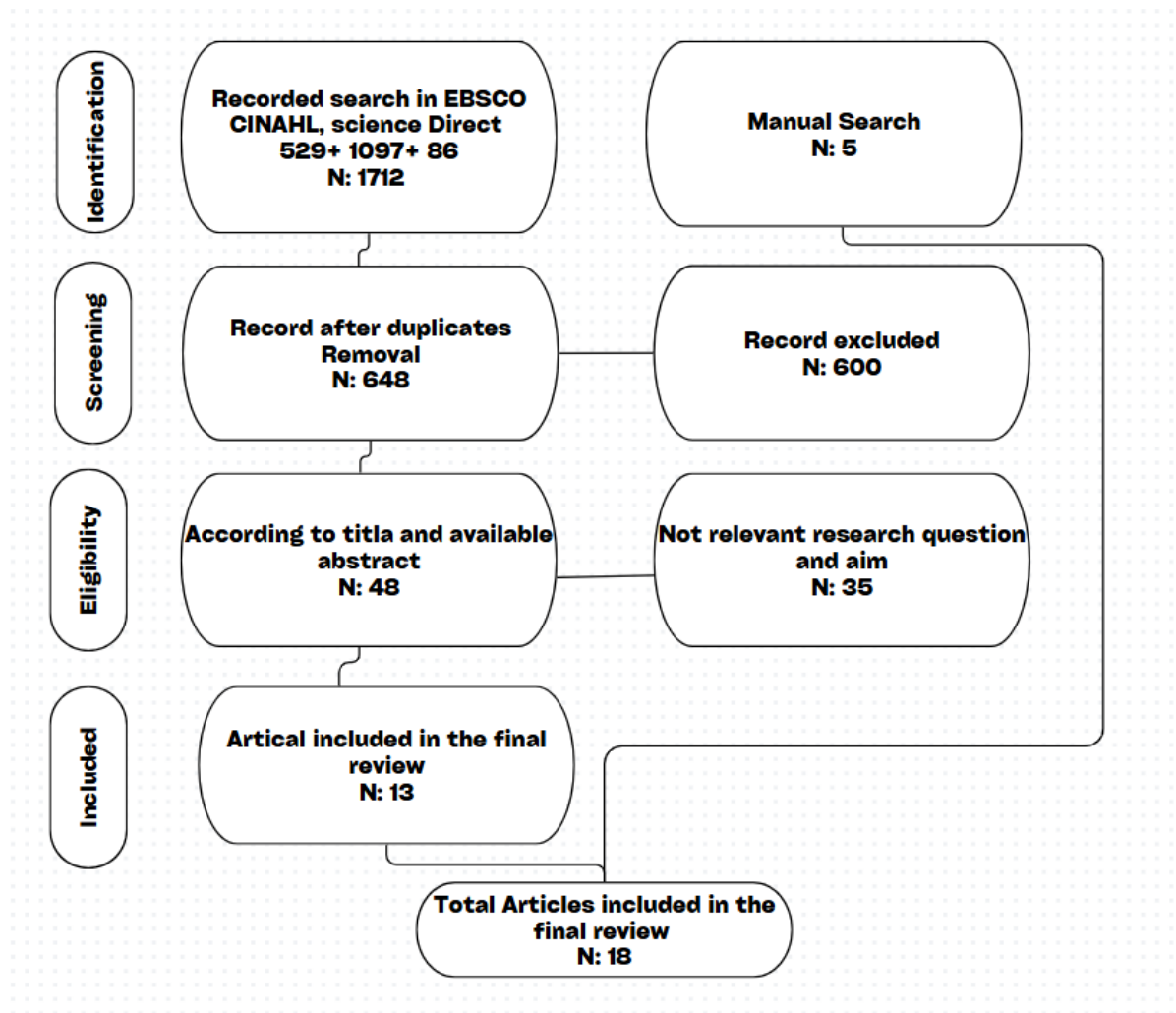


Figure 2 PRISMA Flow Diagram

The Prisma flow chart above is seen figure 2. Show the overall result in various database search.

5.3 Data Analysis

In this study we used inductive content analysis to analyze documents and interpret the data in a systematic way. Content analysis is a systematic process of qualitative data analysis, commonly used in health research. The process begins with reading and familiarizing with the data, coding of key ideas, formation of categories, emerging themes, verifying interpretation and lastly reporting the findings (Mabuza et al.,2014)

This study applies the same structured approach to content analysis starting from familiarizing the data ourselves with theme development and result presentation.

Content analysis conducted in two ways inductive or deductive approach (Bingham,2023). In the inductive approach, real life experiences are used to build new ideas and theories. It does not involve testing old theories or measuring results (Im et al., 2023).

In this study data from 18 peer reviewed research articles were analyzed in-depth reading, to gain understanding, then figure out (table below) based on our research question and findings from the literature review. After a thorough reading of the articles, we identify relevant information concerning those challenges faced by nurses in the prevention of pressure ulcers. This analysis revealed the theme, categories, sub-categories. The table below illustrates the structure of the theme, Categories its associated subcategories and unit of analysis.

Theme	Categories	Sub- Categories	UNIT OF ANALYSIS
Challenges Faced by Nurses to prevent Pressure ulcers	Staffing and Workload	-Inadequate Staff	2,4,5,13,16,18
		-Heavy Workload	3,5,6,8,12,16
	Knowledge and Training	-Lack of updated guidelines and insufficient training.	1,2,3,4,5,7,8,9,11,14,15,16, 18
		-Gap in evidence – based nursing practice.	9,17

	Institutional Barriers	-Lack of resources, support.	1,4,8,12,16,17
	Communication	-Poor communication and lack of Teamwork	10,11
	Psychological distress	-Stress, Frustration	18

Table 4 Outcomes of content analysis

5.4 Ethical Consideration

Ethical Consideration is an essential principle that ensures research is conducted with honesty, integrity, and fairness for all involved. Ethical consideration protects the rights of participants, maintains data accurately and avoids harm. This includes being informed constantly, keeping information private, avoiding conflicts of interest and minimizing risk. Through this ethical principle helps to make trust and ensures that research is responsible, meaningful and benefits everyone (Bhandari, 2024). In Finland, Finnish National board on research integrity (TENK), ethical review is only needed for certain types of research. According to TENK (2025), it emphasizes that is essential to value the work and rights of others to maintain ethical standards in academic writing. TENK is the body responsible for ensuring ethical research practices. Plagiarism or presenting another person's work without proper credit is considered misconduct (Kesti et al., 2023).

Multiple ethical considerations should always be carefully considered throughout the research process. This was a literature review where no human participants were involved. Therefore, informed consent was not required. For this study we have chosen freely available open access articles from our database. During the research process we have cited all sources, authors,

publications and references according to APA7 format, ensure accurate credit is given and avoid plagiarism. In this study, Following Arcada University of Applied Sciences' official bachelor's thesis guidelines, which are publicly available on their website, this thesis was completed with helpful guidance from professionals at the university.

6. Result / Findings

6.1. Challenges faced by nurses to prevent pressure ulcers.

6.1.1. Staffing and Workload

The main challenges identified that insufficient staffing level and increased workload reduced the ability of nurses to carry out through skin assessment, patient repositioning and the implementation of preventive measures.

6.1.1.1 Inadequate Staff

Factors such as staff turnover and understaffing are key factors of increase prevalence of pressure ulcers (Anker -Hansen et al., 2024). The lack of staff in nursing care makes it difficult to carry out essential tasks such as regular repositioning patients every two hours and through skin assessment for pressure ulcers risk patients. Nurses often don't have enough time to give each patient the attention needed, which can lead to emotional exhaustion, making it harder to stay motivated. (Na, 2024; Berihu, 2020; Awad, 2020; Taylor, 2021).

In health care settings with high staff turnover, less experienced nurses often struggle to develop the skills needed for effective pressure injury care. The lack of continuity makes it harder for new nurses to integrate into the team and socialize follow best practice (Wan et al., 2023).

6.1.1.2. Over Workload

Heavy workloads limit's ability to implement pressure ulcer prevention (Taylor, 2021; Appiah, 2023).

Research conducted across six public hospitals in Addis Ababa and Gondar University reported that heavy workload pressure as a leading obstacle to effective care, when limited nursing staff and bedside care is rushed can lead to more pressure ulcers (Berihu et al., 2020). The study revealed that due to nurses 'heavy workloads patients received only limited education on

pressure ulcers, despite both nurses and patients recognized their value. Therefore, education is essential helping patients and reducing risk factors for pressure ulcers (Mathew, B., & Gloc, N 2024).

According to participants nurse *“Sometimes I come on a shift with no degree nurse to even guide us on how to care for this patient, the few of us will feed patients, bath them, give medications, prepare some for x-rays... We are being forced to do things hurriedly, and we tend to forget about doing that, so sometimes it is not intentional, but we sometimes become exhausted that we have to reschedule it to the following day”* (Appiah et al., 2023, p.8).

During shifts with overwhelming workloads nurses had to prioritize other critical or life-threatening patient condition over pressure ulcer prevention, which led to pressure ulcer prevention being neglected or delayed (Ebi et al., 2019). According to Buntoro et al., (2025) Nurses experienced challenges in implementing pressure ulcer risk assessment tools such as Barden Scale, including concerns about added workload and requires stronger institutional support.

According to participants nurse *“Because there were times when we should be performing other tasks or actions, but instead, we ended up adding to our workload by evaluating pressure injuries”* (Buntoro et al.,2025, p.35).

6.1.2 Knowledge and Training

6.1.2.1 Lack of updated guidelines and training

Nurses expressed that lack of universal guidelines or regular training (Awad & Hewi, 2020). it's difficult to maintain best practices for pressure ulcer prevention. In many cases nurses face frequently high-pressure situation and competing priorities in their work which makes it hard to focus on preventive measures. The lack of clear protocol and competing demands of others patient care task makes it difficult for nurses to implement effective pressure ulcer prevention in everyday practice (Berihu, 2020; Appiah, 2023). For better outcomes pressure ulcer prevention training should be regularly revised, systematic and evidence- based (Ebi, 2019;

Ajil, 2024). Similarly found in the critical care setting nurses pointed out that absence of clear written guidelines as a barrier in preventing pressure ulcers.

According to participants nurse *“We manage pressure ulcers however the only problem is that we do not have protocols on it in this ward. Pertaining to this, we sometimes do things differently according to how we were taught in school. If there is a protocol pasted, it helps you as a nurse to easily reference when you forget something”* (Appiah et al., 2023, p.5).

It was found that Nurses were faced challenges due to insufficient knowledge about unusual location of pressure ulcer, study revealed that 87,8 % of pressure ulcers were located on patients` feet. nurses were primarily focused on more common sites like sacrum during assessment. This is perhaps because healthcare staff know where pressure ulcers typically occur, and the sacral region was always inspected as a part of personal hygiene care (Anker - Hansen et al., 2024).

The level of Nurses' knowledge regarding pressure ulcer prevention is influenced by various factor. Nurses who have fewer years' experience had lower knowledge level compared with more experience. Nurses with higher education, such as a bachelor's degree (registered nurses), showed greater understanding of pressure ulcer prevention comparison to vocational-level practical nurses. However, impact their education level and job role prevention of pressure ulcer (Parisod ,2022; Saibertová, 2021). Similarly, Nurses holding a bachelor`s degree or higher were almost twice as likely to prevent pressure ulcers effectively compared to those with diploma. the extra education and training help nurses better use risk assessments and critical thinking (Getie, 2020; Saibertová, 2021; Taylor, 2021). Lack of knowledge regarding proper care and risk factors plays a role in the development of serious of pressure ulcers in patients (Heywood-Everett et al.,2023). This review identify barriers to guideline implementation were mainly due to outdated knowledge and lack of ability resources like pressure -relieving devices. Nurses emphasised the critical role for multidisciplinary care, where coordinated teamwork, regular training and communication to more effective pressure injury prevention (Wan et al., 2023).

According to Dalvand et al. (2018) Nurses were not equipped with sufficient knowledge for pressure ulcer prevention. Even though nursing students and assistants, most nurses were

lacking in important skills like patient repositioning. This was widespread in many countries. Increase training is needed to help nurses gives better care and lower the risk of pressure injury.

6.1.2.2 Gap in evidence-based nursing practice

According to Getie et al., (2020) study 38.7% of nurses reported they never used a risk assessment scale for pressure ulcer prevention, throughout the observation period, none of the nurses applied any assessment tool to identify patient's risk of developing pressure ulcers. Most nurses indicated a lack of evidence-based nursing practice. The Study revealed wide gap in the implementation of Hospital Acquired pressure injury prevention in Finnish acute care Hospital. (Tervo-Heikkinen et al.,2023)

6.1.3 Institutional barriers:

6.1.3.1 Shortage of resources and support

According to Ebi et al., (2019) Ethiopia is developing country supply of medical equipment for health institutions are insufficient. Many nurses indicated that there is shortage of pressure-relieving devices such as air mattresses, turning charts and cushions (Awad, 2020; Ajil, 2024) In this situation nurses faced barriers to carry out standard preventive practices to applying pressure ulcers prevention protocols. The research concluded that there was a clear gap between nurse managers 'reporting on implementation of nursing protocols and observed implementation, including screening for at risk malnutrition, while reported that screening was performed in 70% of the units but 20% of patients received. This gap points to institutional barriers including lack of routines protocol implementation as well as failure to actual monitor (Tervo-Heikkinen et al.,2023).

The inefficient use of specialized support within UK hospitals muddles clinical decision-making and is costly. Although equipment was available, just 51.3% of patients at risk had a repositioning plan, which suggests that there must be an improved correlation between risk assessment, the use of equipment and prevention practices (Mathew, & Gloc,2024).

Within the home care environment, a key barrier was the presence of clutter, which obstructed the provision of the equipment, mobility and anatomical inspection (Taylor et al., 2021).

6.1.4 Communication

6.1.4.1 Poor communication and lack of Teamwork

Communication skills are key to effective information sharing between patients, families and healthcare teams. Nurses emphasized that timely communication by nursing assistants is critical for early detection of changes of patient's skin condition like impending pressure injury risks. Further, nursing assistants also reported challenges in communicating with uncooperative patients and families (Guo et al., 2025).

“Some patients are not very cooperative in turning over, changing clothes, wiping their bodies to keep their skin clean, etc. We want to learn how to communicate effectively” (Guo et al., 2025, p.7)

Strong communication and teamwork among nurses and nursing assistants significantly enhanced work performance, self-esteem and overall work environment. Teamwork was identified as being essential for early detection of patient care issues and maintaining high levels of care standards (Guo et al., 2025).

The study found that Nurses feel uncomfortable with sensitive communication when performing tasks like skin checks in intimate areas, often created barriers to effective pressure ulcer prevention, also found Many patients Highlighted the effective collaboration with healthcare professionals in preventing pressure ulcers, with teamwork seen as key to achieving positive results (Heywood-Everett et al.,2023)

6.1.5 Psychological distress

6.1.5.1 Stress and Frustration

Nurses share feelings and frustration when patients develop hospital-acquired pressure injuries with competing responsibility, providing proper care due to heavy workloads, constant time pressure and despite their commitment to preventing pressure injuries. (Wan et al., 2023).

7. Discussion

This Chapter presents a key finding of the study relating it to existing studies and drawing meaningful conclusions. The background of this study emphasized that pressure ulcers remain persistent and costly in health care facilities (Anker-Hansen et al., 2024).

The challenges experienced by nurses in their daily working life in the practice of pressure ulcer prevention, one major theme 5 categories and 7 subcategories were revealed through this literature review. These challenges affect the patient's care quality and significantly impact well-being and low morale of the nurses themselves, who bear the emotional weight of these demanding roles (Heywood -Everett et al., 2023).

The Staffing challenges like understaffing, high patient to nurse ratios, and turnover directly impact pressure ulcers prevention. When nurses have too many patients, they do not have the time for preventive interventions such as frequent repositioning, skin assessment and pressure relief. Additionally, high turnover and the use of temporary or inexperienced staff can interrupt care continuity, leading to inconsistent pressure ulcer prevention (Berihu et al., 2020, Tervo- Heikkinen et al., 2023).

The absence of formal guidelines, inadequate training and differing qualifications, especially among less experienced or more experienced staff, are some of the issues leading to the inconsistency of pressure prevention practices. This highlights the urgent need for standard evidence-based policies and ongoing education specific to different levels of nursing competence. In addition, the common failure to consider less typical areas of ulcer development, like the feet, highlights the importance of enhancing critical thinking and holistic assessment skills in nurses.

Communication is critical to effective ulcer prevention because it enables the smooth transfer of patient information between health care providers. But heavy workloads usually lead to fragmented records, resulting in missed or lost information between health care providers. These issues allude to the necessity of streamlined processes, effective communication and improved integration of assessment instruments towards improved patient outcomes. Nurses

are frustrated and upset when patients develop hospital-acquired pressure injuries after careful prevention. This is stimulated by high workloads, time constraints and staff shortages that limit the amount of time to prevent, generating moral distress and burnout (Wan et al.,2023). It is important in preventing the risk for pressure ulcers and promoting better patient outcomes to attend to these factors with improved staffing, streamlined workflows and better support systems.

This result is consistent with Imogene King's Theory of Goal Attainment, which focused on mutual goal setting and working together between the nurse and patient. Good nursing practice as proposed by King's Theory, is based on systematic communication, shared understanding and facilitative environment. However, the challenges found in this study- particularly insufficient staffing, time constraints and a lack of institutional support limit the nurse's ability to engage in effective interaction and goal setting with patients. When nurses are overloaded, the fundamental processes of assessment, planning and evaluation central to both nursing care and king's theory become compromised. For Instance, King's model interpersonal system which clarified effective nurse- patient communication is disrupted when nurses lack time for detailed risk assessments or patient education due to high workloads. Similarly, the social system, which includes institutional structures and support, is turned into a barrier rather than enabler when institutions have inadequate staffing or lack of systematic training procedures. The systemic gap reduces opportunities for personalized care, an important element in pressure ulcers prevention. (Gonzalo, 2024).

8. Conclusion

Overall, to prevent pressure ulcers within healthcare centers, nurses face certain barriers that significantly influence patient results and the practice of nursing. Common barriers included inadequate staff, high workloads, limited access to pressure-relieving equipment, poor institutional support, and insufficient training (1,17,18). In addition to inefficiently preventing pressure ulcers, those factors cause burnout and stress among nurses, which lowers the standard of care for the patients. These results align with Imogene King's Theory of Goal Attainment in revealing the significance of communication between nurses and individual receiving care and mutual goal setting, with the system supporting nursing activities for favorable nursing outcomes. Yet, staffing shortage and resource constraints as systemic issues often contribute to massive incongruences between theoretical models and real-world application occurring in many healthcare settings. As these considerations move forward, healthcare organizations must better facilitate access to pressure-relieving equipment, strengthen staffing levels and give priority retention to ongoing professional education. In addition, conversion of knowledge into evidence-based, standard guidelines, with periodically enduring nursing education, may help bridge the gap pressure ulcers. All things considered, this study emphasizes the necessity of a comprehensive strategy for preventing pressure ulcers, one that gives nurses the tools they need, clear guidelines and continual professional development to improving patient care quality and workplace satisfaction for nurses.

References

- Afzali Borojeny, L., Albatineh, A. N., Hasanpour Dehkordi, A., & Ghanei Gheshlagh, R. (2020). The incidence of pressure ulcers and its associations in different wards of the hospital: A systematic review and meta-analysis. *International Journal of Preventive Medicine*, 11(1), 171. https://doi.org/10.4103/ijpvm.IJPVM_182_19
- Ajil, Z. W., Majeed, H. M., & AlReda, J. J. A. (2024). Critical care nurses' knowledge and perceived barriers regarding pressure injury prevention among critically ill patients at Baghdad teaching hospitals: A cross-sectional survey. *International Journal of Critical Illness and Injury Science*. https://doi.org/10.4103/ijciis.ijciis_60_24
- Alyahyawi, K. O., Alshekh, F. O., Madkhali, A. Y., Mosleh, A. A., Alfaifi, I. A., Omar, R. N., Baiti, M. A., & Hakami, A. (2024). Knowledge and attitudes toward pressure ulcer prevention evidence-based guidelines among nursing students at Jazan University, Saudi Arabia. *Annals of African Medicine*, 23(3), 365–371. https://doi.org/10.4103/aam.aam_149_23
- Anker-Hansen, C., Grøndahl, V. A., Helgesen, A. K., Olsen, L. B., Rummelhoff, G., Halvorsrud, L., & Bååth, C. (2024). Pressure ulcers point prevalence, classification, locations, and preventive measures: Insights from a Norwegian nursing home survey. *Scandinavian Journal of Caring Sciences*, 38(2), 409–416. <https://doi.org/10.1111/scs.13245>
- Appiah, E. O., Appiah, S., Oti-Boadi, E., Boadu, B. A., Kontoh, S., Adams, R. I., et al. (2023). Attitude and preventive practices of pressure ulcers among orthopedic nurses in a tertiary hospital in Ghana. *PLOS ONE*, 18(9), e0290970. <https://doi.org/10.1371/journal.pone.0290970>
- Awad, W. H. A., & Hewi, S. A. H. (2020). Effect of pressure ulcer preventive nursing interventions on knowledge, attitudes, and practices of nurses among hospitalized geriatric patients in Alexandria, Egypt. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 9(2), 1–12. <https://doi.org/10.9790/1959-0902060112>
- Balan S, Bahar A, Kocaçal E. Determination of Association Between the Knowledge and Attitudes of Nurses to Pressure Ulcer Prevention. *J Educ Res Nurs*. 2021; 18(3): 304–310
- Berihu, H., Wubayehu, T., Teklu, T., Zeru, T., & Gerensea, H. (2020). Practice on pressure ulcer prevention among nurses in selected public hospitals, Tigray, Ethiopia. *BMC Research Notes*, 13, 207. <https://doi.org/10.1186/s13104-020-05049-7>

Bhandari, P. (2024, October 01). *Ethical Considerations in Research | Types & Examples*. Scribbr. Retrieved March 17, 2025, from <https://www.scribbr.com/methodology/research-ethics>

Bingham, A. J. (2023). From Data Management to Actionable Findings: A Five-Phase Process of Qualitative Data Analysis. *International Journal of Qualitative Methods*, 1–11. <https://doi-org.ezproxy.arcada.fi:2443/10.1177/16094069231183620>

Boyko, T. V., Longaker, M. T., & Yang, G. P. (2018). Review of the Current Management of Pressure Ulcers. *Advances in Wound Care*, 7(2), 57–67. <https://doi.org/10.1089/wound.2016.0697>

Brodsky, M. (n.d.). *Steps in the literature review process*. University of Texas at Austin. <https://guides.lib.utexas.edu/c.php?g=1060589&p=7710319>

Buntoro, I. F., Datusanantyo, R. A., Koamesah, S. M. J., Wijaya, R. P. C., & Handoyo, N. E. (2025). Issues and challenges in implementing Braden Scale to assess pressure injury risk: Participatory action research in South-Eastern Indonesia. *Journal Plastik Rekonstruksi*, 12(1), 30–41. <https://doi.org/10.14228/jprjournal.v12i1.386>

Cruz Neto, J., De Oliveira Lima, A., Chaves Costa, E., & University for International Integration of the Afro-Brazilian Lusophony. (2024). Qualitative nursing research: Evidence of scientific validation from a translational perspective. *Investigación y Educación en Enfermería*, 42(1), Article e11. <https://doi.org/10.17533/udea.iee.v42n1e11>

Dalvand, S., Ebadi, A., & Gheshlagh, R. G. (2018). Nurses' knowledge on pressure injury prevention: a systematic review and meta-analysis based on the Pressure Ulcer Knowledge Assessment Tool. *Clinical, Cosmetic and Investigational Dermatology*, 11, 613–620. <https://doi.org/10.2147/CCID.S186381>

Dhillon, P. (2022). How to write a good scientific review article. *The FEBS Journal*, 289(13), 3592–3602. <https://doi.org/10.1111/febs.16565>

Ebi, W. E., Hirko, G. F., & Mijena, D. A. (2019). Nurses' knowledge to pressure ulcer prevention in public hospitals in Wollega: A cross-sectional study design. *BMC Nursing*, 18, 20. <https://doi.org/10.1186/s12912-019-0346-y>

Edsberg, L. E., Black, J. M., Goldberg, M., McNichol, L., Moore, L., & Sieggreen, M. (2016). Revised National Pressure Ulcer Advisory Panel Pressure Injury Staging System: Revised Pressure Injury Staging System. *Journal of Wound, Ostomy & Continence Nursing*, 43(6), 585–597. <https://doi.org/10.1097/WON.0000000000000281>

Fletcher J, Hall J (2018) New guidance on how to define and measure pressure ulcers. *Nursing Times*; 114: 10, 41-44

Getie, A., Baylie, A., Bante, A., Geda, B., & Mesfin, F. (2020). Pressure ulcer prevention practices and associated factors among nurses in public hospitals of Harari regional state and Dire Dawa city administration, Eastern Ethiopia. *PLOS ONE*, 15(12), e0243875. <https://doi.org/10.1371/journal.pone.0243875>

Gonzalo, A .(2024). Imogene king: Theory of goal attainment. Nurselabs. <https://nurseslabs.com/imogene-m-kings-theory-goal-attainment/>

Guo, Y., Zhu, W., Boonyamalik, P., Powwattana, A., Zhang, B., & Sun, J. (2025). Exploring nursing assistants' competencies in pressure injury prevention and management in nursing homes: A qualitative study using the iceberg model. *BMC Nursing*, 24, 333. <https://doi.org/10.1186/s12912-025-02911-6>

Heywood-Everett, S., Henderson, R., Webb, C., & Bland, A. R. (2023). *Psychosocial factors impacting community-based pressure ulcer prevention: A systematic review. International Journal of Nursing Studies*, 146, 104561. <https://doi.org/10.1016/j.ijnurstu.2023.104561>

Im, D., Pyo, J., Lee, H., Jung, H., & Ock, M. (2023). Qualitative Research in Healthcare: Data Analysis. *Journal of Preventive Medicine and Public Health*, 56(2), 100–110. <https://doi.org/10.3961/jpmph.22.471>

Kesti, R., Kanste, O., Konttila, J., & Oikarinen, A. (2023). Quality of working life of employees in public healthcare organization in Finland: A cross-sectional study. *Nursing Open*, 10(9), 6455–6464. <https://doi.org/10.1002/nop2.1896>

Kivunja, C. (2018). Distinguishing between theory, theoretical framework, and conceptual framework: A systematic review of lessons from the field. *International Journal of Higher Education*, 7(6), 44. <https://doi.org/10.5430/ijhe.v7n6p44>

Lacerda, M. R., Silva, R. S. D., Gomes, N. P., & Souza, S. R. R. K. (2024). Reflections on theoretical framework use in nursing research. *Revista Brasileira de Enfermagem*, 77(3), e20230486. <https://doi.org/10.1590/0034-7167-2024-0486>

Mabuza, L. H., Govender, I., Ogunbanjo, G. A., & Mash, B. (2014). African primary care research: Qualitative data analysis and writing results. *African Journal of Primary Health Care & Family Medicine*, 6(1), Article #640, 5 pages. <https://doi.org/10.4102/phcfm.v6i1.640>

Mathew, B., & Gloc, N. (2024). *Scoping review of pressure ulcer prevalence and prevention in elderly inpatient care in England. Graduate Journal of Interdisciplinary Research, Reports and Reviews, 1*(2), 85–94.

<https://jpr.vyomhansjournals.com/index.php/gjir/article/view/16>

Meena, A. K., Varshney, A., Dhaka, K., & Chowdhry, S. (2024). "Study of Knowledge, Attitude and Practice (KAP) about Pressure Ulcers Amongst Nurses of a Tertiary Care Hospital in New Delhi, India." *European Journal of Cardiovascular Medicine, 14*(4).

Na, H.-J., Yoo, S.-H., & Kweon, Y.-R. (2024). Exploring nurses' experiences in pressure sore care in long-term care facilities. *International Journal of Qualitative Studies on Health and Well-Being, 19*(1), 2324495. <https://doi.org/10.1080/17482631.2024.2324495>

Neziraj, M., Andersson, M., Hellman, P., Axelsson, M., & Kumlien, C. (2021). Prevention of pressure ulcers, malnutrition, poor oral health, and falls in nursing homes: A focus group study with nurse aides, registered nurses, and managers. *International Journal of Nursing Studies Advances, 3*, 100056.

<https://doi.org/10.1016/j.ijnsa.2021.100056>

Paré, G., & Kitsiou, S. (2017). Methods for literature reviews. In F. Lau & C. Kuziemsy (Eds.), *Handbook of eHealth evaluation: An evidence-based approach* (Chapter 9). University of Victoria. <https://www.ncbi.nlm.nih.gov/books/NBK481583/>

Parisod, H., Holopainen, A., Koivunen, M., Puukka, P., & Haavisto, E. (2021). Factors determining nurses' knowledge of evidence-based pressure ulcer prevention practices in Finland: A correlational cross-sectional study. *Scandinavian Journal of Caring Sciences, 35*(3), 853–862. <https://doi.org/10.1111/scs.12972>

Ramadan, F. (2025). Making a difference in pressure injury prevalence: the community nurse's guide. *British Journal of Community Nursing, 30*(3), 128–131 <https://research-ebSCO-com.ezproxy.arcada.fi:2443/c/vonq4v/viewer/html/laj2j7dbs5>

Saibertová, S., & Pokorná, A. (2021). Nurses' knowledge in pressure ulcers management related to the monitoring of the incidence and prevalence of pressure ulcers: A questionnaire survey. *Praktický lékař, 101*(Supplementum 1, díl 2), 27–31. ISSN 0032-6739.

Taylor, C., Mulligan, K., & McGraw, C. (2021). Barriers and enablers to the implementation of evidence-based practice in pressure ulcer prevention and management in an integrated community care setting: A qualitative study informed by the theoretical Domains framework. *Health & Social Care in the Community, 29*(3), 766–779.

<https://doi.org.ezproxy.arcada.fi:2443/10.1111/hsc.13322>

TENK. (2012). Responsible conduct of research and procedures for handling allegations of misconduct in Finland. https://tenk.fi/sites/tenk.fi/files/HTK_ohje_2012.pdf

Tervo-Heikkinen, T., Heikkilä, A., Salmela, S., Koivunen, M., Sankelo, M., Ylitörmänen, T., Kortteisto, T., Peltokoski, J., & Junntila, K. (2023). Nursing interventions in preventing pressure injuries in acute inpatient care: A cross-sectional national study. *BMC Nursing*, 22, 198. <https://doi.org/10.1186/s12912-023-01369-8>

Wan, C. S., Cheng, H., Musgrave-Takeda, M., Liu, M. G., Tobiano, G., McMahon, J., & McInnes, E. (2023). Barriers and facilitators to implementing pressure injury prevention and management guidelines in acute care: A mixed-methods systematic review. *International Journal of Nursing Studies*, 145, 104557. <https://doi.org/10.1016/j.ijnurstu.2023.104557>

Yap, T. L., Alderden, J., Gadhomi, K., Horn, S. D., Sonenblum, S. E., Hays, J. C., & Kennerly, S. M. (2024). Movement and Pressure Injury Prevention Care for Nursing Home Residents: Addressing the Nescience. *Advances in Skin & Wound Care*, 37(7), 369–375. <https://doi.org/10.1097/ASW.000000000000165>

Zaidi, S. R. H., & Sharma, S. (2024). Pressure ulcer. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK553107/>

Zencir, G., Yeşilyaprak, T., Ünal, E. P., Akın, B., & Gök, F. (2025). Evaluation of surgical nurses' knowledge and attitudes towards pressure ulcer prevention. *Journal of Tissue Viability*, 34(2), 100862. <https://doi.org/10.1016/j.jtv.2025.100862>

Zhao, R., Liang, H., Clarke, E., Jackson, C., & Xue, M. (2016). Inflammation in Chronic Wounds. *International Journal of Molecular Sciences*, 17(12), 2085. <https://doi.org/10.3390/ijms17122085>

Appendixes

	<p>Title of the article &</p> <p>Publication date</p>	<p>Author</p>	<p>Aim</p>	<p>Method</p>	<p>Results</p>
<p>1.</p>	<p>Exploring nurses' experiences in pressure sore care in long term care facilities.</p> <p>(2024)</p> <p>KOREA</p>	<p>Na, Hyung-Ju; Yoo, Sung-Hee; Kweon, Young-Ran</p>	<p>This research explores the challenges nurses face in managing pressure sores in long-term care.</p>	<p>Qualitative method (interpretive description approach)</p>	<p>The article proved that there is need for increased staff, structured guidelines and institutional support.</p>

2.	Practice on pressure ulcer prevention among nurses in selected public hospitals, Tigray Ethiopia. (2020) (ETHIOPIA)	Hagos Berihu ¹ , Tewolde Wubayehu ² , Teklu ³ , Teklay Zeru ¹ and Hadgu Gerenseal	The aim of this research is to assess practices towards pressure ulcer prevention among nurses.	Quantitative method (Cross-sectional study)	Heavy workload, inadequate training, and lack of universal guideline and shortage of resource are barriers that hamper nurses from prevention pressure ulcer.
3.	Factors determining nurses' knowledge of evidence-based pressure ulcer prevention practices in Finland. (2022) (FINLAND)	Parisod, Heidi; Holopainen, Arja; Koivunen, Marita; Puukkka, Pauli; Haavisto, Elina	The aim of studies is to assess nurses' knowledge of evidence – based pressure ulcer prevention in primary and specialized care and explore the factors that	Quantitative method (correlational, cross-sectional design)	This article proved that need for targeted training, especially for nurses with less education and limited experience in pressure ulcer care.

			influence their knowledge levels.		
4.	Pressure ulcer prevention practices and associated factors among nurses in public hospitals of Harari regional state and dire Dawa city administration, Eastern Ethiopia (2020) (ETHIOPIA)	Asmare Getie, Amsalu Baylie, Agegnehu Bante, Biftu Geda, Firehiwot Mesfin	This study aims to explore how nurses in public hospitals in eastern ethiopia prevent pressure ulcers and the factors that influence their practices.	Quantitative method (Cross-sectional study)	Need of Continuing education and training for nurses.

5.	<p>Critical care nurses' Knowledge and perceived barriers regarding pressure injury prevention among critically ill patients at Baghdad teaching hospitals: A cross-sectional survey</p> <p>2024</p> <p>(IRAQ)</p>	<p>Zaid Waheed Ajil, Haider Mohammed Majeed, Juma Jabur A. Al-Reda</p>	<p>This study aimed to explore nurses' knowledge and challenges they face in preventing pressure ulcers in critically ill patients.</p>	<p>Quantitative Method</p>	<p>Lack of preventive devices, training and standardized written guidelines are key barriers in preventing pressure ulcers.</p>

6.	<p>Nurses` Knowledge to pressure ulcer prevention in public hospitals in Wollega: a cross- sectional study design</p> <p>(2019)</p> <p>(ETHIOPIA)</p>	<p>Werku Etafa Ebi1*, Getahun Fetensa Hirko1 and Diriba Ayala Mijena2</p>	<p>Evaluate the nurses` Knowledge to pressure ulcer prevention in public hospitals in Wollega.</p>	<p>Quantitative method</p>	<p>Shortage of pressure relieving devices, Lack of staff and lack of training are the most common barriers to prevention pressure ulcer.</p>
7.	<p>Nursing intervention in preventing pressure injuries in acute inpatient care:a cross-sectional national study</p>	<p>Tarja Tervo-Heikkinen1*, Anniina Heikkilä2 Susanne Salmela6 , Marita</p>	<p>This study aimed to explore the prevention of pressure injuries in Finnish acute</p>	<p>Quantitative method</p>	<p>There is Gaps in evidence-based nursing practice for pressure injury prevention in Finnish acute care.</p>

	(2023) (FINLAND)	Koivunen ³ , Merja Sankelo ^{7,8} , Tuija Ylitörmä ⁿ⁹ , Tiina Kortteisto ⁴ , Jaana Peltokoski ⁵ and Kristiina Junttila ¹⁰	inpatient care.		
9	Psychosocial Factors impacting community- based pressure ulcer prevention (2023)	Suzanne Heywood- Everett, Rebecca Henderson, Claire Webb, Amy R. Bland	To analyse the key factors that affecting community- based pressure ulcer prevention.	Mixed methods systematic review	The study proved that knowledge, social influences, motivation, communication skills and strong interpersonal relationship is necessary for effective pressure ulcer prevention in community setting.
10.	Scoping Review of Pressure Ulcer Prevalence and Prevention in Elderly Inpatient Care in England.		To investigate the pressure ulcer	Scoping Review	In England pressure ulcers are rising due to improper use and

	ENGLAND		prevalence and prevention of elderly patients in inpatient wards across England		over-prescription of manual handling equipment, delayed risk assessments, and training gaps.
11	Pressure ulcers point prevalence, classification, locations and preventive measures: Insights from a Norwegian nursing home survey 2024	Camilla Anker-Hansen PhD, Associate Professor Vigdis Abrahamse n Grøndahl PhD, Professor Ann Karin Helgesen PhD, Professor Liv Berit	To explore the prevalence of pressure ulcers, their location, their stages, and preventive strategies in Norwegian nursing home	Quantitative method (cross-sectional research design)	Pressure ulcers most commonly develop on the sacrum but This study revealed a high prevalence of pressure ulcers, mainly on residents' toes, sacrum was considerably low. In the most common regions, pressure ulcers were probably avoided because to the nursing home's standardized skin

		<p>Olsen MSc, Associate Professor Guri Rummelhoff MSc, Associate Professor Liv Halvorsrud PhD, Professor Carina Bååth PhD, Professor</p>			<p>evaluation. However, it's possible that this strategy accidentally ignored fewer common places.</p>
12	<p>Barriers and enablers to the implementation of evidence-based practice in pressure ulcer prevention and management in an integrated community care setting. A qualitative study informed by the theoretical domains' framework</p>	<p>Carole Taylor, Kathleen Mulligan, Caroline McGraw</p>	<p>This study aims to investigate the challenges and support that health practitioners when trying to implement</p>	<p>Qualitative Method</p>	<p>Need for better training & communication practices. High workloads.</p>

	2021 England		evidence - based methods to prevent and manage pressure ulcer in community care setting.		Discomfort with inspecting sensitive areas.
13.	Exploring nursing assistants` competencies in pressure injury prevention and management in nursing homes: a qualitative study using the iceberg model. 2025 CHINA	Guo, Yanxia; Zhu, Wen; Boonyamal ik, Plernpit; Powwattana, Arpaporn; Zhang, Baolu; sun, Junjun	This study aimed to identify the most relevant competencies for nursing assistants regarding pressure injury prevention and management in the nursing homes.	Qualitative Method	Competency-based training programs required for nursing assistants.

14.	<p>Attitude and preventive practices of pressure ulcers among orthopedic nurses in a tertiary hospital in Ghana.</p> <p>2023 Ghana</p>	<p>Appiah, Evans Osei; Appiah, Stella; Oti-Boadi, Ezekiel; Boadu, Beatrice Ama; Kontoh, Samuel; Adams, Roland Iddrisu; Appiah, Cyndi; Sarpong, Collins</p>	<p>To investigate orthopedic, nurses' attitudes and practices of pressure ulcer prevention.</p>	<p>Qualitative method</p>	<p>Absence of clear guidelines, shortages of staff, and excessive workload.</p>
15.	<p>Nurses Knowledge in pressure ulcers Management related to the monitoring of the incidence and prevalence of pressure</p>	<p>Saibertov Saibertová, Simona; Pokorná, Andrea</p>	<p>To assess nurses' knowledge on the prevention and management</p>	<p>Quantitative method</p>	<p>Requires continue training for nurses in preventing pressure ulcers.</p>

	ulcers: a questionnaire survey		of pressure ulcers.		
	2021				
16	Nurses' Knowledge on pressure injury prevention; a systematic review and meta-analysis based on the Pressure Ulcer Knowledge assessment tool.	Sahar Dalvand, Abbas Ebadi Reza Ghanei Gheshlagh	To evaluate nurse's knowledge of pressure ulcer prevention by using PUKAT scores different care settings.	Systematic review and meta-analysis.	Regular training courses and clinical guidelines are needed to improve pressure ulcer prevention particularly among assistant nurses and nursing students.
	2018				
17.	Effect of pressure ulcer preventive Nursing	Wafaa Hassan Ali	To explored how Nurses`	Quantitative method	Staff shortage, lack of equipment,

	Interventions on Knowledge, Attitudes and Practices of Nurses Among Hospitalized Geriatric Patients in Alexandria, Egypt	Awad 1 , Sarah Ali Hafez Hewi 2	knowledge behaviours, and attitudes about pressure sore prevention nursing interventions affected hospitalized elderly patients.		Heavy workload, lack of training.
2020					
EGYPT					
18.	Issues and Challenges in Implementing Braden Scale to Assess Pressure Injury Risk: A Participatory Action Research in South-Eastern Indonesia.	Ika Febianti Buntoro, Robertus Arian Datusanantyo, Sangguana M. J. Koamesah R. Pasifikus Christa Wijaya and Nicholas	This study aimed to explore the challenges nurses face in using the pressure injury risk assessment tool	Qualitative method	Nurses experienced challenges in implementing pressure ulcer risk assessment tools such as Barden Scale,

		Edwin Handoyo			
--	--	---------------	--	--	--

List of chosen articles for data analysis.

1. Ajil, Z. W., Majeed, H. M., & AlReda, J. J. A. (2024). Critical care nurses' knowledge and perceived barriers regarding pressure injury prevention among critically ill patients at Baghdad teaching hospitals: A cross-sectional survey. *International Journal of Critical Illness and Injury Science*. https://doi.org/10.4103/ijciis.ijciis_60_24

2. Anker-Hansen, C., Grøndahl, V. A., Helgesen, A. K., Olsen, L. B., Rummelhoff, G., Halvorsrud, L., & Bååth, C. (2024). Pressure ulcer point prevalence, classification, locations, and preventive measures: Insights from a Norwegian nursing home survey. *Scandinavian Journal of Caring Sciences*, 38(1), 409–416. <https://doi.org/10.1111/scs.13245>

3. Appiah, E. O., Appiah, S., Oti-Boadi, E., Boadu, B. A., Kontoh, S., Adams, R. I., et al. (2023). Attitude and preventive practices of pressure ulcers among orthopedic nurses in a tertiary hospital in Ghana. *PLOS ONE*, 18(9), e0290970. <https://doi.org/10.1371/journal.pone.0290970>

4. Awad, W. H. A., & Hewi, S. A. H. (2020). Effect of pressure ulcer preventive nursing interventions on knowledge, attitudes, and practices of nurses among hospitalized geriatric patients in Alexandria, Egypt. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 9(2), 1–12. <https://doi.org/10.9790/1959-0902060112>

5. Berihu, H., Wubayehu, T., Teklu, T., Zeru, T., & Gerensea, H. (2020). Practice on pressure ulcer prevention among nurses in selected public hospitals, Tigray, Ethiopia. *BMC Research Notes*, 13, 207. <https://doi.org/10.1186/s13104-020-05049-7>

6. Buntoro, I. F., Datusanantyo, R. A., Koamesah, S. M. J., Wijaya, R. P. C., & Handoyo, N. E. (2025). Issues and challenges in implementing Braden Scale to assess pressure injury risk: Participatory action research in South-Eastern Indonesia. *Jurnal Plastik Rekonstruksi*, 12(1), 30–41. <https://doi.org/10.14228/jprjournal.v12i1.386>

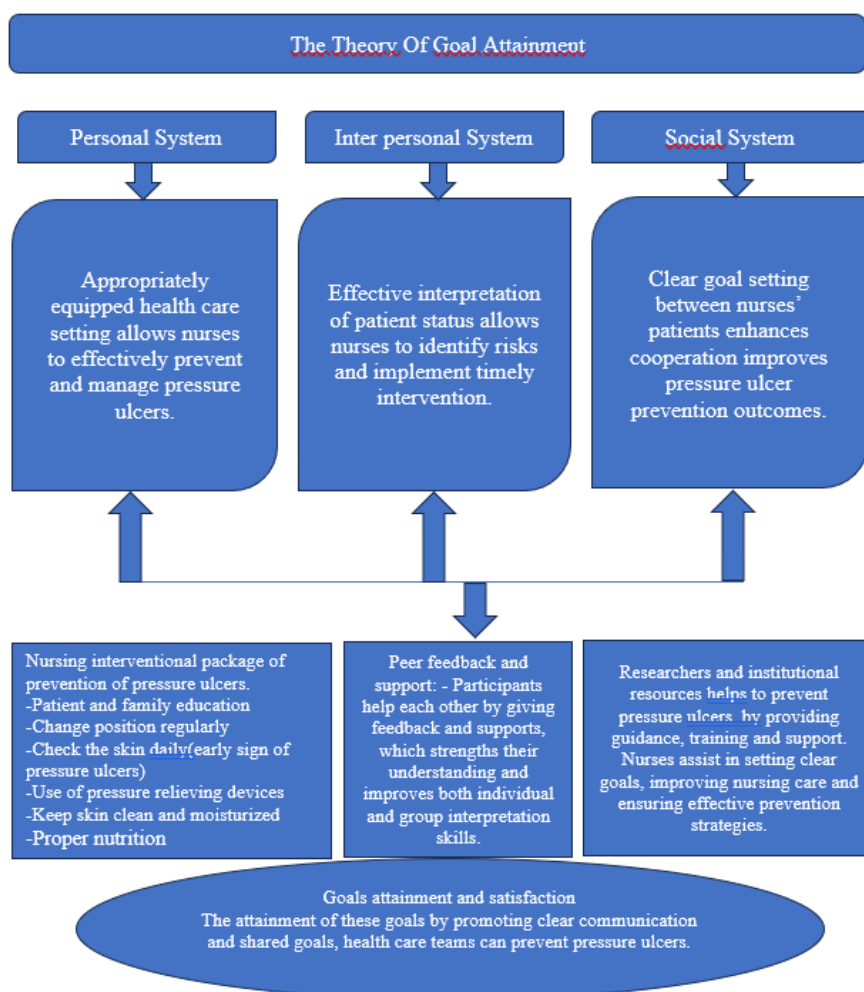
7. Dalvand, S., Ebadi, A., & Gheshlagh, R. G. (2018). Nurses' knowledge on pressure injury prevention: a systematic review and meta-analysis based on the Pressure Ulcer Knowledge Assessment Tool. *Clinical, Cosmetic and Investigational Dermatology*, 11, 613–620. <https://doi.org/10.2147/CCID.S186381>

8. Ebi, W. E., Hirko, G. F., & Mijena, D. A. (2019). Nurses' knowledge to pressure ulcer prevention in public hospitals in Wollega: A cross-sectional study design. *BMC Nursing*, 18, 20. <https://doi.org/10.1186/s12912-019-0346-y>
9. Getie, A., Baylie, A., Bante, A., Geda, B., & Mesfin, F. (2020). Pressure ulcer prevention practices and associated factors among nurses in public hospitals of Harari regional state and Dire Dawa city administration, Eastern Ethiopia. *PLOS ONE*, 15(12), e0243875. <https://doi.org/10.1371/journal.pone.0243875>
10. Guo, Y., Zhu, W., Boonyamalik, P., Powwattana, A., Zhang, B., & Sun, J. (2025). Exploring nursing assistants' competencies in pressure injury prevention and management in nursing homes: A qualitative study using the iceberg model. *BMC Nursing*, 24, 333. <https://doi.org/10.1186/s12912-025-02911-6>
11. Heywood-Everett, S., Henderson, R., Webb, C., & Bland, A. R. (2023). *Psychosocial factors impacting community-based pressure ulcer prevention: A systematic review. International Journal of Nursing Studies*, 146, 104561. <https://doi.org/10.1016/j.ijnurstu.2023.104561>
12. Mathew, B., & Gloc, N. (2024). *Scoping review of pressure ulcer prevalence and prevention in elderly inpatient care in England. Graduate Journal of Interdisciplinary Research, Reports and Reviews*, 1(2), 85–94. <https://jpr.vyomhansjournals.com/index.php/gjir/article/view/16>
13. Na, H.-J., Yoo, S.-H., & Kweon, Y.-R. (2024). Exploring nurses' experiences in pressure sore care in long-term care facilities. *International Journal of Qualitative Studies on Health and Well-being*, 19(1), 2324495. <https://doi.org/10.1080/17482631.2024.2324495>
14. Parisod, H., Holopainen, A., Koivunen, M., Puukka, P., & Haavisto, E. (2021). Factors determining nurses' knowledge of evidence-based pressure ulcer prevention practices in Finland: A correlational cross-sectional study. *Scandinavian Journal of Caring Sciences*, 35(3), 853–862. <https://doi.org/10.1111/scs.12972>
15. Saibertová, S., & Pokorná, A. (2021). Nurses' knowledge in pressure ulcers management related to the monitoring of the incidence and prevalence of pressure ulcers: A questionnaire survey. *Praktický lékař*, 101(Supplementum 1, díl 2), 27–31. ISSN 0032-6739.
16. Taylor, C., Mulligan, K., & McGraw, C. (2021). Barriers and enablers to the implementation of evidence-based practice in pressure ulcer prevention and management in an integrated community care setting: A qualitative study informed by the theoretical Domains framework. *Health & Social Care in the Community*, 29(3), 766–779. <https://doi.org.ezproxy.arcada.fi:2443/10.1111/hsc.13322>

17. Tervo-Heikkinen, T., Heikkilä, A., Salmela, S., Koivunen, M., Sankelo, M., Ylitörmänen, T., Kortteisto, T., Peltokoski, J., & Juntila, K. (2023). Nursing interventions in preventing pressure injuries in acute inpatient care: A cross-sectional national study. *BMC Nursing*, 22, 198. <https://doi.org/10.1186/s12912-023-01369-8>

18. Wan, C. S., Cheng, H., Musgrave-Takeda, M., Liu, M. G., Tobiano, G., McMahon, J., & McInnes, E. (2023). Barriers and facilitators to implementing pressure injury prevention and management guidelines in acute care: A mixed-methods systematic review. *International Journal of Nursing Studies*, 145, 104557. <https://doi.org/10.1016/j.ijnurstu.2023.104557>

Figure 3. Application of King’s Theory in Nursing Interventions



Nursing Interventional Package for prevention of pressure ulcers. By using King’s Goal Attainment Theory