# VOL.3 NO.2 2005 CAN \$9.95

THE OFFICIAL PUBLICATION OF THE CANADIAN ASSOCIATION OF WOUND CARE

A REVIEW OF THE PREVENTION OF SURGICAL SITE INFECTIONS

CLINIMETRICS AND WOUND SCIENCE

FOOT CARE FOR PERSONS WITH TYPE 2 DIABETES

Use of Alginates and Foams for Management of Symptoms of Chronic Malignant Wounds



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# EDITOR'S MESSAGE

MOT DE LA RÉDACTRICE

# The Challenge of Ongoing Education



Sue Rosenthal

Even in our pressed-for-time society, good wound-care practitioners are constantly seeking ways to improve their knowledge and skills through ongoing education. Fortunately, woundcare organizations, whether nonprofit or corporate, offer a wide variety of methods that clinicians can employ to improve their practices, even when they can't take time away from their facilities.

Throughout this issue of *Wound Care Canada*, readers will find a number of different avenues they can use to advance their practices, regardless of available time or financial resources. *Wound Care Canada* itself is one such tool and is designed to provide practitioners from many disciplines with articles on a range of topics and on different levels of assumed knowledge. This issue is no exception. In addition to articles covering topics such as bariatric medicine, facial wounds, and the use of honey in wound healing, this issue focuses on several education-specific subjects, such as the use of the Web for selfeducation (see Using the Web for Ongoing Self-education on page 50), the experiences of CAWC scholarship winners in the pursuit of educational initiatives (see Last Word in the First Person, page 56), how to choose the best wound-care conference to suit your needs and get the best educational experience once there (page 36), as well as news about a new certificate program offered by the University of Toronto that will move IIWCC graduates closer to a Master's degree. The article entitled "Foot Care for Persons With Type 2 Diabetes: Can a Teaching Video Improve Compliance?" on page 20 addresses how one type of education, clinician education, can affect another type of education, patient education.

With so many options available, clinicians have many excellent opportunities for furthering their wound-care education.

Sue Rosenthal, Editor

# Le défi de la formation continue

Même dans notre société bousculée par le temps, les bons praticiens du soin des plaies sont constamment à la recherche de moyens d'améliorer leurs connaissances et leurs compétences par le biais de la formation continue. Heureusement, les organisations du soin des plaies, qu'elles soient ou non à but lucratif, offrent une grande variété de méthodes que les cliniciens peuvent utiliser pour améliorer leur pratique, même lorsqu'ils ne peuvent s'absenter de leur lieu de travail.

Dans ce numéro de *Wound Care Canada*, les lecteurs trouveront plusieurs avenues à utiliser pour améliorer leur pratique, sans égard au temps disponible ou aux ressources financières. *Wound Care Canada* est en soi un outil concu pour fournir aux praticiens de plusieurs disciplines des articles sur des sujets variés, adaptés à leurs divers niveaux de connaissance supposés. Ce numéro ne fait pas exception. En plus d'articles portant sur des sujets comme la médecine bariatrique, les plaies faciales et l'utilisation du miel dans le soin des plaies, il présente plusieurs sujets liés à l'éducation, notamment l'utilisation du Web pour l'auto-apprentissage (voir "Using of the Web for Ongoing Self-education" à la page 50) et les initiatives éducatives des récipiendaires des bourses de l'ACSP (voir "Last Word in the First Person, page 56). Ce numéro donne des recommandations sur la façon de choisir une conférence

sur le soin des plaies qui convient

à vos besoins pour en faire une expérience éducative optimale (page 36). On présente un nouveau programme d'accréditation offert par l'Université de Toronto qui permettra aux diplômés de l'IIWCC de se rapprocher d'une maîtrise. L'article intitulé "Foot Care for Persons Living with Type 2 Diabetes : Can a Teaching Video Improve Compliance?" à la page 20 relate comment un type d'éducation, à savoir la formation des cliniciens, peut affecter un autre type d'éducation, la formation des patients.

Avec tant de choix offerts, les cliniciens ont à leur portée de nombreuses occasions de parfaire leur formation en soin des plaies.

La rédactrice, Sue Rosenthal

**BA, MA,** 

Sue Rosenthal,

specializes in health and wellness communications and has been associated with the CAWC since 2000.

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Reference: 1. Bowler PG, Jones SA, Walker M, Parsons D. The spectrum of activity of an antimicrobial Hydrofiber® dressing against potential wound pathogens. Poster presented at: the 16th Annual Symposium on Advanced Wound Care; April 2003; Las Vegas, Nev.



# Features



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The Canadian Association of Wound Care is a non-profit organization of health-care professionals, industry participants, patients and caregivers dedicated to the advancement of wound care in Canada.

The CAWC was formed in 1995, and its official meeting is the CAWC annual conference held in Canada each year. The association's efforts are focused on five key areas: public policy, clinical practice, education, research and connecting with the international wound-care community. The CAWC works to significantly improve patient care, clinical outcomes and the professional satisfaction of wound-care clinicians.

L'Association canadienne du soin des plaies est un organisme sans but lucratif regroupant des professionnels de la santé, des gens de l'industrie, des patients et des membres du personnel soignant fortement intéressés à l'avancement des connaissances pour le soin des plaies au Canada.

Fondée en 1995, l'ACSP organise, chaque année, au Canada, un congrès qui lui tient lieu de réunion officielle, le Congrès annuel de l'ACSP. L'association consacre ses efforts dans cinq domaines particuliers : les politiques gouvernementales, la pratique clinique, la formation, la recherche et la création de liens avec la communauté internationale directement impliquée dans le soin des plaies. L'Association canadienne du soin des plaies vise une amélioration significative du soin donné au patient, des résultats cliniques et de la satisfaction professionnelle des spécialistes en soin des plaies.

# CLINICAL PRACTICE



# Use of Alginates and Foams for Management of Symptoms of Chronic Malignant Wounds and Their Impact on Quality of Life:

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# The Critical Review of Abstract Presentations (CRAP) Tool:

How to Appraise the Quality of
Research Abstracts

# EDUCATION

# Wound Care Conferences:



# INTERNATIONAL PARTNERSHIPS

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# Interested in sharing your research?

If you are interested in submitting an article to Canada's only national wound care journal, turn to page 52 to read How to Be Published in Wound Care Canada. Or visit the Wound Care Canada section of the CAWC Web site at www.cawc.net and click on "Information for Authors."

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# **CAWC Events**



Eleventh Annual Conference Palais des congrès de Montreal November 12–15, 2005 Delta Centre Ville Montreal, QC www.cawc.net

# **Other Events**

Symposium for Advancement of Wound Care April 30–May 3, 2006 Henry B. Gonzalez Convention Center San Antonio, TX www.sawc.net

The Wound Healing Society May 14–17, 2006 Double Tree Paradise Valley Scottsdale, AZ

# Canadian Association

for Enterostomal Therapy May 25–28, 2006 "Policy, Practice and Proof" The Fairmont Chateau Laurier Ottawa, ON www.caetconference.ca

# WOCN

June 24–28, 2006 Minneapolis Convention Center Minneapolis, MN www.wocn.org

# News from the Corporate World of Wound Care

## New KCI Web Site

KCI Medical Canada, Inc., has announced the launch of the Kinetics Concepts, Inc., (KCI) International Web site at www.kci-medical.com. The Web site has been designed for KCI International customers and includes a Canadian-specific site. The Web site features KCI International's product range, including V.A.C.<sup>®</sup> Therapy™ and Therapeutic Surfaces, and uses animation to demonstrate the principles of V.A.C.<sup>®</sup> Therapy<sup>™</sup>, KCI's proprietary Vacuum Assisted Closure<sup>®</sup> technology. V.A.C.<sup>®</sup> Therapy<sup>™</sup> has been clinically demonstrated to promote wound healing and be cost-effective in treating patient's wounds.

KCI invites you to navigate the new Web site and welcomes your feedback or questions. Please contact Marianne MacMillan, National Marketing Manager, by e-mail at mmacmill@kci-medical.com.

# Coloplast Introduces Biatain, a New Generation Polymer Foam Dressing

Managing exudate while maintaining a moist environment is a key consideration when selecting appropriate chronic wound dressings. Biatain is a new generation polymer foam dressing designed for wounds with moderate to high levels of exudate. Its unique matrix ensures vertical absorption, without lateral spreading. It also encapsulates exudate, minimizing the risk of maceration to peri-wound skin.

Biatain is available in two new sizes. Biatain Contour (3486) is a 17 x 17 cm adhesive foam with contour wings that secure it in hard-todress areas such as hips, elbows and other bony prominences. A new Biatain Small Sacral dressing (18 x 18 cm) (3483) completes the sacral line.

For more information on Biatain or Contreet Antimicrobial foam dressing with silver, please contact your local Coloplast representative or simply call 866-293-6349.

# 3M Product Wins Design Award

3M Health Care has announced that the 3M<sup>™</sup> Foam Adhesive Dressing—Heel Design, received a Silver 2005 Medical Design Excellence Award for design innovation. This dressing is unique in providing an easy one-handed application method for the significant problem of pressure ulcers on the heel and other highly contoured body sites that are difficult to dress. The design of 3M<sup>™</sup> Foam Adhesive Dressing–Heel Design provides cost-effective, time-saving product solutions for healthcare providers that help improve patient outcomes. Available now as 3M<sup>™</sup> Foam Adhesive Dressing, the dressing will soon become part of 3M's established and trusted Tegaderm brand line.

### ConvaTec Launches New FMS

ConvaTec, a Bristol-Myers Squibb Company, has launched its new Flexi-Seal® Fecal Management System (FMS) for patients with episodic fecal incontinence in Canada. Flexi-Seal® FMS, a new advanced alternative to more traditional diversion and containment, is designed to improve fecal incontinence management. Flexi-Seal® FMS is indicated for patients with liquid to semi-liquid stool.

Flexi-Seal® Fecal Management System contains a soft silicone catheter assembly. Flexi-Seal® FMS diverts and contains fecal waste, protecting the patient's skin, to help decrease the risk of skin breakdown and infection from fecal matter. For more information, please contact ConvaTec Customer Relations Centre at 1-800-465-6302.



When you see the Web Connect icon associated with an article, look for more information on the CAWC Web site at www.cawc.net. Click on *Wound Care Canada*.

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References: 1. Kukutsh N., Von Den Driesch P. Cutinova Foam, a hydroactive dressing, in the management of leg ulcers. Hautna dermatology 1994:292-2. Schott H., Herzberg, Hydroactive wound dressing treatment of extensive wounds healing by secondary intention: A postmarketing surveillance study 3. Wunscher U. Treatment of tenes with Hydroactive Dressings. Scientific Information 1994.4. Stroomer C. Treatment of deep wounds with varying etiology: Study of the use of hydroactive wound dressings in the clinical and outpatient settings. PZ Medizin 1996 141(24):74-76. 5. Data on File.

**Smith&nephew ALLEVYN**<sup>°</sup> **COMPRESSION** Wound Dressing

### CLINICAL PRACTICE

# Use of Alginates and for Management of Symptoms of and Their Impact on Quality of Life

BY Valerie J. Arklie, Shirley Herlick AND Kerron Kidd alignant wounds develop in 10 per cent of cancer clients. They are characterized by visible changes in the skin, with cancer cells protruding through the dermal layer. Wounds are not only cutaneous—sinuses may drain from areas of necrosis or from erosion into organs such as the bowel. Symptoms such as copious exudates, bleeding, infection, pain, and foul odour can occur.<sup>1</sup> This can be devastating for both clients and their families, affecting quality of life. The right choice of dressing can help control exudate and improve quality of life.

Alginates and foams have proven to be effective for the symptoms of malignant wounds.<sup>2</sup> The literature states alginate is a natural polymer derived from brown seaweed.<sup>3</sup> Alignates act via an ion exchange mechanism, absorbing exudate and forming a non-adherent gel.<sup>4</sup> Alginates are designed to absorb large amounts of discharge<sup>5,6,7</sup> and can

be changed every two to seven days.<sup>8,9</sup> Alginates transport excess exudate from the skin surface to prevent maceration. They are strong when wet and are fibre-free.

Alginates may influence wound healing in a number of ways not yet fully understood.<sup>5,6,7,10,11,12</sup> In 1999, Bowler et al. showed that alginates and hydrofibres sequester and bind bacteria.<sup>13</sup> The use of an alginate showed that healing time was significantly faster in Stage III or IV pressure ulcers.<sup>14</sup> In a multicentred, randomized controlled trial comparing an alginate dressing to a hydrofibre dressing in the management of various wound types, researchers found that the alginate dressing demonstrated a statistically significant faster healing time when compared to the hydrofibre.<sup>15</sup> Alginates contain calcium and sodium. It is well established that calcium plays an important role in wound healing and it is possible that calcium in the wound fluid, some of which is released from the alginate dressing, may modulate the healing.<sup>16</sup> Perhaps sodium's ability to kill bacteria or other unique properties of calcium alginates may be influencing this outcome. Further study is warranted in this area.



"Window-framed" foam dressing.

For two case studies comparing the outcomes and cost-effectiveness of alginate and foam dressings, please visit the *Wound Care Canada* section of the CAWC Web site at www.cawc.net.

study is warranted in this area. However, alginates are designed to have a secondary dressing.<sup>4</sup> Foams have proven effective as a secondary dressing with alginates, increasing the absorption of fluid. Many foam products are water resistant<sup>3</sup> and can be left on for up to seven days.<sup>4</sup> Foams come in either a polyurethane polymer or a hydrocellular construction.<sup>17</sup> Both

have been shown to be equally effective.<sup>18</sup> Most are hydrophyillic, which means they will absorb exudate and wick into the attached backing, thus keeping the skin dry.<sup>19,20</sup> Exudate management depends critically on venting excess fluid.<sup>21</sup> Because some foams are permeable to air and moisture, it is important not to cover them but only to "window frame" the dressing (see photo 1) with tape to allow maximum evaporation.<sup>22</sup> Foams are 80 per cent air, offering cushioning, insulation, and absorbability.<sup>3</sup>

Let us examine how alginates and foams affect each symptom of malignant wounds.



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# HOAMS Chronic Malignant Wounds

# **Exudate and Periwound Skin**

Increased exudate in malignant wounds is caused by an excessive permeability of the tumour to fibrinogen and plasma colloids, the secretion of a vascular permeability factor, and the general inflammatory response.<sup>23</sup> Alginates and foams, when combined, are excellent for managing increased exudate.<sup>24</sup> Alginates absorb up to 20 times their weight, and foams can absorb from 1,000 to 3,000 cc per square metre per day.<sup>3</sup> Foam wicks away moisture<sup>19</sup> and alginate transports exudate away from the wound,<sup>3</sup> therefore, the use of both together helps prevents maceration of periwound skin.

Periwound skin can be affected by a number of factors, including cleansing solutions and procedures used for cleansing and maceration from wound exudate, absorption and evaporation of moisture, and adhesive products that strip the skin.<sup>25,26</sup> Application of protective barrier products such as pastes, ointments, solid barrier sheets or alcohol-free liquid barrier films helps to protect and maintain the periwound skin. Liquid barriers that contain no alcohol provide effective protection to the periwound skin.<sup>25</sup> Choosing an adhesive product that is skin-friendly to affix the dressing decreases the pain and trauma associated with adhesive removal.

# Bleeding

Bleeding in malignant wounds is caused by the absence of platelets and the abundance of friable capillaries. Because bleeding occurs easily, it is essential that dressings do not adhere or cause trauma. Alginates are ideal for bleeding wounds as they have hemostatic properties.<sup>1</sup> They do not adhere when saturated, allowing for easy removal.<sup>3</sup> Foam dressings are also effective for bleeding wounds because they are highly absorbent and non-adherent.<sup>4</sup>

# **Malodour and Infection**

The presence of a malodorous wound is a constant reminder to the patient of the underlying disease and often contributes to diminished self-esteem, embarrassment, depression, and social isolation.<sup>25</sup> Wound malodour is caused mainly by heavy bacterial colonization, both aerobic and anaerobic, that occupies the moist environment, necrotic tissue, exudate and dressings.<sup>27</sup> Debridement of the sloughed and necrotic tissue is not recommended in malignant wounds because of the tendency for these wounds to bleed.<sup>24</sup>

Appropriate systemic antimicrobial therapy is essential when the signs and symptoms of infection extend beyond the wound margin or the wound probes to bone.<sup>28</sup> Antibiotics that are effective against anaerobes may be applied topically to control bacteria and produce surface deodorization and odour control.<sup>27,29</sup> Topical antimicrobial agents for local symptoms and signs of infection or increased bacterial burden such as ionized silver dressings, cadexomer iodine and topical antibacterials may help to reduce bacterial colonization and treat the wound surface.<sup>28</sup>

Both foams and alginates can be used on infected wounds.<sup>22</sup> Foams provide a bacterial barrier and are non-occlusive.<sup>3</sup> Effective containment of wound drainage by the use of semi-occlusive dressings, which are sealed at the wound edge, help to control wound odour. Adhesive foams, absorbent hydrofibres, alginates or hypertonic dressings, together with semi-occlusive dressings, are effective in controlling odour when sealed at the wound edge.<sup>30</sup> Frequent dressing changes, quick containment, and removal of soiled dressing materials will help to control odour.

Charcoal-impregnated dressings may be helpful to absorb gases and filter odour from the wounds.<sup>25</sup> The use of local external deodorizers, air fresheners and other fragrances close to the person or in the room Valerie J. Arklie,

RN, BN, is a Home Care Nurse in Winnipeg, MB. She is a Wound Care Consultant on the Wound Care Best Practice Team of the Winnipeg Regional Health Authority.

# Shirley Herlick, RN, BN, MScA,

works as a Wound Care Consultant in the role of 3M Skin Health Account Representative and as a casual in Emergency at Health Sciences Centre, in Winnipeg, MB. For 31 years, she has worked in a variety of roles and settings at this tertiary care hospital, including Manager of a Trauma Unit, ER, Nutrition Support Nursing, Vascular Access Consultant, ICU, Manager of Special Procedures in Radiology and OR. She also worked as a CNS for Medicine and Surgery at Concordia Hospital in Winnipeg. She is a member of the CAWC.

### Kerron Kidd, RPN,

was the Wound Resource Nurse and Resident Care Co-ordinator at Poseidon Care Centre, one of the personal care homes of Central Care Corporation. She has 35 years of nursing in a variety of settings throughout the health-care system, with the last 20 years being in geriatric settings. Currently, she is the acting Director of Resident Care in this Poseidon Care Centre. often merely mask odours, aggravating sensitivity to odour.<sup>30</sup> The use of odour absorbers such as vinegar, baking soda, and charcoal briquettes in the room have been reported to assist with odour reduction within the environment.<sup>29,30</sup>

## Pain

There are a number of mechanisms that can cause pain in patients with malignant wounds. There are many pharmacological and non-pharmacological interventions available, such as regular and bolus systemic pain medications, local anaesthetics, and relaxation strategies. As well, techniques used in caring for the person such as pain-reducing dressings, skin barriers, pressure relief surfaces, and lifting and turning strategies are interventions that can help reduce pain.<sup>25</sup>

Alginates and some foams prevent pain because they do not adhere to wounds. Alginates must be moist to be removed.<sup>4</sup> Foams are approximately 0.5 cm thick and provide a cushion to reduce pressure and provide comfort to a painful area.<sup>31</sup> Alginates and foams can be left on for two to seven days, thus reducing the pain and trauma associated with frequent dressing changes.<sup>89</sup>

The best approach to pain management is an individualized plan of care for each person. It involves a careful assessment of the wound and the pain as well as identification of the impact the pain is having on the person's activities of daily living and quality of life.<sup>24,25</sup>

### **Quality of Life**

The symptoms of malignant wounds can be overwhelming for clients. More than 30 per cent of clients



Source: From Barton and Parslow. *Malignant Wounds: Holistic Assessment and Management.* 2001. Adapted from Barton and Parslow. *Caring for Oncology Wounds: Management Guidelines.* 1998. with malignant wounds have psychosocial problems resulting from the wound.<sup>34</sup> Groccott states society is repulsed by uncontrolled body fluids and resulting odours, causing clients to hide away.<sup>21</sup> Disfiguring wounds or bulky dressings can cause body image changes, which promote social isolation often resulting in depression.<sup>32</sup> Pain resulting from the wound and from painful dressing changes can be very debilitating. Since these malignant wounds rarely heal, their management is based on symptom control, promoting comfort and maintaining or improving the patient's quality of life (see Figure 1).<sup>33</sup>

Alginates and foam dressings are effective for large amounts of exudate and therefore can assist in preventing depression and social isolation.<sup>21</sup> Alginates and foams are thin, self-adhesive and conform well to contours. This increases the freedom to carry out normal daily activities.<sup>33</sup> Many types of foam are flesh-toned, assisting with body image changes. Alginates and foams are effective in reducing pain in malignant wounds, therefore improving quality of life.

Social support from family and staff are also extremely important in the client's quality of life. Research shows such support alleviates social isolation resulting from malignant wounds.<sup>32</sup>

Alginates and foams are highly effective dressings for chronic malignant wounds. They control the symptoms, increase the quality of life for clients coping with cancer, and are cost-effective.

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## CLINICAL PRACTICE

# A Review of Prevention of Surgical Site Infections: General Principles and Relation to Facial Wounds



BY Kenneth Dolynchuk

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Wound Care Canada

Ithough facial surgery has historically had a low incidence of surgical site infections (SSIs) when compared with other surgery, certain clinical situations can arise in which infection occurs. Sepsis has been on the rise over the past two decades, and, while the death rate is decreasing in the general population and facial infection carries a low mortality risk, the morbidity is significant.1 Staphylococcus aureus and Streptococcus pyogenes are the most common isolates from facial wound infections and in septicemia.<sup>2</sup> Pseudomonas infection is common in the ear, and anaerobic bacterial infection is common in the intra-oral locations.3,4 The following review will present our current understanding of the pathogenesis of infection with emphasis on recommendations for prevention of infection in the facial surgical site.

### History

Experience with prevention of facial infection dates back to the 16th century and Brancha and his son who used fresh urine in an attempt to disinfect amputated noses on the dueling field.<sup>5</sup> In an attempt to perform delayed facial reconstruction in field hospitals, mafenide acetate was placed in facial wounds as prophylaxis by the Germans in the Second World War. The British used analine dyes to achieve control of infected maxillary wounds during the same period.<sup>6</sup> In the modern era, systemic antibiotics provided the ability to perform complex head and neck reconstructions without concern of fulminant sepsis from prolonged exposure of the aerodigestive tract in the wound during surgery. In spite of these advances, death and debility continue to be a problem in cases where host immune function is decreased or pathogenic virulence is allowed to go unheeded by physicians.<sup>7</sup> The principled surgeon should be able to recognize the major factors contributing to infection and reduce the preventable factors in the patient at risk. Let us examine these factors.

## Contamination

The risk of infection rises with the amount of contamination in the wound.<sup>8</sup> The size of the inoculum required to cause infection in incisional wounds has been studied and used to determine a classification on which to base treatment of wounds. Generally, the *clean, clean-contaminated, contaminated* classification has been used in facial wounds as well as wounds elsewhere to assess the risk of infection.<sup>9</sup> In facial wounds the time used in predicting a clean-contaminated wound is extended from six to 24 hours due to the rich blood supply in the face.

The incidence of surgical site infection has been significantly reduced clinically by preparation of the skin pre-op using chlorhexidine skin cleanser the night before and the day of surgery by the patient.<sup>10</sup> It has been shown previously by Burke that control of bioburden is important in permitting normal wound healing.<sup>11</sup> Resident bacteria in the wound are effectively removed by topical antibiotics during delayed primary wound closure. The presence of local wound infection will prevent skin graft take. Furthermore, systemic antibiotics have little role in preventing local infection prophylactically once bacteria quantitatively reside in the wound.<sup>12-15</sup> This provides the impetus to find better strategies to reduce bacterial numbers in the wound prior to closure, since we know that *de novo* invasion does not occur after an hour of the wound being closed.

# **Patient Assessment**

The need for proper pre-operative patient assessment is vital in the fight against SSIs. Malone et al. studied 5,031 patients who underwent non-cardiac surgery at Veteran Affairs Hospital over a six-year period ending in 1990. The overall incidence of SSIs was 3.2 per cent, and independent risk factors for the development of infection included ascites, diabetes mellitus, postoperative anemia, tobacco use, or corticosteroid use.<sup>16</sup> As stated above, host immunity carries with it the balance between colonization and infection. The need for strict adherence to surgical principles and prophylactic antibiotics in the presence of depressed host immunity (such as HIV) is paramount. Where possible, steroid medication and antimitotic drugs must be stopped in advance of the surgery to enable patient immune systems to recover. In addition, radiation injury provides an ischemic environment with depletion of reserves in the wound to control infection, whether clinically evident or not.

Other important causes of altered host immunity include diabetes, and tight control of blood glucose is an important determinant in preventing surgical site infections.<sup>17,18</sup> The presence of complicating skin lesions needs to be addressed pre-operatively. Secondary infection due to the presence of such conditions as poison ivy, psoriasis, eczema, atopical dermatitis, acne and scabies has lead to the contamination of wounds with known pathogens.<sup>19</sup>

Inadequate blood flow into a region of injury has been documented to affect many factors in healing wounds. The most important is inhibition of host defences. Adrenalin ischemia has been studied in the presence of known amounts of bacteria, and it was found that infection is increased with ischemic insult during the first few hours post injury.<sup>20</sup> Insight into host immune mechanisms has provided some explanation for this finding.

Leukocyte influx into areas of inflammation is stimu-

lated by chemokines and complement. The latter is both chemotactic and opsonic in its function but is less microbiocidal than the leukocytes that are attracted. Polymorphonuclear leukocyte defence is dependent on the presence of oxygen. Bacteria, which are common wound pathogens such as *Staphylococcus*, *Streptococcus, Escherishia coli* and *Klebsiella*, are sensitive to this mechanism of defence.<sup>21</sup> They are the most likely to flourish in hypoxic conditions as well. Where nutrient flow is diminished, so is the influx of antibiotics into the tissues. Tissue ischemia must be prevented as much as possible in the care of acute wounds in order to prevent surgical site infection.

The patient's temperature has profound effects on tissue perfusion, and even mild hypothermia can increase the likelihood of infection. Mild pre-operative warming of the patient reduces these risks significantly.<sup>22</sup>

# **Surgical Technique**

Proper preparation of the surgeon before the operation, including scrubbing up and double gloving, has been shown to be key, and adherence to standard operating theatre protocol has been shown to reduce patient risk.<sup>23</sup>

Studies by Haury et al. have shown that devitalized tissue can serve as a nidus for infection.<sup>24</sup> Bacterial killing is hampered by trauma to the nutrient inflow, which provides ingress of leukocytes. Since then, Miles demonstrated that a critical period of three hours postinjury is the most important in terms of being able to mount an effective inflammatory response.<sup>25</sup> This is also vital in timing of peak levels of prophylactic antibiotics in the wound tissue.

Clinically, Hohn has determined another important factor in mastectomy scars. He demonstrated that devitalized tissue is phagocytically removed by macrophages, which are then relatively incapable of microbiocidal activity.<sup>21</sup> This all leads to the importance of adequate wound debridement prior to any form of closure.

There is considerable evidence that induced foreign bodies have a number of detrimental effects on inflammation and repair. The type of suture material used can influence the rate of infection. Edgerton's group found that monofilament nylon or polypropylene had less infection-promoting effects than polyfilament silk or cotton.<sup>27</sup> Stainless steel or Dacron was intermediate in its effects. Furthermore, in standard infected wound models the critical concentration of bacteria (>105 organisms/gram of tissue) was related to the closure material.<sup>28</sup> Tape was shown to be superior in skin closure of elective abdominal surgery in which bowel was entered. Subcutaneous suture placement resulted in a 62 per cent infection rate in animals, whereas no attempt to close dead space resulted in no infection. Suture closure of adipose tissue was advisably discouraged, even in the obese patient.

Debridement is the most important first step in these wounds. It is not only important in removing devitalized tissue, which will impair the host response, but it controls resident bacteria in the wound. Ultimately, inflammation is kept to the lowest level of activity possible in order to prevent excessive scar formation, which is an important consideration in the facial area. Primary closure of facial wounds has been controversial even though little debate exists in abdominal wounds. The ability to debride the edges in limited fashion and irrigate the edges with pulsed lavage has been instrumental in permitting primary closure in facial wounds for aesthetic reasons. Meanwhile, preservation of tissue for aesthetic reasons needs to put limits on the degree of debridement as well. The use of an antimicrobial impregnated suture would be beneficial in this regard. The innovation of a triclosan impregnated suture has advanced our technology further by preventing resident bacteria present in the wound at the time of closure from persisting to create a nidus for wound infection.<sup>29</sup> This has an advantage over topical antimicrobials in that the activity is at the very location where bacteria preferentially colonize wounds, at the site of the suture itself. Furthermore, neither triclosan-resistant organisms nor skin sensitivity problems have yet to emerge.<sup>30</sup>

The development of an antibacterial suture and skin adhesives promises an even greater diversity in the tools available to the surgeon. Skin adhesives are designed for use on small incisions but can be very useful for children and adults where the desired cosmetic effect during healing precludes the use of bandages.<sup>31</sup>

### **Summary**

As with all surgery, the optimal clinical outcome is restoring patient health and preventing serious infection. However, with facial surgery, cosmesis has to be taken into account and may indeed be the principle reason for the surgery. Proper assessment and preparation of the patient before surgery and adherence to standard operating theatre protocol during surgical procedure has been shown to significantly reduce patient risk.

Topical antibacterial creams are efficacious and first-line in infection management, whereas systemic antibiotic use can be considered for patients at particular risk or in operations where risk of SSI is particularly high. New devices such as skin adhesives and the triclosan antibacterial suture are yet other tools for the surgeon to use and may become commonplace in facial surgeries as the shift in emphasis moves toward prophylaxis rather than treatment. <sup>(1)</sup>

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# Clinimetrics and Wound Science

BY Donna Flahr, M. Gail Woodbury AND Diane Grégoire s health-care professionals we have an obligation to provide optimal care to our patients. Clinical decision-making is a key component of patient care that can be enhanced by the use of evidence-based measurement tools.

Clinimetrics is the science of development and evaluation of evidence-based clinical assessment tools.<sup>1</sup> Clinimetrics was "defined as the domain concerned with indexes, rating scales, and other expressions that are used to describe or measure symptoms, physical signs, and other distinctly clinical phenomena in clinical medicine".<sup>1</sup><sup>195</sup> The clinimetric approach is not entirely different from the psychometric approach employed by psychologists and other social scientists. In fact, much of the terminology used by health scientists is based on the psychometric approach or a combination of psychometric, biostatistical, and clinimetric approaches. In this paper, all terminology in relation to assessment instruments will be considered clinimetric and no further distinctions will be made.

To be considered evidence-based, clinical assessment tools should undergo a clinimetric evaluation that assesses their accuracy, reliability, and validity. We will discuss briefly the important clinimetric properties that clinicians will want to consider when choosing an assessment tool that will provide good clinical evidence for their wound-care practice. The statistical issues related to the clinimetric properties are beyond the scope of this paper.

**Reliability** refers to the reproducibility of measurements with a particular measurement tool.<sup>2</sup> " Reliability addresses the range of fluctuation that is likely to occur in an individual's score as a result of chance errors".<sup>3,p,277</sup> Reliability is necessary for validity, although in and of itself, it is insufficient to make a tool valid.<sup>4</sup> Intrarater reliability is the variation among the results of the same rater on subsequent occasions using the same instrument; interrater reliability refers to the consistency in results using the same instrument across a variety of raters.<sup>5,6</sup> A reliable instrument provides precise measurements and therefore requires a smaller amount of change to occur for the change to be considered real (due to treatment) rather than measurement.<sup>2</sup>

Accuracy is defined as being exact or free from error; therefore, it is a measurement of the preciseness of a measurement.<sup>4</sup> With all measurements, there is a degree of inaccuracy. Our job as wound-care practitioners is to attempt to make a measured result as accurate as possible in order to assess the effectiveness of interventions. One way to establish accuracy is by setting standards. An example of this would be the use of a consistent approach to wound measurement; for example, by establishing the longest axis as the length and the widest axis perpendicular to this as the width, an attempt is made to improve measurement accuracy and repeatability. When such standards are missing in experiments, there have been reported variations in measurement of over 20 per cent.<sup>7</sup>

**Validity** refers to whether or not the instrument actually measures what it intended to measure.<sup>4,6,8</sup> No wound measurement tool should ever be presumed to have validity. Prior to the use of any measurement tool, there should be an assessment of its usefulness in the context in which it is to be used, i.e., the clinical setting and population. Such an assessment would anticipate the extent to which data that have been obtained in a subsequent study in similar context reflect the truth.<sup>3</sup>

There are several types of validity. Criterion-related validity compares the results from the measuring tool being reviewed to a more accurate measure or "gold standard." Criterion-related validity has two forms: predictive and concurrent.<sup>2</sup> Predictive criterion validity demonstrates the ability of a test to predict a positive or negative outcome measured in the future.<sup>9</sup> Concurrent criterion validity demonstrates the relationship of the results of a new test with those of an existing test that might be considered the gold standard when both tests are measured at the same time.<sup>4</sup>

Data collected in research projects and in clinical practice using reliable and valid instruments and data collection processes have credibility and usefulness for developing and conducting evidence-based practice.

The use of protocols and guidelines in practice are ways of establishing standards of care and can assist in bridging the gap between scientific evidence and clinical decision-making.<sup>10</sup> Improved consistency in documentation and care delivery can improve woundhealing outcomes and reduce practice variability.<sup>11,12</sup>

There are a number of wound-care assessment tools for which clinimetric properties have been assessed and documented. The following are some examples outlined in the literature. The Braden Scale for Risk Assessment has demonstrated interrater reliability when used by registered nurses versus licensed practical nurses or nursing assistants.13 The other risk assessment scale that has demonstrated some evidence of reliability is the Norton Scale.13 The Pressure Sore Status Tool (PSST) has been shown to be valid and reliable as a measuring tool,<sup>14</sup> but due to the training and time required to use the tool, it has been deemed more appropriate for use in a research setting.26 The Sessing Scale was found to be valid when compared with ulcer size and the Shea Scale as measures of healing.15 The Sessing Scale has been proposed to be useful for clinical practice due to its simplicity.<sup>2</sup> The Photographic Wound Assessment Tool (PWAT) for evaluating pressure and leg ulcers has been shown to have concurrent validity as well intrarater and interrater reliability.<sup>16</sup> It is useful for clinical practice or in research.<sup>16</sup> The Leg Ulcer Measurement Tool (LUMT), which has been shown to have good concurrent validity and interrater and intrarater reliability,  $^{17}$  has been included in the RNAO best practice guidelines for venous leg ulcers.  $^{18}$ 

For several wound-care assessment tools, there is limited evidence of evaluation of validity and reliability. The following examples outline some of these limitations. Diabetic foot ulcer classification systems like Wagner's are widely used but have minimal evidence of validity or reliability.4 Gray reports limited evidence exists to support use of the Braden Q Scale among children who are at risk for pressure ulceration or the Neonatal Skin Risk Assessment Scale (NSRAS) in the neonatal intensive care unit.19 His recommendations for clinical practice are use of the scales combined with individualized and subjective risk assessment, coupled with appropriate preventive measures.<sup>19</sup> Until the validity and reliability of the Braden Q and NSRAS are established, these risk assessment tools will have limited credibility and usefulness for developing evidence-based practice. Systematic literature searches reveal none of the following scales were tested for validity or reliability in the paediatric population: Gosnell Scale, Cubbins Scale, Douglas Scale, Norton Scale, and Risk Assessment Pressure Scale (RAPS).

Although there are a few valid and reliable tools available on which wound-care practitioners can base their assessments, there is considerable need for further evaluation of measurement tools in wound care in various populations, whether they are for accurate wound, risk or vascular assessment.

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# Foot Care for Persons with Type 2 Diabetes: Can a Teaching Video Improve Compliance?



BY Kyle Goettl



David H. Keast

Patient education materials abound—but how effective are they in modifying attitudes and knowledge? The following article is an excellent example of the value of student projects in advancing wound-care practice. Students of the International Interdisciplinary Wound Care Course (IIWCC) at the University of Toronto are required to undertake a selective project to complete the course. Many produce educational activities but few produce patient educational materials, and even fewer evaluate their effectiveness. This project is a good example of the process of identifying a problem through practice reflection, designing and implementing an intervention, and then closing the loop by evaluating that intervention to determine whether or not the intervention achieved the desired change in knowledge, skills or attitudes. The project also demonstrates the effective use of resources. The skills and talents of multiple departments in the health centre were used in completion of the project. Effective wound care is truly interdisciplinary. One of the objectives of the IIWCC is to produce wound-care leaders. This project is one of many truly outstanding efforts on the part of our course participants.

pproximately 15 per cent of all patients with diabetes mellitus will develop a foot or leg ulcer at some time during the course

of their disease. The majority of lower limb amputations are preceded by a foot ulceration.<sup>1</sup> Eighty four per cent of diabetic foot ulcers can be attributed to external factors, such as ill-fitting shoes and socks, mechanical trauma, stress ulcers and paronychia.<sup>2</sup> Persons newly diagnosed with diabetes must have the opportunity to learn proper foot-care practices. Exposure to current best-practice foot-care recommendations and the incorporation of those practices into their daily lives may help patients prevent future wounds and possible amputation. The American Diabetes Association estimates that learning proper foot care and dealing with foot problems early can prevent 50 per cent of amputations among people living with diabetes.<sup>3</sup>

While developing educational strategies and materials for an inpatient amputee rehabilitation population (80 David H. Keast, MSc, MD, FCFP, Co-director IIWCC

per cent diabetics), it became clear that access to a demonstration of best practice diabetic foot care was lacking in our amputee program as well as in local wound clinics, doctors' offices and diabetes referral centres. A study by De Berardis et al. found that "those patients who had received foot education and had their feet examined were significantly more likely to regularly check their feet."<sup>4</sup> The reality for many clinics is that they do not have the resources or the time necessary to devote to individual foot-care demonstrations. In many clinics, teaching videos have been developed to educate patients and families on specific aspects of their disease.

After the success of developing a foot-care-education video specifically for the amputee population served through the Inpatient Rehabilitation Program at Parkwood Hospital, St. Joseph's Health Care in London, Ontario, it was felt that a similar teaching tool could be developed for the newly diagnosed persons with diabetes, but presented from the perspective of the Amputee Rehabilitation Program. The content of the video was based on current best practice guidelines.<sup>5,6</sup> Video production was provided by the hospital's Media Services Department with support from the Amputee Rehabilitation Program. While teaching videos can be an efficient use of time in an outpatient setting, are they effective in changing patient's perceptions of the importance of proper foot care? To answer this question, a pre-test, post-test instrument was developed.

## **Objective**

The objective was to measure the extent to which the foot-care teaching video was effective in altering the perception of the importance of foot care in persons newly diagnosed with diabetes mellitus type 2 who were referred to a diabetes education centre.

# **Methods**

The change in perception of the importance of foot care and actual foot-care knowledge was tested using a pre-test, post-test and one-month follow-up multiple-choice questionnaire (see Figures 1–5). The individual questions in the questionnaires were designed to test perception and knowledge of the key information points in the video. To determine content validity several wound-care experts, an epidemiologist, and members of the Quality Measurement Department at Parkwood Hospital reviewed the questionnaires.

The participants were a convenience sample of person's newly diagnosed with type 2 diabetes that had been referred to the Lawson Diabetes Education Centre in London, Ontario. The inclusion criterion was all patients newly diagnosed with type 2 diabetes referred for diabetes education to a specific diabetes nurse educator. Persons who did not wish to complete the questionnaire were excluded from the study. Other exclusion criteria included cognitive impairment, persons under 18 years of age, visual or hearing loss that would preclude viewing the video and persons who did not speak English.

After obtaining written consent, one diabetes nurse educator administered the pre-video questionnaire and then showed the video. The educator administered the post-video questionnaire after the participants viewed the video. Upon completion of the post-video questionnaire, the participants self-addressed an envelope that contained a second postage-paid envelope. Inside *continued on page 22*  Figures 1–5: Change in respondent's perception or awareness before, after, and upon follow-up.











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### **Pre-video Questions**

# 1. How much foot care education have you received since you were told you have diabetes?

Of the 41 respondents who answered this question, almost 76 per cent indicated that they had no prior foot-care education and 15 per cent indicated having less than five minutes of education. Six people included comments about the amount of education they had received prior to the video presentation. Some comments included:

- "But [I] have read about foot care, looked [it] up on Internet, etc."
- "Mentioned in many brochures and other info, but none in terms of anything other than passing mention in programs by instructors."
- "None! Till today."
- "I would like to learn a lot about feet."
- "Foot care, until I came to the Lawson clinic, was never brought up."

# 2. Is the amount of education you have received on diabetic foot care since your initial diagnosis of diabetes (about right, too much, not enough)?

Ninety-two per cent of respondents indicated that the amount of education they had received was not enough (n=38). Six people included the following comments about the amount of education they had received prior to the video presentation:

- "Only diagnosed three weeks ago."
- "Probably need more."
- "Never received instructions on foot care."
- "Need more education."
- "We should be told of this part of it."
- "Doctor on vacation right after diagnosis."

### **Immediate Post-video Questions**

# 1. Is the amount of education you have received on diabetic foot care since your initial diagnosis of diabetes (about right, too much, not enough)?

Among respondents, 73.2 per cent indicated that the amount of education was "about right"; however, there were still 26.8 per cent who found that they did not have enough education. Ninety-eight per cent of respondents indicated that watching the foot-care video was a "good to excellent" way to learn about car-

ing for one's feet. Seven people included the following comments about watching the foot-care video:

- "Very clear instruction on the care/importance of looking after your feet."
- "Feel that educating on how to stimulate circulation would be helpful."
- "I would like to hear about socks."
- "Clear and concise presentation. I always wear a wide-toe-box shoe and I do lots of Tai Chi, which has taught me a lot about feet and their care. I have peroneal palsy and diminished sensation/nerve in my right foot—but I'll be extra aware. Thank you!"
- "You should make a copy of this little video available to people who just got diabetes."
- "When I watch a video I look for relevant information and not so much fluff. This video was excellent for relevant info."
- "Have your video available for purchase."

## **One-month Follow-up Questions**

# 1. Have you followed the recommendations from the foot-care video?

At the time of the one-month follow-up, 42 per cent of respondents indicated that they had followed the recommendations made in the video. The distribution of responses is shown in Figure 6.



Perceived Adherence to Video Recommendations

# 2. What are the areas that I need additional support regarding my foot care?

Seventeen of the 25 respondents included comments. Five main themes emerged about what education was needed:

- Nail care (six comments)
- Fitting shoes properly (three comments)
- More general foot-care education (four comments)
- Circulation (one comment)
- No education required (three comments)

### **Additional Comments**

Some participants also included more general comments. Three representative quotes follow.

"I found this video very informative and am aware that as my diabetes worsens I may lose sensation in my feet, as one participant was surprised to discover he did not have sensation in one great toe. I now know this could happen to me as well so I always need to be checking. Thank you."

"I did not realize the extent of problems that may occur with diabetes."

"Your video was extremely useful. I was oblivious to the loss of touch sensation, and to advise me to use a mirror and my eyes is so valuable for me to know. I have always been careful about my feet, since I have a reconstructed right ankle and peroneal palsy, but the basics you provided are ones I really needed to know."

# Discussion

It is interesting to note that 91 per cent of the referrals had minimal or no foot-care education prior to viewing the video. It would indicate that in this region, the health-care providers making the diagnosis of type 2 diabetes are depending on the diabetes education centre to provide all of the necessary foot-care education to the clients. This underscores the need to provide consistent best practice education on preventative foot care.

The improved scores in self-perceived knowledge are mirrored in the actual foot-care knowledge scores. Figure 1 demonstrates a large increase in perceived knowledge of foot care after viewing the video, with a small drop in the one-month follow-up. This compares favourably with the results of the actual foot-care knowledge question on the best way to examine one's feet (see Table 1). In all of the five self-perceived knowledge questions (Figures 1, 2, 3, 4 and 5), there was a substantial improvement in scores at the postvideo testing point compared with pre-video testing. In three out of the five questions, the participants were still reporting improved levels at the one-month follow-up (Figures 2, 3 and 4). Results from questions regarding actual foot-care knowledge showed the same trend in two out of the four questions. The congruence between the perception of increased knowledge and the percentage of respondents choosing the correct response in the knowledge testing questions suggests that the video was effective both in raising awareness of the proper foot care and in communicating proper foot-care knowledge.

The one-month follow-up questionnaire was an attempt to test the retention of the information presented in the video. It is remarkable that 59 per cent of the participants completed and returned the onemonth follow-up questionnaire. The high response probably relates to the use of a mailed-out questionnaire with a stamped return envelope. It also may relate to the participant's impression of the importance of the information contained in the video. The high retention of information contained in the video is also worth noting. In general terms, unless new knowledge is reinforced, it is likely to be lost within weeks of the initial educational activity. It can be argued that only those people who had retained the information in the video chose to complete the follow-up questions, thus skewing the results. On the other hand, it can also be argued that the video was very effective in that nearly 60 per cent of those who viewed the video still retained the knowledge one month later.

Knowing and doing are not the same thing. The survey ultimately relies on the participants' self-reporting of the incorporation of the video information into their lives. Over 90 per cent of the respondents indicated that they had incorporated some or all of the teaching in the video. Putting this into context, this means that 24 of the original 42 people (57 per cent) who watched the video were now attempting to implement at least some of the best practice preventative foot care illustrated in the video. While the self-reporting nature of the survey may be seen as a weakness of the study, even if the respondents are only implementing half of what they report they are, it marks a major improvement in preventative foot care.

# Conclusions

The general trend of the responses from the questionnaires indicates that the video was effective in altering the perception of the importance of foot care in people newly diagnosed with type 2 diabetes. The results also indicated that a large proportion of the participants retained a significant amount of information immediately and one month after viewing the video. A high percentage of the patients enrolled in the survey reported an incorporation of best practice foot care into their daily lives.

Longer term retention of the information in the video and the positive effect on perceptions of the importance of foot care are unknown. A survey over a period of years would be useful in determining the long-term effect. Also, a longer term study looking at the incidence of neuropathic foot ulcers in the study population might demonstrate the video's effectiveness in preventing diabetic foot complications. It cannot be emphasized enough that the video should not be left to stand on its own, but can be used by concerned clinicians as a valuable teaching tool to communicate best practice information in a consistent way. When coupled with regular foot examinations by a health-care provider and ongoing educational activities, it could prove valuable in preventing foot complications. "

# Acknowledgement

The authors wish to express special thanks to Jean Jewitt, RN, CDE, for her help with this project.

Copies of the video are available for a nominal charge by contacting the author by e-mail at kyle.goettl@sjhc. london.on.ca.

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# The Critical Review of Abstract Presentations (CRAP) Tool

BY/PAR Virginia McNaughton, M. Gail Woodbury AND/ET Pamela E. Houghton linicians rely on research evidence to help them make clinical decisions. With the abundance of wound-care literature available today, it is necessary to develop the skill to critically appraise the quality and relevance of the work in order to sort out the meaningful and relevant information from that which is less rigorous. Not all wound-care practitioners have a research background. The Critical Review of Abstract Presentations (CRAP) tool has been developed to aid the practitioner to appraise the quality of abstracts that they read or hear at conferences.

# References:

 Woodbury MG, Boyd M, McNaughton V, Gregoire D. How to write an abstract. *Wound Care Canada*. 2005;3(1):30,32-33.

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# What are Abstracts?

Abstracts are brief summaries of the overall goal of a written or oral presentation and the specific ideas or concepts that will be presented, including outcomes and implications for practice.

- Abstracts essentially answer four questions:
- 1. What was the problem?
- 2. How did the author(s) solve the problem?
- 3. What was discovered as a result of the research?
- 4. What can be generalized or learned from the experience?

# How to Use the CRAP Tool

- To use the CRAP tool:
- 1. Find the category of the abstract to be appraised across the top row.
- 2. Reading down the left column, determine if each of the elements in the 10 criteria have been met.
- 3. A plus sign indicates that this element must be present.
- 4. A negative sign indicates that this element does not need to be present.
- 5. Refer to the glossary of terms for further definitions if necessary.

# L'outil d'analyse critique des présentations de résumés (ACPR)

es cliniciens se basent sur les résultats probants de la recherche pour les aider à prendre des décisions d'ordre clinique. Avec l'abondance de la documentation sur le soin des plaies dont on dispose aujourd'hui, il est nécessaire de perfectionner les compétences afin de faire une évaluation éclairée de la qualité et de la pertinence des écrits afin de trier l'information cohérente et pertinente de celle qui est moins rigoureuse. Les praticiens en soin des plaies n'ont pas tous de l'expérience en recherche. L'outil d'analyse critique des présentations de résumés (ACPR) a été élaboré pour aider le praticien à évaluer la qualité des résumés qu'ils lisent ou qu'ils entendent lors des conférences.

# Que sont les résumés?

Les résumés décrivent brièvement le but général d'une présentation écrite ou orale ainsi que les idées ou concepts qui seront présentés, y compris les résultats et les implications pour la pratique. Les résumés répondent essentiellement à quatre questions :

- 1. Quel était le problème?
- 2. Comment l'auteur / les auteurs ont-ils résolu le problème?
- 3. Qu'est-ce que la recherche a permis de découvrir?
- 4. Que peut-on conclure ou apprendre de l'expérience?

# **Comment utiliser l'outil ACPR**

Pour utiliser l'outil ACPR :

- 1. Trouver la catégorie du résumé à évaluer dans la rangée du haut.
- 2. En lisant la colonne de gauche vers le bas, déterminer si on a répondu à chacun des éléments des 10 critères.
- 3. Un signe plus indique que cet élément doit être présent.
- 4. Un signe négatif indique que cet élément n'a pas besoin d'être présent.
- 5. Se reporter au glossaire des termes pour des définitions plus détaillées au besoin.

suite à la page 30

# 28

Questions to Ask about the Abstract	Clinical or Laboratory Research	Clinical Case Studies	Clinical/Instructional Educational Report	Health Care Policy and Delivery
① Does the title reflect the objectives?	+	+	+	+
<ul> <li>② Does the background information provide good rationale for doing the study and lead to the purpose?</li> <li>Does it allow the reader to understand usage or potential application?</li> </ul>	+	+ +	+	+
③ Are the objectives of the study clearly stated in terms of the popu- lation, intervention, and outcome?	+	+	+	+
<ul> <li>Are the objectives stated in terms of the control group?</li> <li>Are the study objectives of importance and of interest to</li> </ul>	+	-	-	-
this audience?	+	+	+	+
and complete? Do they include the following:	+	+	+	+
<ul> <li>study design</li> <li>patient population well-defined</li> </ul>	+	+	+	_
(criteria) • appropriate control included	+	+	-	_
(standard treatment vs. placebo) • confounding variables have been considered	+	-	_	_
<ul> <li>randomization of subjects</li> </ul>	+	_	_	_
<ul><li>sample size justified</li><li>outcome assessments</li></ul>	+	-	-	_
<ul> <li>non-biased (blind assessment)</li> <li>outcome measures valid</li> </ul>	+	+	-	-
<ul> <li>drop-outs accounted for (intention to treat)</li> </ul>	+	+	_	_
<ul> <li>(5) Is the intervention</li> <li>appropriate to produce desired physiological/sociological effects?</li> <li>clearly explained with sufficient</li> </ul>	+	+	+	+
detail to be reproducible?	+	+	+	+
* O the results correspond with the	+	+	+	+
<ul> <li>study objectives and are the details</li> <li>specified?</li> <li>is a between group comparison</li> <li>stated in statistical terms including</li> </ul>	+	+	+	+
significance level, e.g., (p=0.001)?	+	+	+	+
<ul> <li>(7) Are the conclusions appropriate, given the study limitations?</li> <li>Do they relate back to the</li> </ul>	+	+	+	+
study objective(s)?	+	+	+	+
(a) Are the study results generalized appropriately, e.g., to patient populations and clinical situations?	+	+	+	+
③ Are the project outcomes and benefits clearly stated and pertinent?	+	+	+	+
relevant to the target audience?	+	+	+	+
10 Have conflict of interest and/or study sponsorship been disclosed?	++++++	+++++	+ +	+++++

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\*Required items that are frequently missing

# The following glossary will help you to understand terms used in the CRAP tool

Term	Definition
Blind assessment	The person who makes the assessment of outcome is unaware of the group (experimental versus control) to which the patient belongs.
Conflict of interest	A situation in which the researcher's private interests may benefit from either conducting the research or the results of the research. A situation in which the sponsor of the study may benefit from positive results of the study.
Confounding variable	A variable not related to the variable under investigation that can cause or prevent the experiment's outcome.
Control group	The group of participants in a clinical trial that receives either the placebo or a non-experimental treatment. Researchers compare the results from the group receiving the experimental drug to that of the control group.
Intention to treat	Statistical analysis that includes all subjects entered into the study, i.e., includes dropouts and non-compliers. Statistical analysis that involves only the subjects who participate fully in the study procedures is called "per protocol."
Methods	Techniques for obtaining, manipulating, analyzing, and presenting data.
P value	This is the level of significance of the results. Statistical significance requires P<0.05. This means the probability of results of this magnitude being due to chance is less than or equal to five per cent.
Placebo	A placebo is an inactive intervention, e.g., pill, device. In clinical trials, experimental treatments are often compared with placebos to assess the treatment's effectiveness.
Randomization	A method based on chance by which study participants are assigned to treatment groups. Randomization minimizes the differences between groups by equally distributing subject characteristics between the groups.
Reliable	An outcome measure is reliable if two or more people gathering the same data get similar results, or if the same person obtains similar results at different times when no change has occurred.
Sample	A subset of the population. Subjects are selected intentionally to be representative of the population being studied.
Significance	The degree to which a researcher's finding is statistically meaningful or important.
Valid	An outcome measure is valid if it accurately measures what it is intended to measure.

# Le glossaire suivant vous aidera à comprendre les termes utilisés dans l'outil ACPR

Terme	Définition
Conflit d'intérêt	Une situation dans laquelle les intérêts personnels du chercheur peuvent être servis soit en menant la recherche, soit par les résultats de la recherche. Une situation dans laquelle le commanditaire de l'étude peut bénéficier de résultats positifs de l'étude.
Échantillon	Un sous-ensemble de la population. Les sujets sont choisis intentionnellement pour être représentatifs de la population à l'étude.
Évaluation à l'aveugle	La personne qui fait l'évaluation des résultats n'est pas au courant du groupe (expérimental versus témoin) auquel appartient le patient.
Fiable	Une mesure de résultat est fiable si deux ou plusieurs personnes recueillant les mêmes données obtiennent des résultats analogues, ou si la même personne obtient des résultats analogues à des moments différents lorsque aucun changement n'est survenu.
Groupe témoin	Le groupe de participants à un essai clinique qui reçoit le placebo ou un traitement non expérimental. Les chercheurs comparent les résultats du groupe recevant le médicament expérimental à ceux du groupe témoin.
Intention de traiter	L'analyse statistique qui comprend tous les sujets inclus dans l'étude, cà-d. comprend les abandons et les non fidèles au traitement. L'analyse statistique qui ne porte que sur les sujets qui participent pleinement aux procédures de l'étude s'appelle « selon le protocole ».
Méthodes	Techniques pour obtenir, manipuler, analyser et présenter les données.
Placebo	Un placebo est une intervention inactive, p. ex., pilule, dispositif. Dans les essais cliniques, les traitements expérimentaux sont souvent comparés aux placebos pour évaluer l'efficacité du traitement.
Randomisation	Une méthode basée sur le hasard selon lequel les participants à l'étude sont attribués à des groupes de traitement. La randomi- sation minimise les différences entre les groupes en distribuant également les caractéristiques des sujets entre les groupes.
Signification	Le degré auquel les résultats du chercheur sont statistiquement cohérents ou importants.
Valeur p	C'est le niveau de signification des résultats. La signification statistique exige p≤0,05. Cela signifie que la probabilité que des résultats de cette magnitude soit due au hasard est inférieure ou égale à cinq pour cent.
Valide	Une mesure de résultat est valide si elle mesure de façon précise ce qu'elle est censée mesurer.
Variable confusionnall	Line unighte ner encontée à le verighte que investigation qui neut avect au encôther le dénouement de l'eurérience

Variable confusionnelle Une variable non apparentée à la variable sous investigation qui peut causer ou empêcher le dénouement de l'expérience.

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Questions à poser à propos du résumé	Recherche clinique ou expérimentale	Études de cas cliniques	Rapport éducatif clinique / pédagogique	Pratiques et politiques
① Le titre reflète-t-il les objectifs ?	+	+	+	+
② Les renseignements généraux fournissent-ils une bonne justification pour mener l'étude et atteindre / l'objectif visé ?	+	+	+	+
<ul> <li>Permettent-ils au lecteur de comprendre l'utilisation ou l'application potentielle ?</li> </ul>	+	+	+	+
<ul> <li>3 Les objectifs de l'étude sont-ils clairement énoncés en ce qui concerne la population, l'intervention et le dénouement ?</li> </ul>	+	+	+	+
<ul> <li>ce qui concerne le groupe témoin ?</li> <li>Les objectifs de l'étude sont-ils importants et intéressants pour cet auditoire ?</li> </ul>	+	-+	-+	-+
* (a) Les méthodes sont-elles		1	· · ·	
claires et complètes ? Incluent-elles les éléments suivants ? :	+	+	+	+
<ul> <li>conception de l'étude</li> <li>population de patients bien</li> </ul>	+	+	+	_
définie (critères)	+	+	-	-
<ul> <li>Inclusion d'un ternoin approprie (traitement standard vs placebo)</li> <li>les variables confusionnelles ont</li> </ul>	+	-	-	-
été envisagées	+	-	-	_
randomisation des sujets     instituctification de la taille de l'échaptillen	+	_	_	_
<ul> <li>évaluation des dénouements non biaisées (évaluation à l'aveugle)</li> </ul>	+	+	_	_
<ul> <li>mesures des dénouements valides et fiables</li> </ul>	+	+	-	_
(intention de traiter)	+	_	_	_
<ul> <li>(5) L'intervention est-elle :         <ul> <li>appropriée pour entraîner les effets physiologiques / sociologiques désirés ?</li> <li>clairement expliquée avec assez de détails</li> </ul> </li> </ul>	+	+	+	+
pour être reproductible ?	+	+	+	+
• cliniquement faisable ?	+	+	+	+
<ul> <li>(6) Les resultats correspondent-ils aux objectifs de l'étude et les détails sont-ils précisés ?</li> <li>Une comparaison entre les groupes est-elle énoncée en termes statistiques incluant le principal de signification en que (n. 0.001) 2</li> </ul>	+	+	+	+
Inveau de signification, p. ex., (p=0,001) ?	т		T	
<ul> <li>compte tenu des restrictions de l'étude ?</li> <li>Se réfèrent-elles aux objectifs</li> </ul>	+	+	+	+
de l'étude ?	+	+	+	+
(8) Les résultats de l'étude sont-ils correctement appliques, p. ex., aux populations de patients et aux situations cliniques ?	+	+	+	+
<ul> <li>Les résultats et les bienfaits du projet sont-ils clairement énoncés et pertinents ?</li> <li>L'information est-elle récente</li> </ul>	+	+	+	+
et pertinente à l'auditoire cible ?	+	+	+	+
<ul> <li>(ii) A-t-on révélé un conflit d'intérêt et/ou une commandite de l'étude ?</li> <li>Y a-t-il un conflit ?</li> </ul>	+ +	+ +	+ +	+ +

# An Interview with Lincoln D'Souza:

A Clinical Leader's Experience with Bariatric Wound Care



Lincoln D'Souza, RN, BScN

INTERVIEWED BY Catherine Harley, Associate Editor, Wound Care Canada

Lincoln D'Souza, RN, BScN, is a Nurse Clinician, Surgical Out-Patient Department, McGill University Health Centre, Royal Victoria Hospital Pavillion. For over 15 years he has worked in varied settings, including the neuro ICU, plastic surgery, general surgery, transplant, vascular, urology and dialysis units. He is presently participating in the Masters in Educational Studies with a concentration in Adult Education program at Concordia University, Montreal.

# What is your current position at the McGill University Health Centre in Montreal?

Nurse Clinician, Surgical Clinics. In this position I oversee the daily operations of the clinics, which include Plastics and Reconstructive Surgery, General Surgery, Vascular, Cardio-Thoracic, Podiatry, Bariatric, and Neurosurgery. Additionally, my practice encompasses wound care and expert consultation on patients with complex wounds.

> How long have you been in this role? Eight years.

Could you define the area of bariatric wound care for us? Bariatrics is the field of medicine

concerned with the causes, prevention, and treatment of obesity. Our particular bariatric clinic follows patients who have undergone the Isolated Gastric Bypass (IGBP), either by laparotomy or via laparoscopy approach. Some of these patients will develop incisional infections and subsequent wounds. Other patients present in one or more of the aforementioned clinics with wounds related to co-morbid factors.

Thus bariatric wound care is the care of obese people with wounds.

# How often do you see patients with bariatric wound issues?

The exact numbers are not vigorously documented. The bariatric clinic runs two days per week, so it is possible to see patients with wounds on those days. As well patients may be referred to one of the other clinics from an outside source or from the ER.

# How do these patients present themselves?

Anecdotally, we had a much higher incidence of post-op infections three years ago, but the nurses were able to identify that a problem existed and captured the data. Once the data were presented to the surgeon, we looked at and tried some options for reducing the incidence. The biggest breakthrough was by the surgeon, who opted to alter his surgical approach by training to perform the procedure by laparoscopy.

The original laparotomy could mean an incision from 15 cm to 30 cm. The laparoscopy route means three to five openings approximately 1.5 cm long. This greatly reduced the risk for infection and wound dehiscence. We still see many obese patients with skin fold dermatitis abrasions and/or cellulitis, excoriation from friction and shear, panniculitis, venous stasis ulcers, lymphedema, perineal and genital skin erosion from urinary and fecal deposits. Fungal and or bacterial infections may be present in the axilla and below the breasts in both females and males.

Could you walk us through the assessment of a patient with a bariatric wound? What are some key things clinicians should be looking for?

Many of our obese patients do not provide information that they have a "wound" because they may not be aware that one exists. It may not be possible to visualize parts

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of their body, and though they feel something, it may be difficult to identify just what they are feeling. Others may know they have a wound but over time come to accept the wound as a part of their life. The wound may become another complexity to be added to the burden of their obesity.

Assessment, therefore, often starts with patient-centered concerns. This is followed by systematically visualizing the skin folds, starting at the neck, moving down the body or in reverse fashion and lifting them out of the way to check the intactness of the area underneath.

Areas of redness, erythema, increased warmth/moistness, odour, skin breakdown and frank drainage must be identified and well documented. Assessing the incision sites for signs and symptoms of infection is the next step. It is not uncommon to have deep cavities of necrotic or liquefied fat.

# What are the management techniques that are common to bariatric wound care?

For post-op wounds, ensuring the principles of best woundcare practice is the norm. Additionally, frequent follow-up is essential. Often the size and depth of the wound(s) are profound, so the risks for a deep compartment infection are much higher; community care and support are usually part of the plan. Keeping in mind the build of the obese patient, it is often suggested that an abdominal binder be used to maintain support and abdominal integrity.

# Are there members of your woundcare team who play a key role with these patients? Who are they and what role do they play?

The team presently consists of a nurse co-ordinator who is the primary source for contact. There are two nutritionists who are actively involved in assessing the patients' nutritional status by interviewing and by the use of diaries. Coaching is a tried-andtrue method to encourage patients to be and remain involved and motivated in their self-care. The operating MD as well as a consulting general surgeon are available during the clinics for general medical assessment and treatment as needed. The surgeon's secretary is an integral member of the team as she may be the first person the patient speaks to when things are not going well.

The patients themselves are another important resource. We have created a number of support groups and meetings where patients can meet with a moderator to discuss their concerns and experiences and to offer testimony. As well, the McGill University Health Centre has developed and maintains a bariatric Web page at www.weightloss surgery.ca for all to access.

The bariatric program has entered into an agreement with a private company that can provide personal trainers, physiatrists and even a psychologist if needed.



# How long does it take for these patients to heal?

This is a difficult question because healing will depend on the location and cause of the wound as well as the severity of any co-morbid factors, the nutritional status and the patient's mobility status. Suffice it to say that incisional wounds may take longer than 12 weeks to heal.

# How do you go about teaching these patients and their families?

We use frequent clinic visits as a means to follow up the progress of the patient as well as using the time to reinforce any previous teaching. We have developed a comprehensive booklet (available in either French or English) that is given to the patient at the first visit with the surgeon.

The booklet contains the name and contact information of the Bariatric Nurse Co-ordinator, as well as numerous online resources. Prior to the surgery the Nurse Co-ordinator holds a group teaching session (twice a month once in French, once in English) where a number of patients who are awaiting the IGBP come together and are given the same information at the same time. During this session they are free to get contact information from other attendees, thus forming their own coalitions and support system right from the beginning. They are then able to discuss with each other areas that may not be so clear, and in essence are a sounding board for each other.

Patients are invited to contact the nurse at any time; his phone number and voice mail are provided and, during the work week, he will return any calls within 24 hours.

# How would you sum up the hurdles faced by the patients you see in the bariatric clinic?

Obese patients face numerous challenges. The excess weight not only affects their quality of life and their life expectancy, but unfortunately they must face the biases and unforgiving nature of a society that does not recognize and accept the person that lies below the fat. Mental anguish and pain are other components of the burden they must bear. Importantly, we must recognize, identify and expose these issues if we as health-care providers and members of society wish to truly help lighten the load.

# Get Your Questions Answered!



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were done separately

with the patient using various pressure

reduction mattresses

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# Wound Care Conferences: Maximizing Your Educational Experience



BY Heather L. Orsted



Sue Rosenthal

ver the course of each year many healthcare organizations in North America offer educational conferences that present topics of interest to the wound-care practitioner. With time and financial resources often scarce, wound-care clinicians need to get the best value from any conference they attend. Here are some tips on choosing the right conferences to attend and maximizing your educational experience once you are there.

### **Selecting the Right Conference**

To select the conference that is going to be a good fit for you, you will need to reflect on where you are currently in your wound-care practice and where you want to go. Once you've identified your needs, you are better able to select the conference with the best chance of fulfilling them. Remember, needs may not be just educationally based, but may also revolve around networking with national organizations, interdisciplinary colleagues and industry.

- Not all conferences are created equal. Choose conferences that have a reputation for variety, highquality presenters, and the type of sessions that suit your learning style.
- Support your national organization when possible. Industry-sponsored events can provide excellent educational opportunities, but your attendance at such events should not detract from national organization conference attendance. Attending the confer-

ence of your national association helps to not only keep your organization afloat but also serves to continually challenge your organization to meet your educational needs, thus improving opportunities for everyone in your area of practice.

 If you need to travel to another city to attend a conference, make sure the conference has a good selection of sessions that apply to your current practice and your goals for the future. It's not worth the expense if there are only one or two sessions that will fulfill your needs. If it's in the same city as the one in which you live, you may be able to attend for just one day. In that case, a variety of sessions spread over several days is less important for you.

# Plan Ahead

Once you have selected your conference, make your hotel reservation. If you don't receive a confirmation via e-mail or fax, contact the hotel. A week or two before the conference, call and confirm your reservation again. If you have a change in travel plans, or get delayed anywhere along the route, call your hotel to advise them of the change in your arrival time. Plan your airline reservations and other travel services in the same way.

• Check the long-range weather forecast before you go and pack accordingly. Layers work well in places where the temperature is unpredictable.

continued on page 38



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A French version of this article is available in the *Wound Care Canada* section of the CAWC Web site at www.cawc.net.

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- Gather all of your travel documentation in one place (e.g., tickets, maps, reservations, programs, photo ID for the airport) after making photocopies. Give the photocopies to a significant other or carry them in a different location (in case one set gets lost or stolen). Note that most foreign countries now require a passport, and that as of this year photo ID is required for air travel even within Canada.
- Provide your significant others with information on how to contact you in your absence.

# Don't Leave Home Without...

Make a checklist of all of the items you'll need while

at the conference—cell phone, charger, laptop with appropriate cables, connectors and devices (memory sticks, CDs), local access numbers for e-mail (if appropriate), business cards, schedule, airline tickets, hotel confirmation, etc.—and physically check them off as you load them into your carry-on bag (not into checked-in luggage).

Always leave room in your luggage for material that you collect at the conference.

# Start to Plan your Conference Experience

Begin to familiarize yourself with the conference agenda, speakers, exhibitors and attendees as far in advance of the conference as possible. Write down three to five goals

that you plan to achieve while attending the conference. Based on your goals, select the sessions you wish to attend and plot them in your calendar. Give each one a priority number (like 1, 2 and 3) in case you run out of steam and can't attend all the sessions you'd checked off. Make sure you at least attend the highpriority ones.

Make a list of the people and companies participating in the conference you want to meet with and where their exhibit is, if appropriate.

Try to avoid taking other work with you to the conference. It will detract from your conference experience, and you will feel guilty because you won't have time to focus on it anyway.

### **Before the Sessions Begin**

As soon as possible, stop by the registration table or desk to pick up a delegate package, which will include a copy of the final conference program. Skim the program and highlight the sessions that interest you. Make special note of any keynote addresses. Make a daily schedule to tell yourself where to be, and when.

# During the Conference Managing Yourself and Your Time



# Key Conference Survival Tips

- Get enough sleep.
- Plan some time to do something just for yourself.
- If you have a physical fitness routine, try to follow it while you're at the conference.
   You'll be able to concentrate better and have more energy throughout the day.
- Eat healthy meals and snacks to enhance your concentration and prevent drowsiness.

Attend opening, plenary, keynote, and closing sessions. Support peers and colleagues by attending their sessions. Attend both oral and poster presentation sessions on topics in your discipline. Attend a few sessions in areas that are new to you. An interdisciplinary understanding of the world is a good thing, and increasingly necessary. Check your schedule from time to time to see whether you are attaining the conference goals you identified before you arrived.

- Try to maximize the time you spend in sessions, but don't overdo it. Conferences are intense and the days can be long.
- Stick to your game plan of attending selected sessions, but be flexible.
- Actively participate by asking questions of poster and oral presenters. This is a chance to network.
- Make notes on aspects of oral and poster presentations that contribute to their effectiveness. Use those notes when you are developing your own presentations in the future. Likewise, note those things that detract from effectiveness and avoid doing them.
- Arrange to attend sessions with another colleague. Maximize your learning by discussing the content of the session with the colleague afterward.
- Sit in a strategic location so you can hear and see the continued on page 40



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presentation. Be aware of your body position and alignment to avoid neck strain. Take a break when you need to.

- Have some fun! Conferences often have banquets, dances, performances, or field trips. Take advantage of these as your schedule permits.
- If the conference is in a city other than the one in which you live, plan some time to take in the sites. Because time is tight during conferences, you should book a few extra days to accomplish this. However, you can build in some sightseeing time during the conference, such as a short walk before dinner. This will give you a chance to experience the city as well as refresh your mind and body before the next day of sessions begins without interfering in your daily schedule of conference-related sessions and events.

# Making the Most of Networking with Colleagues

Everyone at a conference has something in common, so it's easy to connect with people you don't know.

- Make use of the question-and-answer period, and introduce yourself before you ask the question.
- Talk to other delegates who attend the same sessions you do.
- Always wear your name tag so others get to know you, but remember to remove your name tag when leaving the conference, for safety and security reasons.
- In workshop-type settings, try to get into a group with people you don't know, rather than the colleagues you see every day. You'll expand your network and learn about different situations and styles.
- If you have met fellow practitioners from previous conferences whom you do not see regularly, plan to meet at lunch to catch up and exchanges ideas.



- Exchange business cards with people you meet.
- If the organization that's hosting the conference has a booth, introduce yourself to the people staffing the booth. Check out what resources the organization has and see if there is a "fit" for you.

# **Take Advantage of Access to Exhibitors**

Most conferences have exhibitors displaying their products and explaining their services. This is a good time to talk to the sales reps, ask questions, and watch demonstrations.

# **Evaluate the Conference**

During the day, jot down your impressions and reflections of your conference experiences. This will help when it comes time to fill out your evaluation form. Make sure you complete the evaluation forms to support the planning of future educational events and conferences.

- On your way home, review the notes that you have jotted down, and begin to organize a written reflection. Some ideas include the following: expectations versus reality, new things I learned, surprises, how I will use the conference to inform my own practice, tips on giving oral and poster presentations, tips that should be added to this list, how I attained my goals.
- Provide your employer with a written report about the conference and how your new knowledge will improve practice; it will motivate your employer to send you to future conferences.
- Share the information or your new learning with your colleagues who did not have the opportunity to attend.

# **Ethics and the Conference Experience**

- Show professional behaviour and support for colleagues by attending conference sessions rather than shopping, going to the spa, or touring the city. If your conference is in an attractive geographical location, schedule a few days before or after the conference to do these things.
- Whenever possible, try to attend the entire conference. It is not appropriate to simply appear for the session in which you are presenting.
- If you are attending with a significant other who is not

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registered for the conference, claim reimbursement only for those expenses that you would have incurred if attending the conference alone. For example, if a single hotel room is \$180, and double occupancy is \$200, seek reimbursement only for \$180.

 If you combine business with pleasure (e.g., stay a few extra days in the host city), seek reimbursement only for expenses associated with the conference.
 For example, airfare costs the same whether you stay four days or eight days so you may seek full reimbursement for airfare, but extra hotel days would not be reimbursable.



# **Taking Care of Business**

Save receipts for any reimbursable expenses such as meals, airfare, hotel, airport taxis and local transportation. Seek reimbursement in a timely fashion (typically within 30 days). Use reimbursement forms provided by your agency and organize your receipts so that they are easily processed.

Planning well is a cornerstone for achieving your educational and professional goals, and these tips can help you as you prepare for your participation at your next wound-care conference. "

### Resources

www.techwr-l.com/techwhirl/magazine/ gettingstarted/tipsforconferences.html

www.graggadv.com/direct\_marketing/Gragg\_ Guide\_To\_Attending\_Conferences.phpo

www.iaapmichigan.org/Documents/Tips%20for %20Attending%20Conferences.doc

**Do you have a tip for getting the most out of a conference?** E-mail us at WCCeditor@cawc.net and we'll publish the best of them on the *Wound Care Canada* Web site.

### Heather Orsted, MSc, RN, BN, ET,

is the Chair of the CAWC Education Committee. She is a co-director of the University of Toronto's International Interdisciplinary Wound Care Course and has made major contributions to wound-care education both nationally and internationally.

### Sue Rosenthal, BA, MA,

specializes in health and wellness communications and has been associated with the CAWC since 2000.

# Education News

International Interdisciplinary Wound Care Course (IIWCC) graduates now have the opportunity to undertake the second part (of three) in pursuit of a Master's (non-thesis) or Clinical Teacher Certificate.

Interprofessional Applied Practical Teaching and Learning in the Health Professions is a dynamic certificate course offered by Dr. Helen Batty and presented by the Department of Public Health Sciences at the University of Toronto. This course will offer two credits toward a Master's degree, plus prepare participants for the one-credit education field practicum. IIWCC graduates will already have the basis for three credits (which may need some additional work to complete). Another similar course from Public Health Sciences offers two credits, and electives offer another two credits, for a total of 10 credits required for the proposed Master's degree. The format for Dr. Batty's course is very similar to that of the IIWCC: it is distance learning with two residential weeks (Monday to Friday) in Toronto, one in October, one in May. The program was originally designed to give physicians the background they need to teach medical school and residents, but it has now been modified into an interprofessional format.

Participants who are not interested in working toward a Master's degree may enroll as continuing education students and obtain a certificate of completion or complete the first half of a Clinical Teacher Certificate. For more information, please contact Sandra Meisner at inter.wcc@utoronto.ca or go to the Web site at www.utoronto.ca.

# ASK THE EXPERT

# Pat Coutts Answers a Question on The Effects of Cultural Background on Patient Communication and Adherence to Treatment



By Patricia Coutts

#### Patricia Coutts is a

Registered Nurse with a background in psychiatry, medicine, surgery and family practice. She is a graduate of the University of Toronto's International Interdisciplinary Wound Care Course. She has worked for the past six years as a Wound Care Specialist and Clinical Trials Co-ordinator in a private practice in Mississauga, ON. I know cultural beliefs can impact on the care that I can offer and the care that my patients will accept, so how do I recognize and deal with cultural differences that may affect my patients' care?

"Treat the whole patient not just the hole in the patient" is a phrase that health-care providers working with people who have chronic wounds often pronounce. An important part of treating the whole patient is for the team to have a cultural awareness of the individual and their family and caregivers regarding any issues that may be significant to the plan of care. Some of these issues might involve who the patient perceives is in charge, pain and pain management, traditions around the use of herbal medications, customs around

The Webster Dictionary defines culture as "education, training, development of mental and bodily faculties and qualities, refinement of taste, keenness and balance of intellect and judgment, elegance and manners."

footwear and beliefs concerning specific days of the week or dates on the calendar. Let's look at each of these topics.

### Who's in Charge?

Many elderly individuals may believe that the "the doctor knows best" and therefore is in charge. They do not want to take an active role in the decision-making around their care as they do not think they have the expertise or anything of value to add to these decisions. These people, in most cases, have a good sense of what they are able to do and tolerate but are hesitant to say anything lest they offend someone and possibly hinder their care. Often, the older individual may be accompanied by a family member. The family member may proceed to be the main participant in the discussion of care at the visit. Is this involvement part of this *continued on page 44* 

**Who's in Charge?** Knowing that some patients are reluctant to speak up and understanding the relationship between family members and the client can be important steps in getting clients to participate in their own care.



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#### Pain

individual patient's cultural back-

rewarding.

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Herbal medications are another

area that people have strong

beliefs about. They will some-

times fail to mention that they

are taking these medications

because the health-care provider

may not approve or they will be thought of as "silly" for taking

them. These herbal medications

may enhance or diminish the

effect of other treatment modali-

ties that may be prescribed.

Some individuals may have tradi-

tional ways-for example, folk

medicine-of treating various con-

ditions. It is important for the

health-care professional to be

aware of these traditions and the

possible merit for their use. As

well, it is important to look for

ways that their use could be a

detrimental factor in treatment-

for example, as a confounding fac-

tor that may be contributing to a

problem with a contact dermatitis.

around treatment modalities

Homeopathic Remedies

Assessment of traditions

and rationale is a basis

for discussion with the

client when developing

ground? Because it is important Pain and pain management is for the patient to participate another area that is greatly as much as possible in their care influenced by past history and plan, if they choose to do so, it is beliefs. Some patients with important for us as health-care chronic wounds believe that professionals to know the relabecause there is a wound, there tionship between the family should be pain and therefore members. To encourage the they should "just put up with it." Some patients and families older individual to speak up and become an active participant in believe that taking medication his or her own plan of care can for pain will lead to addiction to be very challenging but very that particular medication. This belief is not confined to the older individual but is seen in the younger population as well.

> Some cultures are very stoic about pain while other cultures appear to be more intolerant of it. Both of these groups provide an assessment challenge to the health-care professional to provide the right medication in the right amount that the patient will utilize to achieve the most effective pain relief. Part of that challenge is for the health-care provider to understand the patient's perception and understanding of their situation and the cause of their pain.

# Pain Relief

It is important to realize that each person experiences pain differently, making an individual approach to a care plan essential.

#### Footwear

As wound-care clinicians, we are all aware of the importance of off-loading for an individual with diabetes who has a wound on their foot or for a patient with a pressure ulcer on the foot. People from certain cultures do not wear shoes inside their homes. or wear different footwear inside and outside the

house. We ask people to wear their shoes and orthotics or other off-loading devices at all times. Do we, as health-care providers, stop to consider the cultural implications of our request?

Some patients may not have the financial resources to have two completely different pairs of shoes and orthotics or offloading devices. We may need to negotiate with the individual to have orthotics that will fit in both the shoes they wear outside and in the footwear that is worn inside.

Some patients have certain types of footwear that need to be worn because of their occupation; others have traditionally worn a particular type of shoe and are not willingly going to change. The team approach is very important in developing an innovative way to provide protection and to keep the pressure off the affected area that is acceptable to the individual and the health-care team.

## Footwear

Identification of the individual's traditional use and perception of footwear may lead to a requirement for patient education and extra emphasis on adherence in order to ensure success.

### **Date and Time**

Something as simple and common as the date or day of the week may have specific significance to some people, and because of this, they may not attend appointments. Being aware of these issues and making appointments on an appropriate day at a time that is suitable for the patient, their families and the health-care professional will help to give the patient continuity of care.

**Date and Time** Pay attention to specific days, dates (holidays) and times of the day that may interfere with an individual's ability to adhere to their plan of care.

Culture is developed from beliefs, traditions and customs that create a way of life. We, as health-care providers, come into contact with many different cultures each day. It is essential that we endeavor to be aware of the subtle and not-so-subtle cultural aspects of individuals when we are working with them as a member of the team to develop their plan of care.

# **Action Plan for Dealing** with Cultural Differences

- 1. Acknowledge that *all* patients have beliefs, customs and traditions that may affect their health care. (It is important to acknowledge that you, too, have cultural beliefs, customs and traditions that influence how you practise health care.)
- 2. Conduct a thorough interview with each patient to determine if their beliefs, customs or traditions may positively or negatively affect a treatment or prevention plan.
- 3. Ask patients to repeat back to you in their own words what the treatment plan is. This is one way to identify areas they may not understand.
- 4. If you think a cultural factor is at play, ask the patient outright about it and then discuss. Treat all concerns seriously.

continued on page 48

a care plan.

# Same family...

contreet

# . yet different!

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# Articles of Interest Literature Review

Reviewers Patricia Coutts, RN Heather Orsted, MSc, RN, BN, ET

# Pressure Ulcers in Long–Term Care

Authors: Rockwood K, Bethune G, Dastoor D, Reddy M, Cabico L, Rochon P Publication: *Geriatrics Today. J Can Geriatr Soc* 2005; 8:50-54 Reviewer: Patricia Coutts, RN

There is an ongoing debate among health-care providers regarding the development or worsening of pressure ulcers when patients are transferred from long-term-care to acute-care facilities. This article discusses a retrospective cohort study involving all of the residents from a long-term-care setting that were transferred to an acute-care setting within the same institution over a period of one year.

The results of this study showed that patients transferred from longterm care to acute care were more likely to develop a pressure ulcer or have an existing pressure ulcer worsen. The authors noted that the patients most at risk were those admitted with a hip fracture, and, to a lesser extent, those admitted with pneumonia. The lack of mobility over an extended period of time was the most common factor in the development of a pressure ulcer in this highrisk group of individuals.

Documentation of the presence and severity of a pressure ulcer was found to be poor, particularly in the acute-care setting, but documentation of severity was also found to be lacking in the long-term-care setting. The article suggests that this study is important in helping facilities to provide "improved quality of care and reduce hospital costs" by developing strategies that will increase awareness, improve documentation and develop prevention programs for patients at increased risk in both acute- and long-term-care settings.

# Preventing Foot Ulcers in Patients with Diabetes

Authors: Singh N, Armstrong DG, Lipsky BA Publication: JAMA. 2005;293(2):217-228 Reviewer: Heather Orsted, MSc, RN, BN, ET

This paper systematically reviews the evidence on the efficacy of methods advocated for preventing diabetic foot ulcers in the primary care setting. The authors look at the evidence related to screening and how assigning a patient to a risk category can determine the type and frequency of both their educational needs as well as clinical interventions.

# Home Monitoring of Foot Skin Temperatures to Prevent Ulceration

Authors: Lavery LA, Higgins KR, Lanctot DR, Constantinides GP, Zamorano RG, Armstrong DG, Athanasiou KA, Agrawal CM Publication: Diabetes Care. 2004;27(11):2642-2647

# **Reviewer:** Heather Orsted, MSc, RN, BN, ET

This innovative study asks clinicians to consider the use of at-home patient self-monitoring of daily foot temperatures to prevent foot complications in individuals at high risk for diabetic foot ulceration. Results showed that the control group had a 20 per cent foot complication rate while the group that used the home self-monitoring had a two per cent foot complication rate.

Since this paper is published in *Diabetes Care*, it is available free and downloadable online at http://care.diabetesjournals.org.

# Get the Picture! Developing a Wound Photography Competency for Home Care Nurses

Authors: Buckley KM, Koch Adelson L, Thomas Hess C Publication: *J WOCN*. 2005;32(3): 171-177 Reviewer: Heather Orsted,

MSc, RN, BN, ET

More and more, wound photography and digital imaging is becoming a part of our practice, not only for chart records, but also for consulting with specialists and telehealth resources. This very well designed and informative article provides the clinician with a systematic and competency based approach to wound photography in a clinical setting. *continued on page 47* 

# Use of Alginates and Foams for Management of Symptoms of Chronic Malignant Wounds and Their Impact on Quality of Life continued from page 12

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# **Updated Guidelines Available**

Rosser WW, Pennie RA, Pilla NJ, and the Anti-infective Review Panel. Anti-infective guidelines for communityacquired infections. Toronto: MUMS Guideline Clearinghouse; 2005. (www.mumshealth.com)

The 10th anniversary edition of the Anti-infective guidelines for community-acquired infections–2005 is now available. This "orange book" is one in a series of guidelines developed by and for front-line clinicians. The Anti-infective Review Panel represents a mix of health professionals with expertise in several fields and who practise in a variety of clinical settings. In addition, the guidelines are peerreviewed by hundreds of front-line health professionals in order to ensure a very practical and relevant document that is evidence-based and user-friendly.

To order a copy, visit www.mumshealth.com, phone 416-597-6867, fax 416-597-8574, e-mail guidelines@mumshealth.com or visit your closest university medical bookstore.

Sequential treatment with calcium alginate dressings and hydrocolloid dressings accelerates pressure ulcer healing in older subjects: A multicenter randomized trial of sequential versus nonsequential treatment with hydrocolloid dressing alone. *Journal of the American Geriatrics Society.* 2002;50(2):269-74.

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# Using the Web for Ongoing Self-education

s every year passes, the quantity and quality of wound-care-related information on the World Wide Web increases and, as a result, wound-care practitioners now have access to an unprecedented amount of material on all aspects of wound healing. Clinicians and researchers can connect with Web sites from all over the world that feature articles, discussion forums, patient-centred information and journals, as well as news on courses, conferences and workshops.

For a focused query, using a search engine is a good option. For general surfing, a good place to start is with the Web sites of national associations. In addition to information of interest to wound-care practitioners, most of them also contain links to other Web sites, making the possibilities for discovery almost endless.

Listed below are just a few of the relevant national association sites, along with a few useful portal and specialty sites under the "Miscellaneous" and "Educational Institutions" headings. "

# **Societies and Associations**

#### Canada

Canadian Association of Wound Care: www.cawc.net Canadian Association of Enterostomal Therapy: www.caet.ca

# U.S.

American Professional Wound Care Association: www.apwca.org

Association for the Advancement of Wound Care: www.aawc1.com

Visiting Nurse Associations of America: www.vnaa.org/vnaa/gen/html~home.aspx Wound Healing Society: www.woundheal.org Wound, Ostomy and Continence Nurses Society: www.wocn.org

#### Australia

Australian Wound Management Association: www.awma.com.au

Wound Care Association of New South Wales: www.clininfo.health.nsw.gov.au/wcansw

### **Europe**

European Tissue Repair Society: www.etrs.org European Wound Management Association: www.ewma.org Icelandic Wound Healing Society:

www.sums-is.org/english.aspx Société Francaise et Francophone des Plaies

et Cicatrisations (French only): www.sffpc.org Tissue Viability Nurses Association: www.tvna.org Tissue Viability Society: www.tvs.org.uk Wound Care Society: www.woundcaresociety.org Wound Management Association of Ireland: www.wmaoi.org

## International

World Union of Wound Healing Societies: www.wuwhs.org Wound Healing Association of South Africa: www.whasa.org

# Miscellaneous

European Pressure Ulcer Advisory Panel: www.epuap.org National Pressure Ulcer Advisory Panel: www.npuap.org Symposium on Advanced Wound Care: www.woundcaresymposium.com/sawc World Wide Wounds: www.worldwidewounds.com Wound Care Communications Network: www.woundcarenet.com Wound Update: www.woundupdate.com

# **Educational Institutions**

Cardiff University: Wound Healing Research Unit: www.whru.co.uk Monash University: www.vcp.monash.edu.au/ courses/woundcare/gradcert.html University of Toronto: www.cme.utoronto.ca/PDF/MED0504-C.pdf (Requires Adobe Acrobat to view.) How to Be



# Published in *Wound Care Canada*

he editorial team is constantly looking for authors for *Wound Care Canada*. If you have an idea for an article, please submit a proposal to WCCeditor@cawc.net outlining your idea.

The proposal should

- 1. include an abstract of the proposed article, along with the name(s) and credentials of the author(s).
- 2. include a list of resources, such as photos or illustrations, tables, charts, etc.
- 3. indicate how many words you expect the article to be (note that *Wound Care Canada* articles tend to have fewer than 3,000 words).
- indicate how much time you would need to prepare the article. We plan our issues fairly far in advance, so a lead time of six months or more is common. However, we also accept articles with less lead time. Once you have submitted an idea, our team of

editors will include it in the line-up of possible items for an upcoming issue. If it fits into our planning, we will contact you to discuss the length, timing and, in some cases, the slant we'd like to see.

Complete details of the technical requirements for submitting materials are posted on the CAWC Web site at www.cawc.net/open/wcc/submissions.html. The summary below will give you an idea of how easy it is to fulfill the requirements.

Articles and accompanying photos and illustrations should be sent electronically as e-mail attachments if

the total submission is less than 2 Mb in size. If the total submission is larger than 2 Mb, you may need to mail a CD to our editorial offices (see the Web site).

## Text

The article should be formatted as a Microsoft Word (.doc) or Wordperfect (.wpd) file. Text embedded in Acrobat (.pdf), Publisher, Corel or PowerPoint files cannot be accepted. Either PC or Macintosh format will be accepted.

Each submission must include the names and affiliations of all authors and the contact information of the principal author.

# Images

Photographs should be saved as high-resolution (300 dpi) .tif, .jpg, .psd or .eps files. Images embedded in Word, WordPerfect, Acrobat (.pdf), Publisher, Corel or PowerPoint files are not suitable for publication.

To ensure images are placed correctly, indicate in the text document the position of insertion for each image. Include captions or titles in the document.

# **Submitting Previously Published Materials**

Articles submitted to this publication cannot have been published elsewhere in substantially similar form or with similar content. Authors in doubt about what constitutes prior publication should consult the editor.

Wound Care Canada accepts articles on a wide range of topics. If you are considering submitting an article, it may useful to know that articles in the magazine are organized into departments, based on the pillars of the CAWC: Clinical Practice, Education, Public Policy, Research, and International Partnerships. Articles also appear in sections designated for Regional Initiatives, Ask the Expert, and Future Watch.

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# Canadian Association of Wound Care

## **CAWC Conference**

Time is running out! Have you registered for the 11th Annual Conference of the Canadian Association of Wound Care? It will be held in Montreal on November 12–15, 2005, at the Palais des congrès.

Bridging Wound Care Communities is the theme of this year's conference. Our special guest, Danièle Sauvageau, knows how important building bridges can be, having led the Canadian women's hockey team to Olympic victory. As keynote speaker, she will inspire those attendees who wish to get involved in their respective practice communities.

To emphasize the importance of an interdisciplinary approach to wound care, the majority of the sessions and workshops will be delivered by pairs or groups of experts, facilitating the creation of bridges between professionals of different practice communities and contributing to the harmonization of wound care.



For more information or to register online, please visit the CAWC Web site at www.cawc.net. See you in Montreal!

# **Conférence de l'ACSP**

Le temps passe vite...Vous êtes-vous inscrits à la 11<sup>e</sup> conférence annuelle de l'Association canadienne du soin des plaies? Elle aura lieu à Montréal au Palais des congrès, du 12 au 15 novembre 2005.

Réunir les communautés de pratique en soin des plaies est le thème de la conférence de cette année, et notre invitée spéciale, Danielle Sauvageau, sait à quel point il est important d'établir des ponts, elle qui a su mener à la victoire l'équipe canadienne de hockey féminin aux Jeux Olympiques. À titre de conférencière d'honneur, elle saura sûrement être une source d'inspiration pour ceux et celles qui souhaitent s'impliquer activement dans leurs communautés de pratique respectives.

Dans le but de souligner l'importance de l'interdisciplinarité dans les soins de plaie, la majorité des sessions et des ateliers seront animés en duo ou en groupes d'experts, ce qui favorisera la création de liens solides et durables entre les professionnels des différentes communautés de pratique pour ainsi contribuer à l'harmonisation du soin des plaies.

Pour plus d'information ou pour vous inscrire en ligne, visitez le site web de l'ACSP à www.cawc.net. Au plaisir de vous rencontrer à Montréal!



# **Discussion Forum Winners**

When the CAWC Web Discussion Forum was relaunched almost two years ago, the CAWC offered an incentive to create interest. Since then, 20 lucky forum "post-ers" have won CAWC CD sets. The prizes are gone for now, but the real incentives to get involved in the forum live on: connect with your colleagues, ask questions about topics that concern you and offer your expertise to help others. Visit the forum at www.cawc.net/open/forums/discussion\_forum.html.

# **S Series Spring Tour**

The educational S Series workshops presented by the Canadian Association of Wound Care will continue this coming spring in three cities across Canada. Each two-day session is based on best practice principles for wound bed preparation, pressure ulcers, venous ulcers and diabetic foot ulcers. The first day, the S1, is "Knowledge Learning: Understanding the CAWC Best Practice Recommendations," which provides an overview, a background and a context for the CAWC best practice recommendations. It is a prerequisite for S2. The S2 section, which begins on the second day, is an interactive day entitled "Skills Learning: Hands-on Workshops in the Fundamental Wound Healing Skills," with a focus on vascular assessment, compression therapy and debridement.



It is a prerequisite for the S3, a selfdirected reflective component of the S Series.

S Series locations for spring 2006: London, ON-March 31 to April 1 Montreal, QC-April 21 to 22 Victoria, BC-May 12 to 13

Visit the CAWC Web site at www.cawc.net for details, beginning December 2005.

# Does Your Facility Have an **Opening for a Wound-care Specialist?**

Did you know the CAWC Web site offers facilities with woundcare jobs a place to post employment opportunities? The Job Market area is tailor-made for facilities wanting to reach the widest possible targetted audience. Not only is it regularly visited by wound-care specialists from all across the country, but it's free! Visit the CAWC Web site for details on how to post a job listing.

# Pressure Ulcer Awareness Campaign

The CAWC is preparing to launch a Pressure Ulcer Awareness Campaign (PUAC) in November 2005 at the national meeting in Montreal, Quebec. In June 2005, a task force met in Toronto to begin preliminary discussion on the strategic planning for the campaign. Members of the task force are chair David Keast, MD; Cathy Burrows RN; Pat Coutts, RN; Connie Harris, RN; Leah Shapera, RN; Gail Woodbury, PhD; Sue Rosenthal CAWC Communications and Web Consultant; and Ann Gallery from High View Communications. During the day-long session, task force members discussed the first phase of the campaign. The purpose of the project will be to develop mechanisms to raise awareness of the



prevalence of pressure ulcers in Canada. The target groups for the awareness campaign will be patients, clinicians, lay caregivers, and facility administrators. Five facilities/agencies across Canada will be selected for a pilot program. These facilities/agencies will be asked to assign a champion to their project who will promote the campaign. This champion will be provided with the materials and evaluations developed by the CAWC. Follow-up work will look at changes in awareness of pressure ulcers as a result of the campaign.

Modifications will be made based on the evaluation of results, and the second phase of the project will then extend to a larger, national campaign.

The CAWC hopes to make pressure awareness a part of public policy for local, provincial and federal governments. Education and resource materials will be developed by the appropriate CAWC committees and members. Finally, the Association plans to partner with organizations, agencies and other associations who have an interest in pressure ulcer prevention.



You've Got Questions, We've Got Answers The CAWC Discussion Forum at



www.cawc.net is the only place in Canada accessible to every wound-care clinician in the country. It's a great way to tap into a national network of wound-care professionals. Visit it today!

# CAWC Scholarships Advance Wound Care

Each year, the CAWC awards scholarships for research and education to its members. Although the endeavours of the recipients are diverse, in all cases, the scholarships help them to further their wound-care careers and move the practice of wound care in Canada forward. Excerpted below, in their own words, are summaries from some of 2004's CAWC scholarship recipients.

**Barbara Moyst:** The NewLab Clinical Research Educational Grant that I received in November 2004 allowed me to enroll in the International Interdisciplinary Wound Care Course offered through the University of Toronto. This course was challenging, rewarding and enlightening.

It has enabled me to not only advance my wound-care knowledge and skills training but also to network with many wound-care enthusiasts from around the world. As part of the course assignment, after determining patient education needs, I developed a patienteducation pamphlet on foot care that can be used in our clinics to help prevent ulcers.

The best part of doing the course will be [the opportunity] to put my expertise to use through knowledge sharing with colleagues and teaching patients about wound care and preventative tips on how to take care of oneself.

Donna Flahr: I was awarded the CAWC Tendra Wound Care Education Scholarship in the fall of 2003. I was enrolled in the University of Wales (now Cardiff University) College of Medicine Master's in Wound Science course as of October of that year. Since then I have completed eight modules on various wound-care topics.

The first module was based on an area of physiology of wound healing, and I chose to research wound contraction. The next module was on the psychology of healing, which was based on a case study and examined the stress, social support and coping mechanisms of a patient situation. The third module was to choose an intrinsic risk factor and outline its effects on the healing process. For this module I researched diabetes and wound healing. The fourth module looked at the clinimetrics of one method of assessment/ measurement, and I examined ruler-based wound measurement [see page 18 for an article on clinimetrics by Flahr et al.]. Module five was an overview of acute wound healing and the management issues associated with acute wounds; I researched and wrote a paper on hydrocolloids in the management of acute wounds. Module six was a discussion on an area of controversy in chronic wounds. I chose to examine the role of micro-versus macro-vascular disease in diabetic foot ulceration. Module seven was an examination

of cost-effectiveness vs. quality when examining our country's health-care system, and I examined the literature support for and against the use of guidelines in the practice and provision of wound care. The eighth module was a research proposal, and I intend to attempt to examine the role of non-weight-bearing, isometric exercise in the healing outcomes related to diabetic foot ulcers. In Saskatchewan, diabetic foot ulceration is a significant problem. I have found little to no research assessing the role of exercise in this population, although there is a large amount of evidence relating exercise to improvements in circulation with arterial disease and improvements in venous return with venous leg ulcers.

Karen Campbell: The Canadian Association of Wound Care Educational Scholarship has provided me with some support so that I was able to complete the first year of my PhD in Rehabilitation Science at the University of Western Ontario. During the school year 2004–2005, I was a full-time student and took courses in

- Statistics
- Research methodology
- Philosophy of rehabilitation science
- Seminar series in rehabilitation science

I was successful in all of my course work and maintained an A average. While taking the courses I have worked with my advisory committee to determine my research focus. Much of my review of the literature is complete, and preliminary work has sketched out the design of the study. I have determined that my focus will be on wound-care knowledge translation as well as prevention of pressure ulcers in acute-care hospitals.

**Cheryl Boyd:** The 3M Novice in Wound Care Scholarship from the Canadian Association of Wound Care allowed me to attend the Wound, Ostomy and Continence Nurses Society Conference in Las Vegas in June of this year. This was my first experience attending a conference of this type. It was exciting to meet so many colleagues in this specialty area from all over North America.

The conference started out well with the morning breakfast for first-time attendees. This allowed me to meet others in my field, which immediately reduced my anxiety and gave me an opportunity to share and understand the opportunities in the next few days. What I found of particular interest was the ability to choose a specific track of sessions. I chose the ostomy track, which covered Pre, Post and Beyond Ostomy Surgery, Sexuality Issues, Stomal Complications, and a pouching seminar on convexity, to name only a few of the topics. Also helpful to acquiring additional information were the exhibit hall sessions and networking with the companies regarding their new products. My membership in CAWC and this learning opportunity will assist me in my daily practice as a Wound Ostomy Resource Nurse within the community setting. I would encourage others to take advantage of these educational opportunities to further their clinical practice.

Jenny Juchymenko and Christine Willey: It was a great pleasure and honour to be the first recipients of the Heather Louise Orsted Scholarship for team development. As a nursing and occupational therapy interdisciplinary team, we share Heather's passion for wound care and delivery of best practice. The scholarship provided us with the opportunity to attend the CAWC Conference in Calgary, Alberta, in November 2004, as well as attend the International Interdisciplinary Wound Care Course (IIWCC) in Toronto. At the IIWCC, we met and networked with other colleagues from various disciplines and countries who also share our passion for wound care.

This scholarship has helped us achieve our latest goals of IIWCC to enhance wound-care delivery for continuing care residents. <sup>(II)</sup>

For information on Canadian Association of Wound Care scholarships, please visit the CAWC Web site at www.cawc.net/ open/scholarship/scholarships. html.



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01/04



# Honey, an Old Remedy Creating a New "Buzz" in Wound Care

BY Catherine Harley

For centuries, honey has been used as an effective treatment for leg ulcers, pressure ulcers, diabetic ulcers, burns and infected acute wounds.<sup>1,2</sup> In more recent years, however, honey has fallen out of favour in mainstream medical care.

There are many features in honey that, in combination, contribute to its anti-microbial properties.

> With clinical evidence mounting on the use of honey in wound management, several manufacturers are ready to launch, or are developing, various types of honeybased wound dressings. So the use of honey in wound treatments may be closer than you think.

> The main components of honey are glucose (40 per cent) fructose (40 per cent) and water (20 per cent); it also contains amino acids.<sup>3</sup> Research has shown that wounds treated with honey have resulted in debridement of necrotic tissue, clean wound beds, reduction of edema, growth of granulation tissue and re-epithelialization.<sup>3,4</sup> A major benefit of honey, however, has been the antimicrobial effect that it appears to have when used

in the wound bed.5

It has been established that honey inhibits a broad spectrum of bacterial species, and reports have shown both bacteriocidal as well as bacteriostatic activity.6 The antibacterial activity can be explained through the following mechanisms of action. Honey has a high osmolarity due to the fact that it is a saturated or supersaturated solution of sugars that have a powerful interaction with water molecules. The lack of "free water" helps to inhibit the growth of micro-organisms. Honey has an acidic pH that ranges between 3.2 and 4.5. This acidic pH assists in inhibiting bacterial growth. The literature shows, however, that there are different sources for honey around the world and that not all types of honey have the same bacteriocidal action.7 Honey from Manuka trees (Leptospermum scoparium) in New Zealand has been shown to have a high level of phyochemicals that have an antibacterial mechanism.7,8

Generally, honey is used only when the wound is non-responsive to conventional anti-bacterial treatment with systemic antibiotics and antiseptics. Studies have shown that recalcitrant wounds

respond well to honey-based dressings.<sup>3</sup> When using honey in wound care, it is important that a sterilized, laboratory-tested, medical-grade honey cleared commercially for medicinal purposes be selected.<sup>1</sup>

Modern wound-care dressings containing honey may be part of a combination product—for example, with an alginate or hydrogel, or in an amorphous gel format. Additional controlled research is warranted, particularly studies pertaining to validating cost effectiveness. Future watchers need to keep an eye out for the new "buzz" on an old remedy. "

references listed on page 47

# Catherine Harley, RN, is a registered nurse

and graduate of the University of Toronto International Interdisciplinary Wound Care Course. She is the Executive Director of the Canadian Association for Enterostomal Therapy and the Associate Editor of *Wound Care Canada*.

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1) Principles of best practice: Minimising pain at wound dressing-related procedures. A consensus document. London: MEP Ltd, 2004 Downloadable on www.tendra.com CA019290409EN GENTLE CARE™ Mölnlycke Health Care www.tendra.com 1-800-494-5134

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