Pressure-sore bulletin – December 2017

Compiled by John Gale – JET Library
Contents

The impact of an educational intervention on home support workers' ability to detect early pressure ulcer damage..........................................................3
Unavoidable pressure ulcers at the end of life and nurse understanding..................3
A 100 patient clinical evaluation of an alternating pressure replacement mattress in a home-based setting.................................................................4
Why is the heel particularly vulnerable to pressure ulcers? ........................................5
Effectiveness of compression bandaging education for wound care nurses..................5
Linking challenges in wound healing: key highlights from the Hartmann congress.......6
Pressure ulcer prevention with a new mattress..........................................................6
Are we overcomplicating pressure ulcer risk assessment?...Joanna Swan................6
The 3-risk approach to pressure ulcer assessment in Norway -- safe or a risky business?....7
Reducing hospital-acquired pressure ulcers: the business case for purchasing new technology........................................................................................................7
Using TLC-NOSF advanced wound dressing to improve outcomes for patients with leg and diabetic foot ulcers.................................................................7
Support pressure distribution for positioning in neutral versus conventional positioning in the prevention of decubitus ulcers: a pilot study in healthy participants.....................8
Joint EPUAP & EWMA Pressure Ulcer (PU) Prevention & Patient Safety Advocacy Project.................................................................9
Compression therapy in the community........................................................................9
Pressure ulcers... This reflective account is based on NS824 Barry M, Nugent L (2015) Pressure ulcer prevention in frail older people.................................................9
Apex Pro-care mattress: How can this advanced mattress assist in prevention of pressure injuries?.........................................................................................10
How Greek nurses perceive and overcome the barriers in implementing treatment for pressure ulcers: 'against the odds' .................................................................10
Pressure points: learning from Serious Case Reviews of failures of care and pressure ulcer problems in care homes.............................................................11
SEM Scanner™ Detects Bedsores Sooner than Skin Evaluation..................................12
Diabetes and pressure ulcer risk in hip fracture patients: a meta-analysis.....................12
The impact of an educational intervention on home support workers' ability to detect early pressure ulcer damage.

Author(s): Clarke, Mairead; Moore, Zena; Patton, Declan; O'Connor, Tom; Nugent, Linda

Source: British Journal of Community Nursing; Dec 2017; vol. 22

Publication Date: Dec 2017

Publication Type(s): Academic Journal

Abstract: Objective: To investigate the impact of an educational intervention on home support workers' ability to detect early pressure ulcer damage. Method: A repeated measure design was employed to quantify the effectiveness of an educational intervention, consisting of one pre-test and two post-tests. Results: Education was provided to home support workers and this was followed by an assessment of their ability to correctly classify 20 photographs detailing varying stages of skin damage severity. At the baseline (pre-education), 58% of the photographs were classified correctly. At post-test 1, 55% of the photographs were classified correctly. In post-test 2 this increased to 58%, achieving the original baseline scores. There was a moderate negative relationship between pre-training and post-test 2 scores (r=−0.44; n=27; p=0.02). Conclusions: The educational intervention has been shown not to have a statistically significant effect on home support workers' ability to detect early pressure ulcer damage. The moderate negative relationship between pre-training and post-test 2 scores concur with the aforementioned qualitative findings, and similarly indicate behaviour associated with individuals experiencing difficulty comprehending new health terms.

Database: CINAHL

Unavoidable pressure ulcers at the end of life and nurse understanding.

Author(s): Carlsson, Maria; Gunningberg, Lena

Source: British Journal of Nursing; Nov 2017; vol. 26

Publication Date: Nov 2017

Publication Type(s): Academic Journal

Abstract: Objectives: prevention of pressure ulcers (PUs) in end-of-life care is often problematic because both PUs and interventions to prevent them can cause suffering. The primary aim of this study was to identify and describe the different ways in which nurses understood unavoidable PUs in late palliative care. A second aim was to explore the expediency of the different levels of understanding. Methods: a qualitative interview study with a phenomenographic approach was carried out. The study participants were nurses and
healthcare assistants who worked in nursing homes or in specialist palliative inpatient care units run by private providers, non-profit foundations, municipalities and county councils. A phenomenographic analysis of the interview data was undertaken. Results: all participants shared a fundamental understanding that the prevention of PUs is highly worthwhile in end-of-life care. Within this common view, practitioners’ understanding of whether PUs could be prevented differed in four main ways, and were divided into categories: A: unavoidable PUs do not exist. All can be prevented if all interventions are applied, and all patients are at the same risk for developing PUs in end-of-life care; B: unavoidable PUs do not exist, but some patients do not participate in prevention interventions, which makes prevention difficult. The risk of developing pressure ulcers in end-of-life care varies between patients; C: some PUs are unavoidable because some patients do not participate in prevention interventions; the risk of developing pressure ulcers in end-of-life care differs between patients. D: some PUs are unavoidable, depending on the pathophysiological processes in the dying body. The risk of developing pressure ulcers in end-of-life care differs between patients. Conclusion: it is paramount to communicate to nurses that not all PUs can be prevented in dying patients, to lessen the burden of ethical stress for the nurses.

Database: CINAHL

A 100 patient clinical evaluation of an alternating pressure replacement mattress in a home-based setting.

Author(s): Stephen-Haynes, Jackie; Callaghan, Rosie
Source: British Journal of Nursing; Nov 2017; vol. 26
Publication Date: Nov 2017
Publication Type(s): Academic Journal
Available at British Journal of Nursing - from EBSCO (CINAHL with Full Text)
Available at British Journal of Nursing - from MAG Online Library

Abstract: Background: alternating pressure air mattresses (APAMs) support the prevention and management of pressure ulcers. A health and care NHS trust was seeking an APAM that would improve clinical outcomes in relation to pressure ulcers while considering financial cost. An APAM existed that could meet the trust’s needs but there was a lack of evidence over its use in a community/home setting. This study examined the effect of using the Dual Professional (IQ Medical) APAM for patients at a high risk of pressure ulceration. It also determined patient and family satisfaction, and the views of clinicians in relation to clinical outcomes. Additionally, infection prevention and control, servicing, maintenance and electrical biomechanical engineer input were considered. Method: a prospective observational study was undertaken of 100 patients in their own homes following a pilot study of 10 patients. The period of the evaluation was from one day up to 295 days, with a mean average of 83 days, and a total of 5809 bed days. Results: with a regimen of regular repositioning of patients and a good diet, the APAM was effective in preventing pressure ulceration in the 100 patients who were at a high or very high risk of skin breakdown and pressure ulceration. Conclusion: selection of pressure redistributing surfaces should be based on holistic patient assessment, including risk assessment, mobility levels, grade of pressure damage and clinical judgment.

Database: CINAHL
Why is the heel particularly vulnerable to pressure ulcers?

**Author(s):** Gefen, Amit

**Source:** British Journal of Nursing; Nov 2017; vol. 26

**Publication Date:** Nov 2017

**Publication Type(s):** Academic Journal

Abstract: In this article, the vulnerability of the soft tissues of the heel to pressure ulcers (injuries) is explained from a biomechanical engineering perspective, and emerging technologies for protecting the heel, particularly low-friction garments, are reviewed. Sustained deformations in the soft tissue of the weight-bearing posterior heel cause progressive cell and tissue damage due to loss of homeostasis in the cells, as the cytoskeleton and plasma membranes of the affected cells lose integrity and functionality. This deformation damage onsets and evolves rapidly when there is no relief of the tissue distortion (e.g. in supine motionless lying). Hence, prevention should be timely and be applied across all patient populations that are at risk. In particular there is a need to protect tissues from the action of frictional forces that are shearing not only the skin but also the deep tissue structures of the heel. The internal anatomy and physiology of the posterior heel, the common hospital conditions (lying supine, head of the bed elevated) and medical conditions involving neuropathy and perfusion impairments may impose specific risk for heel (pressure) ulcers. There is growing evidence that low-friction-fabric garments may provide added benefits in preventing heel ulcers when used in addition to standard clinical and technology-supported pressure ulcer prevention strategies, as the low-friction fabric structures absorb frictional forces before these are able to considerably distort the susceptible heel tissues.

Database: CINAHL

---

Effectiveness of compression bandaging education for wound care nurses.

**Author(s):** Tidhar, D.; Keren, E.; Brandin, G.

**Source:** Journal of Wound Care; Nov 2017; vol. 26 (no. 11); p. 625-629

**Publication Date:** Nov 2017

**Publication Type(s):** Academic Journal

Abstract: Objective: Compression bandaging is an essential component in the treatment of venous leg ulcers (VLUs). An adequate pressure and stiffness is needed in order for the treatment to be successful. The aim of this study was to evaluate the effectiveness of a training workshop on compression bandaging among wound care nurses who had no previous experience in application of compression bandages, immediately post-training and six months after training. Method: A quasi-experimental design, conducted at Maccabi Healthcare Services, in which nurses underwent a four-hour educational session, including practising with a device that measures sub-bandage pressure. Results: We assessed 37 nurses. Before training, 5.4% of nurses bandaged in the optimal range; after training, 58% bandaged in optimal range, and six months post-training, 37% bandaged in optimal range. At post- and six months post-training, no nurse bandaged 'too low' (≤20mmHg). Stiffness of the bandage was achieved in only 5.4% of nurses before training; 62% immediately after, and 75% six months...
after training. Conclusion: We conclude that the proposed educational session using a device that measures the pressure applied is an effective way to teach wound care nurses how to use compression bandages. However, more practice is needed to achieve an optimal range of pressure over time. Declaration of interest: The authors have no conflict of interest to declare.

**Database:** CINAHL

---

**Linking challenges in wound healing: key highlights from the Hartmann congress.**

**Author(s):** De Coster, Annabel  
**Source:** Journal of Wound Care; Nov 2017; vol. 26 (no. 11); p. 696-697  
**Publication Date:** Nov 2017  
**Publication Type(s):** Academic Journal  
**Available at:** Journal of Wound Care - from MAG Online Library  
**Abstract:** The article discusses the highlights of the Hartmann LINK for Wound Healing Congress held in Belfast, Northern Ireland on September 19, 2017 with topics discussed including hydro-responsive wound dressings, diabetic foot ulcers, and negative pressure wound therapy.  
**Database:** CINAHL

---

**Pressure ulcer prevention with a new mattress.**

**Author(s):** Payne, Drew  
**Source:** Nursing & Residential Care; Nov 2017; vol. 19 (no. 11); p. 613-615  
**Publication Date:** Nov 2017  
**Publication Type(s):** Academic Journal  
**Available at:** Nursing and Residential Care - from MAG Online Library  
**Database:** CINAHL

---

**Are we overcomplicating pressure ulcer risk assessment?...Joanna Swan**

**Author(s):**  
**Source:** Wounds UK; Nov 2017; vol. 13 (no. 4); p. 14-17  
**Publication Date:** Nov 2017  
**Publication Type(s):** Academic Journal  
**Available at:** Wounds UK - from EBSCO (CINAHL with Full Text)  
**Abstract:** The article presents the views of Alison Schofield, Edda Johansen and Joanna Swan on the use of risk assessment strategy in preventing pressure ulcer. Topics discussed include analysis of sensitivity, specificity and reliability associated with risk assessment tool; evaluation of the process of care used in risk assessment for the prevention of pressure ulcer; and planning of appropriate care.  
**Database:** CINAHL
The 3-risk approach to pressure ulcer assessment in Norway -- safe or a risky business?

Author(s): JOHANSEN, EDDA
Source: Wounds UK; Nov 2017; vol. 13 (no. 4); p. 50-52
Publication Date: Nov 2017
Publication Type(s): Academic Journal
Available at Wounds UK - from EBSCO (CINAHL with Full Text)

Abstract: Successful prevention of Pressure Ulcers (PU) requires that at-risk patients are identified and provided with a package of measures. In Norway, the use of numerical risk assessment tools like Braden, Norton and Waterlow has never been widespread. Instead, a non-numerical approach based on immobility and clinical judgment is recommended by the National Patient Safety Programme to identify those at risk. This article describes the 3-risk approach to risk assessment, its development and whether an even simpler approach could be safe.

Database: CINAHL

Reducing hospital-acquired pressure ulcers: the business case for purchasing new technology.

Author(s): LOI, SONYA
Source: Wounds UK; Nov 2017; vol. 13 (no. 4); p. 70-73
Publication Date: Nov 2017
Publication Type(s): Academic Journal
Available at Wounds UK - from EBSCO (CINAHL with Full Text)

Abstract: There is considerable variation in the way pressure ulcer prevention and management are handled within individual organisations. In an effort to improve efficiency and make cost savings, an NHS Trust identified processes that could be simplified, reviewed its equipment contracts and assessed new technology to reduce hospital-acquired pressure ulcers. The decision was made to downgrade existing contracts to cover decontamination and maintain old equipment and to purchase hybrid mattresses, which it was estimated would prevent 17-39% of hospital-acquired pressure ulcers, returning cost efficiencies of £740,100-£1,694,29. Taking into account the cost of the downgraded contract, this could realise a cost saving of £1,400,731.50 over 7 years and enable the Trust to achieve its pressure ulcer reduction targets.

Database: CINAHL

Using TLC-NOSF advanced wound dressing to improve outcomes for patients with leg and diabetic foot ulcers.

Author(s): DOWSETT, CAROLINE
Source: Wounds UK; Nov 2017; vol. 13 (no. 4); p. 113-117
Publication Date: Nov 2017
Publication Type(s): Academic Journal
Available at Wounds UK - from EBSCO (CINAHL with Full Text)

Abstract: Healthcare providers are under pressure to balance cost of care with the delivery of high-quality patient outcomes. Breaking the cycle of hard-to-heal wounds requires a proactive approach that includes recognising and understanding the extent of the problem, and early intervention using advanced wound technologies that improve healing rates, reduce clinical time, avoid hospital admission and improve patient satisfaction. There is evidence that some advanced wound dressings are effective in improving healing rates when used as part of a holistic approach to leg and diabetic foot ulcer management, contributing to improved patient outcomes and more effective use of resources. This article reviews the use of technology lipido-colloid nano-oligosaccharide factor (TLC-NOSF) and the evidence for its use.

Database: CINAHL

Support pressure distribution for positioning in neutral versus conventional positioning in the prevention of decubitus ulcers: a pilot study in healthy participants.

Author(s): Pickenbrook, Heidrun; Ludwig, Vera U.; Zapf, Antonia

Source: BMC Nursing; Oct 2017; vol. 16 ; p. 1-7

Publication Date: Oct 2017

Publication Type(s): Academic Journal

Available at BMC Nursing - from BioMed Central

Available at BMC Nursing - from Europe PubMed Central - Open Access

Abstract: Background: Decubitus ulcers are associated with a burden for the patients and cause enormous costs. One of the reasons for the development of decubitus is prolonged exposure to pressure. The aim of this pilot study was to examine the pressure distribution of healthy individuals either positioned in Positioning in Neutral (LiN) or conventional positioning (CON). Methods: Four healthy participants were positioned in a supine, 30° degree side lying and 90° side lying position both in LiN and CON. A thousand pressure sensors in a mattress enabled a visual presentation of low, medium and high pressure on a screen. This presentation was processed by Photoshop in order to count the pixels representing the total support pressure surface and the pressure intensity. Results: LiN showed, on average, a smaller surface with measurable pressure compared to CON (46,293 versus 64,090 pixels). The areas of medium pressure were comparable. Mean areas of low and high pressure were both smaller in LiN as compared to CON (low: 8315 versus 22,790 pixels; high: 3744 versus 7277 pixels). Conclusion: The results of this pilot study indicate that LiN is suitable for pressure sore prophylaxis because LiN showed less support surface and less maximum pressure as compared to CON.

Database: CINAHL
**Compression therapy in the community.**

Author(s): Mosti, Giovanni

Source: Journal of Community Nursing; Oct 2017; vol. 31 (no. 5); p. 36-41

Publication Date: Oct 2017

Publication Type(s): Academic Journal

Available at Journal of District Nursing (Formerly: Journal of Community Nursing) - from ProQuest (Hospital Premium Collection) - NHS Version

Abstract: This article examines current guidelines and best practice statements for the treatment and management of chronic venous leg ulcers (VLUs). There is a need for continuous professional development (CPD) for community staff, who are constantly under pressure to maintain evidence-based practice when dealing with the complex, clinical and challenging environment associated with chronic venous leg ulcers. This article highlights the importance of patient assessment, management and treatment options, including the gold standard of compression therapy and new options available.

Database: CINAHL

---

**Pressure ulcers... This reflective account is based on NS824 Barry M, Nugent L (2015) Pressure ulcer prevention in frail older people.**

Nursing Standard. 30, 16-18, 50-58.

Author(s): Madlakama, Pamela

Source: Nursing Standard; Sep 2017; vol. 32 (no. 5); p. 64-65

Publication Date: Sep 2017

Publication Type(s): Academic Journal

Available at Nursing standard (Royal College of Nursing (Great Britain) : 1987) - from EBSCO (CINAHL with Full Text)

Available at Nursing standard (Royal College of Nursing (Great Britain) : 1987) - from ProQuest (Medical Database) - New Platform

Available at Nursing standard (Royal College of Nursing (Great Britain) : 1987) - from ProQuest (Hospital Premium Collection) - NHS Version
Abstract: An interview with Pamela Madlakama, a staff nurse at Connect House Care Home in Nottingham, England, is presented. Madlakama discusses the incidence and severity of preventable pressure ulcers in older people. She also talks about how she changed and improved her nursing practice at the nursing home and the importance of effective teamwork in determining the risk of pressure ulcers.

Database: CINAHL

**Apex Pro-care mattress: How can this advanced mattress assist in prevention of pressure injuries?**

**Author(s):** Shingfield, Lynn; Carr, Helen; Thomson, Jo  
**Source:** British Journal of Community Nursing; Sep 2017; vol. 22  
**Publication Date:** Sep 2017  
**Publication Type(s):** Academic Journal  
Available at British Journal of Community Nursing - from EBSCO (CINAHL with Full Text)  
Available at British Journal of Community Nursing - from MAG Online Library  
**Abstract:** Avalon Nursing Home is fully aware of the potential for pressure ulcers in immobile residents and were keen to undertake an evaluation to ensure their residents have the most appropriate care possible. They selected Apex Pro-care to evaluate as there were concerns for residents heels in those with any arterial insufficiency. The Apex Pro-care mattress has a heel section where one or more of the bottom five cells can be deflated under the patient’s heel to create a void, which will enable the heel to "float" so that there is no pressure in contact with the heel area. The mattress would reduce the cost of nursing care as repositioning times can be optimised according to need. The three residents who agreed to evaluate the mattress found it to be extremely comfortable and they remained free of any pressure injury.  
**Database:** CINAHL

**How Greek nurses perceive and overcome the barriers in implementing treatment for pressure ulcers: 'against the odds'.**

**Author(s):** Kaba, E.; Kelesi, M.; Stavropoulou, A.; Moustakas, D.; Fasoi, G.  
**Source:** Journal of Wound Care; Sep 2017; vol. 26  
**Publication Date:** Sep 2017  
**Publication Type(s):** Academic Journal  
Available at Journal of Wound Care - from MAG Online Library  
**Abstract:** Objective: Although the occurrence of pressure ulcers (PUs) is now considered as an indicator of poor quality nursing care, questions and concerns remain regarding situations where PUs were unavoidable, irrespective of the care provided. The aim of this study was to explore Greek nurses’ perceptions about the barriers involved and to identify the factors that influence care planning in PU treatment. Method: A grounded theory approach was used and semi-structured interviews were conducted with nurses who provided pressure care to clients in a rehabilitation centre in Greece. Data were analysed using the constant comparative
method. Results: We interviewed seven nurses. Findings revealed one main category entitled 'anarchy' in delivery of care consisted of the following three subcategories: interdisciplinary conflicts; total trust in traditional knowledge; and devaluation of other's work/role and a core category 'Against the odds': the perceived value of prevention and treatment can overcome the barriers in treating PUs. Conclusion: This study gives an overview of the views and beliefs of nurses about the problems and barriers involved in PU prevention and treatment. The study reveals that although some barriers to good practice may exist, nurses can hold a positive attitude toward PU prevention and treatment, and their perceived value of prevention and treatment may help nurses to overcome the barriers in managing PUs. Declaration of interest: The authors have no conflict of interest to declare.

**Database:** CINAHL

---

**Pressure points: learning from Serious Case Reviews of failures of care and pressure ulcer problems in care homes.**

**Author(s):** Manthorpe, Jill; Martineau, Stephen

**Source:** Journal of Adult Protection; Sep 2017; vol. 19 (no. 5); p. 284-296

**Publication Date:** Sep 2017

**Publication Type(s):** Academic Journal

**Available at** The Journal of Adult Protection - from ProQuest (Hospital Premium Collection) - NHS Version

**Abstract:** Purpose Serious Case Reviews (SCRs, now Safeguarding Adults Reviews (SARs)) may be held at local level in England when a vulnerable adult dies or is harmed, and abuse or neglect is suspected, and there is cause for concern about multi-agency safeguarding practice. There has been no analysis of SCRs focussing on pressure ulcers. The purpose of this paper is to present findings from a documentary analysis of SCRs/SARs to investigate what recommendations are made about pressure ulcer prevention and treatment in a care home setting in the context of safeguarding. This analysis is presented in cognisance of the prevalence and risks of pressure ulcers among care home residents; and debates about the interface of care quality and safeguarding systems. Design/methodology/approach Identification of SCRs and SARs from England where the person who died or who was harmed had a pressure ulcer or its synonym. Narrative and textual analysis of documents summarising the reports was used to explore the Reviews’ observations and recommendations. The main themes were identified. Findings The authors located 18 relevant SCRs and 1 SAR covering pressure ulcer care in a care home setting. Most of these inquiries into practice, service communications and the events leading up to the death or harm of care home residents with pressure ulcers observed that there were failings in the care home, but also in the wider health and care systems. Overall, the reports reveal specific failings in multi-agency communication and in quality of care. Pressure ulcers featured in several SCRs, but it is problems and inadequacies with care and treatment that moved them to the safeguarding arena. The value of examining pressure ulcers as a key line of inquiry is that they are "visible" in the system, with consensus about what they are, how to measure them and what constitutes optimal care and treatment. In the new Care Act 2014 context they may continue to feature in safeguarding enquiries and investigations as they may be possible symptoms of system failures. Research limitations/implications Reviews vary in content, structure and accessibility making it hard to compare their approach, findings and recommendations. There are risks in drawing too many conclusions from the corpus of
Reviews since these are not published in full and contexts have subsequently changed. However, this is the first analysis of these documents to take pressure ulcers as the focus and it offers valuable insights into care home practices amid other systems and professional activity.

Practical implications
This analysis highlights that it is not inevitably poor quality care in a care home that gives rise to pressure ulcers among residents. Several SCRs note problems in wider communications with healthcare providers and their engagement. Nonetheless, poor care quality and negligence were reported in some cases. Various policies have commented on the potential overlap between the raising of concerns about poor quality care and about safeguarding. These were highlighted prior to the Care Act 2014 although current policy views problems with pressure ulcers more as care quality and clinical concerns.

Social implications
The value of this documentary analysis is that it rests on real case examples and scrutiny at local level. Future research could consider the findings of SARs, similar documents from the rest of the UK, and international perspectives.

Originality/value
The value of having a set of documents about adult safeguarding is that they lend themselves to analysis and comparison. This first analysis to focus on pressure ulcers addresses wider considerations related to safeguarding policy and practice.

Database: CINAHL

**SEM Scanner™ Detects Bedsores Sooner than Skin Evaluation.**

**Author(s):**

**Source:** Journal of Gerontological Nursing; Sep 2017; vol. 43 (no. 9); p. 5-5

**Publication Date:** Sep 2017

**Publication Type(s):** Academic Journal

Available at Journal of Gerontological Nursing - from ProQuest (Medical Database) - New Platform

Available at Journal of Gerontological Nursing - from ProQuest (Hospital Premium Collection) - NHS Version

**Abstract:** The article evaluates SEM Scanner, a wireless handheld scanner to detect bedsores from Bruin Biometrics.

**Database:** CINAHL

**Diabetes and pressure ulcer risk in hip fracture patients: a meta-analysis.**

**Author(s):** Wei, R.

**Source:** Journal of Wound Care; Sep 2017; vol. 26 (no. 9); p. 519-524

**Publication Date:** Sep 2017

**Publication Type(s):** Academic Journal

Available at Journal of Wound Care - from MAG Online Library

**Abstract:** Objective: The aim of this study was to assess the relationship between diabetes and pressure ulcer (PU) risk in patients with hip fractures. Method: Searches of MEDLINE (1966-), ISI Databases (1965-) and Scopus (1996-) were performed for English language studies. The search data was 29 July 2016. Odds ratio (OR) for PUs were calculated for hip
fracture patients with or without diabetes and a meta-analysis was carried out following meta-analysis of observational studies in epidemiology (MOOSE) guidelines. Results: A total of 8 studies with 22,180 patients were included in this study. The mean PU incidence was 15.1% in group with diabetes compared with 7.5% in the group without diabetes. When comparing with and without diabetes meta-analysis showed the summary OR was 1.825 [95% confidence interval (CI): 1.373-2.425; z=4.15, p<0.00001]. No significant publication bias was found. Sensitivity analysis included prospective studies [OR: 1.383, 95%CI: 1.035-1.847] and pooled the adjusted OR [OR: 1.282, 95%CI: 1.054-1.560] showed the result was robust. Subgroup analysis by PU stage showed the summary OR was 1.474 [95% CI 0.984-2.207] for ≥ category II PU, and 2.814 [95%CI: 2.115-3.742] for ≥ category I PU. The meta-regression showed PU incidence explained 27.77% proportion of between-study variance, but statistical test showed no significance (t=-1.96, p=0.097). Conclusion: Our meta-analysis indicates that diabetes increases the PU risk in hip fracture patients. Therefore, specific recommendations should apply for the management of diabetic patients with hip fractures at risk of PU.

**Database:** CINAHL