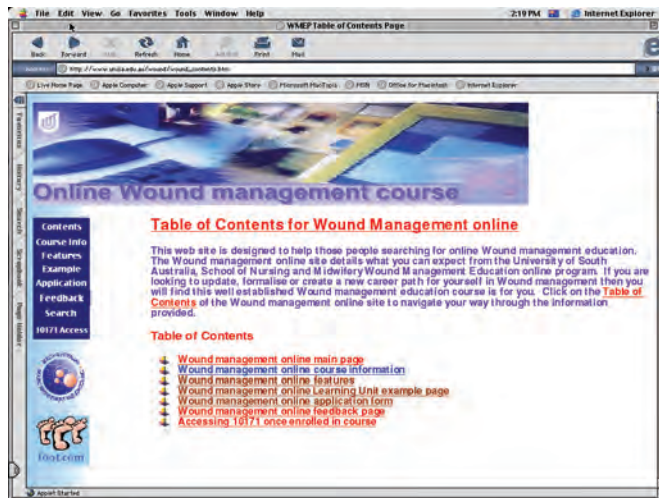


The University of South Australia's online wound management course <http://www.unisa.edu.au/wound>

Ellis T



Introduction

An important aspect of many health professionals' work is to care for a person's skin. The professional prevents or minimises damage to the integument or provides care to person with a wound.

Effective management of a person with a wound requires specific knowledge of anatomy and physiology, wound healing processes and factors that influence healing outcomes. A wound management care provider requires the skill and ability to make clinical decisions based on assessment, classification and/or staging of the wound. They should be able to effectively plan management strategies, select appropriate wound dressing products to

facilitate wound healing and must be able to document and evaluate wound healing. The wound management care provider must also be conversant with available resources to support their practice and these are increasingly found via the internet. Given the knowledge, skill and resources needed to care for a person with a wound, education needs to be comprehensive, responsive and available via appropriate media.

The University of South Australia, School of Nursing and Midwifery, now offers an online wound management course via the internet. The advantages of this online course are that you can study from anywhere in the world, complete a certificate level course equivalent to a subject at university, and participate in discussions with other students and lecturers online. Additionally, students can complete this course within a flexible timeframe and are given access to the vast university electronic library and search facilities.

Each student receives instructions for studying online, a hard copy full colour study guide, a course outline as well as CD ROM/video based lecture material and scenario activities. To further support the students' study, an extensive set of readings are also provided. The University of South Australia Online Wound Management Course is designed to prepare a range of health care practitioners for the reality of modern wound management and represents a new direction in wound management education.

Background to course development

In 1994 the University of South Australia and Ashford Community Hospital began a jointly offered wound management course. This course became well established in South Australia over the next 5 years and many of the state's local wound management experts have completed and

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Pictures courtesy of the University of South Australia

contributed to the course content. There have been several reviews and updates.

Initially, the course was modular and delivered 'face to face'. It was adapted for distance mode delivery in 1996 due to the changing needs of the nursing community. Over time, the distance mode of course delivery became more popular than the didactic method and it was decided in 2000 that a totally online version should be developed.

The course was extensively reviewed, re-structured and re-written for conversion to web-based delivery. This process took 8 months, including the re-write, updating readings and uploading of materials to the university's educational web resource, Unisanet.

Changes to the course included changing modules to discrete learning units, the development of automated lectures, the inclusion of both CD and video based mediums for the case studies and the production of a full colour study guide. The course, whilst still recognisable in terms of content, has undergone a transformation aimed at continuing quality wound management education in the 21st century.

Aims

This course aims to provide the participant with an up to date knowledge of wound management principles and practice. It aims to give the participant an opportunity to examine their own practice, develop skill in assessment of clients and become familiar with the use of wound care products. The course also aims to familiarise people with web-based resources to support wound management practice.

Course objectives

On completion of the wound management course, the participant should be able to:

- Outline the physiology of the wound healing process.
- Outline the principles of moist wound healing.
- Discuss factors influencing or affecting wound healing.
- Accurately assess and classify wounds.
- Identify and implement appropriate wound dressing methods/strategies.
- Identify the major categories/types of wound care products.
- Understand the aetiology and associated treatment of specific wound types.
- Accurately document care outcomes and the progress of wound healing.

- Identify ward, political and social factors affecting wound management.
- Discuss the options available for treatment in the community.
- Understand the impact of wounds on those who have them.
- Identify web-based resources for wound management information.

Graduate qualities

The table opposite indicates the weighting as a proportion of the total point value of this subject given to developing one or more of the qualities of a University of South Australia graduate.

Even though the wound management course is at the certificate level, we aim to promote the graduate qualities expected of all students exiting a University of South Australia course. This feature of the course facilitates entry to other programmes of study at the tertiary level, even at different universities. On completion of the course, a student receives a signed certificate from the University of South Australia, an audit notice, letter of completion and course transcript. This official documentation is designed to facilitate entry to other university level programmes of study.

Course structure and content

Material covered includes:

- Anatomy and physiology of wound healing.
- Intrinsic and extrinsic factors (including wound aetiology) influencing wound healing.
- Moist wound healing.
- Dressing technologies.
- Nurses' role in wound management.
- Assessment.

Graduate weighting

Graduate quality		Point weighting
1	Body of knowledge	2.5
2	Lifelong learning	0.5
3	Effective problem solving	2.0
4	Work autonomously and collaboratively	1.0
5	Ethical action and social responsibility	1.0
6	Communicates effectively	1.0
7	International perspectives	1.0

Example learning unit

Learning unit 6: dressing categories and technique Part A: categories of dressings

Characteristics of an ideal dressing

There is a lot of literature on different types of dressings, their uses, strengths and supposed benefits. It is important therefore to be able to base your treatment decisions regarding dressing choice on fundamental principles. Principle based care is particularly important as there is still relatively little sound clinical research comparing one dressing type with another, the costs of using various dressings and the benefit to the patient, despite the length of time 'modern' dressings have been available.

When making your choice, it must be based on accurate, appropriate assessment and planning, i.e. what is known about the patient, the wound itself and what the planned outcomes are. In this way, you will be matching the treatment to the patient as an individual and will not make treatment decisions based on attractive advertisements.

Turner, Thomas, Gilchrist, Harding, Bates-Jensen, Flannagan and Carville are authors who have written extensively in the area of wound management. You will find articles throughout the readings by these people. All have, at some stage, written on the characteristics of the ideal dressing and a short summary of the main issues is included below:

- Should maintain a moist wound environment.
- Should not induce maceration (skin shedding).
- Should control exudate.
- Should not introduce toxins, foreign particles or fibres into wound.
- Should provide an effective barrier to microorganisms.
- Should require infrequent changing.
- Should not cause trauma on removal.
- Should allow for gaseous exchange.
- Should maintain optimum pH of wound environment (acidic).
- Should provide thermal insulation.
- Should meet the person's needs i.e. suit their lifestyle, aesthetic sensibilities.

Journal activity

Can you add to the above list? What aspects of wound dressing choice do you consider to be of greatest/least importance?

Dressing classifications

For today's wound manager, the choice of dressings grows each day, making the choice more and more confusing. For example, there are now over 40 different types of hydrogel on the market, some professing to be better or different to each other. It is important to keep abreast of the changing products and their characteristics but not to be overwhelmed by them. A summary of the major dressing classifications and their intended uses is provided.

Some examples of dressings

When reading articles on dressing types and their uses, be careful to critically analyse any associated research. Look for research that has been published in refereed journals, is well controlled and is balanced in its approach.

Learning unit 6: dressings/dressing categories readings

Two examples of actual readings supplied:

- W6.9: Poston J. The use of silicone gel sheeting in the management of hypertrophic and keloid scars. *Journal of Wound Care* January 2000; 9(1):10-16.
- W6.10: Jones V & Milton T. When and how to use hydrocolloid dressings. *Nursing Times* January 27 2000; 96(4)(NT plus):5-7.

Clinical practice/focus questions

Write a response to the content of the readings on dressings and dressing categories etc. What are the current areas of controversy? What is the current practice in your clinical area? What is your current practice? What rationale do you have for your practice in the selection of dressings?

The presented example is only a part of the study you would undertake for this particular learning unit. Accompanying this work are two exercises and an automated lecture designed to help tie the information together. All the resources you need to complete each unit are supplied as course materials. These resources are all available online as well. By supplying all the materials and making them available via the web, we aim to give the student flexibility and choice in the manner they wish to study.

Dressing classifications and their intended uses.

Dressing type	Example	Intended use
• Film membranes	Polyurethane	Superficial, minimal exudate
• Foams	Polyurethane	Moderate-heavy exudate
• Particulates	e.g. Debrisan – availability declining	Sloughy wounds
• Hydrogels	Polyethylene glycol	Rehydration, necrotic wounds
• Hydrocolloids	Carboxymethylcellulose; second generation woven (e.g. Aquacel)	Light-moderate exudate, sloughy to granulating wounds
• Alginate	Kelp (seaweed)	Bleeding wounds, moderate-heavy exudate
• Enzymes	Streptokinase/Streptodornase	Sloughy wounds (low rate of use)
• Combinant dressings	Alginate plus hydrocolloid etc	See individual uses
• Antiseptics	Cadexomer iodine dressings (e.g. Iodosorb)	Lower bacterial burden

- Matching a person and their wound with wound dressings.
- Wound healing and treatment evaluation.
- Legal, ethical and political dimensions of wound management.
- Assessment and diagnostic dimensions of practice.
- The inter/multi disciplinary team.
- Family and staff education.
- Specific skill and knowledge of wound management for a person with surgical wounds, complex wounds (e.g. arterial, venous, mixed aetiology or neuropathic ulcers), cancer and fungating wounds, skin tears, traumatic wounds, animal bites, burns etc.
- Children with wounds.
- Web based resources.

New units are going to be added over the next 6 months, including a trauma wound unit examining gunshot, knife and armed-conflict related wounds.

There are 13 learning units and course structure is essentially linear. This means that each unit builds on the work completed in previous units. Students can choose how long to spend on each unit and, whilst each unit should take around 1 week to complete, this really depends on experience and individual learning needs. The wound management course therefore commonly takes 13 weeks to complete; however, extensions can be granted if necessary.

Teaching and learning arrangements

Study guide, selected readings, video, CD ROM

The study/learning guide, selected readings and video (or CD ROM) have been devised to provide up to date



information relating to the care of people with wounds. The course is structured in such a way as to guide learning through critical analysis of literature and covers information on current wound management and the debates surrounding contemporary issues in wound management.

The study guide (hard copy and online) provides a pathway through the readings and activities that comprise the course. The study guide contains an introduction to each week's readings, important information not contained within the supplied readings and exercises such as clinical practice/focus questions and journal activities. The readings are comprehensive, current and topical. Each booklet is clearly identified and the readings are arranged and divided to help students follow the designated pattern of learning units.

The supplied video/CD ROM shows four different people with wounds. These scenarios can be used not only for the

scenario activity assignment but also to support study during the first 5 weeks of the course. Detailed notes about the client's history and wound can be found in week 11 of the study/learning guide.

Students are also encouraged to examine clients and their wounds from their worksite to enhance learning. Therefore, through use of video/CD ROM, selected readings and an online study/learning guide, this course allows the many interesting aspects of wound management to be explored in a variety of ways.

Written activities

The formats for written activities vary and the text of the study guide will facilitate your progress through them. Some of the written activities can be completed within the study guide, while others, such as the clinical practice/focus questions and the journal activity, should be completed separately.

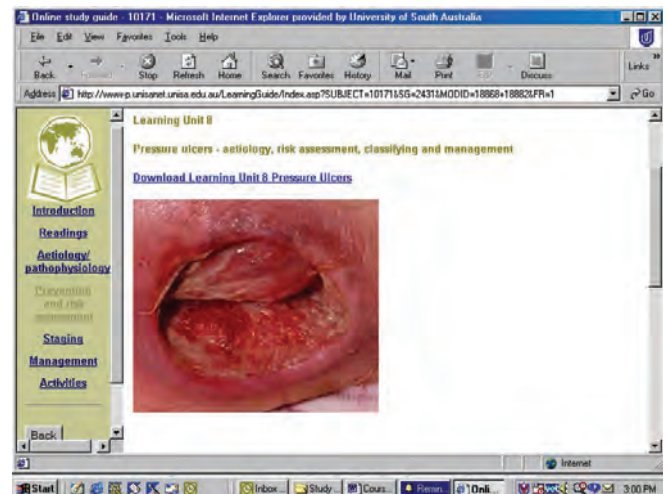
The clinical practice/focus questions and journal activity are a feature of the study guide and provide you with the opportunity to consider and/or critically analyse the literature and wound management practices. The focus might also be on the clinical applications of wound management relating to the student's own practice or the wound management practices at their worksite.

Assessment summary

All assignments are graded according to standard university policies and procedures. A developmental approach is taken to the feedback given for assignments, ensuring that people who have not previously studied at university are assisted to acquire writing skills at this level.

The university has a large number of web-based resources to help with assignment writing, further advantaging students who undertake this course. All of the University of South Australia's online resources to assist students' development are available whilst enrolled in this course. This includes access to the learning connection pages designed to assist study and writing at the required level.

Fee-paying students are given a timeframe to work within but are not strictly required to do so. As previously stated, should problems develop, extra time can be negotiated. This flexibility, combined with the available resources, means that wound management students are able to complete the course at a tertiary level in a timeframe that suits them.



The online learning environment

Many people are intimidated or wary of studying online. This appears to relate to unfamiliarity with computers or the internet. As the course is supplied hard copy as well as online, people can take their time to become familiar with web-based learning and therefore progress at a rate that suits them. The screens you will see are represented in this article (example only).

A detailed set of instructions explaining how to log on to the university's network are provided and, for the duration of the course, you are given an e-mail address. This means that you can send and receive e-mails, contact lecturers, as well as access all the necessary materials. The learning units contain examples of wounds, dressings, procedures etc in full colour. When viewed 'full-screen', the detail is excellent, allowing the student to get a clear idea of the topic being studied.

By course completion even those people who have never accessed the internet should be able to do so with confidence. It is anticipated they will not only be able to study online but also access the enormous amount of resource material relating to wounds and wound management.

Conclusion

Studying online is becoming increasingly popular. The University of South Australia wound management course is one of the world's first fully online wound management courses and, as such, represents a step forward in the delivery of wound management education.

If you wish to obtain further details about the course, please visit the website – <<http://www.unisa.edu.au/wound>>. If you would like to speak with the coordinator, please contact Tal Ellis – contact details on first page of this article. ■