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# Scientific Tracks & Sessions

## May 20, 2022

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### *Wound Care Congress 2022*



6<sup>th</sup> INTERNATIONAL CONFERENCE ON  
**WOUND CARE, NURSING AND TISSUE SCIENCE**  
May 20, 2022 | Webinar

## Wound Care and Advances Therapy | Wound Healing Care and Dressing | Acute and Impaired Healing Therapy | Chronic Wound Care and Research | Skin Grafting



Chair

**Kathleen Leak**

Genadyne Biotechnologies, INC | United Kingdom

### Session Introduction

Title: **The challenges of the multidisciplinary team in preventing surgical wound complications**

**Viviana Goncalves** | Hospital Sao Joao | Portugal

Title: **Improving timely referrals by implementing lower extremity amputation prevention tool in an suburban wound care clinic**

**Azam Tayyebi** | Frontier Nursing University | United States

Title: **Reducing number of cast-related pressure injury cases for post-orthopedic surgical patients**

**Leonard Brian dela Cruz Alfonso** | Amana Healthcare | United Arab Emirates

Title: **Mangement of a difficult -to -treat diabetic foot wound complicated by osteomyelitis: A case study**

**Maram ALKhatieb** | King Abdulaziz University | Saudi Arabia

### Session Introduction

## Wound Care Nursing | Surgical Wound Care | Nursing Management of Wound Carepain | Wound Healing and Tissue Repair | Wound, Ostomy and Continenence Nursing

Title: **Evaluation of quality of life after temporary ileostomy for ileal perforation**

**Ashesh Kumar Jha** | All India Institute of Medical Sciences | India

Title: **Effect of incentive spirometry on post-operative recovery**

**Kusum K Rohilla** | All India Institute of Medical Sciences | India

Title: **Antimicrobial stewardship in wound care**

**Dianne Rudolph** | San Antonio Wound Care | United States

Title: **Achieving closure of the high output enterocutaneous fistula with the use of an extracellular matrix in patients with multiple comorbidities**

**Ann Marie Lanza-Bisciello** | Frontier Nursing University | United States

Title: **An integrative literature review to identify if the use of negative pressure wound therapy on closed/incision surgical wounds decreases the risk of surgical site infection in high-risk patients**

**Van Der Merwe** | Cardiff university | United Kingdom

# 6<sup>th</sup> International Conference on Wound Care, Nursing and Tissue Science

May 20, 2022 | Webinar

Received date: March 10, 2022 | Accepted date: March 11, 2022 | Published date: May 30, 2022

## The challenges of the multidisciplinary team in preventing surgical wound complications

**Viviana Goncalves**

Hospital Sao Joao, Portugal

Every year, a significant number of patients develop surgical wound complications worldwide, with economic, social and health care implications. With the increase in average life expectancy, comorbidities increase, and the complexity and number of surgeries performed accompany this growth, with an increased risk of developing complications of the surgical wound and therefore prevention becomes an increasing challenge. The early identification of risk factors is essential for an effective management in the prevention of surgical wound complications, and the process is continuous and new risk factors can be identified at all stages of the patient's healing process. This identification depends on the networking of the multidisciplinary team that, from the moment of admission to the total discharge of treatments on an outpatient basis, signals patients with risk factors, helping the decision of the next intervention that is taken as a team.

The interaction of the elements of the multidisciplinary team in health care is fundamental, increasing their quality, which in this way promotes the quality of life of the patient who is subject to the same care. Being a transversal problem in the surgical area, one of the biggest challenges of the multidisciplinary teams is the surgical wound, and in cardiothoracic surgery there are several types of wounds that come from different approaches and interventions and their complications can become a major problem of difficult resolution, with a very large social and economic impact. The major complications of the surgical wounds are infection and dehiscence, increasing on average the hospitalization days by 10 days with a direct economic cost of 19 billion euros per year, to European health systems. In addition, the indirect costs associated with incapacity for work, increased morbidity, and mortality, with loss of family members, leisure time, are impossible to calculate. Prevention programs can be an asset to the quality of health care, promoting the patient's quality of life, reducing the economic and social impact, with the shortening of hospitalization days and the

number of treatments. All team members must be involved to be able to identify warning signs and symptoms.

In Cardiothoracic Surgery at Centro Hospitalar e Universitário de Sao Joao, this work is being carried out, involving the entire perioperative period and professionals from the different teams, who signal patients and their risk factors, so that management plan can be outlined, as soon as possible. A great effort was made by the entire team, with the acquisition of new material, with the training of professionals and with the increase of the interaction of the multidisciplinary team in this area, with mutual sharing of knowledge. This effort has had positive results, with great potential for multidisciplinary sharing and preventive intervention to provide the patient with the best quality of life.

### Recent Publications

1. Goncalves V, Lopez E. Nightmares in saphenous harvest veins in cardiac surgery. *Cirur Cardio-Torácica E Vascul*, 2019, 26(4): 296
2. Ramos P, Gonçalves V, Moura A, Vaz A, Ferreira A, Malcato E, Sousa F, Afonso G, Homem-Silva P, Dias V, Alves P Pupro. Prevention of Pressure Ulcers in the PROno Position and in Patients with ECMO and other medical devices in the context of Intensive Care. (Intensive Care – Critically Ill). Portuguese Wound Care Association, 2020
3. Alves P, Moura A, Vaz A, Afonso G, Ramos P, Goncalves V, Pinto M. Pele. The "Temple" that identify and protect us. Portuguese association for wound care, 2021.

### Biography

Viviana Goncalves completed surgical instrumentation and anaesthesia graduate programme. She is a member of the European Wound Management Association (EWMA). Viviana is currently employed at the University Hospital Centre of Sao Joao, Portugal, where she oversees the Cardiothoracic Surgery Surgical Wound Dehiscence Prevention Project, which includes all patients, neonates, paediatrics, and adults.

E: [enf.vivianagoncalves@gmail.com](mailto:enf.vivianagoncalves@gmail.com)

6<sup>th</sup> International Conference on  
Wound Care, Nursing and Tissue Science

May 20, 2022 | Webinar

Received date: March 25, 2022 | Accepted date: March 27, 2022 | Published date: May 30, 2022

## Improving timely referrals by implementing lower extremity amputation prevention tool in an suburban wound care clinic

**Azam Tayyebi**

Frontier Nursing University, United States

**Background:** Globally, every 30 seconds there is an amputation due to a non-healing diabetic foot ulcer (DFU) (Jabrink et al., 2017). Research shows prevention programs such as utilizing a lower extremity amputation prevention (LEAP) tool could reduce DFU complications.

**Local Problem:** Impact DuPage (2013) reported that 8.1% of the DuPage population had diabetes, however 12% of the patients with diabetes have had no diabetic foot screening. At a clinic located in DuPage County, the charts audit for the second half of 2017 indicated 55% compliance with documentation of diabetic foot exams.

**Method:** This quality improvement (QI) used four two-weeks plan-do-study-act cycles. Each cycle included tests of change (TOC) related to patient and team engagement, DFU screening, and referral for treatment. Data were analyzed using run charts and the impact of the interventions were measured.

**Intervention:** Staff was engaged by a kickoff in-service, daily huddles, and weekly team meetings. A modified "Team Effectiveness Diagnostic" survey measured team engagement. Foot Care for a Lifetime was used as shared decision-making tool. Clinicians assessed patients with diabetes with the LEAP checklist and utilized referral log to track appropriate referrals.

**Results:** At the end, patient and team engagement improved to 75% and 92% respectively; also all patients with DFUs were assessed by the LEAP tool (100%) and appropriate referrals (100%) were made.

**Conclusion:** Team engagement was essential in the success of this QI. Patient engagement in the care of their DFU was empowering to patients. The team became better engaged with patients and patients reported more involvement in their own care.

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1. Alavi, A. et al. Diabetic foot ulcers: Part I: Pathophysiology and Prevention. *Journal of the American Academy of Dermatology*. 2014, 70(1)
2. Sloan FA et al. Receipt of care and reduction of lower extremity amputations in a nationally representative sample of U.S. Elderly. *Health Services Research*. 2010, 45:1740-1762.
3. Siersma V. Health-related quality of life predicts major amputation and death, but not healing, in people with diabetes presenting with foot ulcers: the Eurodiale study. *Diabetes Care*. 2014, 37(3): 694-700

### Biography

Azam Tayyebi is a wound and ostomy care specialist. As a hospice nurse at Vitas Healthcare from 2009 to 2012, performed many traditional nursing duties such as observing, assessing, and recording symptoms, and still worked closely with physicians, administered medications, and provided emotional support. Azam Tayyebi worked as a Telemetry nurse at St. Margaret's Health, where she cared for patients who needed extra monitoring, such as those who had recently been released from the intensive care unit. She is currently employed at Elmhurst Memorial Healthcare.

E: [azamtayyebi@gmail.com](mailto:azamtayyebi@gmail.com)

6<sup>th</sup> International Conference on  
**Wound Care, Nursing and Tissue Science**

May 20, 2022 | Webinar

Received date: February 27, 2022 | Accepted date: February 29, 2022 | Published date: May 30, 2022

## **Reducing number of cast-related pressure injury cases for post-orthopedic surgical patients**

**Leonard Brian dela Cruz Alfonso**

Amana Healthcare, United Arab Emirates

**D**evice related pressure injuries are increasing nowadays and becoming the dilemma of patient with cast especially in pediatrics population. Why there is a need to act on this and do the best possible option to prevent or ameliorate exposure of the skin to ulcer development as increases patient's length of stay and nursing time, discomfort from pain, in some cases this interferes with therapies/rehab goal, and mainly pressure injury incidence the affects the quality of life of the patient. Development of cast-related Pressure Injury is preventable; it is not a single factor but there are multi contributing factor that leads to its occurrence. Additional paddings on high-risk such as heel and malleoli will help to give more cushion avoiding direct pressure. Education plays a big role in prevention. Increasing patient and family awareness about skin care while on cast have a big impact if prevention of cast-related pressure injuries.

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tion and Wound Management. Fragility Fracture Nursing: Holistic Care and Management of the Orthogeriatric Patient, 2018

2. Barbara M Bates-Jensen, Heather E McCreath, Gojiro Nakagami, Anabel Patlan. Subepidermal moisture detection of heel pressure injury: The pressure ulcer detection study outcomes. International Wound Journal, 2018, 15(2): 297-309
3. Fazila Aloweni, Shin Yuh Ang, Stephanie Fook-Chong. A prediction tool for hospital-acquired pressure ulcers among surgical patients: Surgical pressure ulcer risk score. International Wound Journal, 2018, 16(2): 164-175

### **Biography**

Leonard Brian dela Cruz Alfonso completed the International Interprofessional Wound Care Course (IIWCC) year 2020 in Abu Dhabi UAE. He worked as Wound Care Specialist and Educator in Saudi Arabia (Sultan Bin Abdulaziz Humanitarian City) for 4 years. Current member of IIWCG and working now as Tissue Viability Nurse in Dubai UAE (Amana Healthcare).

E: [brhayhan24@gmail.com](mailto:brhayhan24@gmail.com)

6<sup>th</sup> International Conference on  
**Wound Care, Nursing and Tissue Science**

May 20, 2022 | Webinar

Received date: January 20, 2022 | Accepted date: January 21, 2022 | Published date: May 30, 2022

**Mangement of a difficult -to -treat diabetic foot wound complicatted by osteomyelitis: A case study**

**Maram ALKhatieb, Hatan Mortada and Hattan Aljaaly**  
King Abdulaziz University, Saudi Arabia

**D**iabetic ulcers are a major health issue worldwide, causing significant economic burdens and affecting both the patient and the society as a whole. Predisposing factors in diabetic patients known as the pathogenic triad, comprise trauma, ischemia and neuropathy. Regardless of the cause, correct diagnosis and prompt treatment are essential in the management of leg ulcers.

We report a case of a 51 year-old male patient, with a known history of type 2 diabetes who presented to our hospital with a history of two ulcers one that he was mainly complaining of, which was actively infected and located at the posterior part of the distal left leg, and the second, dry ulcer caused by unrecognized trauma, located on the heel of the same limb. Magnetic resonance imaging showed osteomyelitis and degenerative changes in the calcaneonavicular and tarsal joints. The patient underwent multiple sessions of excisional debridement. He was started on negative pressure wound therapy with some improvements. However, after skin graft failure, nanoflex powder was used, leading to complete wound closure within one month of treatment. A multidisciplinary holistic approach must be used when treating diabetic foot ulcers. Different modalities and sessions of debridement should be performed after optimizing the general condition of the patient.

**Recent Publications**

1. Dareen A AlMehman, Abrar S Faden, Badr M Aldahlawi, Mohammed S Bafail, Maram T Alkhatieb, Abdullah M Kaki. Post-amputation pain among lower limb amputees in a tertiary care hospital in Jeddah, Saudi Arabia: A retrospective study. Saudi Med J, 2022, 43(2):187-196
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**Biography**

Maram Taha Alkhatieb is a Assistant Professor in General Surgery department at King Abdulaziz University, Saudi board certified on 2014-2015. He completed his Diabetic foot fellowship in Complutense university, Spain. Currently working as a Home Health Care Director at King Abdulaziz University Hospital beside his academic and clinical work.

E: [maramalkhatieb@gmail.com](mailto:maramalkhatieb@gmail.com)

6<sup>th</sup> International Conference on  
Wound Care, Nursing and Tissue Science

May 20, 2022 | Webinar

Received date: January 13, 2022 | Accepted date: January 19, 2022 | Published date: May 30 2022

## Evaluation of quality of life after temporary ileostomy for ileal perforation

**Ashesh Kumar Jha**

All India Institute of Medical Sciences, India

**Background:** Ileal perforation is the second commonest cause of peritonitis in India. In our set up poor nutritional status, delayed presentation and extensive contamination of the peritoneal cavity preclude the choice of repairing this perforation primarily. Hence surgical intervention in such cases typically leads to creation of a temporary ileostomy. Although temporary ileostomy is performed as life-saving procedure but it can considerably impact the overall quality of life.

**Methodology:** This cross-sectional study was carried out in a tertiary care teaching hospital of India. The adequate sample size required for this study was 379 patients, however, up till now we could include 105 patients. Stoma QOL and SF-36 questionnaires were used to assess the stoma related quality of life and overall quality of life in these patients. All data was collected by a single observer after interviewing the patients in the follow-up clinic.

**Results:** Most of these patients were bothered about the skin excoriation in the follow-up clinic. Some of them were also concerned about their physical appearance. Mean stoma quality of life score was 51 and mean overall quality of life score was 47. The mean scores in males were more than females in most of the parameters.

**Discussion:** After surgery, patients with stoma experience more stress and a variety of physical problems causing worry and shame. The stoma is usually red, swollen and large im-

mediately after surgery, which is unpleasant for the patients to look at for the first time. This emotional stress, along with physical problems, pain and isolation from others reduce the quality of life in ostomy patients.

Based on our results, it appears that temporary ileostomy does affect the quality of life. This problem is further aggravated by the unavailability of dedicated stoma therapist in a most of our healthcare facilities.

### Recent Publications

1. Jha A, Sharma SK, Tandon N, Lakshmy R, Kadiravan T, Handa KK, Gupta R, Pandey RM, Chaturvedi PK. Thyroxine replacement therapy reverses sleep-disordered breathing in patients with primary hypothyroidism. *Sleep Med*, 2006, 7(1):55-61
2. Vijayvergiya R, Jha A, Pandian RP, Sharma R, Grover A. Isolated left ventricular noncompaction in association with rheumatic mitral stenosis. *Int J Cardiol*, 2008, 123(3): e54-6.
3. Raman Sharma, Mahendra Kumar, Kusum K Rohilla. COVID-19 Infodemic: Evaluating Information-Seeking Behaviour Among Healthcare Workers During a Pandemic. *Cureus*, 2022, 14(1): e20910.

### Biography

Ashesh Kumar Jha had completed his masters in general surgery from the University College of Medical Sciences affiliated to prestigious Delhi University. He has over 30 publications and 43 citations.

E: [asheshjha@yahoo.com](mailto:asheshjha@yahoo.com)

6<sup>th</sup> International Conference on  
**Wound Care, Nursing and Tissue Science**

May 20, 2022 | Webinar

Received date: December 02, 2021 | Accepted date: December 03, 2021 | Published date: May 30, 2022

## Effect of incentive spirometry on post-operative recovery

**Kusum K Rohilla**

All India Institute of Medical Sciences, India

Post-operative care is management of patients after any surgery. The main goal of post-operative care is to prevent complications i.e. atelectasis and infection. The other objective is early healing of the surgical incision and return of patient to a state of health. About 17% to 88% of people in postoperative duration will have decreased lung volumes. This decreased lung volume problem can be solved with the use of incentive spirometry in the postoperative period on Day 1. Incentive spirometer is perioperative respiratory therapy given to postoperative patients to improve lung volume of patients and hasten recovery of patients also. The main aim of study was to identify effect of Incentive spirometry on postoperative patient's recovery. It was a pre-experimental study with pre-test-posttest design only, which was done on post-operative patients at All India Institute of Medical Sciences, Rishikesh. Data collection tools consist of two parts. Part I consists of socio-demographic variable including age, gender, and diagnosis. Part II consist of observation checklist in which patients were observed when they were doing incentive spirometry (Take 15 breaths with spirometer in every 2 hours) on Day 1, 2 and 3 and check their performance level i.e. score=0, not able to perform, score=1 means inadequate, score=2 means moderately adequate and score=3 meaning adequate performance. Data analysis was done using descriptive statistics and inferential statistics. For socio-demographic data frequency and percentage were calculated. Chi square test was used to find relationship of socio-demographic variables with pre-test and post-test results. t test was applied to identify difference between pre-test and post test results. Majority (52 %) of participants were 41 to 50 years age group. The male and female ratio for participants was 46:54. paired 't' test p value i.e. 0.00\* with CI [0.72,

1.03] showed that on pretest and Day 3 performance level on incentive spirometry of participants showed a significant value, which indicated that spirometer enhanced recovery of post-operative patients by increasing their lung volumes. This study revealed that incentive spirometry is effective in improving pulmonary function among post-operative patients, which further improves blood circulation and hasten early recovery of surgical wound. This spirometry should be an integral part of post-operative care. All nurses who are involved in postoperative units should encourage patients to do it on a regular basis and document it as a vital sign.

### Recent Publications

1. S Seema, Kusum K Rohilla, Vasantha C Kalyani, Prerna Babbar. Prevalence and contributing factors for adolescent obesity in present era: Cross-sectional Study. J Family Med Prim Care, 2021, 10(5): 1890–1894.
2. Rakesh Sharma, Kusum K Rohilla, Lisa Chadha, Priyanka Malhotra, S Sharmila, Prasuna Jelly. Strategy to prevent infection from Covid-19 among security officers of tertiary care centre: A pre-experimental study J Family Med Prim Care, 2021, 10(9): 3257-3261.
3. Raman Sharma, Mahendra Kumar, Kusum K Rohilla. COVID-19 Infodemic: Evaluating Information-Seeking Behaviour Among Healthcare Workers During a Pandemic. Cureus, 2022, 14(1): e20910.

### Biography

Kusum K Rohilla is perusing her PhD from All India Institute of Medical Sciences, Rishikesh, India. She has over 25 publications that have been cited over 50 times, and her publication H-index is 5 and has been serving as a reviewer of reputed journals.

E: kus2211@gmail.com



# 6<sup>th</sup> International Conference on Wound Care, Nursing and Tissue Science

May 20, 2022 | Webinar

Received date: March 04, 2022 | Accepted date: March 05, 2022 | Published date: May 30, 2022

## Antimicrobial stewardship in wound care

**Dianne Rudolph**

ISan Antonio Wound Care, United States

Antimicrobial resistance is a significant global problem and has resulted in over 35 thousand deaths annually with a projection of 100 million by the year 2050 at a cost of over 100 trillion dollars. It is estimated that over 40% of antibiotics are misprescribed. These statistics, coupled with the fact that no new classes of antibiotics have been developed since the 1980's have significant implications for practitioners managing patients with wound infections. These clinical and economic burdens can be detrimental to many patients in need of care and can pose a tremendous burden on health care providers.

**Materials/Methods:** This presentation will provide an overview of best practices in antimicrobial stewardship with the following objectives:

1. Discuss the concepts of biofilm and wound infection
2. Identify concerns related to emerging antibiotic resistance
3. Describe the use of antimicrobial stewardship as it applies to wound care.
4. Explore at least three strategies for appropriate use of antimicrobials and antibiotics in wound care

This program will discuss current state of the art based on literature review and anecdotal experience with case studies included.

**Conclusion:** Antimicrobial stewardship is interprofessional effort to use timely and optimal selection of antibiotics at the correct dose and duration of use. Key principles include:

Avoid prescribing antibiotic when not indicated, Prescribe appropriate treatment regimen (narrow spectrum), and correct duration/dose. A comprehensive approach based on current evidence-based guidelines offers the best outcomes for treating and potentially healing infected wounds.

### Recent Publications

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2. Rudolph, D, Cantu, J. Wound Dressings. In J. Shah, P. Sheffield, & C. Fife (Eds.), CWS wound certification exam review, Flagstaff, AZ, 2nd Edition, 2016
3. Rudolph, D, Heiderich, E Patient education and preparation. In J. Shah, P Sheffield, & C. Fife (Eds.), CWS wound certification exam review, Flagstaff, AZ, 2nd Edition, 2016.

### Biography

Dianne Rudolph is a nurse practitioner with more than 25 years of experience in treating wound care patients. She is board certified in wound care and as a gerontological nurse practitioner. She has practiced in a variety of settings to include acute care, long term/extended care, home health care and clinic settings. She has published and presented on numerous wound care topics and serves as a consultant on medicolegal issues. She has served as adjunct faculty/faculty for the University of Texas Health Science Center School of Nursing in San Antonio Texas and Houston Texas. She currently is working full time as the primary provider for San Antonio Wound Care in San Antonio, TX.

E: [dianne.rudolph@gmail.com](mailto:dianne.rudolph@gmail.com)

# 6<sup>th</sup> International Conference on Wound Care, Nursing and Tissue Science

May 20, 2022 | Webinar

Received date: March 27, 2022 | Accepted date: March 28, 2022 | Published date: May 30, 2022

## Achieving closure of the high output enterocutaneous fistula with the use of an extracellular matrix in patients with multiple comorbidities

**Ann Marie Lanza-Bisciello**

Frontier Nursing University, United States

**Topic:** An enterocutaneous fistula is an abnormal passage that develops between the intestine and the skin. Enterocutaneous fistulas can develop spontaneously but most are iatrogenic and develop postoperatively. They develop more commonly in patients with multiple comorbidities. High output enterocutaneous fistulas are challenging to manage, maintain output and get to closure. The spontaneous closure rate for this type of complex fistula is less than 10%. Patients that develop an enterocutaneous fistula have a higher mortality rate due to sepsis, nutritional abnormalities, and electrolyte imbalance.

**Purpose:** The use of an extracellular matrix to achieve closure of the high output enterocutaneous fistula in patients with multiple comorbidities that failed to close using traditional medical management.

**Process:** The extracellular matrix was applied weekly until closure. The wound bed surrounding the fistula was debrided of any non-viable tissue. The extracellular matrix was applied in two forms powder and a two-layer sheet. A negative pressure wound therapy system was placed on low continuous suction for the first two applications and then a pouching system was used to maintain output. The extracellular matrix facilitates the body's ability to remodel site appropriate tissue to achieve healing.

**Outcomes:** Closure of the high output enterocutaneous fistula occurred after five weekly applications of extracellular matrix.

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3. Hiles, M., Nihsen, E., & Hodde, J. *Biologics in Fistula Surgery: Parallels with Chronic Wounds.* Seminars in Colon and Rectal Surgery, 2009, 20(1): 32–37

### Biography

Ann Marie Lanza Bisciello has 14 years of nursing experience across the health care continuum and is board certified as a wound ostomy and continence registered nurse and an adult geriatric primary care Nurse Practitioner. She is currently the Wound Care Manager at New York Presbyterian Hospital Lower Manhattan Campus. She is the chair of skin care council; she designed and implemented educational programs for wound, ostomy care. Ann Marie has been an active member of the Metro New York Affiliate of the WOCN Society for the past eight years. She has served as President and is now the President elect for the Affiliate.

E: [ambisciello@gmail.com](mailto:ambisciello@gmail.com)

6<sup>th</sup> International Conference on  
**Wound Care, Nursing and Tissue Science**

May 20, 2022 | Webinar

Received date: May 09, 2022 | Accepted date: May 11, 2022 | Published date: May 30, 2022

**An integrative literature review to identify if the use of negative pressure wound therapy on closed/incision surgical wounds decreases the risk of surgical site infection in high-risk patients**

**Zhavandre van der Merwe**

Cardiff university, United Kingdom

Surgical site infection has been documented as a significant problem worldwide, due to the rise of surgical procedures and interventions. Limited resources in low and middle-class income countries, such as South Africa, restrict the ability to report and investigate the prevalence and costs of surgical site infections in the surgical patient population. This evidence-based review aimed to identify evidence supporting the use of closed/incision negative pressure wound therapy in high-risk surgical patients to prevent the occurrence of surgical site infections, focusing on length of hospital stay, cost-effectiveness and occurrence of surgical site infections. A secondary objective was to assess the utilisation of risk assessment tools to identify high-risk patients for closed/incision negative pressure wound therapy. The Evidence-Based Review included an extensive literature search of relevant databases including the Cochrane Library, MEDLINE, CINAHL and Scopus, to identify up to date evidence applicable to the topic. Document types included; randomised controlled trials, cohort studies, economic evaluations, and systematic reviews. Each included study was assessed for level of evidence using the Grading of recommendations, assessment, development and evaluation recommendations to ensure the strength of the evidence. The evidence-based review indicated moderate-certainty evidence in favour of the use of prophylactic closed/incision negative pressure wound therapy in the prevention of surgical site infections. Cost analysis studies indicated that prophylactic closed/incision negative pressure wound therapy showed to be cost-effective in the prevention of surgical site infections in obese women who underwent caesarean sections and orthopaedic surgeries. Furthermore, Low-certainty evidence suggested the use of a risk assessment tool to identify high-risk patients aided in the prevention of surgical site infections by recommending the use of closed/incision Negative Pressure Wound Therapy. The Evidence-Based Review concluded that the use of Negative Pressure Wound Therapy on closed/incision surgical wounds would decrease the risk of surgical

site infections in high-risk patients who underwent caesarean sections. Furthermore, the findings suggested that negative pressure wound therapy on closed/incision surgical wounds of high-risk patients decreased the occurrence of wound complications and showed to be cost-effective in patients who underwent orthopaedic procedures. However, further research is required involving high powered studies to successfully determine the cost-effectiveness of prophylactic closed/incision negative pressure wound therapy.

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3. Nutescu, E.A., et al., Warfarin and its interactions with foods, herbs and other dietary supplements. *Expert Opin Drug Saf*, 2006. 5(3): p. 433-51.

**Biography**

Zhavandre van der merwe is a master's degree graduate in wound healing and tissue repair from the University of Cardiff UK Wales School of Medicine. During her 13 years in nursing and wound care, she has worked in a clinical practice to maintain her abilities whilst continuously investing in her academic growth. She is passionate about education and providing clinical education courses for wound management. Zhavandre is the owner and director of 4Wounds wound care practice that is focused on providing personalized and holistic wound management to each patient. Promoting healing, preventive wound care and improved quality of life. Zhavandre has published one article and co-authored on one article, both published in peer reviewed journals. She is the regional chairperson for the Wound Healing Association of South Africa and serves as chair of the educational committee.

E: [zhavandre@4wounds.co.za](mailto:zhavandre@4wounds.co.za)